

Health Systems in Transition

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Portugal

Health system review

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European
Observatory 
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Health Systems in Transition

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Preface

The Health Systems in Transition (HiT) profiles are country-based reports that provide a detailed description of a health system and of reform and policy initiatives in progress or under development in a specific country. Each profile is 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 detailed guidelines and specific questions, definitions and examples needed to compile a profile.

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

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

Compiling the profiles poses a number of methodological problems. In many countries, there is relatively little information available on the health 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 World Health Organization (WHO) Regional Office for Europe European Health for All database, national statistical offices, Eurostat, the

Organisation for Economic Co-operation and Development (OECD) Health Data, the International Monetary Fund (IMF), the World Bank, and any other relevant sources considered useful by the authors. Data collection methods and definitions sometimes vary, but typically are consistent within each separate series.

A standardized profile has certain disadvantages because the financing and delivery of health care differ across countries. However, it also offers advantages, because it raises similar issues and questions. The HiT profiles 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 systems. This series is an ongoing initiative and material is updated at regular intervals.

Comments and suggestions for the further development and improvement of the HiT series are most welcome and can be sent to: info@obs.euro.who.int.

HiT profiles and HiT summaries are available on the Observatory's web site at www.euro.who.int/observatory. A glossary of terms used in the profiles can be found at the following web page: www.euro.who.int/observatory/glossary/toppage.

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The current series of HiT 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, Slovenia, Spain and Sweden, the Veneto Region of Italy, 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.

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The data used in this report are based on information available in May 2007.

List of abbreviations

	English term		English term
ACS	High Commissariat for Health	ERDF	European Regional Development Fund
ACSS	Central Administration of the Health System	EU	European Union
ADFA	Health subsystem for the Air Force	EU15	European Union Member States before May 2004
ADMA	Health subsystem for the Navy	EU25	European Union Member States before January 2007
ADME	Health subsystem for the Army	EUROPEP	Internationally standardized instrument to evaluate general/family practice
ADSE	Health subsystem for civil servants	FNAM	National Medical Federation
ANPC	National Authority for Civil Protection	GDH	General Directorate of Health
APIFARMA	Association of Pharmaceutical Companies	GDP	Gross domestic product
ASST	Authority for Blood and Transplantation Services	GMP	Good Manufacturing Practice
CAS	NHS Call Centre	GP	General practitioner
CIAV	Anti-poison Information Centre	HFA	Health for All (WHO Regional Office for Europe database)
CIS	Commonwealth of Independent States	HIV/AIDS	Human immunodeficiency virus/Acquired immune deficiency syndrome
CNS	National Health Council	HRA	Health Regulatory Agency
CODU	Urgent patients orientation centre	ICD	International common designation
CODU-Mar	Urgent patients orientation centre for situations occurred at sea	IDT	National Institute of Drug Addiction
CT	Computerized (axial) tomography	IGAS	General Inspectorate of Health-related Activities
CTT	Health subsystem for the Portuguese postal services	IGIF	Institute for Financial Management and Informatics
DALE	Disability-adjusted life expectancy	IMF	International Monetary Fund
DGIES	Directorate-General for Health Premises and Equipment	INE	National Statistics Institute
DRG	Diagnosis-related group	INEM	National Institute for Medical Emergencies
EC	European Commission	INFARMED	National Authority on Drugs and Health Products
		INN	International Nonproprietary Name

INSA	National Institute of Health, Dr Ricardo Jorge	PPP	Purchasing power parity
IPS	Portuguese Blood Institute	PPP's	Public-private partnerships
IQS	Institute for Health Quality	PRACE	Governmental Programme for Public Administration Restructure
IT	Information technology		
LCU	Local currency unit	PT-ACS	Health subsystem for workers of Portugal Telecom
MRI	Magnetic resonance imaging	R&D	Research and development
NGO	Nongovernmental organization	RHA	Regional Health Administration
NHS	National Health Service	RMP	Regional master plans
NUTS	Nomenclature of Territorial Units for Statistics	SAD GNR	Health subsystem for National Republican Guards
OECD	Organisation for Economic Co-operation and Development	SAD PSP	Health subsystem for Police Agents
OMCL	Official Medicines Control Laboratory	SAMS	Health subsystem for employees of the banking sector
OMD	Medical Dentists Federation	SARA	Rapid Alert and Response System
ONSA	National Health Observatory	SG	General Secretariat of Health
OOP	Out-of-pocket (payments)	SIGIC	System for management of (waiting list) patients waiting for surgery
OPSS	Portuguese Health System Observatory	SIM	Independent Medical Union
OTC	Over-the-counter (pharmaceuticals)	SSMJ	Health subsystem for employees of the Ministry of Justice
PALOP	African countries with Portuguese as official language		
PCC	Primary care centre	TB	Tuberculosis
PEC	Stability and Growth Programme	THE	Total health expenditure
PET	Positron emission tomography	USF	Family Health Units
PFI	Project Finance Initiative (English NHS)	VAT	Value-added tax
PIDDAC	Central Administration's Investment and Development Plan	VHI	Voluntary health insurance
		WHO	World Health Organization
		WPU	Weighted production units

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Abstract

The Health Systems in Transition (HiT) profiles are country-based reports that provide a detailed description of a health system and of policy initiatives in progress or under development. HiTs examine different approaches to the organization, financing and delivery of health services and the role of the main actors in health systems; describe the institutional framework, process, content and implementation of health and health care policies; and highlight challenges and areas that require more in-depth analysis.

The Portuguese population enjoys good health and increasing life expectancy, though at lower levels than other western European countries. All residents in Portugal have access to health care provided by the National Health Service (NHS), financed mainly through taxation. Co-payments have been increasing over time, and co-insurance is higher for pharmaceutical products. Approximately a quarter of the population enjoys a second (or more) layer of health insurance coverage through health subsystems and voluntary health insurance (VHI). Health care delivery is based on both public and private providers. Public provision is particularly present in primary care and hospital care, with a gatekeeping system in place for the former. Pharmaceutical products, diagnostic technologies and private practice by physicians constitute the bulk of private health care provision.

The Portuguese health system has not undergone any major changes on the financing side since the early 1990s, despite the steady growth of public health expenditure. On the other hand, many measures have been adopted to improve the performance of the health system. Measures since 2002 have included: public–private partnerships (PPPs) for new hospitals; a change in NHS hospital management rules towards a more entrepreneurial approach and a more effective purchaser–provider split; promoting generic substitution of pharmaceuticals;

liberalization of prices and entry onto the over-the-counter (OTC) market; administrative price reductions for pharmaceutical products; introduction of a reference pricing mechanism for pharmaceuticals facing competition from generics; regular updates of the co-payments for public health care services; reorganization of the public network of services (closure of delivery rooms in some hospitals, reshuffling of emergency departments, mergers of hospital management teams); definition of a national health plan; reform of primary care (creation of Family Health Units (USFs, *Unidades de Saúde Familiar*)); and creation of long-term care networks. Some of these measures have faced opposition from the (local) population, namely those related to the closure of health care facilities. There is an overall awareness, and concern, about the rise in health care expenditure in Portugal. Most of the reforms that have come into effect have done so too recently to measure any effects at the time of writing.

Executive summary

Portugal is a republic located in part of the Iberian Peninsula in the southwest of Europe, also comprising two Atlantic archipelagos (Azores and Madeira). The Portuguese population reached 10.57 million in 2005. In 2004, life expectancy at birth was 81.4 for females and 74.9 for males. The main causes of death in Portugal are cardiovascular disorders and malignant neoplasms.

The Portuguese health system is organized around an NHS, with some responsibilities delegated to regional bodies. The NHS is managed by the Ministry of Health. The internal organization of the Ministry is being restructured, in the context of a general reform of civil service in the country. Overlapping with the NHS are certain special public and private insurance schemes for certain professions (termed “health subsystems”), which are compulsory for groups of employees, and private VHI.

Total health expenditure (THE) in 2004, as a percentage of gross domestic product (GDP) was approximately 10%, which is above the European Union (EU) average. Health care expenditure expressed in US\$ purchasing power parity (PPP) per capita was 1813 in 2004, which is below the EU average of 2269. The contrast between the values relative to GDP and THE per capita reflect the relatively low GDP level of Portugal within the EU. Public health expenditure has grown since the early 1990s, although its growth has halted during 2005 and 2006. The Portuguese health system is primarily funded through taxation. Public sector funding as a percentage of total expenditure on health care fluctuates around 72%.

The Portuguese NHS establishes the right of all citizens to health protection; a guaranteed universal right to health care (mostly free at the point of use) through the NHS and access to the NHS for all citizens regardless of economic

and social background. In the Portuguese Constitution the NHS is defined as “universal, comprehensive and approximately free of charge”.

Since the mid-1990s, there have been several attempts to shift from retrospective to prospective payments for providers. Although the NHS health care units are paid according to yearly budgets, mid-year financial reinforcements made the payment system closer to historical cost budgeting and cost reimbursement than prospective budgeting. Since 2003, with the transformation of many NHS hospitals into (state-owned) corporate entities, the purchaser–provider split and the use of explicit contracts based on prospective payments have gained momentum. The contractual approach to hospital payments has also been recently extended to the remaining purely state-owned hospitals.

Patients in Portugal participate in health care financing via co-payments and co-insurance. For certain health care services delivered by NHS facilities the patient pays a certain fixed amount per use. For pharmaceutical products, a co-insurance scheme exists, for which the patient pays a certain fixed proportion of the cost of the pharmaceutical. These systems work as third-party payer systems.

The number of all types of health care professionals has increased continuously since the mid-1980s. The growth was slower in physicians, due to tight controls on admissions to medical schools. This has actually created an undersupply of physicians, which will likely lead to shortages in the medium term (5–10 years). Besides this, certain areas of the country face shortages of physicians due to an uneven distribution across the country. Recently, two new schools of medicine have opened, and numerus clausus constraints have been relaxed in existing ones. For other health professions, namely health ancillary technicians, training has occurred at a faster pace.

Health professionals working in the NHS are paid on a salaried basis. In some hospitals, incentive mechanisms such as performance-related pay are being introduced. Primary care reforms, with the creation of USFs, are also introducing activity-related payments. Private practices of physicians and other health care services are paid for on a fee-for-service basis. Many, if not most, involve explicit agreements with the NHS.

Pharmaceutical products are distributed through community and hospital pharmacies. Only physicians can prescribe pharmaceuticals. The co-insurance rate varies depending on the therapeutic importance of the pharmaceutical product. For therapeutic groups with a generic equivalent, cost sharing has evolved to a reference pricing scheme. The reference price is set equal to the highest generic price for the pharmaceutical that has the same form and dosage,

which must, nonetheless, be 35% below the price of the original branded product.

The Portuguese health system has not undergone any major changes in terms of financing, despite the steady growth of public health expenditure since the early 1990s. On the other hand, many measures have been adopted to improve the performance of the health system. Measures since 2002 have included: PPPs for new hospitals; a change in NHS hospital management rules towards a more entrepreneurial approach and a more effective purchaser–provider split; promoting generic substitution of pharmaceuticals; liberalization of prices and entry onto the OTC market; administrative price reductions for pharmaceutical products; introduction of a reference pricing mechanism for pharmaceuticals facing competition from generics; regular updates of the co-payments for public health care services; reorganization of the public network of services (closure of delivery rooms in some hospitals, reshuffling of emergency departments, mergers of hospital management teams); definition of a national health plan; reform of primary care (creation of USFs); and creation of long-term care networks. Some of these measures have faced opposition from the (local) population, namely those related to the closure of health care facilities. There is an overall awareness, and concern, about the rise in health care expenditure in Portugal. Most of the reforms that have come into effect have done so too recently to measure any effects at the time of writing.

The Portuguese health system has been under the political spotlight in recent years. Despite improvements to population health, growing concern about spending levels and an increasing awareness that there is a fair amount of waste in terms of resource utilization have motivated many policy measures. Although controlling costs has been an important driver behind some of the government interventions, other measures were actually taken without careful and detailed analysis of the cost implications.

Moreover, health care reform has been widespread, touching all areas of the system to differing degrees, including: public health, primary care, hospital care, long-term care, pharmaceutical market, PPPs, regulation, human resources and new investments in capacity.

In terms of the health of the population, the National Health Plan is a major landmark, as a guide for public action aimed at obtaining health gains for the population. The National Health Plan covers the period 2004–2010, and implementation is currently under way. However, the pace seems to be slower than anticipated. A major challenge for the Portuguese health system is, therefore, to implement the National Health Plan and to monitor the achievements made in terms of health gains.

Primary care was also subject to a major change, with the ongoing implementation of USFs – multidisciplinary teams formed voluntarily – aimed at providing better care to the population.

The main challenges in hospital care are the reduction of waste without harming quality of care, and redefinition of the role of hospitals in the health system in conjunction with the recent developments in primary and long-term care.

Traditionally, long-term care has seen little public sector involvement. Policy measures since 2005 were designed to change this picture. Taking advantage of existing institutions, many non-profit-making and private, the development of a network of integrated long-term care is envisaged. It aims at reducing costly acute hospital care episodes and admissions by substitution for care that is of lower cost and closer to the community. Given that such policies have only been enacted recently, it is too early to assess the situation in full.

Other policies, such as PPPs and regulation by the Health Regulatory Agency (HRA), have so far produced few results (but lots of “noise”). The clarification of their role remains an issue.

For many of the reforms, the two main points of import are: (a) they mostly aim at improving efficiency of the health system, namely public provision; and (b) the jury is still out, as they have been implemented too recently for a fair appraisal to be carried out. The legal changes that have occurred are yet to materialize in actual changes in the health system. As has happened in the past, there is a risk that many of them may not translate into actual changes, and that unanticipated effects may emerge.

1 Introduction

1.1 Geography and sociodemography

Portugal is part of the Iberian Peninsula in the south-west of Europe. The archipelagos of Azores (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 (maximum 960 km from north to south and 220 km from east to west), with 832 km of Atlantic coastline and a 1215 km inland border with Spain.

The River Tagus, which rises in the 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. 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 latest estimates, the total resident population of Portugal was 10.57 million at the end of 2005. This represents a 5.26% increase since the mid-1990s. It also represents a 2.26% increase since the last census in 2001 (INE, 2001). Population density is 114.78 per km², similar to Slovakia, Hungary and France.

Recent legal and illegal immigration from Brazil and central and eastern Europe, together with the more traditional immigration from Africa, are presenting some challenges to the Portuguese health care system. The challenges result both from illegal immigrants having difficulty accessing health care providers (exacerbating health inequalities in the population) and from the prevalence of tropical diseases particular to these groups (GDH, 2004). The National Health Service (NHS) works with nongovernmental organizations (NGOs) due to both the better knowledge NGOs have about the social, economic and cultural context of illegal immigrants and the absence of the official constraints associated with governmental institutions.

According to 2005 estimates, the legal immigrant population represents 2.61% of the resident Portuguese population (INE, 2007). A vast majority of these immigrants (52%) live in the Lisbon area. Approximately 78% of them are in the active age groups (15–64 years old), confirming the strong economic reasons for migrating to Portugal. Immigrants from eastern European countries have become more numerous since the mid-1990s. A distinctive feature of this group relative to other immigrants is its higher literacy and higher degree of professional qualifications. For example, the *Fundação Calouste Gulbenkian* promoted the professional recognition and adaptation of 105 physicians originating from eastern Europe who were working in construction or in low-end services (e.g. cleaning services).

While in 1970 only 25.9% of the population lived in urban areas, this rose to 29.4% in 1980, 46.7% in 1990, 53.0% by 2000, and 55.1% by 2004, according to the latest data available (Table 1.1). This is clearly below average for the European Union (EU) Member States prior to May 2004 (EU15), which is approximately 70% (WHO Regional Office for Europe, 2007). The two main metropolitan areas are greater Lisbon (resident population 2.013 million in 2005) and greater Oporto (population 1.276 million in 2005). The migration of the population from the interior to the coastal cities has been a constant feature of the Portuguese 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 1970 (20.0 live births per 1000 population), and in 1990 the crude birth rate for Portugal was 11.80 live births per 1000 population (Table 1.1), below the EU15 average of 12.02 for the first time since 1970 (WHO Regional Office for Europe, 2007). By 2004 the number of births per 1000 population had declined to 10.4 (see Table 1.1).

Table 1.1 Population/demographic indicators, 1970, 1980, 1990, 2000, 2004

	1970	1980	1990	2000	2004
Age dependency ratio (dependants to working-age population)	0.61	0.57	0.51	0.48	0.49
Birth rate, crude (per 1000 people)	20.00	16.20	11.80	11.60	10.40
Death rate, crude (per 1000 people)	10.30	9.70	10.40	10.50	9.70
Fertility rate, total (births per woman)	2.76	2.19	1.43	1.52	1.42
Population ages 0–14 (% of total)	28.80	25.90	20.40	16.20	15.90
Population ages 15–64 (% of total)	62.00	63.60	66.20	67.60	67.20
Population ages 65 and above (% of total)	9.20	10.50	13.40	16.10	16.90
Population density (people per km ²)	98.80	107.00	108.00	112.00	115.00
Population growth (annual %)	-0.58	1.08	-0.41	0.51	0.58
Population, female (% of total)	52.60	51.60	51.80	51.80	51.70
Population, total (thousand)	9 040	9 770	9 900	10 200	10 500
Urban population (% of total)	25.90	29.40	46.70	53.00	55.10

Source: World Bank, 2006.

The median age of the population has been steadily rising. From 1986 to 1996, it rose by 5 years, from 31 to 36. By 2005, it had settled at approximately 40 years of age. The dependency ratio fell from 0.57 in 1980 to 0.49 in 2004 (based on the relation of those under 15 and over 65 years of age to the remainder of the population) (see Table 1.1). 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 the immigrant population (INE, 2003).

1.2 Economic context

Over the past few years, the Portuguese economy has faced a period of very low and even negative growth. In fact, in 2003 the country was in recession.

Since 2002, a number of macroeconomic disequilibria have existed, with the most visible effect being the increase in the government budget deficit, as well as a rise in unemployment levels. Table 1.2 shows the main macroeconomic indicators for the latest available year. Inflation settled at approximately 3.0% in 2006, which was approximately 1 percentage point above the Euro Area inflation rate. In 2005, gross domestic product (GDP) growth rate was 0.4%. The most recent data from the Portuguese Central Bank estimate 2006 GDP growth to be approximately 1.2%. In 2002, GDP per capita was €12 376, and in 2005 it increased to €13 549. Unemployment levels have increased yearly since 2002, from 6.1% in 2002 to 8.2% by the end of 2006.

2006 was the first year of a recovery that is expected to boost the Portuguese economy to reach average EU growth levels. This recovery has been sustained by an increase in exports, as well as by the strong measures and reforms being implemented by the Government in order to correct the main macroeconomic disequilibria, such as the government budget deficit and unemployment. The main policy measures included a value-added tax (VAT) increase in 2005, several spending cuts and a global reform of civil service rulings (still under way).

Table 1.2 Macroeconomic indicators, latest available year

		Year
GDP (constant LCU) (million €)	143 564.9	2005
GDP per capita, PPP (constant 2000 international \$)	18 000	2004
GDP per capita (constant LCU)	13 549	2005
GDP, PPP (constant 2000 international \$, billion €)	189	2004
GDP growth (last 10 years average %)	6.07	2005
GINI index	38.50	1997
Overall general government balance, excluding temporary measures (% GDP)	-3.4	2006
Agriculture, value added (% of GDP)	3.67	2004
Industry, value added (% of GDP)	26.70	2004
Manufacturing, value added (% of GDP)	16.90	2003
Current account balance (% of GDP)	-9.5	2005
Labour force, total	5 544 900	2005
Unemployment, total (% of total labour force)	8.2	2006
Official exchange rate (US\$, €, period average)	1.24	2005
Nominal short-run interest rate (%)	2.2	2005
Nominal long-run interest rate (%)	3.4	2005
Inflation rate	3.0	2006

Sources: Government of the Republic of Portugal, 2006; World Bank, 2006; OECD, 2006; Portuguese Central Bank, 2006; INE, 2005a.

Notes: PPP: Purchasing power parity; LCU: Local currency unit; GDP: Gross domestic product.

1.3 Political context

Portugal has been a constitutional democratic republic since 1974, when the revolution put an end to the 48-year 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 directly elected by means of universal suffrage, through national elections.

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 five 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 State Representative (*Representante do Estado*) 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 São Tomé and Príncipe all became independent after the 1974 revolution, which ended the 48-year dictatorship lead by Salazar (and Marcello Caetano in the final years of the regime) and 13 years of war in the African colonies.

Since the 2005 general elections, the Government is formed by the Socialist Party, which enjoys a majority of seats in the Parliament.

1.4 Health status

Portuguese life expectancy at birth practically doubled during the 20th 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). This trend has continued to develop since the mid-1980s (see Table 1.3), making life expectancy in Portugal converge with the EU average. In 2005 average life expectancy at birth in Portugal was 78.2 years,

while the EU15 average was 78.8 years (OECD, 2006). There is a remarkable difference between estimates of life expectancy for men and for women in Portugal: the 2005 figures were 81.4 years for women and 74.9 years for men (Table 1.3).

Child health indicators, although improving since the early 1960s, have suffered dramatic reductions since the 1974 revolution and are currently near the average European level. The infant mortality rate decreased fivefold between 1970 and 1990, and decreased from 10.8 per 1000 in 1991 to 3.5 per 1000 in 2005, below the average infant mortality rate for EU15 Member States (4.1 per 1000 live births in 2004).

Infant mortality has also declined, as mentioned above (see also Table 1.3). The perinatal mortality rate dropped from 12.1 per 1000 in 1991 to 5.6 per 1000 in the year 2000 and further to 4.4 per 1000 in 2004 (Table 1.3). From 1990 to 2004 the neonatal mortality rate decreased from 6.9 to 2.6 per 1000. Although there has been a positive evolution of infant mortality indicators, there are still some regional disparities of concern (see Table 1.4). In the Azores, the infant mortality rate in 2005 was 6.3 per 1000, twice the mortality rate in the Centro region (2.8 per 1000 live births, Nomenclature of Units for Territorial Statistics (NUTS) II level) (INE, 2005c). The successful evolution of infant mortality, to the point where the level in Portugal is lower than the EU average, may, as well as economic growth and social development (especially after accession to the European Communities in 1986), 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 (see Section 6.1 “Public health”).

Improvements in the health status of the Portuguese population seem to be associated with increases in human, material and financial resources devoted to

Table 1.3 Mortality and health indicators, 1980, 1990, 2000, 2004, 2005

	1980	1990	2000	2004	2005
Life expectancy at birth, female (years)	74.6	77.6	80.3	81.6	81.4
Life expectancy at birth, male (years)	67.5	70.6	73.2	74.9	74.9
Life expectancy at birth, total (years)	71.2	74.1	76.8	78.3	78.2
Mortality rate (per 1000 female adults)	8.7	9.6	9.5	9.0	–
Mortality rate (per 1000 male adults)	10.6	11.1	11.2	10.5	–
Mortality rate, crude (per 1000)	–	–	–	–	10.2
Infant deaths per 1000 live births	24.3	11.0	5.5	3.9	3.5
Probability of dying before age 5 years (per 1000 live births)	29.2	14.0	7.3	5.2	–

Sources: WHO Regional Office for Europe, 2007; OECD, 2006c; INE, 2005a (for all 2005 data).

Table 1.4 Infant mortality rates (per 1000 live births), by region

	1999	2000	2001	2002	2003	2004	2005
National average	5.6	5.5	5.0	5.0	4.1	3.8	3.5
Continent	5.4	5.3	4.8	4.9	4.1	3.7	3.4
North	6.5	5.8	5.9	5.4	4.2	3.9	3.8
Centre	4.7	4.5	3.9	3.9	3.9	3.2	2.8
Lisbon	4.8	5.0	4.4	5.2	3.6	3.8	3.3
Alentejo	3.9	5.3	3.7	4.4	5.2	3.4	3.5
Algarve	4.9	5.5	4.3	5.1	4.5	4.2	3.6
Azores	9.5	8.1	5.1	6.5	2.9	6.3	6.3
Madeira	5.2	8.1	8.2	5.8	7.9	3.7	3.4

Source: INE, 2005b.

Table 1.5 Main causes of death (standardized mortality rates), 1995, 2000, 2003, 2004, 2015 (forecast)

Cause of death	1995	2000	2003	2004	2015'
Diseases of the circulatory system	332.8	272.1	244.0	217.2	238.6
Cerebrovascular disease	179.6	139.8	113.2	97.6	110.4
Ischaemic heart disease	70.5	61.1	59.6	54.2	57.3
Malignant neoplasms of	169.4	164.2	159.4	154.3	145.8
stomach	24.0	20.1	17.5	16.6	16.1
lung	21.8	22.5	23.2	22.3	24.3
breast	25.2	22.4	21.1	19.1	18.2
prostate	28.6	30.0	25.0	24.5	22.6
Diseases of the respiratory system	61.5	66.8	55.2	49.0	52.6
Diseases of the digestive system	38.9	31.4	32.3	31.6	35.2
Diabetes mellitus	23.1	21.1	27.3	26.1	28.5
Land transport accidents	23.1	12.4	16.7	14.5	14.1
Undefined cause of death	94.9	96.3	66.6	58.6	45.5
All causes	838.3	754.0	700.7	646.9	578.0

Source: Personal communication from the General Directorate of Health (GDH).

Note: ' forecast.

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 (as shown in Table 1.4), and also between social classes. These disparities are evident in the variation of some health indicators such as mortality rates (the average for crude malignant neoplasm mortality rates, over the period 1999–2003, ranged between 1.9 per 1000 in the North region and 3.4 in lower Alentejo) and infant mortality rates (4.6 per 1000 in the Lisbon region and 6.9 in the Alentejo region, over the same period). There are also disparities in the supply ratio of physicians (6.0 per 1000 in Lisbon and Oporto, whereas in lower Alentejo the 2004 figure was only 1.6) and nurses (6.0 per 1000 in

Lisbon and Oporto, while in lower Alentejo in 2004 there were 2.4 nurses per 1000 inhabitants) to population (INE, 2004; INE, 2005a).

The leading causes of death are shown in Table 1.5. Since the mid-1980s, the main causes of death have been diseases of the circulatory system, cerebrovascular disease and malignant neoplasms. These are likely to remain the main causes of death of the Portuguese population for the coming decades, according to a recent General Directorate of Health (GDH (DGS, *Direcção-Geral da Saúde*)) study (see Table 1.5). One should not underestimate the extremely high level of undefined causes of death, suggesting there might be weaknesses in data collection. Diseases of the circulatory system, together with malignant neoplasms, account for over 50% of deaths in 2004, according to the latest figures provided by the National Statistics Institute (INE, *Instituto Nacional de Estatística*). The mortality rate of these diseases has been above the EU average over recent decades, despite the clear descending trend. In contrast, Portugal has one of the lowest mortality rates from cardiac ischaemic disease in the EU. The most frequent fatal tumours were gastrointestinal tumours, both among men and women.

Another interesting feature is the analysis of “avoidable deaths”. According to 2001 data, men die from avoidable causes much more than women do, essentially due to cerebrovascular disease and infant mortality. This can be seen in almost every age group, particularly among the older population (Santana, 2005). A large share of premature mortality among men comes from traffic accidents. The mortality rate associated with motor vehicle accidents was 5.1 in 2001, the highest in the EU15 Member States (Santana, 2005). Excessive speed, dangerous manoeuvres and high blood alcohol levels are the main causes of this problem and have been targeted with specific legislation and law-enforcement measures (see Section 6.1 “Public health”).

Disability-adjusted life expectancy (DALE) levels in Portugal are worse than the average for EU15 members, both for men and for women (Table 1.6). The

Table 1.6 Disability-adjusted life expectancy, by gender, 1999–2002^a

Countries	1999			2000			2001			2002		
	MF	M	F									
Portugal	69	66	73	67	64	69	67	64	69	69	67	72
Spain	73	70	76	71	69	73	71	69	73	73	70	76
United Kingdom	72	70	74	69	68	70	70	68	71	71	69	72
EU15	72	–	–	70	–	–	70	–	–	72	–	–

Source: WHO Regional Office for Europe, 2007.

Notes: ^a Due to relatively large year-to-year fluctuations, the empirical estimates should be regarded with caution, as indicative; EU15: European Union Member States before May 2004.

trend over the period 1999–2002 has been similar to that observed in Spain and the United Kingdom. Men have a clearly lower DALE than women do.

The number of both total and new tuberculosis (TB) cases has been decreasing over the last decade. In 2004, the incidence rate was down to 35 per 1000 population, from 49 per 1000 population in 1995. However, when compared to the data from EU15 Member States, it is still above average.

Portugal has one of the highest prevalence of human immunodeficiency virus (HIV) infection in Europe (280 per million population in 2004), more than twice the highest rates observed in the other EU countries. The relative size of incidence data is similar (Table 1.7). The High Commissariat for Health (ACS, *Alto Comissariado para a Saúde*) (through the National Coordinator for HIV/AIDS (acquired immune deficiency syndrome), which has replaced the National Committee against AIDS in the area of prevention and treatment of AIDS) has identified a set of priority areas for intervention, such as epidemiological information, health education, national counselling and early detection centres,

Table 1.7 Factors affecting health status, 1990, 1995, 2000–2003

	1990	1995	2000	2001	2002	2003
HIV incidence per 100 000	–	–	40.4	23.7	24.3	21.5
Pure alcohol consumption, litres per capita	12.8	11.9	10.6	10.1	9.5	9.4
Spirits consumed in pure alcohol, litres per capita	1.9	1.6	1.5	1.4	1.4	1.4
Beer consumed in pure alcohol, litres per capita	3.4	3.4	3.1	3.1	2.9	2.9
Pure alcohol consumed, litres per capita, age 15+	16.0	14.4	12.6	12.1	11.3	11.1
Average number of calories available per person per day (kcal)	3 441	3 552	3 741	3 745	3 769	3 746
% of total energy available from fat	32.2	32.1	33.6	33.4	33.7	34.2
% of total energy available from protein	11.8	12.3	12.6	12.8	12.6	12.5
Total fat intake, grams per capita per day ^a	–	–	–	139	141	142
Total calories intake, calories per capita per day ^a	–	–	–	3 745	3 769	3 747
Total protein intake, grams per capita per day ^a	–	–	–	120	119	117
Alcohol consumption, litres per capita, age 15+ ^a	–	–	–	12.3	11.5	11.4

Sources: WHO Regional Office for Europe, 2007; ^aOECD, 2006.

Table 1.8 WHO Health for All immunization categories (percentage of children under 3 years)

Category	%	Year
Infants vaccinated against:		
tuberculosis	89	2005
diphtheria	93	2005
tetanus	93	2005
pertussis	93	2005
poliomyelitis	93	2005
hepatitis B	94	2005
mumps	96	2003
rubella	96	2003
Children vaccinated against measles	93	2005
Infants vaccinated against invasive disease due to haemophilus influenza type B	93	2005

Source: WHO Regional Office for Europe, 2007.

and national centres for administration of combined therapy and extra-hospital support activities (see Section 6.1 “Public health”).

Data on immunization in Portugal are reliable and show the high coverage of the population (Table 1.8). Figure 1.1 shows a level of measles vaccination coverage that is comparable to the EU15 average but below the current EU25 (European Union Member States before January 2007) average.

Maternal and child health indicators (Table 1.9) show a marked improvement over the period, leading to a convergence with the EU average. This is one of the success stories in the Portuguese health system since the mid-1970s.

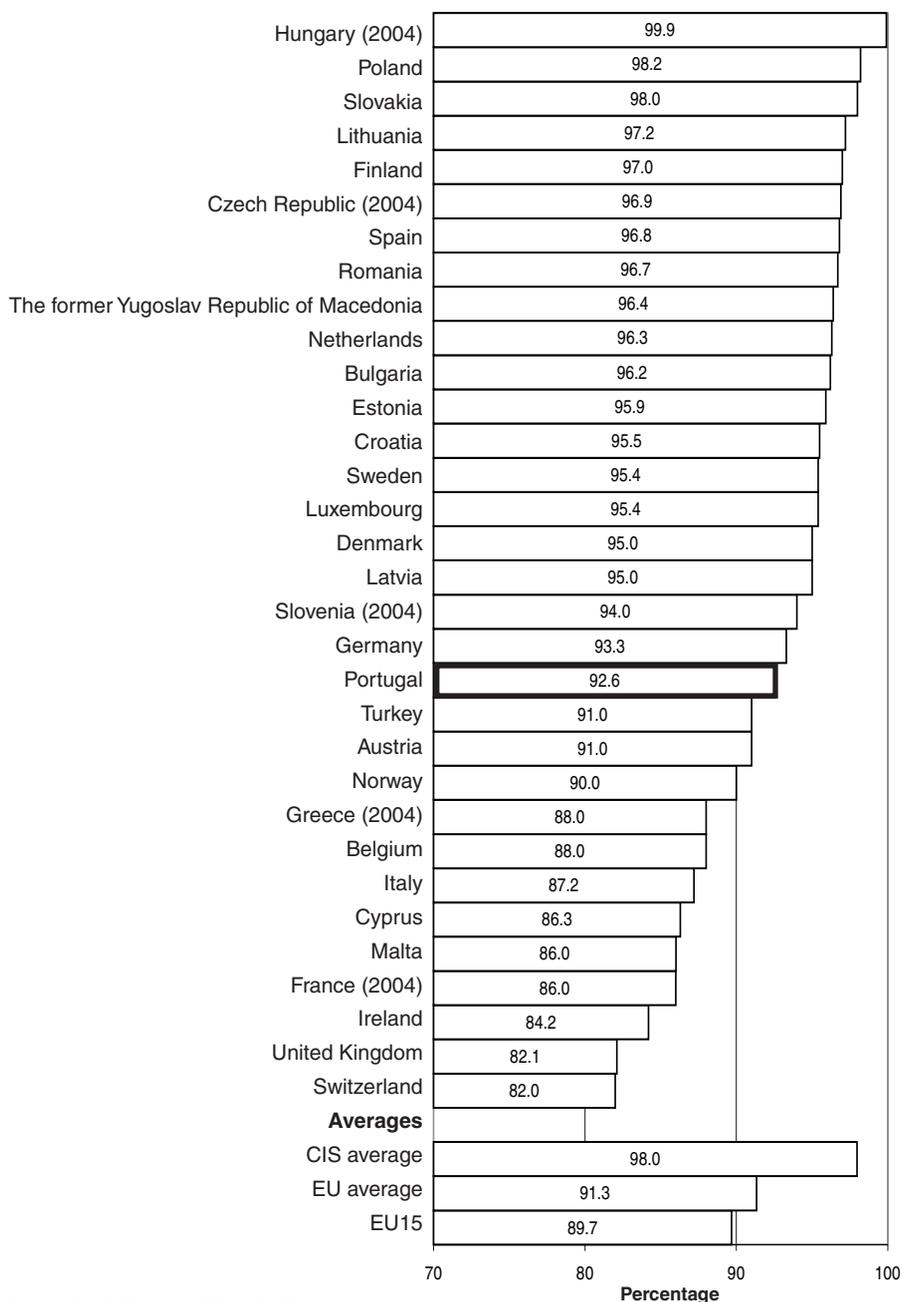
Over recent decades the health status of the Portuguese population has improved. This is due both to more significant progress in 30% of the municipalities and to the diminishing disparities among regions between 1991 and 2001 (Santana, 2005). Both effects are related to social and health factors and behaviours, as can be seen in Table 1.7. However, there is still some concern over regional disparities, particularly between urban-coastal and rural-interior regions. The latter had, and still have, the worst health condition. Rural regions

Table 1.9 Maternal and child health indicators, 1980, 1985, 1990, 1995, 2000, 2004

Indicators	1980	1985	1990	1995	2000	2004
Neonatal deaths per 1000 live births	15.50	12.20	7.00	4.74	3.41	–
Perinatal deaths per 1000 births	22.40	17.40	10.50	7.21	5.20	5.64
Maternal deaths per 100 000 live births	19.60	9.96	10.30	8.40	2.50	8.23

Source: WHO Regional Office for Europe, 2007.

Fig. 1.1 Levels of immunization for measles in the European Union and selected countries, 2005



Source: WHO Regional Office for Europe, 2007.

Notes: CIS: Commonwealth of Independent States; EU: European Union; EU15: EU Member States before May 2004.

are also the poorest in the country. Health inequalities are associated with economic and social factors, such as income, living conditions, unemployment and health care (coverage, utilization rates, among others). The study led by Santana (2005) shows a wide range of health status among the Portuguese population, based on demographic, social and economic inequalities. Of the 275 municipalities analysed in 1991, 144 (52.3%) showed a health status below the mean. Most of them were located in the countryside. By 2001, although there was an improvement in the overall health status, this regional inequality seemed to have prevailed (Santana, 2005).

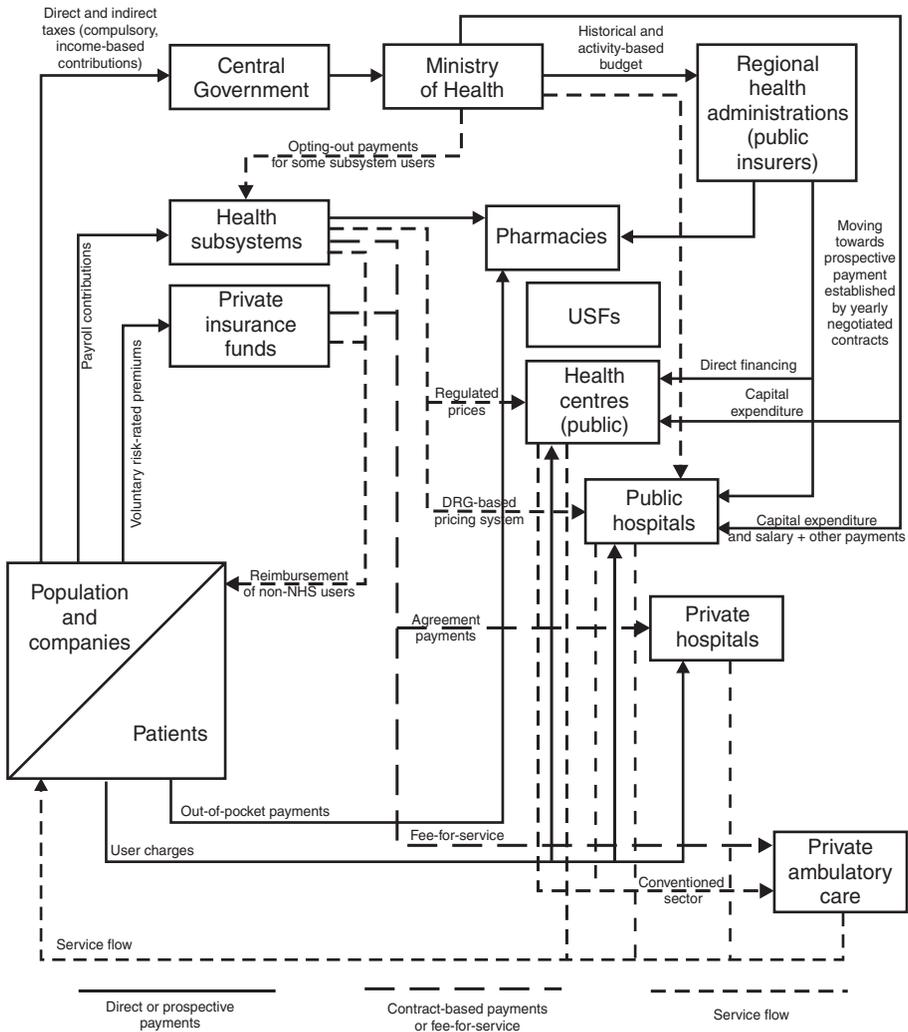
2 Organizational structure

2.1 Overview of the health system

The Portuguese health care system is characterized by three coexisting, overlapping systems: the NHS; special public and private insurance schemes for certain professions (health subsystems); and private voluntary health insurance (VHI). Figure 2.1 outlines the relationships between the various bodies, organizations and institutions comprising the health care system.

The health system in Portugal is a network of public and private health care providers, each of them connected to the Ministry of Health and to the patients in its own way. The key relationships are shown in Fig. 2.1, with the Ministry of Health coordinating all health care provision and the financing of public health care delivery. Most of the population is entitled to choose among (or can use both) two health care insurers: NHS and VHI. Part of the population, approximately 20–25%, are also covered by a health subsystem, which means that they have a third option for the choice of care, although financing of the health subsystem is compulsory for certain beneficiaries (as it is occupation-based health insurance). The providers can be either public or private, with different agreements with respect to their financing flows, ranging from historically based budgets to purely prospective payments. Out-of-pocket (OOP) payments make for a significant portion of the financial flows. Only capitation payments are, at least for the moment, absent from the financial arrangements.

Fig. 2.1 Overview chart of the health system



Source: Authors' compilation.

Notes: DRG: Diagnosis-related group; USFs: Family Health Units; NHS: National Health Service.

2.2 Historical background

In order to understand 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 18th century, health care was provided only for the poor by the

hospitals of religious charities called *Misericórdias* (see “*Misericórdias*” within Section 2.3), which are still first and foremost religiously affiliated institutions. During the 18th century, the State established a limited number of teaching hospitals and public hospitals to supplement this 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 public health legislation act in 1901 enabled the creation of a network of medical officers responsible for public health. 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 TB, 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 Bismarckian model which provided cover for the employed population and their dependants through social security and sickness funds. This social welfare system was financed by compulsory contributions from employees and employers, and provided outpatient 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 to the system in 1959, 1965 and 1971.

Until 1971, the Government did not assume responsibility for providing health care services to the population. Health care provision therefore consisted of many small independent and uncoordinated subsystems that were used in order to accomplish any kind of health policy objective. By 1971, the right to health of the citizens was recognized. This laid the groundwork for certain measures to be taken after the 1974 revolution. Charity and private institutions are no longer the “owners” of health care delivery to the population. Among the measures taken in 1971 were those regarding health care prevention and promotion. These were issues of great concern in the international community, as can be seen by the resolutions taken in Alma-Ata, seven years later. Despite the efforts made prior to 1979, the following major problems still existed. (For more information on the evolution of the Portuguese health system, see Simões (2004).)

- asymmetric geographical distribution of health facilities and human resources;
- poor sanitation;
- population coverage not being universal (although there is no precise estimate of coverage);
- centralized decision-making;

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

The move towards greater public provision of health care and a commitment to universality was embodied in the 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 people and other health-related social welfare activities.

After the revolution of 1974, a process of health services restructuring 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, the Government assumed ownership and responsibility of over 2000 medical units or health posts situated throughout the country. These had previously been operated under the social welfare system for the exclusive use of social welfare beneficiaries and their families. The principle of citizens' 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". After the Constitution's revision (1989), the "free of charge" has been changed to "approximately free of charge", a term that has been subject to a discussion about its exact meaning (essentially, detailing the legal meaning of the term to make clear that the Constitution did not preclude the existence of co-payments in the NHS). 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. The law brought together public health services and the health services provided by the social welfare system, leaving the general social security system to provide cash benefits and other social services (e.g., for older people 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; and a tax-financed system of coverage in the form of the NHS. (Only when health care could not be provided through the NHS would outside services be covered.)

Before 1979 and the establishment of the NHS, the Portuguese State had traditionally left the responsibility for paying for health care to the individual patient and her/his family. Care of the poor was the responsibility of charity hospitals and care outside of hospital 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.

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 system and religious charities, some aspects of the pre-NHS system persisted. In particular, the health subsystems (from the Portuguese *subsistemas*) continued to cover a variety of public and private employees. These schemes offered greater choice of provider than would be available under the NHS and a higher reimbursement level when patients resort to private providers. 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 Azores and Madeira, health policy followed the same general constitutional principles of the NHS, but was implemented locally by regional governments who retained some flexibility.

In addition, private provision has always been available, mainly in ambulatory care (although some in hospital care as well). Physicians' and dentists' private offices (evolving over time into small clinics), laboratory tests, radiology and imaging, and pharmaceutical products are the main areas of private provision.

At the start of the 21st century the health care system in Portugal continues to face problems such as:

- inadequate public ambulatory services, with high use of hospital emergency departments;
- long waiting lists for surgical procedures;
- mixed evidence about satisfaction of consumers and professionals with public services (some surveys show a high degree of satisfaction with the system, while others indicate the need for change – in these cases, it is important to consider the exact service under analysis, as dissatisfaction is higher about waiting lists and congestion related to access to hospital emergency departments);

- a major increase in health expenditure and difficulties with cost control;
- increased demand for health care from vulnerable groups; and
- difficulty in reducing mortality due to traffic accidents and lifestyle-related diseases (despite the marked improvement in the last couple of years, there is still room for further reductions).¹

The discussion of how these problems are being addressed through further reforms is included in the following chapters of this report. The relevant legislation and reforms are discussed in detail in Chapter 7 “Principal health care reforms”.

Table 2.1 The health care system: historical background and recent reform trends – timeline²

1901	The first act of public health legislation was published, whereby a network of medical officers responsible for public health was created. It followed the international trend set by several institutions, which tried to develop the basis of public health movement. This is thought to be the root of “modern sanitarianism” (Ricardo Jorge reform).
1940	Establishment of the first (specific) Health Department within the Ministry of Internal Affairs.
1944	The Social Services Statutory Statute was published, comprising a “minimum state intervention” principle in the social arena.
1945	Public maternity and child welfare services were established. Vertically organized national institutes and programmes for TB, leprosy and mental health, which were already operating, were also legally established.
1946	The law that laid the groundwork for hospital organization and the promotion of new hospital buildings, financed by Government funds, but run by <i>Misericórdias</i> . Hospital regionalization was initiated. Hospitals were to reorganize into three levels, municipality, district and region, ensuring technical cooperation among them. A mandatory social health insurance system for a limited number of professions was created, the <i>Caixas de Previdência</i> .
1958	The Ministry of Health and Assistance is created.
1963	Statute of Health and Assistance, according to which the State is obliged to co-finance the installation and functioning of health facilities.
1968	The Hospitals Regulatory Act defined the nature and attributions of hospital care.

¹ There were 1629 deaths due to traffic accidents in 2000, whereas in 2006 this number had fallen to 850. The number of severely injured patients dropped from 6918 to 3483 (Ministry of Law and Order, 2006).

² A more in-depth view of the historical background and reform trends can be found in Viegas, Frada, Miguel (2006).

- 1971 The State was acknowledged to be responsible for health policy and implementation, for the integration of health activities, and for investment in health prevention and promotion. Citizens' right to health was also recognized. Health centres were created.
- 1974 The democratic revolution occurred on 25 April, which ended a long period of right-wing political dictatorship. As a result, health services administration was taken from private holders that had been financed mainly by public funds, aiming to give the whole population access to health care, irrespective of ability to pay.
- 1976 The Portuguese Constitution was approved, which embodied citizens' right to health care. It recognizes citizens' right to health care by "the creation of a universal, free-of-charge national health system".
- 1979 The National Health Service Law created a universal health system, free at the point of use.
- 1982 The career of general practitioners (GPs)/family doctors was created.
- 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 DRGs was issued for third-party payers with respect to NHS hospital inpatient use by their beneficiaries.
The Portuguese Constitution was reviewed, and states "national health service is universal and tends to be free-of-charge, taking into account citizens' social and economic conditions".
- 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 profit-making and non-profit-making sectors, through contracting with the NHS; the system's operation and management was decentralized to 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. Private financing of health care was allowed, and incentives for private health insurance were given. The possibility of creating an alternative health insurance system was also approved.
- 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 internal organization 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 (RHAs, Administração Regional de Saúde) were established.
- 1995 The first attempt at putting an NHS hospital under the management control of a private consortium was initiated with the launch of a public bid for proposals according to a set of predefined terms.

- 1997 Contracting Agencies (initially named Accompanying Agencies) were created – one in each RHA – 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 GPs working at health centres was introduced. The intention was to pay according to capitation and performance, instead of the traditional payment by fixed salary. Adherence to this experimental system was voluntary.
A National List of Health Equipment was published for the first time.
A law on the principles of mental health policy was published, whereby community care is given priority over institutional care under different arrangements. The law also regulated the compulsory inpatient status of individuals with mental illness.
- 1999 A National Health Strategy and goals for the period 1998–2002, involving a broad range of social partners, were 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 into frameworks for hospitals, health centres and other health care provider entities. Primary health care reform was based on financially autonomous health centres, with networks of primary health care teams. This legislation was not implemented.
The Local Health Unit of *Matosinhos* became the first example of effective integration of local hospitals and related health centres into a unique provider entity. A law was approved in Parliament to fund a special programme 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.
Responsibility Centres in hospitals were set up as a means of establishing intermediate management levels and promoting decentralization of authority and of responsibility, in order to achieve higher levels of efficiency in the NHS.
- 2000 The use of an NHS Identity Card became mandatory.
- 2001 Regulations for the licensing and evaluation of private clinics and dentists' private practices were published.
- 2002 A framework for the implementation of PPPs for the building, maintenance 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. A total of 34 hospitals, corresponding to approximately 40% of all NHS hospitals, were transformed into public enterprises.
A Decree established NHS drugs prescription using the common international denomination (International Nonproprietary Name, INN) as obligatory, as well as the conditions under which prescribed brands can be substituted by generics when dispensing.
Reference prices for pharmaceuticals were introduced to cap state co-payment levels.
- 2003 The HRA was created, to ensure citizens have access to health care and to guarantee competition among health care providers.
- 2004 The National Health Plan for 2004–2010 was approved.

- | | |
|------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2005 | Law that allows the selling of OTC products in other authorized establishments (i.e., outside pharmacies).
The number of hospitals transformed into public enterprises was increased. A new legal statute was adopted, to signal that there is no intention of privatization. |
| 2006 | USFs were created. The goal is to bring GPs closer to patients. The GP payment system depends on their performance and on the case-mix of their patients. |
| 2007 | The values of co-payments were updated. Co-payment was expanded to ambulatory surgery and hospital admission. The prices of pharmaceutical products decreased for the second consecutive year, by administrative ruling. |

Notes: TB: Tuberculosis; GP: General practitioner; NHS: National Health Service; RHA: Regional health administration; DRG: Diagnosis-related group; OTC: Over-the-counter; USF: Family Health Unit; PPPs: Public-private partnerships.

2.3 Organizational overview

This section describes the administrative structure of the NHS.

Ministry of Health

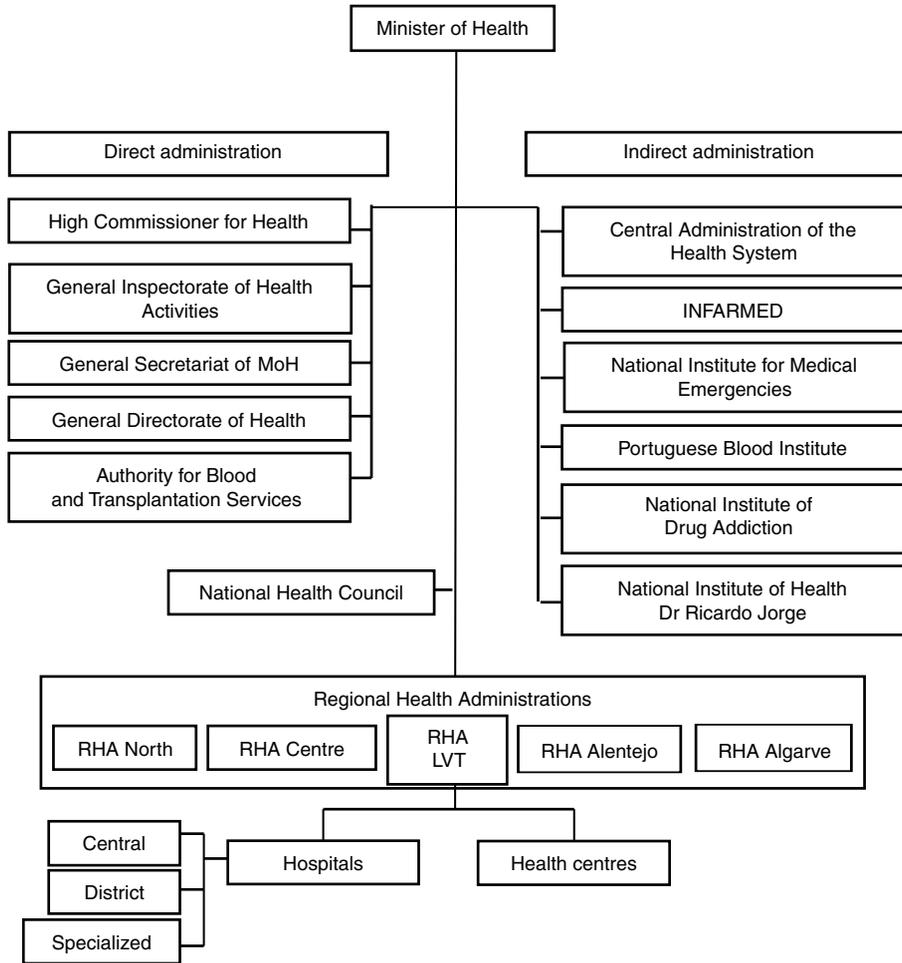
The central Government, through the Ministry of Health, is responsible for developing health policy and overseeing and evaluating its implementation. Figure 2.2 outlines the organization of the Ministry of Health. Its core function is the regulation, planning and management of the NHS. It is also responsible for the regulation, auditing and inspection of private health services providers, whether they are integrated into the NHS or not.

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, under delegation of the Minister of Health.

The Ministry of Health is made up of several institutions: some of them under direct government (*Estado*) administration; some integrated under indirect government administration; some having public enterprise status; an HRA and a consultative body. The HRA is formally independent in its actions and decisions, though its budget comes mostly from the Ministry of Health.

The following central services are under the State's direct administration, which means that they are run by the Ministry of Health (in terms of their hierarchic relation).

Fig. 2.2 Organizational chart of the Ministry of Health



Source: Authors' compilation.

Notes: MoH: Ministry of Health; INFARMED: National Authority on Drugs and Health Products; LVT: Lisbon and Vale do Tejo.

• **The High Commissariat for Health (ACS)**

The aims of the ACS are to provide technical support on policy development and strategic planning in the health sector; to guarantee the development of vertically integrated health programmes; to assure international relations coordination; to assess policy execution, planning instruments and results; and to elaborate, coordinate and evaluate the National Health Plan.

- **The General Inspectorate of Health-related Activities (IGAS, *Inspecção-Geral das Actividades em Saúde*)**

The IGAS performs the disciplinary and audit function for the NHS and audits NHS institutions and services.

- **The General Secretariat of Health (SG, *Secretariado-Geral da Saúde*)**

The SG provides technical and administrative support to the other sections of the Ministry, coordinates their work and provides assistance to staff within various government offices. The SG gives support to other institutions, services and bodies not integrated within the NHS, concerning internal resources, legal advice, information and public relations.

- **The General Directorate of Health (GDH, *Direcção-Geral da Saúde*)**

The GDH 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 Authority for Blood and Transplantation Services (ASST, *Autoridade para os Serviços de Sangue e Transplantação*)**

The ASST guarantees quality and safety regarding donation, analysis, processing, storing and distribution of human blood and blood components, as well as human organs, tissues and cells.

The following central services are under the State's indirect administration.³

- **Central Administration of the Health System (ACSS, *Administração Central do Sistema de Saúde*)**

The ACSS is in charge of the management of financial and human resources, facilities and equipment, systems and information technology (IT) of the NHS. It is also responsible for the definition of policy, regulation and planning of health, along with the RHAs, namely in the area of health service contracting.

³ Indirect administration designates activities performed by public institutes or state-owned companies.

- **The National Authority on Drugs and Health Products (INFARMED, *Autoridade Nacional do Medicamento e Produtos de Saúde*)**

INFARMED regulates and supervises the pharmaceuticals and health products sector, following the highest standards of public health protection (see Section 6.6. “Pharmaceutical care”).

- **The National Institute for Medical Emergencies (INEM, *Instituto Nacional de Emergência Médica*)**

The INEM delineates, participates in and assesses the activities and performance of the Integrated System of Medical Emergency, guaranteeing immediate assistance to injured or severely ill patients (see Section 6.5 “Emergency Care”).

- **Portuguese Blood Institute (IPS, *Instituto Português do Sangue*)**

The IPS regulates, at a national level, the pharmaceuticals related to transfusions and guarantees there is a stock of secure blood and blood components available when needed.

- **National Institute of Drug Addiction (IDT, *Instituto da Droga e da Toxicodepência*)**

The IDT promotes the reduction of both legal and illegal drugs consumption, as well as the decrease in drug addictions.

- **National Institute of Health, Dr Ricardo Jorge (INSA, *Instituto Nacional de Saúde Dr Ricardo Jorge*)**

This institute is a state laboratory, the aim of which is to increase gains in the public health sector, along with health monitoring and epidemiological surveillance, either in the field of laboratorial or genetic medicine. It is responsible for conducting, coordinating and promoting health research at the Ministry of Health. It should also produce evidence for policy and action in public health.

- **Regional health administrations (RHAs)**

The NHS, although centrally financed by the Ministry of Health, has had a strong regional structure since 1993 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. The management responsibilities of these boards 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 RHAs are responsible for the regional implementation of national health policy objectives and coordinating 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 primary health care; establishment of agreements and protocols with private bodies; and liaison with government bodies, *Misericórdias*, other private non-profit-making bodies, and municipal councils. They are also in charge of the development of a long-term care network.

- **National Health Council (CNS, *Conselho Nacional de Saúde*)**

The CNS is the consultative body for the Ministry of Health. It is responsible for issuing recommendations and advice on measures to enforce the implementation of health policy objectives. This Council has never actually been put to work, despite its legal existence.

Ministry of Finance

The creation of new posts within the NHS, whether hospital-based or not, requires the approval of the Ministry of Finance. The Ministry of Finance presents a project for inclusion within the state budget, which also includes the NHS budget based on a proposal submitted by the Ministry of Health, for government approval. The state budget is discussed and approved afterwards in Parliament. (See Section 3.4 “Pooling of funds” for more information about this process). The Ministry of Finance also sets the budget for public subsystems.

Ministry of Labour and Social Solidarity

This Ministry 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% (OECD, 2006). 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 older people and people with disabilities. The relations between the two ministries in the long-term care network are described later (see Section 6.7 “Long-term care”).

Ministry of Science and Higher Education

The Ministry of Science and Higher Education is responsible for undergraduate medical education and for academic degrees. Specialty postgraduate training in medicine, however, is the joint responsibility of the Medical Association (*Ordem dos Médicos*) and the Ministry of Health.

Local government

Below the RHAs are the municipalities. For the purposes of health care provision, boundaries are based on geographical proximity rather than administrative areas, so the definition for the purposes of the Ministry of Health is not exactly coterminous with administrative boundaries.

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. Overall, however, the role of municipalities in the Portuguese health system is rather marginal. There is no formal evidence on the subject, but it is possible to make a conjecture that the involvement of the municipalities in health promotion and improvement programmes has not expanded beyond a few specific projects, namely in child oral health, environmental health and behavioural orientation of risk groups.

Health subsystems

Almost three decades after the inception of the NHS in Portugal, the historical remnants of the pre-NHS 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*). In addition to the health insurance coverage provided by the NHS, approximately 25% of the population is covered by the health subsystems or VHI. More precisely, approximately 16% of the population are covered by a health subsystem, approximately 10% are covered by VHI and less than 2% have cumulative coverage from both VHI and health subsystems (INSA, 2007). Health care is provided either directly or by contract with private or public providers (and in some cases by a combination of both). Access is generally limited to members of a specific profession and their families.

Until 2005, the main subsystems operating in the public sector were:

- ADSE (*Assistência a Doença dos Servidores do Estado*), for civil servants;

- SSMJ (*Serviços Sociais do Ministério da Justiça*), for employees of the Ministry of Justice;
- ADMA (*Assistência na Doença aos Militares da Armada*), for the Navy;
- ADME (*Assistência na Doença aos Militares do Exército*), for the Army;
- ADFA (*Assistência na Doença aos Militares da Força Aérea*), for the Air Force;
- SAD PSP (*Assistência na Doença da Polícia de Segurança Pública*), for Police Agents;
- SAD GNR (*Serviços de Assistência à Doença à GNR*), for National Republican Guards.

In 2005, these funds converged into the ADSE, meaning that benefits have been standardized across health subsystems.

In the private sector, the major health subsystems are that of Portugal Telecom (PT-ACS, *Associação de Cuidados de Saúde*) for the employees of the historic telecommunications operator and for postal service employees, and a health subsystem for banking and associated insurance employees (SAMS, *Serviços de Assistência Médico-Social*), set up by their respective unions on a regional basis. 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. PT-ACS was the first fund to sign an opting-out contract with the Ministry of Health. The firm cancelled the contract, effective from January 2007, mainly for financial reasons.

The largest health subsystem, ADSE, which is mandatory for all civil servants, is controlled by the Ministry of Finance. It covers almost 10% of the population (1.36 million enrolled beneficiaries). 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 majority of specialist consultations take place in the private sector whereas the public sector provides the overwhelming majority of GP consultations. According to the data obtained from the preliminary information of the 4th National Health Survey (INSA, 2007), the private sector accounts for 31% of all medical consultations in ambulatory care. Most health centres only have GPs, who should act as gatekeepers to access specialists. Almost all appointments with specialists in the NHS have to be carried out in the outpatient departments of hospitals. Patients with less severe conditions and/or with the

necessary financial means may opt for private practice specialists in ambulatory care, which explains their role and market share.

Misericórdias

Misericórdias are independent non-profit-making 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 Solidarity 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.

Private health insurance companies

On the financing side, the main private actors are the private health insurance companies. VHI was introduced in 1978 (see “Voluntary health insurance”, within Section 3.3). Initially, only group policies were offered, but individual policies have also been available since 1982. Approximately 10% of the population were covered by VHI in 2006 (INSA, 2007). There is a mechanism of double coverage in place, hence increasing the (for the most part specialized) number of medical appointments. People can even benefit from triple (or more) coverage, that is, from the NHS, a health subsystem from their job, acquiring VHI and having coverage from another health subsystem as an extension of their spouse’s coverage. It is not uncommon for beneficiaries of health subsystems to also sign up to VHI. Based on the 4th National Health Survey (INSA, 2007), access to either VHI or health subsystems coverage is associated with better self-reported health status, and with higher usage of resources.

Professional associations and unions

There are three main representative organizations for doctors: the *Ordem dos Médicos* (Medical Association) and two main unions, the National Medical Federation (FNAM, *Federação Nacional dos Médicos*) and the Independent Medical Union (SIM, *Sindicato Independente dos Médicos*). Membership of the *Ordem dos Médicos* is mandatory for practising physicians. Its functions include:

- accreditation and granting of licences to practice
- accreditation and certification of specialist training
- application of the disciplinary code, with powers to warn and punish doctors.

As for the unions, their main role is to defend physicians’ rights as employees, mostly concerning wages and employment issues.

Equivalent bodies also exist for pharmacists (*Ordem dos Farmacêuticos*, founded in 1972; the first Pharmacists' Union was created in 1837, as *Sociedade Farmacêutica Lusitana*), for dentists (Medical Dentists Federation (OMD, *Ordem dos Médicos Dentistas*), founded in 1991) and for nurses (*Ordem dos Enfermeiros*, founded in 1998).

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 pharmacists; dissemination of information on 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.

Patient groups

Organizations specifically advocating for patients are active disease-based advocacy groups, such as those devoted to diabetes, cancer, 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 (see "Patient participation", within Section 2.5).

2.4 Decentralization and centralization

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 RHAs were established in 1993. RHAs are appointed by the Minister of Health. In theory, the creation of the RHAs 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. It is also the case that the Minister of Health appoints hospital administration boards.

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 (e.g. two or three hospitals) under criteria of homogeneity of production and complementarities of objectives, aiming at better coordination of medical specialties, cost control and higher competitive strength. Still, there are currently very few responsibility centres, as their creation never gained momentum. The more general reforms on hospital management did lead to a de facto neglect of these types of centres. No more responsibility centres have been created, nor have the existing ones been eliminated.

Despite this, the creation of “Hospitais EPE” (see “Paying for health services”, within Section 3.6) from 2005 (which replaced and expanded, in terms of hospitals included, the move towards more entrepreneurial statutes) and the recent primary health care reform (see Section 6.3 “Ambulatory care”) point to a high level of responsibility at the institution level. The RHAs’ and other ministry authorities’ role is more to supervise policy implementation and assess results.

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 changes that are needed.

2.5 Patient empowerment

Patient empowerment is one of the five main issues of the Ottawa Charter for Health Promotion (WHO, 1986).⁴ The National Health plan has (also) focused on empowerment, adopting the viewpoint of personal skills development. This section focuses on information for patients, patient rights, patient choice, patient safety and compensation, complaints procedures, and patient participation and satisfaction.

⁴ This was the outcome of an international conference held in 1986. It focused on “the move towards a new public health” and the main pathways to achieve this.

2.5.1 Patient information

Information and knowledge are by now key components of the decision-making process. A well-informed citizen is able to make better choices when dealing with health care services provision. The “information cycle” begins with the individual, who produces some data to be taken into the system, which in turn returns an answer, suitable to the individual’s needs. S/he is then able to make the optimal choice of health care services utilization, saving both time and resources for himself and the system. The Internet and call centres are the most common resources used to fulfil this aim.

All Ministry of Health institutions have their own web site, with areas designed specifically to inform patients. Internet coverage of the population is quite extensive, particularly in the coastal areas, which enables citizens to keep in touch with the latest news and information. *Portal da Saúde* (www.min-saude.pt) is one of the best examples of the link between the Ministry of Health and citizens (see “Information technology”, within Section 5.1).

Another feature of the IT system is the NHS Call Centre (CAS, *Centro de Atendimento da Saúde do Serviço Nacional de Saúde*). In 2004, the Ministry of Health formulated a contest to design a public–private partnership of a call centre, from which CAS originated. It started operating on 25 April 2007.

2.5.2 Patient rights

A Patient Charter (*Carta dos Direitos e Deveres dos Doentes*) from 1997 provides for the official protection of patients in the NHS. The Charter brings together the main legal aspects concerning patients’ rights and obligations. The focus on the patient is the distinctive feature of this Charter, which highlights:

- the right of the patient to be respected for human dignity, as well as for cultural, philosophical and religious beliefs;
- the right of the patient to be informed of her/his health status and to a second opinion;
- the right of the patient to accept or refuse any procedure, either for treatment, research or teaching purposes;
- the right of the patient to the privacy of her/his own records, and access to the clinical data regarding her/his treatment and clinical history;
- the patient’s responsibility to look after her/his own health status, and to provide all necessary information to health care personnel in order to be provided with the most appropriate treatment;
- the patient’s obligation to follow all the health care delivery system’s rules;

- the patient's duty to actively avoid any unnecessary expense under the NHS.

There have not been any studies assessing the effectiveness of the Charter's implementation or its impact. (For a more official summary of patient rights and duties, see MoH and Ministry of Labour and Social Solidarity (2005).)

2.5.3 Patient choice

The concept of health citizenship is not particularly widespread in Portugal. The State tends to be regarded as responsible for population health status and health care delivery, which reduces responsibility in relation to patients' choice. While legal documents do refer to the possibility of patients having choices in health care, the mechanisms needed for citizens to acknowledge their possibilities are not developed.

2.5.4 Patients and cross-border care

Patients are only entitled to payment by the NHS for care provided outside of Portugal with previous medical approval from NHS doctor. Citizens' rights related to cross-border health care are no different from those prevailing in the EU. Recently, the Ministry of Health increased cooperation with Spain, allowing child birth by women living close to the border that occur in Spain to be covered by the NHS.

EU regulations state that all EU citizens have the right to be treated abroad in other EU countries for unforeseen care. Health authorities in all EU countries can issue European Health Insurance Cards that are free to their citizens (usually a matter for social security offices). This seems to work well in practice.

Planned care is another matter. A patient needs to go through a very complicated and lengthy process to get an authorization form, an E112. The GP and then hospital specialists have to certify in a report that the necessary treatment cannot be found within the country. The report is then the subject of an evaluation by a technical Committee from the GDH. Finally, it is also necessary to have a positive decision by the General Director. If the decision is positive, the hospital where the clinical staff co-sponsored the report has to pay for the costs incurred during treatment, the stay of patient and any accompanying health care personnel, transportation, etc, (GDH, 2005a). It is easy to see that this situation is extremely rare, as the barriers are almost insurmountable. (For the position of the Portuguese Government on cross-border health care, see MoH (2007c).)

2.5.5 Complaints procedures

There are formal mechanisms for patients 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 *Ordem dos Médicos* and to the Portuguese judicial system. However, patients are free to write directly to the regional coordinators or to 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. It is often the case that citizens' complaints and high profile reports by the media are investigated by the Ministry of Health.

2.5.6 Patient safety and compensation

The *Ordem dos Médicos* is responsible for medical negligence procedures, as far as its own statutes and disciplinary regulations are concerned (criminal action is not under its jurisdiction). Regional Disciplinary Councils are in charge of the analysis of infractions by physicians. Punishment ranges from a suspension to expulsion from the profession. There has been no mention of possible changes to the current system. Moreover, there are no figures available on the number of complaints or punitive measures.

2.5.7 Patient participation

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 their own health and to obtain better quality and more appropriate care for users of the health system. Examples of programmes that have been developed and widely publicized are malignant neoplasm screening centres, blood donation campaigns and a national campaign to promote surveillance of heart conditions. (See the web site of the GDH (www.dgs.pt) for further information.)

However, patient participation is largely confined to the legislative framework and to intentions announced in official documents. It only occurs, to a limited extent, in hospitals' consultation bodies and through representatives of municipalities. The voice of patients is essentially only heard through lobbying by patients' associations.

In order to assess policy implementation and its results, the Portuguese Health System Observatory (OPSS, *Observatório Português dos Sistemas de Saúde*) elaborates annual reports on performance (the Spring Reports), available to the public online (<http://www.observaport.org>). The OPSS intends to be an independent think tank on health policies.

There is some information available regarding patient satisfaction with the health system. Under the *Saúde XXI* programme, a research team conducted a survey about patient satisfaction with primary care health services, within the framework of EUROPEP (an internationally standardized instrument to evaluate general/family practice). One conclusion is that the Portuguese people are quite happy with primary care services provision. Over 70% of the respondents were very satisfied with their physician and their involvement in the decision-making process regarding their own health. Over 63% appreciated the medical examination carried out by the GP, as well as the attention they received. However, some issues arise about the organization of services, as more than 55% of the respondents identified excessive waiting times and difficulty communicating with the GP. Overall, however, communication and relationship with the doctor during the visit tends to be rated more highly than accessibility (i.e., being able to make an appointment). (See Ferreira, Raposo, Godinho (2005) for more information.)

The National Health Survey includes information about patients' self-reported health status. The best results can be found in the Lisbon and Algarve regions, the worst being the Centre region and Alentejo. In addition, in general the upper-level income groups report a better health status than the poorer groups.

3 Financing

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 between a fifth and 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 both co-payments and direct payments by the patient, and to a lesser extent in the form of premiums to private insurance schemes and mutual institutions. Table 3.1 shows the percentage of total health expenditure (THE) financed through public and private sources. Public expenditure, which comes mainly from taxation (over 90%), includes funding of direct care provision within the NHS and subsidies to the health subsystems for public sector employees. Private expenditure mainly includes OOP payments and VHI. (See Fig. 3.1 for a broad picture of the financing flows.)

OOP payments in Portugal are estimated to be among the highest in Europe, having accounted for approximately 23.5% of THE in 2004, while being generally slightly above 23% since 2000 (see “Out-of-pocket payments”, within Section 3.3).⁵ Following the conclusions of international studies (see Wagstaff et al., 1999), one may state that, overall, the theoretically progressive, redistributive income tax system in Portugal turns out to be slightly regressive in health care financing, reflecting a high share of OOP payments, along

⁵ These figures constitute a major revision of those that were previously available. To provide an example, compare with the value of 44% for 1995, as reported in the OECD 1998 database. This figure, however, seems to be excessive and inconsistent with the revised time series published in 2002, where private expenditure as a whole remained under 35% of THE. This series, in turn, seems to be an overestimation compared to the latest available series.

Table 3.1 Funding mix for the health system (in percentages)

	2000	2001	2002	2003	2004
Public funding	72.91	71.53	72.53	72.58	71.17
of which:					
National Health Service	61.12	58.80	59.38	59.72	57.57
Public subsystems	6.40	6.64	7.69	6.48	7.00
Other public funding (mainly tax benefits)	4.43	5.19	4.46	5.37	5.73
Social Security	0.96	0.90	1.00	0.99	0.86
Private funding	27.09	28.47	27.47	27.44	28.83
of which:					
Private subsystems	1.72	1.79	1.88	2.35	2.24
Voluntary Health Insurance	1.44	1.42	1.82	2.24	2.47
Out-of-pocket payments	23.19	23.15	23.15	21.16	23.56
Other private funding	0.74	2.10	0.12	1.68	0.77

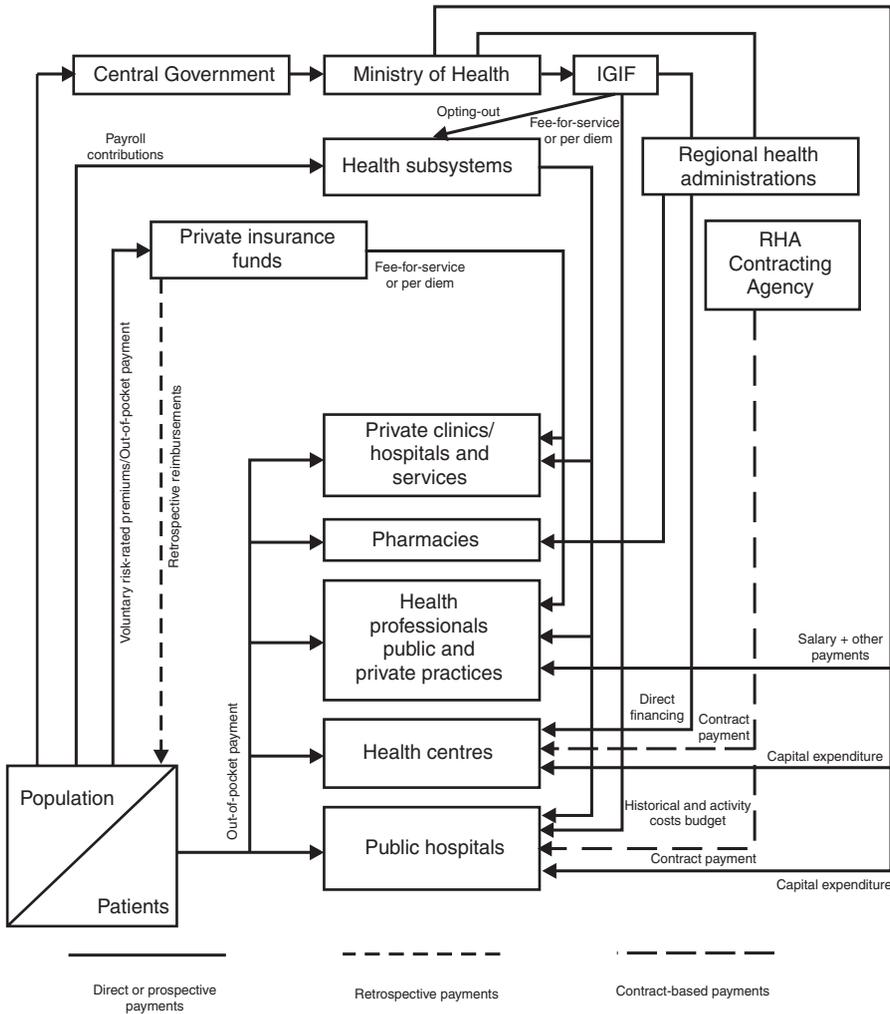
Source: Authors' own compilation based on INE 2006.

with a heavy reliance on indirect taxes. Indirect taxes on goods and services account for 35.2% of total government revenue, whereas taxes on income and profits represented 23.8% of total government revenue in 2006. The existence of a generous (by international standards) system of benefits to private health spending adds to this regressiveness of health care funding. In other words, health expenditure falls relatively more heavily on low-income households. These contributors are less able to get a higher percentage refund from the tax system than the high-income households (6% versus 27%, when analysing the lower and upper groups of income distribution function).

3.1 Health expenditure

Data given here originate from the recently published National Health Accounts (INE, 2006), constructed in accordance with WHO/OECD principles and from OECD Health Data (OECD, 2006). Total health care expenditure in Portugal has risen steadily from as little as 3% in 1970 to 10% of GDP in 2004, above the EU average of 9% (see Fig. 3.2). Portugal now spends more than both Italy and Spain in terms of proportion of GDP, despite having spent considerably less than they did in 1970 (OECD, 2006). Figure 3.3 shows the growth in health spending in Portugal, Italy, Spain, United Kingdom and France over the last decade. Despite spending almost the highest amount on health care as a proportion of GDP, Portugal spends US\$ 1903 per capita (US\$ 1813 according to OECD data sources), which is below the EU average of US\$ 2269 (Fig. 3.4).

Fig. 3.1 Financing flow chart



Source: Authors' compilation.

Notes: IGIF: Institute for Financial Management and Informatics; RHA: Regional Health Administration.

Table 3.2 also shows that the amount spent on health care has risen in both absolute and relative terms.⁶ Growth rates of THE seem to be slowing down (Table 3.3), though still showing a steady and strong growth pattern. This growth

⁶ For comparability, the OECD Health Data from 2006 (OECD, 2006) are used here. However, it should be noted that the recently published National Health Accounts produce lower figures for OOP payments than those previously estimated.

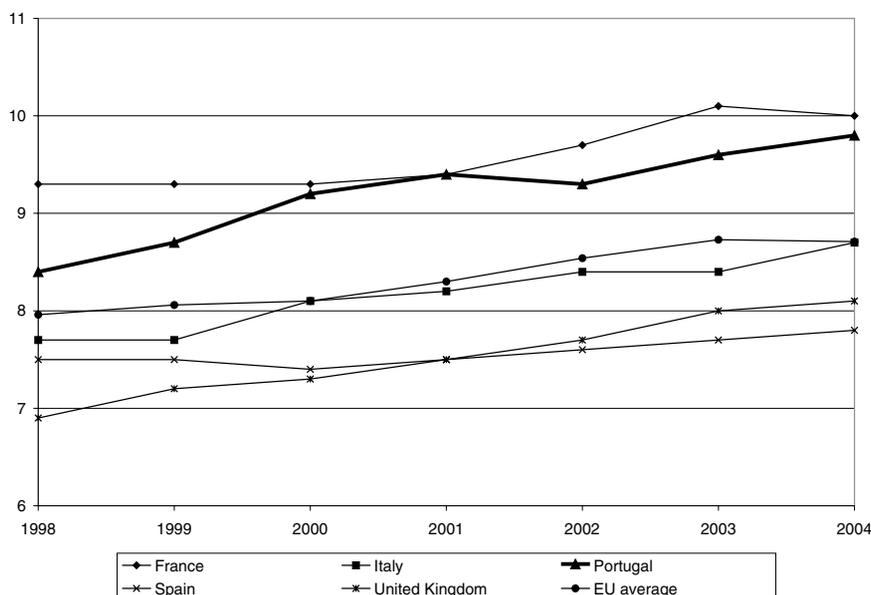
Fig. 3.2 Health expenditure as a share (%) of GDP in the European Union and selected countries, 2004, WHO estimates



Source: WHO Regional Office for Europe, 2007.

Notes: CIS: Commonwealth of Independent States; EU: European Union; GDP: Gross domestic product.

Fig. 3.3 Trends in health expenditure as a share (%) of GDP in Portugal, selected countries and EU average, 1998–2004, WHO estimates



Source: WHO Regional Office for Europe, 2007.

Table 3.2 Trends in health expenditure, 1990 to latest available year

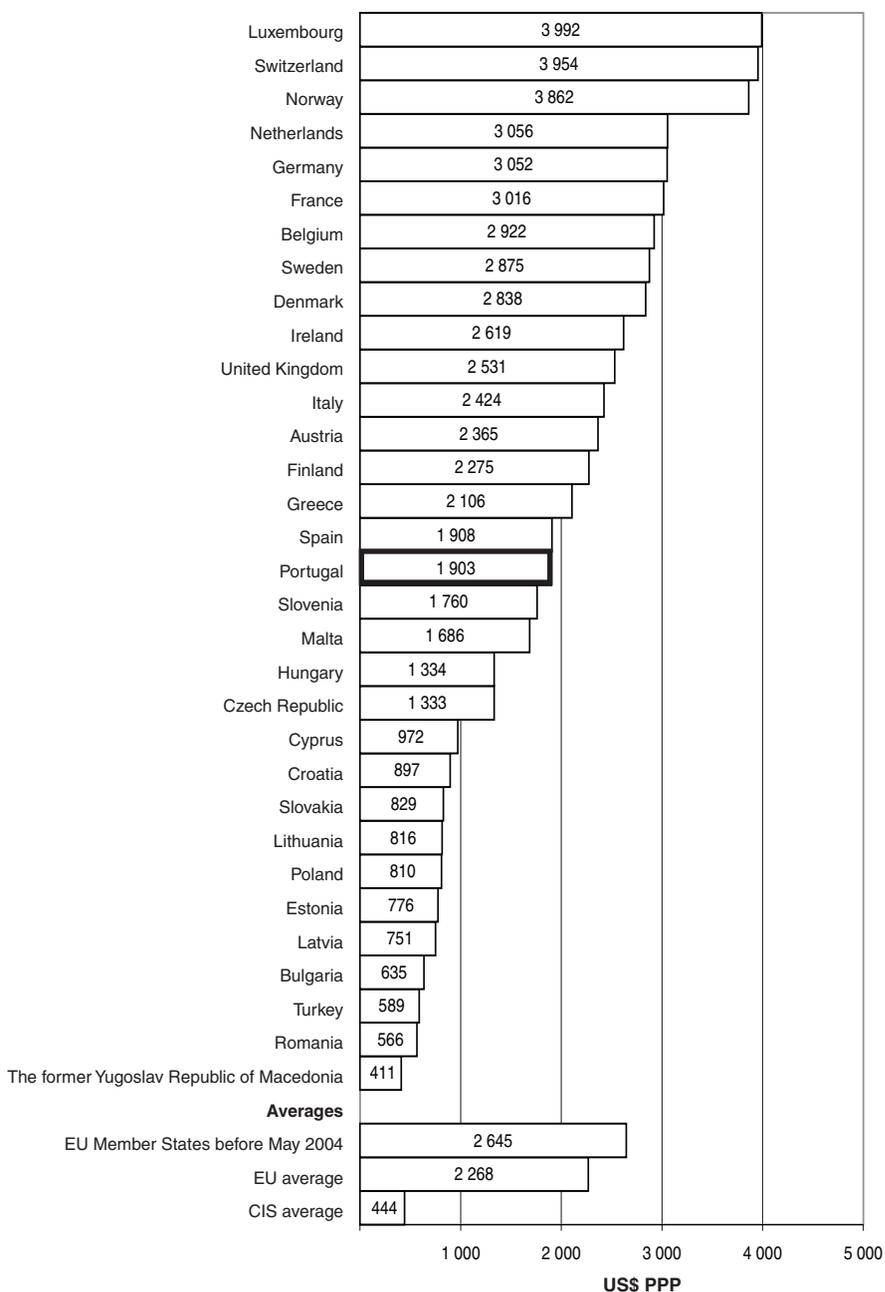
	1990	1995	2000	2004
Total expenditure on health per capita, US\$ PPP	674	1096	1624	1813
Total expenditure on health as a % of GDP	6.2	8.2	9.4	10.0
Public expenditure on health as a % of total expenditure on health	65.5	62.6	72.5	71.9
Private expenditure on health as a % of total expenditure on health	34.5	37.4	27.5	28.1

Source: OECD, 2006.

Notes: PPP: Purchasing power parity; GDP: Gross domestic product.

was more pronounced in public health expenditure, which steadily increased its share of THE. Despite the increase, public sources of spending as a proportion of THE are the lowest among the EU countries (Fig. 3.5). However, THE as a proportion of GDP is currently above average among EU countries, and public sources of spending as a proportion of GDP are among the highest in the EU. It appears that Portugal has not contained health care expenditure growth as

Fig. 3.4 Health expenditure in US\$ PPP per capita in the European Union and selected countries, 2004, WHO estimates



Source: WHO Regional Office for Europe, 2007.

Notes: CIS: Commonwealth of Independent States; EU: European Union; PPP: Purchasing power parity.

Table 3.3 Mean annual growth rates, 1990–1995, 1995–2000, 2000–2004

Mean annual growth rate	1990–1995	1995–2000	2000–2004
Total expenditure on health (million €)	16.0	10.4	5.9
General government expenditure as a % of GDP	1.4	0.1	1.7
Public expenditure on health as a % of general government expenditure	3.4	5.8	0.3
Public expenditure on health as a % of GDP	4.8	5.8	2.0

Source: OECD, 2006.

Note: GDP: Gross domestic product.

successfully as other southern European countries. One plausible explanation lies in the country's 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 (Dixon, Mossialos, 2000).

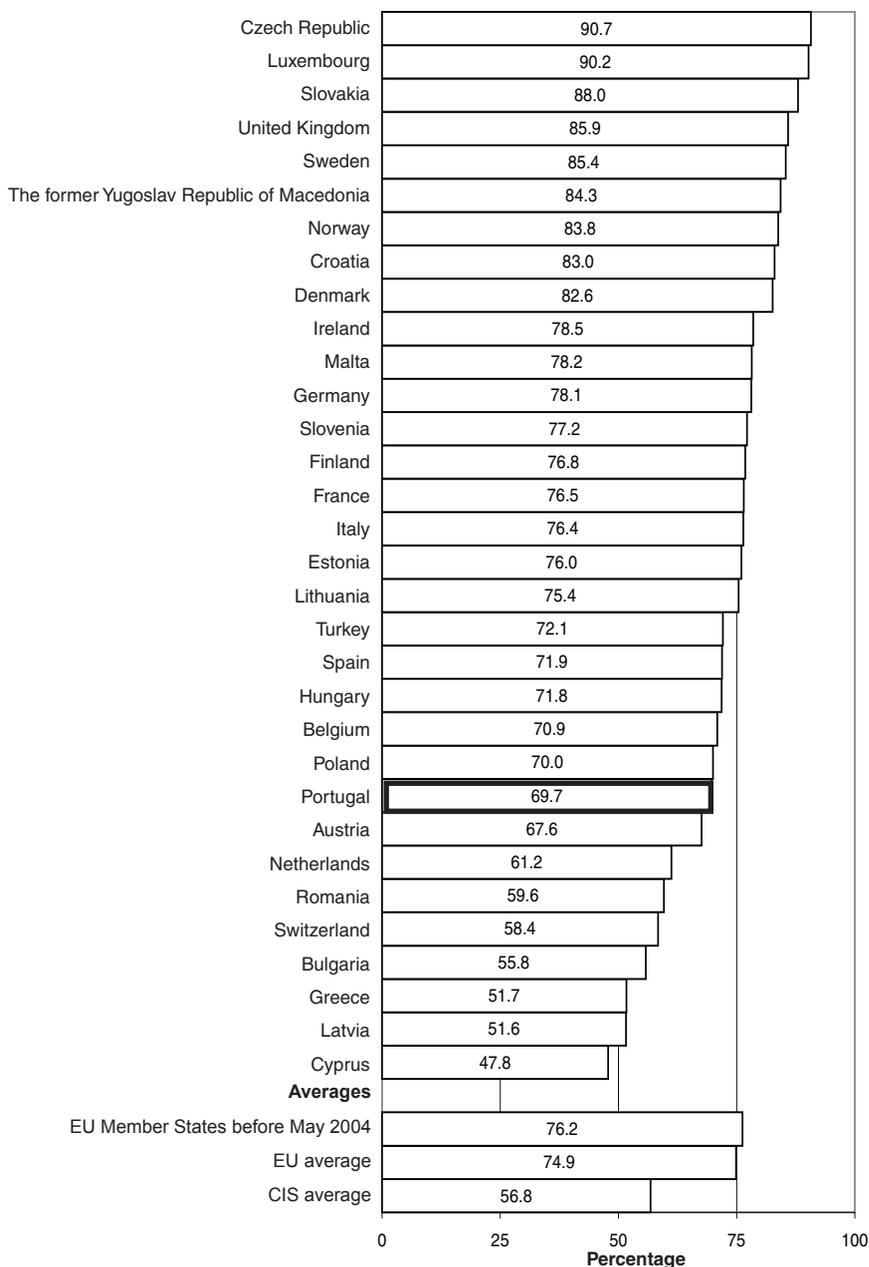
Another factor that has likely been a contributor to the fast growth of public health expenditure was the previous recurrent government underfunding of the NHS. The initial budget for the NHS has often been below its expenditure at the end of the previous year by a substantial amount. The difference between these two values has undermined credibility of budgets as a management tool and provided room for uncontrolled growth of spending through a build-up of debts to suppliers (most notably pharmaceutical companies and other clinical consumables producers), as it was clear that initial budget values faced only a very small chance of being respected. To illustrate the relevance of this issue, it is worth pointing out that in the past 10 years (1997–2006), there were five government budget reinforcements or debt regularization exceptional measures (in the years 1991, 2001, 2002, 2004 and 2005).

Data on health expenditure by health sector, for example, primary care, inpatient care and dental care, are not available. For more information on pharmaceutical expenditure, see Section 6.6 “Pharmaceutical care”.

3.2 Population coverage and basis for entitlement

All residents in the country are covered by the NHS, which is universal, comprehensive and almost free at the point of use (according to the Portuguese Constitution, Article 64). The universal and comprehensive nature of the NHS was defined at its creation (1979), and has been retained since then. The

Fig. 3.5 Health expenditure from public sources as a percentage of total health expenditure in the European Union and selected countries, 2004, WHO estimates



Source: WHO Regional Office for Europe, 2007.

Notes: CIS: Commonwealth of Independent States; EU: European Union.

NHS predominantly provides direct acute hospital care, general practice and mother and child care. Specialist and dental consultations, diagnostic services, renal dialysis and physiotherapy treatments are more commonly provided in the private sector. For diagnostic services, renal dialysis and physiotherapy treatments this is typically done under contractual arrangements with the NHS. Most dental care is paid for out of pocket, as are many specialist consultations in private ambulatory care. Theoretically, there are no services explicitly excluded from NHS coverage. However, throughout Portugal, dental care is not covered by the NHS, that is, it is neither provided nor funded by the NHS. According to the Health Interview Surveys of 1998/1999 and 2005/2006, approximately 92% of dental consultations were in the private sector (MoH, 2000; MoH, 2006b). Also, approximately 60% of specialist consultations take place in the private sector (e.g. cardiology). This results from both NHS shortages (with long waiting times) and a tradition, from before the creation of the NHS, of direct access to physicians' private offices.

There are also gaps in provision due to geographical imbalances, with some areas unable to provide certain specialist services, as hospitals in the interior region do not provide for all medical specialties. However, the high levels of investment in regional facilities outside Lisbon and Oporto in recent years will probably make these new well-equipped environments more attractive to doctors and other health professionals.

Despite the comprehensive nature, in scope, of the services covered by the NHS, some exceptions do occur, namely in pharmaceutical products. In Portugal, as in other countries, such products face an economic hurdle before they are included under NHS coverage. Each product available for sale in pharmacies is subject to an economic evaluation (guidelines for it were enacted in 1998). In 2006, the Government extended the same guiding principles of economic evaluation to new pharmaceuticals introduced in hospital consumption (see Section 6.6 "Pharmaceutical care").

Health insurance coverage is mainly provided by the NHS, but as mentioned above, in addition to the NHS, citizens can benefit from extra layers of insurance coverage. These extra layers have three main sources: public health subsystems, private health subsystems and private VHI (contracted through the employer or on an individual basis) (see "Voluntary health insurance", within Section 3.3).

Most private insurance has limited coverage, as all "insurance products" assume a supplementary nature relative to the NHS coverage. Since commercial private insurance is provided in a free market, there is considerable diversity of products and of contractual conditions. The growth of the private insurance market is facilitated by the generous tax credit associated with private health

insurance premiums. The tax benefits for OOP expenses are indeed generous at a tax credit rate of 30%, without upper or lower limits, but that is not necessarily the case with health insurance, since the upper limit for credit is small (€156 for a married couple). There is no explicit selection of insured people, in the sense that no systematic denial of particular risk groups has been identified. Most likely, selection effects occur through definition of coverage and services made available. One such case is the BPI Medical proposal, with coverage tailored to the life-cycle position of (potential) insured people: having children below 12 years for one policy, and above 12 years for another one. Age-based exclusions are also common in VHI. (For further discussion of VHI in Portugal, and how it compares within Europe, see Mossialos and Thomson (2004).)

No major changes to the NHS coverage are expected. Pharmaceutical products are likely to remain the only area in which, in the near future, health technology assessment will be performed on a regular and a systematic basis (see Section 4.2.1 “Health technology assessment”).

3.3 Revenue collection/sources of funds

Private health expenditure has witnessed some growth in recent years, though at a slower rate than public health expenditure. Table 3.1 reports on the main private sources of financing in the period 2000–2004, distinguishing between OOP payments, private subsystems, VHI and other private sources.⁷ Figure 3.6 shows the relative contributions of all sources of funding in 2004.

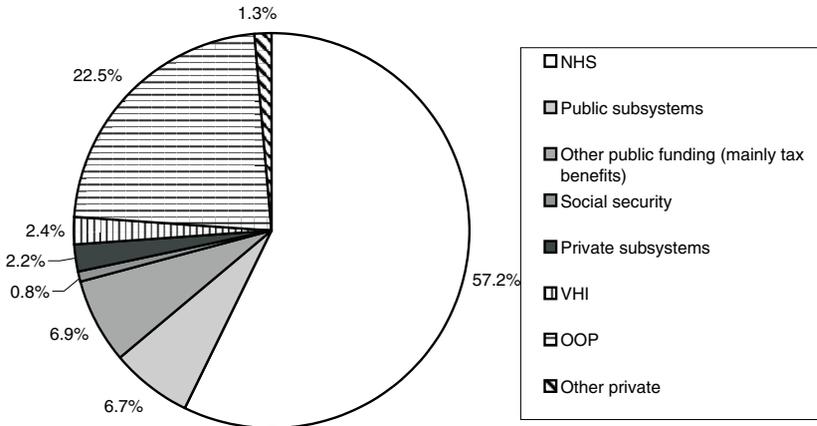
3.3.1 Compulsory sources of financing

Taxation

The NHS is mainly financed by general taxes. Tax revenue also funds the employer contributions for state and public sector employees. The main tax fund source is indirect taxes, which account for approximately 60% of total tax revenue. Tobacco consumption taxes represent more than 6% of this amount. Taxes on income are another source of tax revenue, comprising 39% of total tax revenue.

⁷ The use of these years is only possible by virtue of the availability of the National Health Accounts data. Since they produce results sufficiently distinct from previously available sources, a structural break in the series exists.

Fig. 3.6 Total expenditure on health (in percentage) by source of revenue, 2004



Source: INE, 2006.

Notes: NHS: National Health Service; VHI: Voluntary health insurance; OOP: Out-of-pocket.

A budget for total NHS expenditure is established within the annual government budget. Traditionally, this has been a soft budget. Actual health expenditure usually exceeds the budget limits by a wide margin, requiring supplementary budgets to be approved. Apart from direct transfers from the state budget, the NHS raises its own revenue, mostly generated by hospitals. This includes payments received from patients for special services such as private rooms, payments from beneficiaries of health subsystems and private insurers, payments received for the hiring of premises and equipment, income from investment, donations, fines and flat-rate admission charges. In total these supplementary payments account for approximately 13.4% of the overall public hospital budget (in 2004, the official statistics for the NHS report its own revenue solely from public hospitals). The year 2006 seems to be an outlier to this tradition, as total government spending was kept under the initial budget. It remains to be confirmed in the coming years whether this is a change in the trend or just a one-off occasion and a very unusual year.

Table 3.1 details the funding sources of public health expenditure. It is clear from the table that a significant proportion of public health expenditure results from the fact that private health insurance premiums can be deducted against taxable income (tax credits).

Health subsystems

The public health subsystems receive compulsory contributions from beneficiaries (1.5% of (gross) wage in 2007, up from the historical 1% contribution rate). However, these contributions represent a minor share of the funding of public health subsystems, as the Government, through the state budget, contributes close to 90% of total funds.

Private subsystems also receive, historically, mandatory contributions, in a way that closely matched the practice of public health subsystems. Most of these private subsystems (and the more important ones) have been associated with large companies that, after nationalization in the aftermath of the 1974 revolution, have undergone privatization in the 1980s and 1990s (including sectors such as banking, telecommunications, air transport and energy). Recent evolutions suggest that private subsystems are becoming closer to commercial private health insurance.

3.3.2 Voluntary health insurance

Approximately 10% of the population has taken out some form of VHI. About half of the policies are group insurance provided by the employer, and half are individual policies (50.9% in 2004 and 52.2% in 2005 (Instituto de Seguros de Portugal, 2006)). 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 expenditure, including co-payments and payments to private doctors, deductible from taxable personal income. The value of this implicit government subsidy associated with VHI, that is the value of the fiscal benefit, has been estimated at €24 million, a relatively small proportion of total government spending. Incentives are skewed in favour of OOP expenditure, benefiting from generous (by international standards) fiscal treatment (see “Out-of-pocket payments”, within Section 3.3).

Corporate insurance policies are more generous because corporate tax laws are more liberal, in the sense that fiscal deductions are more generous to corporate health insurance contracts than for individual health insurance policies. 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 VHI, the social status which VHI confers on

subscribers 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 1998–2004 at an annual average rate just below 20% (Instituto de Seguros de Portugal, 2005).

3.3.3 Out-of-pocket payments

In recent years, there has been increasing use of cost sharing in health care with the aim of making consumers more cost aware. OOP payments (including cost sharing and direct payments for private sector services) have consistently accounted for approximately 23.5% of THE in 2004 (see Table 3.1). (These figures are based on the recently published National Health Accounts (INE, 2006) and constitute a major revision of previously existing series.) The majority of these payments are for pharmacies (dispensing chemists) (38%). Outpatient care centres (29%) and offices of physicians, hospitals and nursing and residential care facilities (21.9%) make up the bulk of the rest. These three categories of expenditure represent approximately 90% of a household's OOP payments on health care.

Cost sharing is a part of both the NHS and private financing arrangements. All three forms of cost sharing are present in the NHS; the most common are co-payments (or user charges), defined as a fixed amount charged for a service, and these exist in most public health care services. Flat-rate charges exist for consultations (primary care and hospital outpatient visits), emergency visits, home visits, diagnostic tests and therapeutic procedures. Since April 2007, user charges for hospital admission episodes have been introduced (€5 per day, with a maximum of 10 days' charges) and there are also user charges of €10 per outpatient surgery episode. The values set for co-payments are typically small, when compared to the cost of the service. For example, the co-payment for emergency department cases in central hospitals (the ones with the highest technology level) is €8.75, while the average cost of an episode is €143.50 (according to the values published by the Government). There is no annual ceiling on co-payments.

Co-insurance, in which the user pays a fraction of the cost of the service, is applied for pharmaceutical products covered by the NHS and for other health insurance arrangements (subsystems and VHI). The co-insurance on pharmaceuticals varies depending on the therapeutic value of the drug. Pensioners pay a reduced rate and chronically ill patients are exempt from the cost of some courses of medication. More detail about the level of co-insurance for pharmaceuticals is given in Section 6.6 "Pharmaceutical care". Indirect methods of cost sharing are also present, namely reference pricing for

pharmaceutical products. Finally, deductibles are present in some commercial health insurance contracts.

Cost sharing is a highly debated issue in Portugal. Despite it being a contentious manoeuvre, the Government has been able, in 2006, to increase co-payments and to introduce user charges for hospital admission episodes (effective in 2007). Historically, governments have been able to increase co-payments because opposition has never been strong enough to avoid them. Although there have been recent increases, cost sharing in public provision of care represents a relatively small amount (approximately 1%) of THE. Cost sharing is, however, quite significant for pharmaceutical products.

The different cost-sharing instruments have different objectives. The (stated) objective for co-payments is to contain and regulate demand for public services (the standard argument of moral hazard control). This is visible, for example, in the smaller value paid by patients if they choose to go to primary care centres (PCCs) instead of going to hospital emergency departments for care. On the other hand, the role of co-insurance in pharmaceutical products is not only to influence demand but also to shift the financial burden to the users, given its relatively high value. Moreover, to induce higher usage of generic products, a reduced rate of co-insurance was in place from 2000 to 2006 (see Section 6.6 “Pharmaceutical care”).

The total value of co-payments in NHS hospitals is approximately 0.7% of total NHS expenditure, while those charged in primary care amount to 0.28%. (This value is an underestimation, as no information was available for some cases.) According to available figures (INFARMED, 2007), cost sharing on pharmaceutical products amounted to 31.1% of total pharmaceutical expenditure in 2004.⁸

The above cost-sharing arrangements are accompanied by mechanisms designed to protect vulnerable groups of the population. Exemptions from co-payments are generous and include a considerable fraction of the population.

There is no detailed information on the role and magnitude of informal payments. The general perception is that they play a minor role, if any at all. Transportation costs are paid by the patient, except in special circumstances, such as long-distance travelling, in which case costs are subsidized. Emergency care transportation, on the other hand, is provided free of charge by the INEM (see Section 6.5 “Emergency care”).

⁸ The list of conditions that exempt a citizen from co-payment are described in detail on the Ministry of Health web site. Information available on this web site states that exemption can be as high as 55% of exempted citizens (in 2006) (<http://www.min-saude.pt/portal/conteudos/a+saude+em+portugal/ministerio/comunicacao/artigos+de+imprensa/diario+economico.htm>).

3.3.4 Parallel health systems

Health subsystems

The health subsystems, which pre-date the establishment of the NHS, account for approximately 9.24% of THE 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 (ADSE), contribute 1.5% of their (gross) salary. In the private subsystems, contributions vary. In the PT-ACS subsystem, the contribution of each employee is approximately 1.7% of the wage for 2007, with expected increases over the coming years (1.9% in 2008 and 2.1% in 2009). These contributions can be included in income tax computations as equivalent to social security contributions, benefiting from a tax exemption. In private subsystems, such as those of private enterprises, the contribution that is wage related can vary and even be symbolic or non-existent. 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 subscribers to these funds do 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 (first introduced in 1995, became mandatory in 2000) is progressively avoiding such duplications of coverage since it clarifies the financial responsibility for the patient (see "Information systems", within Section 4.2).

The relationship between the NHS and the subsystems was explicitly addressed by the publication of Decree-Law 401/98, of 17 December 1998. A scheme of systemically 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 certain subsystems.⁹ The State transfers annually to those entities a capitated amount for each beneficiary and in turn, the corresponding subsystem pays the full 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.

⁹ PT-ACS, the Portuguese postal services subsystem (CTT, *Correios de Portugal*) and SAMS.

Effective from January 2007, two of the “opting-out” agreements have been cancelled by initiative of the health subsystems. The reasons for the decision are not clear at the time of writing. Publicly, there was divergence between the health subsystems and the NHS on the number of beneficiaries that were included in the “opting-out” agreement and on the value of the capitation transfer. This coincides with an evolution of the health subsystem organization and coverage towards traditional commercial health insurance. On the other hand, “opting-out” did not rank high on the political agenda. Therefore, despite some conflict reported in the media, there was an apparent alignment of interests of both parties involved to terminate the “opting-out” agreement.

3.3.5 External sources of funds

Since 1994 there has been a programme of investment in health care services, co-financed by the EU. 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, alongside 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 determined as a result of negotiations between Portugal and the EU 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 structural support areas for health. 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 profit-making and non-profit-making sectors, with a special emphasis on home care, long-term care and family health.

3.3.6 Other sources of financing

Mutual funds

Approximately 7% of the population is covered by mutual funds, which are funded through voluntary contributions. They are non-profit-making

organizations that provide limited cover for consultations, pharmaceuticals 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.

Long-term care

Long-term care has been neglected in terms of public sector involvement until recently. Traditionally, long-term care has been provided by *Misericórdias* and other NGOs. Some of the care they provided has been paid by the NHS. In 2006, following an increasing awareness over the period 2003–2006 on the very limited role, given population needs, of public sector involvement in long-term care, a network of long-term care providers was set up mainly in private institutions (largely non-profit-making) (see Section 6.7 “Long-term care”). The financial responsibility of the public sector is to be shared between the Ministry of Health and the Ministry of Labour and Social Solidarity.

3.4 Pooling of funds

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 expenditure. The Institute of Financial Management and Informatics (IGIF, *Instituto de Gestão da Informação Financeira da Saúde*), which is the department responsible for financial management within the Ministry of Health, prepares estimates detailing the resources required to support planned activities. (Given the recent changes in the Ministry of Health, due to the general restructuring in civil service, it is expected that this role will be performed by the ACSS in the future.) 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 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 at the central level.

The RHA budget for primary health care was set in 2003 on the basis of a combination 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. Each RHA budget reached a balance of 40% for historical values and 60% for capitation. In order to provide an adjustment for health care needs, the capitation component is adjusted by demography (age and gender) and also by a disease burden index computed according to the regional prevalence of selected health problems, namely four chronic conditions: hypertension, diabetes, stress and arthritis. Weights, based on pharmaceutical expenditure for each disease and region, were computed to create a disease burden index. The demographic index was based on the intensity of primary care visits per cell of age and gender (for further details see Barros, 2005, Chapter 17). Since 2003, historical values have been predominantly used for initial budgets. An exception to this included a 5% increase in 2005 for one of the health regions (although not the poorest). The “exceptional” budget reinforcement in 2005 also included an amount for payment of debts accumulated by the NHS (which were approximately 35% of the budget). The two more recent years (2006 and 2007) once again had budgets equal to the previous year.

The Ministry of Health receives a global budget for the NHS, which is then allocated to the many institutions within the NHS (hospitals; health regions, which then allocate funds to PCCs; and special programmes). Historically, the global NHS budgets have been “soft”, and overspending has been common. There is evidence that more spending in a hospital (with a deficit well above the allocated budget) in a year results in more funds allocated in the next year, even after controlling for the increases in activity of the hospital and for more resources used. This has created a clear incentive for overspending. At the least, this decreases the incentive for good management practices. The recent figures for 2006 show that government spending in health has been kept under the budget. Whether this constitutes a structural change and a move towards “hard” budgets, or if it was a one-off case just for that year, remains to be seen in the future.

3.5 Purchasing and purchaser–provider relations

Reform proposals initiated in 1996 intended to increase the purchasing role of the RHAs, in order to move the system gradually from an integrated model towards a contract model of health care (see Section 3.6.1 “Paying for health services”). 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, the revenues for which mostly derive 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, the revenue for which comes from risk-rated premiums (for both individual and group schemes), mostly pay health care for their subscribers through retrospective reimbursement.

Since 2003, the hospital payment system has evolved to a contract-based approach (see Section 3.6.1 “Paying for health services”). In that year, roughly half of the hospital sector was given corporate-like statutes, which have now been extended to more hospitals.¹⁰ The contract approach is currently applied also to purely public hospitals. Contracts are set for one year and stipulate the overall payment and expected production level of the hospital (by broad lines of activity).

3.6 Payment mechanisms

3.6.1 Paying for health services

Payment of hospitals

Hospital budgets are drawn up and allocated by the Ministry of Health through the IGIF. At present, public hospitals are allocated global budgets based on contracts (*contratos programa*) signed with the Ministry of Health. 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 hospital outpatient volume. This new activity-based resource allocation model brought to term research that had 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 DRG grouping purposes has led to the generation of a significantly improved information

¹⁰ In 2005, the juridical form was changed to eliminate fears that privatization of hospitals might occur, but it did not change the management rule.

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 all NHS hospitals. The centralized version of the system, which is run by the IGIF, 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 information on the length of stay were available.

The case-mix adjusted component of each hospital budget has 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” methodology (“grade of membership” model) for price setting. In this methodology, a hospital is not necessarily allocated to a group. Instead, the procedure defines a small set of benchmark hospitals, and computes the probability of a given hospital being in the same group of each of the benchmark hospitals. For example, a medium-sized hospital may be associated with 30% probability with a small benchmark hospital and with 70% probability with a large benchmark hospital (the probabilities being the “grade of membership” to each group; see Vertrees, Manton (1986) for further details). 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.

With the introduction of new statutes for hospitals in 2003 (the so-called “*Hospitais SA*”), management rules and financial responsibility at the hospital level changed. In the first year, only roughly 40% of the hospitals received the new statutes (accounting for almost 50% of total NHS hospital activities). Since 2005, and after an assessment made by an independent commission, more hospitals have been given the new statutes. To eliminate fears of privatization of public hospitals, the Government changed the legal status of the hospitals. They are now “*Hospitais EPE*” (public enterprise), but the management rules saw virtually no change relative to “*Hospitais SA*”. A major innovation introduced by this change was the *contratos programa* (contracts), through which the hospital commits to certain levels of activities (admissions, external consultations, emergency department episodes and ambulatory care cases) in return for an overall yearly budget. Negative financial results are to be internalized by the hospital, although it is yet to be seen what the Government will do in the event of repeated negative financial results.

The main issue at present with the payment system is the restoration of global budget credibility. For 2006, the initial budget for the NHS was in line with the previous year's expenditure, unlike what had happened regularly before that. This provides an opportunity to break the overspending cycle. Preliminary evidence for 2006 suggests the overall spending in the NHS has been kept within the limits of the initial budget. If the same does occur in 2007, then budgets may become credible instruments for management in the NHS. Their incentive properties may then start playing a role. Despite the imposition of "hard" budgets, there has been no increase in waiting times. The pressure for more productivity has actually led to a decrease in the median waiting time (from 8.6 months in 2005 to 6.9 in 2006) and in the number of people on waiting lists for surgery (see <http://www.min-saude.pt/portal/conteudos/a+saude+em+portugal/ministerio/comunicacao/discursos+e+intervencoes/desempenhosns.htm>).

The establishment of contracting agencies in each RHA 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 outset quite limited as the leverage of the purchaser was not sufficient to punish the hospital management, to impose any consequence upon them 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 throughout 1998 and 1999 with the creation of more 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 RHAs began in 1999, with what has been conjectured to be marginal impact, as the main relationship was still between the financing institute within the NHS (the IGIF) and the hospitals. The room for budget adjustments by the RHAs was minor. 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, with respect to their performance levels. Access to more efficient and better quality services was the cornerstone of the negotiations. The "soft" budget and the tradition of giving hospitals budgets according to their real needs that were later reinforced, or payments to suppliers delayed, meant that the little effect was to be expected anyway. To date there has been no assessment of the impact of these changes on access, efficiency or quality.

The role of contracting agencies has changed over the past few years. They are now less independent from RHAs, working as a group of experts whose main aim is to assess the degree of accomplishment of the *contratos*

programa (contracts). They also have the task of monitoring overall hospital performance.

Besides direct transfers from the Government, public hospitals also generate their own revenue from payments received from patients for special services (e.g. individual private rooms), payments received from beneficiaries of the health subsystems or private insurance, and flat-rate user charges for outpatient and diagnostic services (see “Out-of-pocket payments”, within Section 3.3). As a whole, these payments account for as much as 15–20% of the overall hospital budget. Private donations are also to be considered, despite their residual values, especially for equipment acquisition.

The health subsystems and private insurance schemes reimburse NHS hospitals retrospectively on a case-by-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. The insurance companies also define networks of preferred providers, at which the patient only pays the co-payment (the remaining being settled directly between the provider and the insurance company). This method acts as an incentive for such patients to seek treatment from contracted providers.

Payment of health centres

Health centres are responsible for delivering primary health care. They do not yet have financial or administrative autonomy. The Ministry of Health allocates funds to the RHAs, which in turn fund the global activity of each health centre through the subregional coordination level.¹¹ The health centres only receive a small budget for rent, utilities, etc., based on historical costs. All other costs are directly paid by the subregional 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 (WPU) (15%), and a residual component to be allocated based on the number of residents with

¹¹ Each health region was subdivided into health subregions, broadly resulting from previous health regions coinciding, to a considerable extent, with administrative districts. The recent civil service changes implied that health subregions will disappear under the new structure, with only the health regions remaining (though in operational terms, the existing structures at the subregion level will be kept).

a 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 the reorganization of health centres was proposed in 1999, but was not implemented. It would have not only granted financial and administrative autonomy to health centres, but also allowed the RHA independently to contract multiprofessional teams, especially family health teams, from the health centres and hold them accountable for the care provided. This reform followed the same principles of introducing contracting and prospective activity-related budgets described in the Subsection “Payment of hospitals” above. There are several incentive mechanisms, designed to improve the quality of health care provision.

In 2003, the Government enacted a new ruling on the primary care network, with several innovations, the more important being the fact that the PCCs could have a nonmedical director and management, that is, they could be given to private entities or groups of health professionals. This raised several concerns, and was not implemented, as in 2005 a new government was elected.

More recently, in 2006, another reform approved by the Government is expected to introduce further changes to the previous organizational and funding models of primary health care. The new reform is based on the idea of USFs, which are multidisciplinary teams, paid partially with incentive mechanisms. These include, among others: supplements, related to the dimension of the list of patients, carrying out house-calls, number of working hours; performance compensations, related to the annual contracting of specific surveillance activities, with respect to vulnerable or high-risk patients; and an additional set of services, if contracted (Decree Law 18/2007). Multidisciplinary teamwork and organizational flexibility are promoted in a bid to provide incentives for the provision of better primary care service to the population. A study conducted for the Ministry of Health showed that there is a cost reduction in the new payment system, either in cost per appointment or examination and drugs prescription (Gouveia et al., 2006).

3.6.2 Paying health care personnel

Doctors

All NHS doctors are salaried government employees. The fixed salary is established according to a matrix linking professional category and duration of service, independently of any productivity measure. There are three employment levels for doctors: full-time (but not exclusive) (35 hours/week), extended full-time with exclusive NHS employment (42 hours/week with no private practice allowed), and part-time (being employed under the part-time contracts is not

allowed for a head of service). There are no data available on the proportion of physicians in each of the three employment categories. There are currently no incentives, or mandatory time, for the interior and rural areas. Since 2002, there has been a progressive increase in individual labour contracts, that is, the use of private management legal rules for admission of workers in the NHS (both doctors and other health care professionals).

In general, doctors perceive their salaries as relatively low and therefore feel justified in augmenting their income through private sector activity, for which they are remunerated on the basis of fee-for-service payments. In 2006, the highest physician's average monthly wage was €5013.50, and the lowest was €1769.00 (for interns) (GDH, personal communication). However, when additional payments, together with other variable components such as overtime (e.g. on-call duties) are taken into account, the total income per doctor is relatively high compared to the average wage (nearly €35 000/year). Particularly in rural hospitals, where there are a small number of doctors and on-call duties frequently arise, overtime can account for the majority of a doctor's income. It is currently perceived that approximately 30% of all medical salary costs are spent on overtime services. A regulation issued in 2001 established new procedures for overtime payment of doctors in hospital emergency departments. All doctors were, from then on, paid at the maximum wage per hour (corresponding to a 42-hour work schedule, with an exclusive contract), regardless of their actual category of contract. The working hours within the ambulatory setting were extended. This payment scheme was enforced both in hospitals and PCCs (Decree-Law 92/2001). The intention was to relate these payments to performance indicators with respect to outpatient visits in hospitals and in health centres, and to operations for patients on surgical waiting lists. There is no information on the extent to which these payments changed provider behaviour. More recently, the Ministry of Health enacted a new ruling, featuring the consideration of the exceptional overtime work of GPs in emergency departments and freedom of choice for hospital physicians that opted for the 35 hours per week regime (Decree-Law 44/2007).

In 1996 the Lisbon and Vale do Tejo RHA initiated the Alfa Project to encourage group practice, teamwork and professional accountability (see Section 6.3 "Ambulatory 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 (and thus cost) in hospital emergency departments in the cities. This experiment attracted only a limited number of innovative primary health care professionals and faced the resistance of the traditional NHS public administration. Most RHAs 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. In the first stage, it is estimated that approximately 12% of doctors enrolled for the new payment scheme (Gouveia et al., 2006). The mixed system comprises a basic guaranteed salary plus capitation payment based on list size, adjusted for population profile; a fee-for-service payment for target services such as home visits and minor surgery; target allowances for preventive care; and payment for episodes of care such as services provided to pregnant women, including postnatal care. In order to collect greater evidence on the benefits of this new organizational and payment system, the scheme was extended until late 2003. From then on, a series of decrees extended the experiment even further. There have been some problems with the design of the new primary care delivery framework, and while there is still indecision, the experimental regime duration has been increased repeatedly. It was only replaced by legislation on Family Health Units (Despacho-normativo No. 9/2006) in early 2006 (Gouveia et al., 2006).

The remuneration system for health professionals in the new primary care USFs extends those experiments and introduces incentive payments for doctors and for the teams (see “Paying for health services”, within Section 3.6).

It is conjectured that about half of the 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 *Ordem dos Médicos*.

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 per week), extended full-time (42 hours per week) and part-time (20 or 24 hours per week). As with physicians, there are no data on the distribution of nurses across these three categories. The option for extended full-time is granted on a case-by-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. There is a deficit of nursing personnel

(see Section 5.2 “Human resources”), with professionals also using the system as a way of upgrading their salary. It is not uncommon that nurses work in both public and private institutions, with a “second employment” position, due to scarcity of resources.

Health ancillary technicians

The technological and scientific evolution of medical diagnostic and therapeutic procedures has given ancillary professionals a much more relevant role in health care provision. As with doctors and nurses, these professions are salaried under a pay scale that is not related 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.

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, appointed by the Minister of Health. 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 related to hospital management rules, 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.

Dentists

Dentists in Portugal work in private practice, where patients pay 100% of fees on a fee-for-service basis. Fees are privately determined, with the intervention of the OMD. This has been challenged by the Competition Authority, and nowadays each private practice sets the fees and has to post them at a visible location. 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 fees. There are very few salaried positions within the NHS related to dental care. Only the

more highly trained stomatologists are permitted to work in hospitals and paid on a salary basis by the NHS.

Pharmacists

Pharmacists in retail pharmacies obtain their income from two main sources: co-insurance directly from patients and the remainder from the NHS (via the RHA) or the relevant insurance fund. The remuneration is set as a maximum fixed margin over the wholesale price. In the case of public hospitals, the individual hospital must cover the cost of the pharmaceuticals. If the prescription is from a health centre the payments due from the NHS are centralized through the RHA. Members of the National Association of Pharmacies invoice the RHA, 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 (OTC) pharmaceuticals yield the greatest profit. In 2006, prices of OTC pharmaceuticals were liberalized, meaning that outlets (pharmacies and others) are now free to set the prices (see Section 6.6 “Pharmaceutical care”). Another major change has been the permission granted for the sale of OTC pharmaceuticals in dedicated outlets, requiring only registration with INFARMED, the regulatory institution for pharmaceutical products. A considerable number of establishments devoted to OTC pharmaceuticals have already opened.

There are also government plans to open up ownership of pharmacies beyond the current restrictions under which pharmacists have a monopoly regarding ownership. In April 2007 the Parliament approved a legislative authorization for the Government to change the laws regulating the ownership of pharmacies.

4 Regulation and planning

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 1996, it has not been fully achieved so far.

4.1 Regulation

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 the 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 GDH, based on plans submitted by the RHA boards. The High Commissioner for Health has authority over the RHAs. Consequently, a general framework within the National Health Plan has been created to avoid regions pursuing national policies at their own pace, 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 (GDH, 2002).

Since then, a new National Health Plan has been designed. The *Plano Nacional de Saúde 2004-2010* is currently being implemented throughout the country (English version available at <http://www.acs.min-saude.pt/ACS/conteudos/plano+nacional+de+saude/planonacionaldesaude.htm>). It comprises strategic guidelines and objectives with relation to a minimum set of health system activities to be put into effect by the Ministry of Health. The Plan sets three main strategic goals:

- to improve health status at every stage of the life-cycle, reducing the burden of disease;
- to ensure that citizens are at the centre of the changes to be implemented, reorganizing health care provision;
- to ensure that the Plan has sufficient human and physical resources for it to be implemented, as well as defining appropriate assessment and auditing mechanisms.

The GDH has been responsible for the Plan’s design and execution (see Section 2.3 “Organizational overview” and Section 6.1 “Public health”).

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 (see “Training of health care personnel”, within Section 5.2). 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 statutory health system. Recognition that entrepreneurial initiatives require adequate measures to control what may otherwise be decisions made purely in the interests of the managers, rather than in the interests of the Ministry, is making the issue of management regulation a matter for discussion.

INFARMED, established in 1993, was reorganized in 1999 to meet the new and reinforced EU regulations in the area of pharmaceuticals. It is responsible for the regulation of pharmaceuticals and medical equipment, and supported by the Pharmaceutical Inspection Service, the Pharmacovigilance Service and the Official Laboratory for Pharmaceutical Quality Control. A full description of their respective functions is given in Section 6.6 “Pharmaceutical care”.

The Court of Auditors, an independent body that conducts periodic external auditing of NHS performance, has in recent years produced some critical reports. These reports have looked at the overall public health expenditure as well as giving a comparison across three hospitals. Since the year 2000, a few major auditing reports have been drawn up. In 2003, the financial status of the NHS was audited (Court of Auditors, 2003). By 2005, it was the turn of the Internal Control System of the NHS to be examined (Court of Auditors, 2005). A 2006 report evaluated the management scheme of the *Sector empresarial do Estado* (state-owned companies), with relation to the period 2001–2004. These analyses have highlighted major organizational and financial problems and have made recommendations. The most recent report is *Relatório n.º 5/2007*, on the Regional Health Service of the Madeira Archipelago. Its recommendations include the improvement of health management mechanisms, the development of financing through *contratos programa* (contracts), the development of specific statistical instruments in order to make assessment of health care delivery easier and more accurate, and the enhancement of waiting list management.

In 2003 the HRA was created. The main tasks of the HRA are to regulate and supervise health care providers' activity in order to guarantee enough competition between them. A recent example of the HRA's work is the study conducted about the health care providers' licensing process. The HRA has suggested to the Ministry of Health to change the laws concerning the licensing process. According to the document (ERS, 2007), the process should be made simpler and legal requirements made easier to fulfil (see "Registration/licensing", within Section 5.2).

4.1.1 Regulation and governance of third-party payers

Organization

RHAs play an essential role in the contracting of health care providers to work with the NHS. They are responsible for setting up (and paying for) *convenções* (*convenções* refer to the contracting of private sector providers to provide NHS patients with specific health care services) and *contratos programa* (contracts) with the hospitals (based on cost history, utilization and complexity variables; see "Paying for health services", within Section 3.6). RHAs are also in charge of negotiating and signing the PPPs contracts. These follow the procedure used in the contract that established the first public hospital under private management, signed between the private operators and an RHA.

Besides the NHS, health subsystems manage the provision of their own "contracted health care providers" among NHS and private sector services.

The opting-out option can be put into effect by an agreement between the subsystem and the RHA.

VHI is provided by several insurance companies, offering specific health insurance programmes. Médis and Multicare are the companies with the largest market shares. (See “Voluntary health insurance” in Section 3.3 for further details on VHI).

Finances for purchasers

The HRA has conducted an assessment of the *convenções* contracted by the NHS (through RHAs). This is a way of making use of the HRA’s powers. These “convenções” are responsible for almost 10% of the NHS total costs, which makes it a key issue with respect to cost-containment. The law regulating *convenções* has been changed in 1998. It specifies there should be a known set of general contractual clauses (following an approach known as “any willing provider”) for each type of *convenção*. These changes have not entered into force, as such general contractual clauses have only been drawn up for surgery, dialysis and a system for the management of (waiting list) patients waiting for surgery (SIGIC, *Sistema de Gestão dos Utentes Inscritos para Cirurgia*). This raises several problems, such as lack of competition, market foreclosure, higher costs and prices, and lower service quality for patients.

Private insurers are free to choose their providers. In fact, providers have to apply in order to be accepted as an “official provider” of a specific system. The way they work is different from both NHS and health subsystems health care provision. There are quite a few rules to conform to in order to be accepted as a client of the insurer. Insurance companies are under the jurisdiction of the Portuguese Competition Authority and the HRA, but are not directly under Ministry of Health supervision.

4.1.2 Regulation and governance of providers

All hospitals belonging to the NHS are in the public sector, under Ministry of Health jurisdiction, as described in Section 3.6.1 “Paying for health services”. Private sector hospitals, both non-profit-making and profit-making, have their own management arrangements.

Since 2003, almost half the NHS hospitals have been given statutes similar to those of a public-interest company (in what may be termed “autonomous public hospitals”, whereby the Government retains ultimate ownership but gives some autonomy to hospital management – “*Hospitais EPE*”). This is clearly an attempt to introduce a more corporate structure into hospital management, with the expected effects on efficiency and cost-containment. The hospitals

not yet transformed are now under pressure to provide better services to their patients, as their performance can be compared to that of the hospitals that have already been converted.

All hospitals are financed through contracts (*contratos programa*), but “*Hospitais EPE*” have many decision-making powers with relation to capital, staff, and negotiation of input prices, which are not present in the traditional NHS-run hospitals. Among the new management rules, “*Hospitais EPE*” may hire staff under individual labour contracts (instead of collective agreements) and may set the performance-related payment schedules of professionals. The use of incentive schemes is seen as a way to counteract the existing rule of “equal pay/least possible effort”. Several hospitals are also getting together to block purchase pharmaceutical products and other clinical consumables, taking advantage of the bargaining power resulting from larger acquisition volumes.

With relation to the organization of services, there is usually a strict gatekeeping process performed by primary care physicians. Access to laboratory tests and screening tests (magnetic resonance imaging (MRI), computerized (axial) tomography (CT) scans, etc.) is also limited, if it falls outside of routine procedures.

4.1.3 Regulation and governance of the purchasing process

Regulation is traditionally centralized within the Ministry of Health. The creation of the HRA implies that some regulatory supervision will be carried out by an entity independent of the Ministry. The scope of intervention of the HRA is not totally clear. Clarification is likely to take place in the near future through a revision of the HRA statutes and its practice (see Chapter 7 “Principal health care reforms”).

The purchasing process is also centralized. At the time of writing, with the use of explicit contracting with hospitals, it is expected that the process will be carried out at the health region level. The RHAs are responsible for the terms of the contracts of provision, and of course for the supervision of the contracts.

4.1.4 Regulating quality of care

The main responsibility for regulation of policy objectives and national quality standards lies at the central level with the GDH. 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 professionals and provider organizations in the continuous improvement of quality for the delivery of health care. It also promotes methods of health institution

certification 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 (IQS, *Instituto da Qualidade em Saúde*) and the King's Fund in London, United Kingdom),¹² now under way in more than one third of NHS hospitals. The MoniQuor model, which aims to monitor the quality of organization at the PCC level, was put into action in 1998, but has evolved into a cross-analysis process: each PCC supervises another one, and is supervised by a third one.

The HRA plays an important role in the assessment of quality of care. It is able to monitor and audit quality of providers, and adherence to legislation.

A specific institute has been created to ensure and monitor the quality of care provided – the IQS, which is to be integrated in the restructuring of the Ministry of Health associated with the general reform in civil service organization. Medical negligence is overseen by the *Ordem dos Médicos* (see “Patient safety and compensation”, within Section 2.5).

4.2 Planning and health information management

A separate central investment plan governs capital outlays within the NHS. Capital investment has traditionally been the responsibility of the GDH. However, a functional revision of the IGIF in 2000 extended its responsibility to that area. More recently, under the civil service general reform, a new body (the ACSS) was created and has taken over the duties of the IGIF. Most of the investment is provided internally by the Portuguese state budget through the Central Administration's Investment and Development Plan (PIDDAC, *Programa de Investimentos e Despesas de Desenvolvimento da Administração Central*). There has also been joint funding of hospital and health centre developments with the EU through the ERDF.

Legislation in 1988 gave the Ministry of Health total control over the procurement and installation of high-technology equipment both within the NHS and in the private sector. The legal guidelines for installing expensive

¹² The Health Quality Service is a health accreditation service in the United Kingdom and the rest of Europe. It works together with international health care organizations to improve the quality of patient care through consultancy services and the development of health care standards and assessment processes. See <http://www.chks.co.uk/index.php?primarycare> for details on the accreditation in primary care, as an example of its activity.

equipment (big-ticket technologies) which established ratios of equipment per inhabitant 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 (MoH, 1998), 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.

In 2001 the Ministry of Health issued formal guidelines for the development of Regional Master Plans (RMPs) for NHS hospital and primary care facilities. The intention was to turn the RMPs into core instruments for the harmonious and integrated development of NHS infrastructures at the national level. However, few developments have been made in order to accomplish the stated objectives. See “Planning of health care personnel” in Section 5.2 for a description of the planning arrangements for physicians and nurses.

4.2.1 Health technology assessment

Portugal does not have a tradition of health 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 (MoH, 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 rather it aimed to enable planners and hospitals to identify areas where there were gaps in service provision. However, this exercise has not been repeated since then. There are currently no effective methods for regulating the distribution of health equipment in the private sector. Most expensive medical equipment (big-ticket technologies) (67%) are located in the private sector, which is more flexible and innovative and therefore outstrips the public sector in the acquisition of high-technology equipment. Hospitals contract with private clinics for the use of equipment, providing a strong incentive for this provision pattern to continue.

INFARMED is in charge of regulating any pharmaceutical's health technology assessment. It does so according to specific published guidelines on new pharmaceuticals' economic evaluation (INFARMED, 1998). The latest was brought out in 1998 (the economic evaluation guidelines were made public in December 1998, and were published in Despacho n° 19064/99 of 9 September 1999), and it has not been revised since then. Economic evaluation

of pharmaceuticals has only been carried out for ambulatory care. It was only determined in 2006 that the same principles are to be followed in the hospital adoption of new pharmaceuticals. INFARMED is extending its responsibility from ambulatory to hospital care. See Section 6.6 “Pharmaceutical care” for more information on health technology assessment for pharmaceuticals.

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

4.2.2 Information systems

Several information systems are run by the National Health Observatory (ONSA, *Observatório Nacional de Saúde*): the National Health Interview Survey, the Sentinel Network of GPs, 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 GDH since 1997 (see Section 6.1 “Public health”).

The concept of a Patient Identity Card followed an international trend in that direction that emerged within the EU. The main advantage of a Patient Identity Card is to identify clearly the entity that is financially responsible for the care provided to each patient, on the one hand, and to identify exemptions from co-payments that legally exist, on the other. The main impetus for the creation of the Patient Identity Card originated in the early 1990s, but it was slow to roll out. The card is free of charge to citizens. The RHAs are responsible for issuing the card. Despite the slow roll-out, there are now more cards than people, meaning that too many cards have been issued. This can only be the result of a lack of organization: duplication of cards for the same person and not eliminating deceased people’s cards are the most likely reasons behind the excess number of cards. The issuing of new cards has been suspended, on the expectation that a broader-based Citizen Card will be introduced.

4.2.3 Research and development

Two of the main institutes under the jurisdiction of the Ministry of Health have specific areas devoted to research and development (R&D). In 2004, INFARMED formed an R&D office, in an attempt to build up a connection between industry, university and the Institute itself. National pharmaceutical industry R&D, is regarded by the Government as an important sector for the Portuguese economy. Bial, a pharmaceutical manufacturer which plays a key role in the industry, aims to introduce in the market its first patented product in

2009 (after obtaining the patent, it is now in the approval process by the relevant European and United States institutions), at the end of a 15-year research effort. The office aims also to establish international partnerships in the R&D field. The INSA has several R&D centres and laboratories. Their focus is on infectious and genetic diseases, nutrition and food safety, chronic diseases, environment and health determinants. Support for R&D has been made explicit in the recent *Portaria* 618-A/2005 of 27 July 2005, in which companies investing in R&D activities above €5 million per annum were exempted from the mandatory price decrease of 6%. Traditionally, health research financing has been carried out by the Ministry of Health and through the Portuguese Science Foundation (*Fundação para a Ciência e a Tecnologia*).

5 Physical and human resources

5.1 Physical resources

5.1.1 Infrastructure

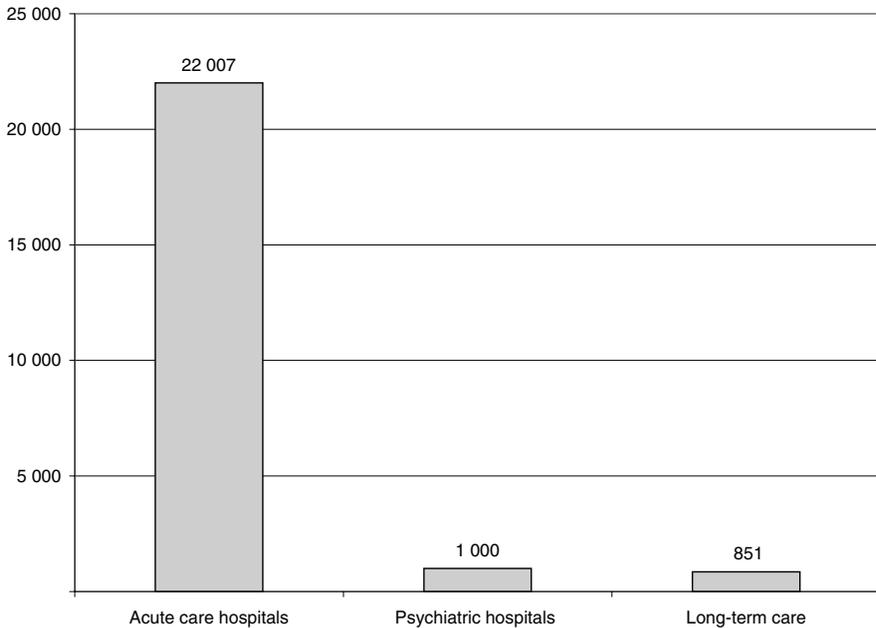
The average length of stay in Portuguese NHS hospitals is slightly less than seven days, with a slight decrease over the period 2004–2006. In terms of hospital occupancy rate, in 2006 the average was 75% (which was the lowest in the past three years). Over the same period, there was an increase in the number of patients treated (2%), day care sessions (12.4%), consultations (9.8%), surgery (5.4%) and emergency admissions (5.1%). However, the number of deliveries has decreased by 4.6%, although with an increase in the share of caesareans of 5.4% (MoH, 2007a).

The mix of beds in acute care hospitals, psychiatric hospitals and long-term care institutions is shown in Fig. 5.1. According to Oliveira (2006), psychiatric care has experienced a reduction in the number of NHS psychiatric beds since the mid-1990s. This was coupled with a decrease in the length of stay and more admissions to psychiatric hospitals and for psychiatric services in non-specialized hospitals.

Portugal has a medium number of beds in a European comparison, though higher than the relative value reported by other countries with similar NHS models, such as the United Kingdom and Spain (Fig. 5.2). The evolution does, nonetheless, match the general international trend: a decrease over time, which is less strong in NHS countries. In fact, looking at the current continuous care reform, the Portuguese NHS is aiming at an increase of long-term beds to approximately 13 400 by the year 2015.

Recently, in late 2006 and early 2007, the HRA published recommendations based on a study about the licensing of private health care providers (ERS, 2007).

Fig. 5.1 Beds in acute care hospitals, psychiatric hospitals and long-term care institutions per 1000 population, 2005



Source: MoH, 2007a.

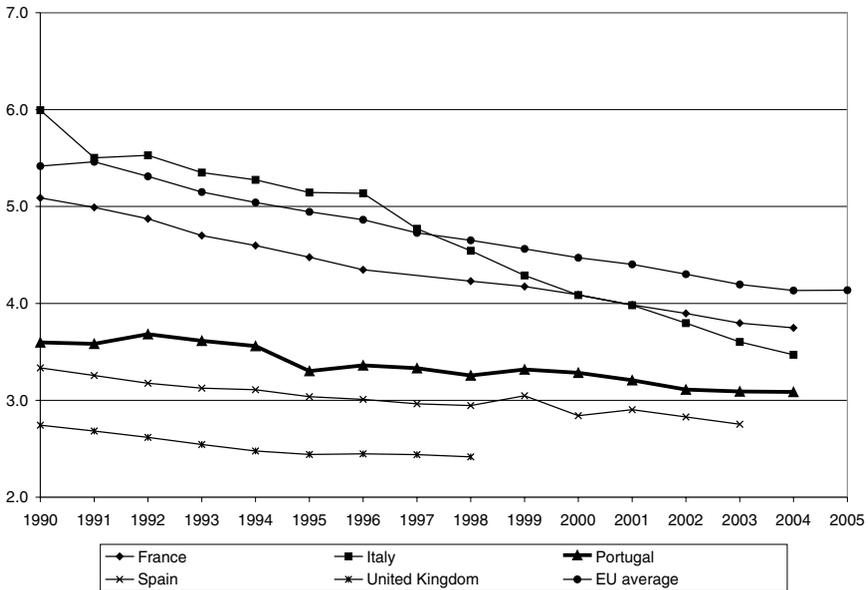
Many licensing laws exist, one for each kind of practice. For example, rehabilitation and physical medicine have completely separate licensing arrangements from clinical pathological laboratories. Since it was found that the present group of laws concerning the licensing of private hospitals and health care facilities is very broad and enables the coexistence of licensed and unlicensed health care providers, it was recommended this issue be subject to a legislative review that should specify the general rules for all facilities of this kind and define the technical specifications for each specialty.

5.1.2 Capital stock and investments

Current capital stock

In 2004, Portugal had 171 hospitals, 89 of which were public and 82 private. Almost half of the private hospitals belong to profit-making organizations. The sharp decline in hospitals owned by *Misericórdias* between 1970 and 1980 followed the incorporation of these facilities into the NHS. *Misericórdias* currently operate hospitals and facilities in the areas of rehabilitation, long-term

Fig. 5.2 Beds in acute hospitals per 1000 population in Portugal, selected countries and EU average, 1990 to latest available year



Source: WHO Regional Office for Europe, 2007.

Note: EU: European Union.

care and residential care for older people, people with disabilities and people with chronic illness (see Section 2.3 “Organizational overview”).

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 decades, from 634 in 1970 to 171 in 2004 (a reduction of 73%). Over the last few years there have been progressive improvements to some older physical infrastructures (see Section 6.4 “Inpatient care”).

Investment funding

Capital investments in the NHS are funded by the Ministry of Health, and some by special programmes. The governmental budget for 2007 foresees an expenditure of approximately €40 million on the national health programme, *Saúde XXI*. It should also be mentioned the investments under the PIDDAC (an investments programme for government departments) amounted to €138 million in 2004 and €92 million in 2005, below the budgeted amounts, and including a significant component of EU co-financing (approximately 45%).

One of the Government's objectives is to improve the NHS providing capacity while guaranteeing more value for money, by associating private entities in the sphere of public responsibility to build, maintain and operate health facilities, under the so-called PPPs. From a financial point of view, the transfer of financial risk from the State to the private operators through PPPs 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 heavily on the experience of the English NHS Project Finance Initiative (PFI), and consideration is being given to including clinical services in the package in addition to ancillary services, at least for the first batch of hospital PPPs. Legal provisions have been undertaken (Decree-Law 185/2002) to create an adequate framework for the further implementation of actual partnerships. Although the intention is to extend the model to virtually all types of health facility, priority will be given to hospitals. Between 2003 and 2006, four hospital projects were launched under PPPs. Another six are predicted for the coming years, including both replacement of facilities and building of new hospitals.

The first two PPPs projects started operations in April 2007: a rehabilitation hospital in S. Brás de Alportel (located in the southern region of Portugal, the Algarve) and CAS, the NHS Call Centre, and it has been estimated that there have been substantial savings from this operation. Looking at a public sector comparator, with a reference value computed to simulate what would be the expected cost under public construction and operation, these two new facilities are contracted at a cost that is 6.2% and 17.5%, respectively, below what would be expected. The next PPPs projects to be completed, according to announcements by the Ministry of Health, are the hospitals of Cascais, Braga, Vila Franca de Xira, Loures, Todos os Santos (Lisbon), Faro, Seixal and the Lisbon Oncological Institute, some of them with even higher savings estimates.

Capital investment controls

Capital investments in health are determined at the central level, by the Ministry of Health, which had, until the recent civil service restructuring, a Directorate-General for infrastructure and investment.¹³ Equity in geographical distribution of health care facilities is often a point of contention, although for the external

¹³ The Governmental Programme for Public Administration Restructure (PRACE, *Programa de Reestruturação da Administração Central do Estado*) will disable the IGIF, the Directorate-General for Health Premises and Equipment (DGIES, Direcção-Geral das Instalações e Equipamentos da Saúde) and the IQS, consolidating all their actual functions in one new Health System Central Administration.

observer it is unclear how such considerations are actually included in the process, alongside the demands from local representatives of the population.

5.1.3 Medical equipment, devices and aids

Almost 10 years ago, in 1998, an equipment chart was developed (MoH, 1998), with information referring to 1995/1996. It established national and regional ratios for the major medical technologies for diagnostic imaging (including CT scans and MRI equipment). Since then, establishment of new equipment has occurred and growth in diagnostic imaging examinations has been strong, especially in the Lisbon area. At the end of 2005 there were four positron emission tomography (PET) scanners in Portugal (two in Oporto, one in Lisbon and one in Coimbra). There is no evidence of any health impact of these increases. (For more information on the diffusion of PET in Portugal, see Cardoso (2006).)

Table 5.1 shows the supply of diagnostic imaging equipment per 1000 population in 2003.

Table 5.1 Items of functioning diagnostic imaging technology per million population, 2003

Imaging technology (per million population)	No. of items
CT scanners	12.8
MRI units	3.9
Radiation therapy equipment	3.3
Mammographs	11.6

Source: OECD, 2006.

Notes: CT: Computerized tomography; MRI: Magnetic resonance imaging.

5.1.4 Information technology

There are currently (as of December 2006) 1.6 million access points to the Internet, of which 1.4 million are broadband connections. The penetration ratio for residential consumers (accesses/population) was approximately 13.8% at the end of 2006. Taking into account that each household has more than one user, these numbers are broadly consistent with previous information that puts Internet usage in the range of 30%, as the more recent estimates state that 31.5% of Portuguese families have home access to the Internet. (Internet penetration data are available from ANACOM (<http://www.anacom.pt>))

The IGIF was the service at the Ministry of Health responsible, in a centralized manner, for the study, guidance, assessment and execution of IT, and for financial management of the NHS. One of its main goals was to develop

an information system and respective infrastructure capable of supporting it and allowing effective and rational management of economic and financial available resources. The IGIF made available to all citizens a great deal of information on hospitals, PCCs and other institutions and projects of the NHS. The web site of the Ministry of Health also provides important information on a regular basis, such as the recently added waiting list of people registered for surgery and performance indicators for the Ministry of Health. Over time, the IGIF produced several IT software applications, for registration and analysis of health units' activities. It also managed the database of hospital admissions (based on DRGs). There have been occasional attempts to launch electronic medical records, but this approach has not yet been widely disseminated. For the emergency departments, for example, a system called "Alert-er" has been adopted by several hospitals.

Some hospitals offer the possibility of booking an appointment electronically (for example, one of the largest hospitals, Hospital de Santa Maria, advertises this possibility on its web page), although this is far from being the norm, and there is no information on how effective the system is.

5.2 Human resources

The number of physicians per 1000 population is already above the EU average. The situation regarding nursing staff is quite different. The relative number of nurses in Portugal is well below that of other countries, although comparable to that of Spain. This implies that Portugal has a ratio of nurses to physicians much lower than in most countries. The definition of activities that can be performed by nurses and by physicians probably contributes to this lower ratio. Still, recent years have witnessed a movement towards a rebalancing of this trend, with a greater increase in nurses than in physicians, and this is likely to continue in the future. One of the major challenges for the next 10 years, not yet translated into policy actions, is the redefinition of roles for health care professionals.

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 2.8% in 2003 (Table 5.2). In 2005 the Ministry of Health was the second largest employer in the public sector, with 142 277 employees. Between 1990 and 2004 the number of workers in the NHS increased 30.6% in Portugal, according to the OECD Health Data from 2006 (OECD, 2006).

According to the *Ordem dos Médicos*, there were 34 255 medical doctors in Portugal (mainland) in 2004. Data from the GDH showed that 23 389 of these were employed by the NHS in 2004 (hospitals and PCCs), the majority

in secondary and tertiary care. GPs/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.

Table 5.2 Health care personnel per 1000 population, 1990, 1995, 2000–2004

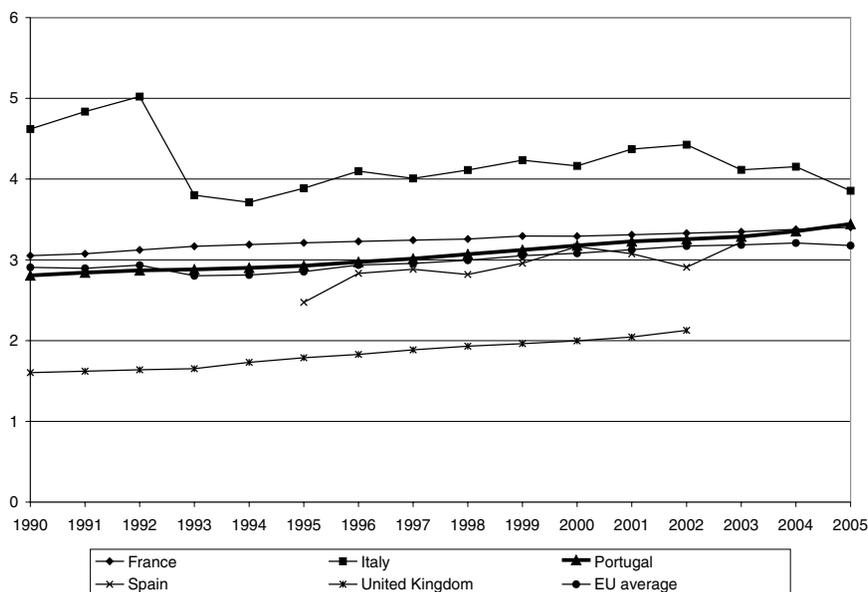
	1990	1995	2000	2001	2002	2003	2004
% total health employment	2.3	2.7	2.8	2.7	2.8	2.8	–
Practising physicians	2.8	3.0	3.2	3.2	3.3	3.3	3.4
GPs	–	0.4	0.4	0.4	0.4	0.5	0.5
Practising specialists	0.9	1.6	1.8	1.8	1.8	1.9	2.0
Practising dentists	0.2	0.3	0.4	0.5	0.5	0.5	0.6
Practising pharmacists	0.6	0.7	0.8	0.8	0.8	0.9	0.9
Practising nurses	2.8	3.4	3.7	3.8	4	4.2	4.4

Source: GDH, 2005.

Note: GP: General practitioner.

There has been a steady increase in the number of practising doctors in Portugal since 1990 (Table 5.2). Before this, there was a rapid increase from as few as 0.95 doctors per 1000 population in 1970 to 2.83 per 1000 in 1990. As can be seen in Fig. 5.3 and Fig. 5.5, there were 3.4 physicians per 1000

Fig. 5.3 Number of physicians per 1000 population in Portugal, selected countries and EU average, 1990 to latest available year



Source: WHO Regional Office for Europe, 2007.

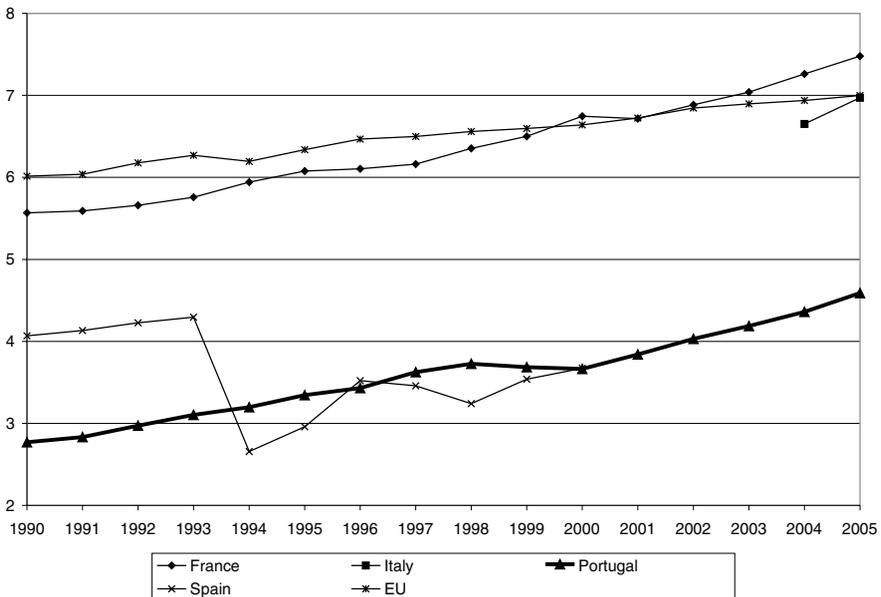
Note: EU: European Union.

population in 2005, a little higher than the EU average (3.2 in 2005). There were fewer physicians per 1000 population in Portugal than in Italy (3.9 per 1000 in 2005) and almost the same number as in Spain.

Fig. 5.4 shows that Portugal, just like Spain, has steadily increased the ratio of nurses to inhabitants but has one of the lowest ratios in Europe (4.6 versus the EU average of 7.0 in 2005). Approximately 74% of nurses work in central and district hospitals, while only 20% work 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. The number of nurses per capita is well below the EU average (Fig. 5.4 and Fig. 5.5).

As Fig. 5.6 shows, the number of dentists has increased steadily since the early 1990s achieving 0.58 per 1000 inhabitants in 2005, very close to the EU average at that time. Since the mid-1990s, in addition to three existing schools in the public system, several private schools for dental care medicine have been opened. Training of new dentists reached the order of hundreds in a few years. Most of them work almost exclusively in the private sector, as the NHS does not offer extensive dental care coverage.

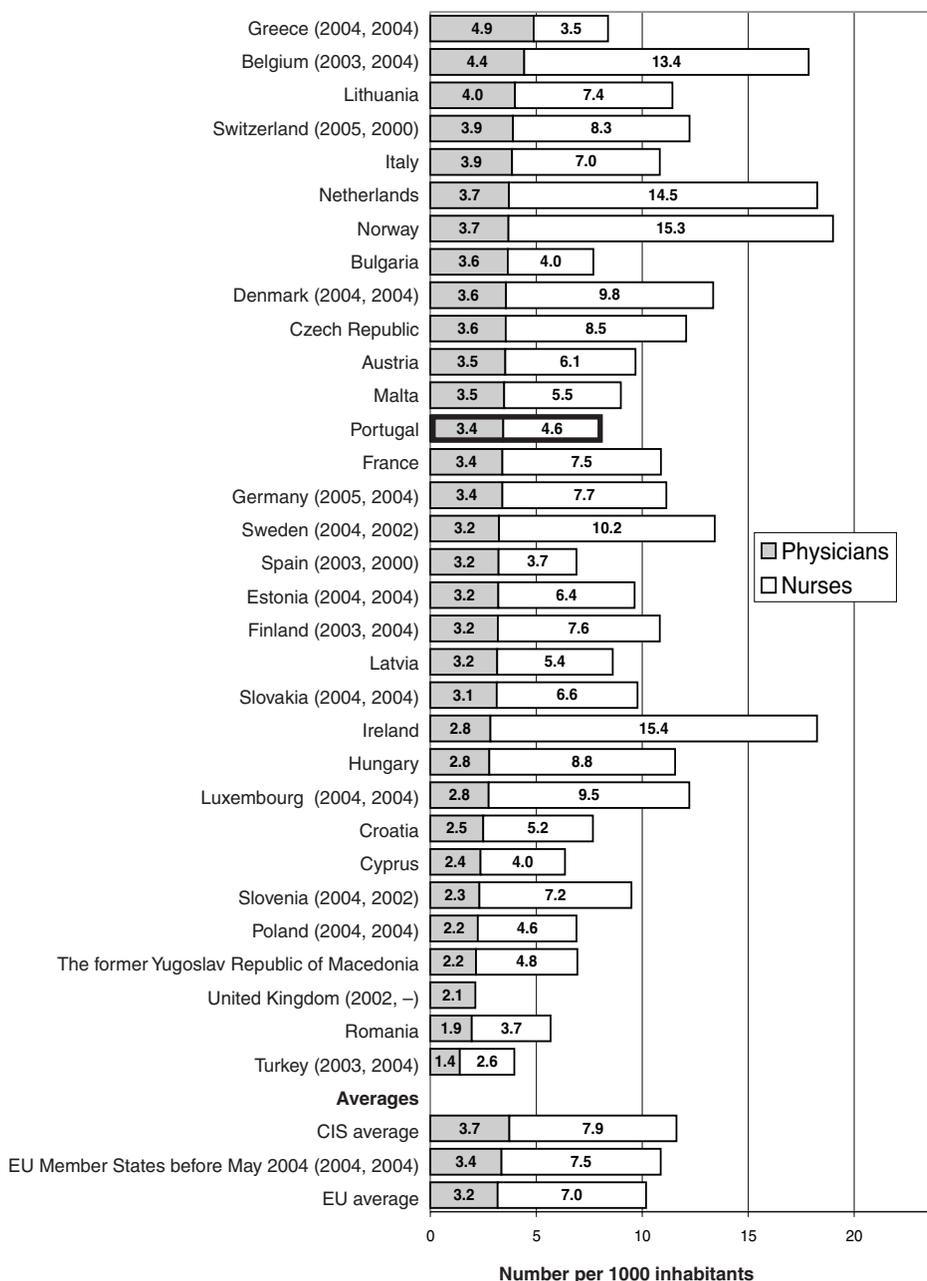
Fig. 5.4 Number of nurses per 1000 population in Portugal, selected countries and EU average, 1990 to latest available year



Source: WHO Regional Office for Europe, 2007.

Note: EU: European Union.

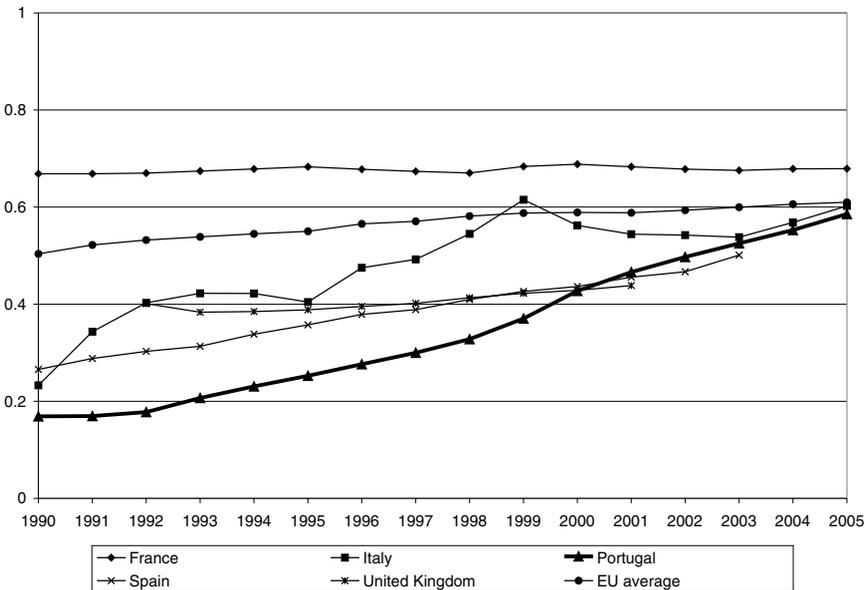
Fig. 5.5 Number of physicians and nurses per 1000 inhabitants in the European Union and selected countries, 2005 or latest available year (in parentheses)



Source: WHO Regional Office for Europe, 2007.

Notes: CIS: Commonwealth of Independent States; EU: European Union.

Fig. 5.6 Number of dentists per 1000 population in Portugal, selected countries and EU average, 1990 to latest available year



Source: WHO Regional Office for Europe, 2007.

Note: EU: European Union.

5.2.1 Trends in health care personnel

According to Table 5.3 and Table 5.4, the Lisbon health care region has a much larger health care staff than the other health regions, but differences between regions are not dramatic. In terms of PCCs, no region is consistently favoured with regard to human resources. Alentejo has a significantly higher number of nurses per 1000 inhabitants when compared to Lisbon, but this is not the case with GPs. As for hospitals, the Lisbon region is slightly favoured, most significantly in terms of physicians and GPs.

According to information provided by the *Ordem dos Médicos*, the number of doctors trained in other countries but working in Portugal represents approximately 10% of the total number of employed doctors. There were 3564 doctors authorized to practise medicine in Portugal in January 2007, up from 2987 in 2003. Most of these foreign physicians are of European origin, with the main country of origin being Spain, followed by Brazil and other countries with Portuguese as their official language (485 doctors from Brazil and 456 from the African countries with Portuguese as their official language (PALOP, *Paise Africanos de Lingua Oficial Portuguesa*)). However, the greatest growth has been in the number of doctors from non-EU countries, increasing from

Table 5.3 NHS health workforce by health region, 2005

	North	Centre	Lisbon	Alentejo	Algarve
Primary Care Centres					
Physicians	2 263	1 779	2 426	335	301
GPs	234	163	276	29	17
Nurses	2 398	1 689	2 128	496	348
Hospitals					
Physicians	5 088	3 682	6 628	432	455
GPs	1 572	1 201	1 921	105	135
Nurses	9 425	7 561	11 086	1 151	859

Source: GDH, 2005.

Note: GP: General practitioner.

57 doctors in 2003 to 210 at the end of 2006. In addition to this inflow of foreign doctors, and given the constraints in admissions to the schools of medicine in Portugal, there is an increasing outflow of Portuguese students to other EU countries. It is estimated by the *Ordem dos Médicos* that their number was close to 600 at the end of 2006. Whether or not they will return after training is still to be seen.

As shown earlier in Fig. 5.4 and Fig. 5.5, it is clear that Portugal has a much lower density of nurses than the average of the EU countries shown. Portugal also has relatively few GPs compared to other EU countries.

5.2.2 Planning of health care personnel

Most NHS staff are civil servants and all new posts have to be approved by the Ministry of Finance. There is an increasing number of workers under individual contracts, which do not confer upon them the same rights as those of civil servant status. In addition, it is clear that rules for civil servants are becoming closer to

Table 5.4 NHS health workforce by health region per 1000 inhabitants, 2005

	North	Centre	Lisbon	Alentejo	Algarve
Primary Care Centres					
Physicians	0.689	0.736	0.690	0.750	0.722
GPs	0.071	0.067	0.078	0.065	0.041
Nurses	0.730	0.699	0.605	1.111	0.835
Hospitals					
Physicians	1.549	1.524	1.884	0.967	1.092
GPs	0.478	0.497	0.546	0.235	0.324
Nurses	2.869	3.130	3.151	2.577	2.061

Source: GDH, 2005.

Note: GP: General practitioner.

those of private labour relations. 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. These excessive barriers to medical education and to other health professional careers, namely nursing, have necessitated recruitment of professionals from other countries.

The striking lack of nursing personnel, the scarcity of doctors in some regions and specialties (e.g. GPs), and the imbalance of primary care clinicians versus hospital specialists are some of the visible signs of the weakness of public health policy in the field of human resources. Moreover, the retirement in the near future of many physicians will create a shortage, as the *numerus clausus* policy applied in the past did not ensure a sufficient intake to replace them. Although in the current situation, the main problem is more associated with distribution (geographic and by specialty) than with supply, absolute numbers will become an issue in the future, if current trends prevail.

A Resolution of the Council of Ministers in December 1998 pointed out some solutions to this problem:

- founding of health sciences departments in existing universities;
- creation of new graduate programmes 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.

As part of this process, two more universities (Universidade do Minho and Universidade da Beira Interior) have been allowed to start offering degrees in medicine, increasing the number of medical doctors trained. Simultaneously, several private schools have started to offer degrees in nursing and paramedic training.

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 permitted by the *numerus clausus*. The chronic understaffing of nurses in primary and long-term care is also addressed, setting the European average as the target for NHS nurse staffing, by 2010.

Although there is a shortage of GPs (and physicians in general), there are strict limitations in terms of internship places which depend on the reported capacity of national health care facilities (NHS health centres and hospitals). In fact, from 2004 to 2006 there was a decrease in the number of physicians working for the Portuguese NHS (-1.1%). Thus, the NHS has been recruiting health staff from abroad, mainly from Spain, although a specific census to analyse this has not been conducted. Despite the existence of an active constraint on the number of training places, during that same period there was an increase of 49% in intern admissions and an increase of 42% in the number of interns in training programmes for GPs and family medicine, which shows the effort that is being made to address the limitations in primary care. From a global point of view, the intern admissions increased by 111% and the actual number of interns in training increased by 57%. It is widely recognized that a shortage of GPs exists and that this situation is likely to worsen in the future, as current GPs start to enter retirement. Recent decisions of the Ministry of Health regarding training vacancies indicate a willingness to deal with this issue.

5.2.3 Training of health care personnel

There are currently seven medical schools in Portugal (two in Lisbon, one in Coimbra, two in Oporto, one in Braga and one in Covilhã). Medical training programmes at the first five medical schools (Lisbon, Oporto and Coimbra) follow the same curriculum and, since the Bologna Treaty, are divided into two cycles leading to a Master's degree (three years plus two years): a core programme covering the basic sciences; and a clinical programme based on practice and specialized procedures. The two new medical schools (opened in 1998) in Braga and Covilhã are developing innovative educational programmes relative to the Portuguese tradition (problem-oriented lectures favouring a tutorial system, promotion of training closer to the communities and less hospital-focused, more multidisciplinary integration). 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: 4–6 years; general practice/family medicine: 3 years; and public health medicine: 4 years (including a 1-year postgraduate public health course).

Nurses

To train as a nurse, one must have undergone at least 12 years of school education. The nursing course lasts for four years, and upon successful completion a graduate degree and the professional title of nurse are granted. There are no nursing auxiliaries or equivalents in Portugal. If a nurse wants to specialize, there are several postgraduate programmes of study, listed here.

- Midwifery: 22 months, after two years' clinical experience.
- Paediatric nursing: 22 months, after two years' clinical experience.
- Psychiatric nursing: 18 months and two years' experience in mental health and psychiatry.
- Community nursing: 18 months, after two years' clinical experience.

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

5.2.4 Registration/licensing

The Government is jointly responsible, with the *Ordem dos Médicos*, 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, for example, 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 be proficient in related techniques. They also have to carry out research and publish scientific 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.

5.2.5 Other health care professionals

Since 1986, several public and private dentistry schools have opened. The courses have a 10-semester duration since the Bologna Process changes (previously, it was six years of training), and consist typically of four areas of knowledge: basics, biomedics, clinical and multidisciplinary. Previously, oral health care was provided by stomatologists who undertook three years' specialist training after their medical degree. Another nonmedical 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. There are also several allied

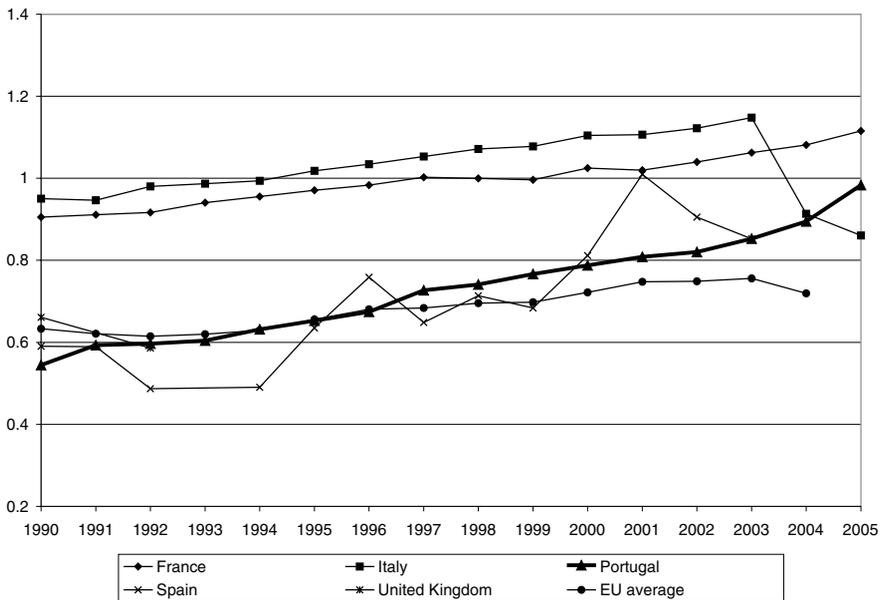
medical professional degrees being offered, covering 18 specializations (such as physiotherapy and radiology).

5.2.6 Pharmacists

The number of pharmacists in Portugal is lower than in other southern European countries, but has been increasing in recent decades and is currently slightly above the EU average (see Fig. 5.7).

Overall, the distribution and density of pharmacies in the country seems to be balanced, and the number of pharmacists has been growing steadily. The distribution of pharmacies throughout the country is highly regulated (see Section 6.6 “Pharmaceutical care”). A recent study commissioned by *Ordem dos Farmacêuticos* (Pharmacists Association) shows that existing regulations have been complied with, ensuring that a good coverage of the country exists (Rodrigues et al., 2007).

Fig. 5.7 Number of pharmacists per 1000 population in Portugal, selected countries and EU average, 1990 to latest available year



Source: WHO Regional Office for Europe, 2007.

Note: EU: European Union.

6 Provision of Services

6.1 Public health

Public health services in Portugal include the surveillance of health status and identification of its determinants, health promotion and disease prevention at community level, and impact assessment. The organization of public health services at national level is the responsibility of the GDH. The GDH is in charge of the establishment of programmes, definition of strategies and approval of national plans. At regional and local levels the main entities are:

- local health authorities consisting of a public health doctor usually based in a PCC;
- public health doctors and sanitary technical staff;
- RHAs, supporting public health within regions and subregions;
- 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-year specialist internship) are responsible for the epidemiological surveillance of the health status of the population and also for activities such as health promotion and disease surveillance. However, in many PCCs these responsibilities are transferred to GPs, due to a shortage 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).

One objective of the National Health Plan is to strengthen public health at both regional and local levels through provision of epidemiological expertise and leadership functions in health promotion. Five Regional Public Health Centres have been created since 1999 as part of this policy. These centres have technical and administrative autonomy and their own budget and staff. They are managed by regional health coordinators, while functionally and technically cooperating with the GDH and with each region's public health authority. They also coordinate their region's public health laboratories' activities with the INSA.

The regional public health centres are responsible for health planning, defining strategies, analysing health and disease phenomena, and ensuring sanitary engineering and international sanitary activities. On top of this, they also have the following responsibilities: guaranteeing technical support to local public health services; assessing population needs and identifying vulnerable population groups; epidemiological vigilance; monitoring of population health and respective risk factors and protectors; and training and research in health.

These centres were intended 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 levels of the regional public health centres are still low. Of particular note is the implementation of the Rapid Alert and Response System (SARA, *Sistema de Alertas e Resposta Apropriada*) currently in use. This is 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. Their work up to now has been to act as health inspectors and occupational health officers, which was heavily bureaucratic and meant working under old directives. The aim of the latest policies set out in the National Health Plan is to link the development of local health systems with the new public health structures, giving public health doctors a broader remit in terms of the health of the population. By creating these new public health units, previously disparate resources will be brought together.

ONSA was also established in 1998 as part of the INSA. This intended to centralize major national health information systems and to produce timely reports on the health of the population and its determinants (see “Information systems”, within Section 4.2).

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, the National Committee on AIDS and the four major national programmes: for prevention of cancer, prevention of HIV/AIDS, cardiovascular diseases and older people. The National Institute for Drug Dependency, mainly concerned with coordination of prevention and treatment activities on drug and alcohol dependency, was merged in 2002 with the coordinating structure for drug addiction treatment and prevention within the Ministry of Health. The new institution, the IDT, now performs this role. However, regional public health centres play a big role in promotion and prevention, for example, by developing school health programmes and education towards healthier lifestyles.

Public access to health information is also improving with the mass dissemination of telecommunications, especially the Internet. A CAS for public health exists, which supports a low-cost telephone number connected to the GDH. It has the support of the five regional public health centres and corresponding RHAs. It provides sorting, counselling and guidance according to the disease, including emergency situations. This service responds to personal primary care needs through health promotion and disease prevention, as well as public health needs, while participating in partnerships with other services to improve the health status of certain groups and communities: it advises people on how to protect themselves from environmental risks, such as heat waves or cold snaps, or the existence of polluted air due to particles in suspension (e.g. a consequence of forest fires); it helps to prevent disease from spreading in epidemic situations, such as influenza or acute respiratory syndrome; and it promotes and encourages healthy behaviours (nutrition and family planning).

Another useful means of getting public health information to a vast proportion of the population in a straightforward manner is the development of Internet web sites dedicated to public health issues, such as those provided by the Ministry of Health and the GDH (<http://www.min-saude.pt/>, and <http://www.dgs.pt/>).

The NHS is responsible for the national vaccination plan, which includes vaccines considered to be the most important for protecting population health. These vaccines can be altered from one year to the next in order to adapt the programme to the population’s needs, usually by combining new vaccines. People can be vaccinated in local PCCs and vaccines that are part of this national

plan are free for Portuguese citizens. Relatively high levels of vaccination are achieved in Portugal (see Table 1.9 and Fig. 1.1 in Section 1.4 “Health status”).

From a global point of view, the ACS is responsible for three nationwide coordination bodies, for heart disease, cancer and HIV/AIDS. Each intends to improve the population’s epidemiological knowledge of its kind of pathology, promote prevention and improve clinical practices and health care provided to affected patients. From a regional point of view, the regional public health centres have their own laboratories and field workers, and use them in order to achieve one of their basic responsibilities: assessing their region’s population health status.

Since a great deal of the population’s time is spent at school, at work and in leisure locations, public health interventions require a multisectoral approach. To strengthen this approach the Ministry of Health cooperates with other ministries, such as the Ministry of Labour and Social Solidarity (for workplaces), the Sports Secretary of State (for sports spaces), the Youth Secretary of State (for public leisure locations), the Ministry of Education (for primary and high schools) and the Ministry of Justice (for prisons).

6.2 Patient pathways

The first point of contact within the public system is the GP/family doctor in a PCC. Theoretically, people do not have direct access to secondary care and GPs are expected to act as gatekeepers (in practice, patients bypass their GP by visiting emergency departments). Frequently, there is a delay in obtaining a consultation depending on the specialty. (Data on the waiting times for specialist care and diagnostic services are not available.) In reality, many people go directly to the emergency department in hospitals if they have any acute symptoms. It is estimated that approximately 25% of the attendees at hospital emergency units do not need immediate care (Bentes et al., 2004). 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 approved by their schemes. Private physicians can also refer them to NHS hospitals. Those patients covered by VHI may be eligible for private specialist consultations but this will depend on the benefits package offered.

6.3 Ambulatory care

Portuguese primary health care is delivered by a mix of public and private health service providers. This network incorporates PCCs integrated in the NHS, private sector primary care providers (both non-profit-making and profit-making) and professionals or groups of professionals in a liberal system with which the NHS contracts or develops cooperation agreements. The primary care network promotes, simultaneously, health and disease prevention, including management of acute or serious health problems according to physical, psychological, social and cultural dimensions, without discrimination of whatever source, through a person-centred approach oriented towards the individual, her/his family and the community of which s/he is a member (Bentes et al., 2004). In this section, primary health care is taken to cover all ambulatory health care provided outside of hospital by both general medicine and specialists, and other nonspecialist care and services such as dental care, physiotherapy, radiology and diagnostic services.

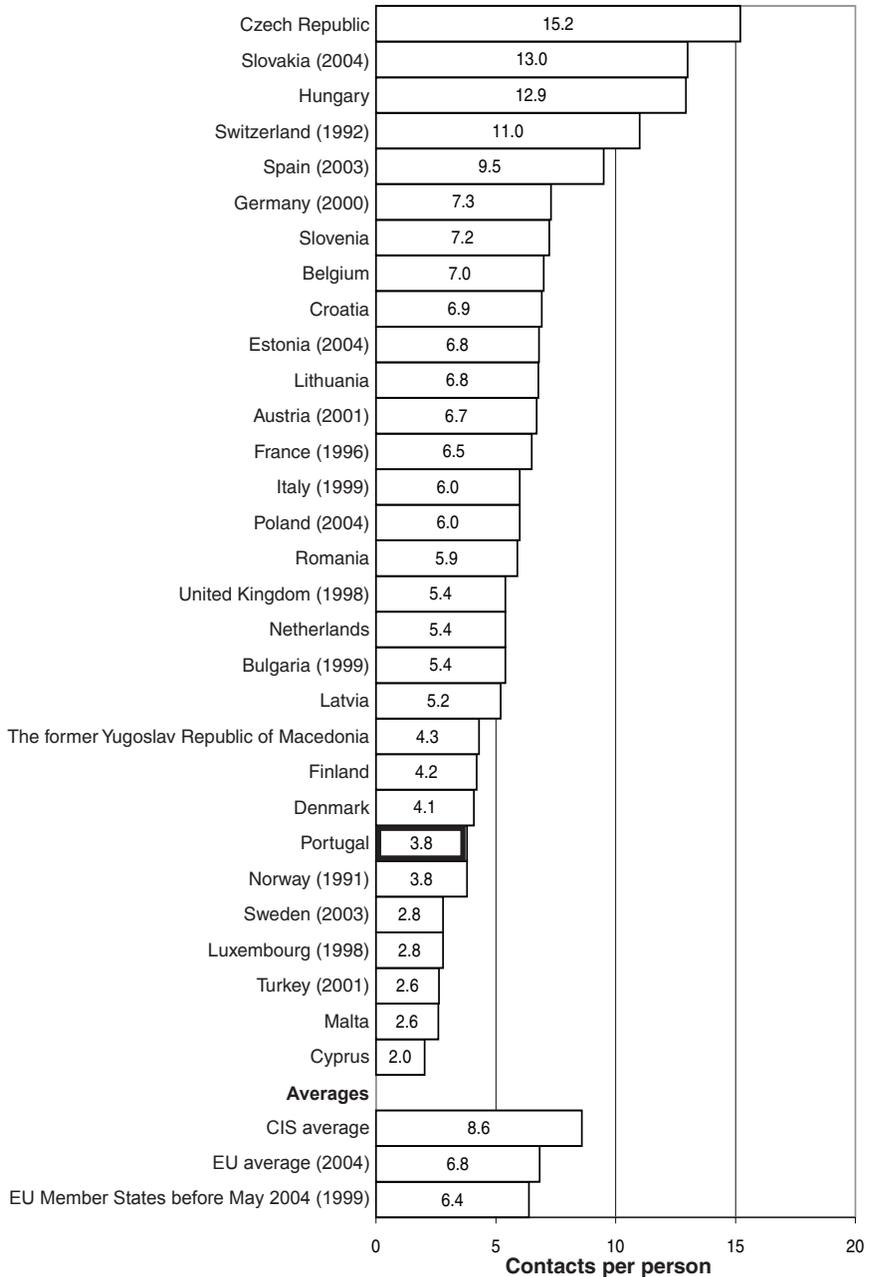
Facilities

The number of PCCs and health posts continued to grow throughout the 1980s and mid-1990s, showing a slight decrease since then with a total of 351 primary care centres, and 1823 primary care medical units in 2005, covering the whole country (MoH, 2006a; Bentes et al., 2004). The facilities provided by each PCC 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 poorly 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. Figure 6.1 shows that relatively few outpatient contacts were made in Portugal in 2005 (3.8 per capita) compared to other European countries, a figure much lower than the EU average (6.8). This is consistent with the disproportionately and inefficiently high use of hospital care.

Primary care centres

Primary health care in the public sector is mostly delivered through publicly funded and managed PCCs. Each of them covers an average of 28 000 people, although some cover more than 100 000 people and others fewer than 5000 people. They employ a total of 30 000 professionals (including RHA personnel). Of these, 25% are doctors (mostly GPs) and 20% are nurses. There are on

Fig. 6.1 Outpatient contacts per person in the European Union and selected countries, 2005 or latest available year (in parentheses)



Source: WHO Regional Office for Europe, 2007.

Notes: CIS: Commonwealth of Independent States; EU: European Union.

average 80 health professionals per centre, although some have as many as 200 and others as few as one doctor.

The PCCs' purpose is to respond to the health needs of their population, including health promotion and health vigilance, prevention, diagnosis and disease treatment through planning and providing care to the individuals, family and community, as well as the development of specific activities to address situations of greater risk or health vulnerability.

PCCs currently have no financial or managerial autonomy and are directly run by the RHA. The Ministry of Health allocates funds to the RHA, which in turn determines the budget of each centre based on historical figures and activity costs.

Most primary health care is delivered by GPs/family doctors and primary care nurses in the PCC setting. However, some PCCs also provide a limited range of specialized care. This is a result of the integration of social welfare medical services into the NHS 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 PCCs. The specialists who work in PCCs 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 (in 2004 there were 6427 GPs working in PCCs and 700 specialists) (IGIF, 2005). The range of services provided by GPs in PCCs 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 and cervical cancer and other preventable diseases (see Section 6.1 "Public health").

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, with on average approximately 1500 patients. There are GPs with patient lists exceeding 2000 and others with fewer

than 1000. People may change GPs 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 January 2007 estimates of the Ministry of Health, which are based on the estimate reported in an unpublished presentation by an official of the Ministry (*Diário de Notícias*, 4 August 2006) approximately 750 000 citizens did not have GPs.

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 (see Section 6.5 “Emergency care”). 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 among the EU15 countries of people living in absolute poverty, at 22% in 2002 (European Commission, 2002). Poverty is particularly prevalent in the southern region (Alentejo). Poorer and geographically isolated people have even bigger problems in accessing health services, because there are fewer hospitals than PCCs and they are concentrated in more populated/urban areas (Santana, 2000).

Challenges and reforms

The major problems currently facing primary health care include:

- inequitable distribution of health care resources (staff shortages in inland areas);
- difficult access to primary health care resulting in emergency department overuse;
- very limited public provision of services in continuing and home care (see Section 6.7 “Long-term care”);
- mixed opinions about the public primary health care system;
- scarcity of quality control programmes, despite efforts by the IQS (see “Regulating quality of care”, within Section 4.1, and Section 8.5 “Quality of care”);
- lack of coordination among PCCs, hospital doctors, hospitals and private doctors;
- lack of motivation of GPs working in isolation for fixed salaries;
- limited access to health care services for poorer and geographically isolated people; and
- a shortage of qualified ancillary staff in PCCs (see “Planning of health care personnel”, within Section 5.2).

A series of health care reforms, initiated in 1995/1996, aimed to tackle these problems by increasing accessibility, improving continuity of care, increasing GP motivation with a new payment system, stimulating home care services (see Section 6.7 “Long-term care”) 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 teamwork. Its objectives were to increase job satisfaction of the primary health care personnel; increase patients’ satisfaction with primary care services; increase access to public health services, including a greater availability of postnatal care, patient-centred, family-oriented care and more time for consultations and preventive activities; improve quality; and 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 on the part of both citizens and providers. The experience was used to provide an *ex ante* assessment of the newly created USFs and a cost saving of 14.4% per visit to a PCC was predicted (Gouveia et al., 2006). Some of the principal ideas behind the reforms have been adopted nationally and new methods of remuneration for GPs are being introduced (see “Paying health care personnel”, within Section 3.6).

Currently, the NHS is restructuring the primary care services (see Section 7.1 “Analysis of recent reforms”) and this intervention will cover the following areas:

- reconfiguration and autonomy of PCCs;
- implementation of the USFs;
- restructuring of public health services;
- implementation of *Unidades Locais de Saúde* (Local Health Units);
- development of information systems.

The initial phase – the one that has had most public visibility – is the creation of USFs which consist of small teams of 3–8 GPs, the same number of family nurses and a variable number of administrative professionals covering a population between 4000 and 14 000 individuals. These teams will have functional and technical autonomy and a payment system sensitive to performance that will reward productivity, accessibility and quality. Their main goal is to maintain and improve the health status of people covered by

them through general health care delivery in a personalized, accessible and continued way.

In October 2006 the Ministers Council created, depending directly on the Minister of Health, the *Unidade de Missão para os Cuidados de Saúde Primários* (Task Force for Primary Health Care) responsible for guiding the global launching project, coordination and tracking of the PCCs' reconfiguration, and implementation of the USFs.

Diagnostic and therapeutic services

Portugal also has a large independent private sector which provides diagnostic and therapeutic services to NHS beneficiaries under contracts called *convenções* (contractual agreements). 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 (available at www.portaldasaude.pt/portal/conteudos/informacoes+uteis/lista+de+inscritos+para+cirurgia/convencoes+privados.htm). 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 receive consultation and tests within a much shorter time. Prices do not vary according to the quality of service which means providers have little incentive to improve quality.

6.4 Inpatient care

Secondary and tertiary care is mainly provided in hospitals, although, as mentioned earlier, some PCCs 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 focuses on hospital inpatient and outpatient services.

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 services, surgery and one or two other basic specialties.

Most hospital services are provided according to the integrated model directly run by the NHS. However, nonclinical 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 “any willing provider” contracts (see Section 6.3 “Ambulatory care”). A very limited number of clinical services are contracted out, usually in specific areas where waiting list reductions are needed (e.g. for cataracts). Decisions on the outsourcing of services are usually made at the hospital administration level, while the decision to contract providers for specific clinical services, usually within waiting list recovery programmes, remains at the RHA level.

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. Many of the inland hospitals have suffered from a lack of resources and poor facilities compared to those in Lisbon and Oporto. 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.

Since the mid-1990s there have been major improvements and inaugurations of medical facilities. In 1998 two hospitals were created in Santa Maria da Feira and Cova da Beira (Centre region); in 1999 a district hospital was opened in Portimão (Algarve); in 2000 and 2003 another three were opened in Vale de Sousa (North region), Torres Novas and later Tomar (Centre region); and finally, in 2004, another hospital in Santiago do Cacém (Alentejo region) was opened. The use of PPPs for renewed infrastructures is also taking place, with the first one starting to operate in April 2007 (S. Brás de Alportel) (see “Paying for health services”, within Section 3.6).

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 PCC, as described earlier (Section 6.3 “Ambulatory care”). The problem of lack of coordination between hospitals and PCCs and the large numbers of patients bypassing 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 PCCs based partly on geographical proximity and partly on the balance of specialties and availability of an accident and emergency department. These Local Health Units, the main focus of which 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 that were enacted in May 1999 went further with the concept of “local health systems”. These were to 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 embracing a broader sense of health care focused on the population. Population-based budgets were then to 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 widely implemented. One exception to this might be a similar experience in Matosinhos, near Oporto, which created a Local Health Unit by integrating the hospital and related PCCs in a unique provider entity. In 2007, a second Local Health Unit was created in the north-east Alentejo region.

6.5 Emergency care

The INEM is the Ministry of Health’s organization responsible for the coordination and functioning, in continental Portuguese territory, of a medical emergency integrated system so that rapid and appropriate health care delivery is given to victims of sudden disease or accident. The provision of medical aid at the scene, the assisted transport of patients to the appropriate hospital and ensuring the coordination between the various participants in the system are the main tasks of the INEM. Through the European Emergency Number (112) the INEM has at its disposal several means to respond rapidly and efficiently, at any time, to emergency care situations. To deliver effective medical care in the case of an accident or sudden disease the INEM uses the following services: Urgent patients orientation centre (CODU, *Centro de Orientação de Doentes Urgentes*); Urgent patients orientation centre for situations occurred at sea (CODU-Mar, *Centro de Orientação de Doentes Urgentes-Mar*); Anti-poison Information Centre (CIAV, *Centro de Informação Antivenenos*); and high-risk newborn transportation subsystem.

In practice, if a health emergency occurs people should call 112, inform the operator about the situation and location and hang up when s/he tells them to do so. If it is a health-related emergency the call will be passed on to the CODU, which has permanent medical assistance and central operators with specific training to receive the help request, manage the triage and counselling before aid arrives and correctly select the adequate rescue means, at the same time preparing the hospital reception for the arrival of the patients. The CODU also has at its disposal various rescue means, including field communication and actuation resources such as ambulances, catastrophe intervention cars and medical emergency helicopters. There is no fee paid by patients for these services. The National Authority for Civil Protection (ANPC, *Autoridade Nacional de Protecção Civil*) and the Ministry of Law and Order have predicted an increase in rescue means and professionals in the INEM, along with better coordination with fire safety services that usually support the CODU's actions in patient transportation and emergency rescue. This prompted a reorganization of the INEM's activities, which seems to be having some result. The years 2004–2006 were characterized by full coverage of continental Portugal by the CODU, which increased its activity by 22%. The number of emergency calls increased by 34.9% and the number of times INEM ambulances were called for duty increased by 66.4%. Transportation of patients, along with emergency unit activity (vehicles and helicopters) also had increases in a similar percentage range.

6.6 Pharmaceutical care

At the time of writing, pharmacies must be owned by a qualified pharmacist. However, the Ministry of Health has passed a new law allowing ownership of a pharmacy to have no constraints other than a maximum number of four pharmacies per owner, pending publication in the official Journal of the Portuguese Republic. It will still be mandatory to have a technical director with a degree in pharmaceutical sciences in each pharmacy.

Pharmaceuticals that require prescription can only be sold in a pharmacy. In 2005 a major change occurred in the OTC market, as it has undergone a double liberalization: OTC products have to be registered with the regulatory institute for the pharmaceutical sector, INFARMED, and can now be sold in specialized stores, which no longer need to be pharmacies, and prices are no longer fixed.

In addition to this, the location of pharmacies is still 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 metres of the proposed site. Thus, established pharmacists have a considerable degree of monopoly over the prescription drug market. Despite the changes that have occurred or have been announced by the Ministry of Health, there is as yet no change in the enforcing of demo-geographic constraints for the opening of new pharmacies.

There is currently a limited service within hospitals for dispensing prescriptions to outpatients. Only those pharmaceuticals which carry no co-insurance are allowed to be dispensed. The idea of extending pharmacy services in hospitals to allow direct sales by the NHS was debated within the Ministry of Health, and a Decree-Law was enacted in December 2006 establishing the possibility of retail pharmacies (open to the population) located in public hospitals being contracted out to private management.

Similarly, in health centres only those vaccinations which are provided free of co-insurance 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 co-insurance

Prescribed drugs are subject to variable patient co-insurance based on effectiveness criteria, with full payment required for those pharmaceuticals deemed to have little or no clinical value. Since 1992, there have been three categories of NHS co-insurance. Pensioners with a maximum annual income of up to 14 times the national minimum monthly wage are eligible for a lower level of co-insurance on pharmaceuticals, according to the Decree-Law 129/2005. Since 1999, some pharmaceuticals have been under periodic re-evaluation for efficacy patterns, resulting in the removal of nearly 100 products from the reimbursement list (see Table 6.1).

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

Table 6.1 NHS co-insurance (percentage paid by the NHS)

Category	“Normal” individual	Eligible pensioner	
	Either brand name or generic drugs	Brand name drugs	Generic drugs
A	95	100	100
B	69	84	79
C	37	52	47
D	20	35	30

Source: Decree-Law no. 129/2005 (see Section 10.2 “Principal legislation”).

- cystic fibrosis treatments
- glaucoma treatments
- haemophilia treatments
- anti-TB and anti-leprosy pharmaceuticals, and antiretrovirals.

In 1995 a new policy was introduced whereby private sector prescriptions were subject to cost sharing by the NHS (Decree-Law 272/95). The rationale of this reform was to reduce the number of private prescriptions being taken to PCCs to be repeated on a NHS prescription.

Regulation and control of pharmaceuticals

Since 1990, several legislative changes have resulted from the implementation of European Commission (EC) Directives, such as that to guarantee the quality and safety of pharmaceuticals. In addition, public information and education programmes on the rational use of pharmaceuticals were developed and cost-containment policies were adopted. 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 pharmaceuticals to be reimbursed by the NHS and for setting co-payment levels. It has introduced some cost-effectiveness measures into the pharmaceutical 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. Owing 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 pharmaceutical safety, recalls drugs or withdraws 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 involved 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 Reference Laboratory on the Quality Control of Medicines, within the scope of the Network of Official Medicines Control Laboratories (OMCL), is in charge of (www.infarmed.pt, accessed 28 June 2007):
 - the licensing, auditing and inspection of manufacturers, wholesalers and pharmacies, ensuring respect for the rules applicable to each operator, namely Good Manufacturing Practice (GMP), Good Distribution Practices and Good Pharmacy Practices;
 - quality control of medicines and health products;
 - collecting and evaluating Adverse Drug Reactions or any other incidents that may occur with medical devices, along with any other information related to the usage of medicines and health products.

Pharmaceutical expenditure and policy

Portugal's pharmaceutical expenditure (excluding hospital consumption) was approximately 2.1% of GDP in 2006, which was very high compared to other OECD countries. However, the country ranks lower in terms of pharmaceutical expenditure per capita, at 421 US\$ PPP (OECD, 2006). There is a national formulary of pharmaceuticals, which is only used by NHS hospitals for inpatient prescriptions. This does not extend to PCCs or outpatient services. Guidelines on prescribing behaviour are issued to doctors, and directors of PCCs are encouraged to draw up local formularies. However, these measures are simply guidelines and are not mandatory. The lack of a national drug list for ambulatory care, together with the powerful influence exerted by the industry on doctors, could explain the high levels of expenditure on pharmaceuticals (as a proportion of GDP). 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 of this initiative, growth in expenditure on pharmaceuticals was already up by 16%.

In 2001 and 2002, the dimensions of pharmaceutical packages were extensively revised, according to their routine usage, resulting in smaller packages of pharmaceuticals for short-term and intensive use and bigger ones for pharmaceuticals used by chronic patients (with a 3-month treatment standard duration).

Increasing the use of generics has been one of the most relevant cost-control goals of pharmaceutical policy in Portugal. Alongside 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 (until 2007). The reimbursement rate was also increased by 10% (until 2006) to provide a consumer incentive towards generics. In 2001, a law was passed stating that medical prescriptions should be prescribed according to the international common designation (ICD) or generic name, but allowing doctors to add the brand name. This rule applies only to pharmaceuticals with generics on the market, not those still under patent protection. In 2002, another important change was made: doctors' prescriptions can be replaced with a cheaper generic by the pharmacist. To make such replacement possible the doctor has to fill in a special indication in the prescription form authorizing the generic, or leave it blank. All these progressive changes, and the setting up in Portugal of the largest generics companies, led to a big increase in the utilization of generics. The most updated data show that in February 2007 generics represented approximately 17% (in value) of all reimbursed pharmaceuticals (INFARMED, 2007). Nevertheless, in 2002, there was an 8% increase in pharmaceutical expenditure, the same as in 2001. However, generics have only a 10% market share in terms of volume, probably because the regulations requiring generics to have prices 35% lower basically deterred entry into many active ingredient submarkets, particularly those with lower prices.

Another aspect of pharmaceutical policy implemented is the use of reference pricing for pharmaceutical reimbursement. Since 1991 (Decree-Law 72/91) the price of pharmaceuticals has been established using an artificial price based on comparisons with other countries. An attempt was made in 1998 to introduce reference pricing and this was implemented in 2003. This system groups pharmaceuticals according to their active ingredients and sets a reference price for the group (often the average or lower-priced pharmaceutical in the

group). The method is only to be applied to the products that have a generic formulation on the Portuguese market, leaving out the pharmaceuticals under patent protection. The reference price is set at the highest price of generics. A substantial reduction in prices of the brand name products without patent protection is expected by the Government, considering the previous experiences in other countries. The available evidence suggests that a considerable number of products had a price reduction. The reference pricing system has since been adjusted several times, and can be adjusted every three months (Portela, Pinto, 2005).

In February 2006 the Ministry of Health signed a protocol with the Association of Pharmaceutical Companies (APIFARMA, *Associação Portuguesa da Indústria Farmacêutica*) regarding the growth of expenditure on pharmaceutical products. The main objective of the protocol is containment of NHS pharmaceutical expenditure. Both ambulatory and hospital pharmaceutical markets are included in the protocol. It establishes ceilings for expenditure growth, involving the return of excess spending to the Government by the pharmaceutical companies if limits are exceeded. The protocol should be in place for the period 2006–2009. However, the administrative price reduction in pharmaceutical prices of 6% (in 2006 and 2007) renders the protocol less effective.

Other recent changes in pharmaceutical policy have included (a) the administrative decrease by 6% of pharmaceutical prices for 2006 and 2007; (b) the change of administrative prices from fixed to maximum prices (allowing pharmacies to pass on to patients any discounts obtained at the wholesale level); and (c) the abolition of an extra reimbursement rate for generics that was created with the goal of stimulating the growth of generics, since that objective is considered to have been achieved.

As of March 2007, the Government enacted new rulings related to the way prices of new pharmaceutical products are determined and established maximum (not fixed) prices. It is stated that pharmaceutical products sold in Portugal cannot have a price higher than the average of four reference-country prices (Spain, France, Italy and Greece). Until this new regulation, the price in the Portuguese market could not be higher than the minimum price of the same product in three reference countries (Spain, France and Italy). Pharmaceutical prices will be checked annually to ensure adherence to this new regulation. Where the price of new generic pharmaceutical products is below €10, it needs only to be 20% below the price of the corresponding brand name drug, in all presentations. Promotion of further generic pharmaceutical penetration into the market is the motivation behind the policy that sets a price reduction of 5% for generics with a market share in the range above 50% and below 60%; a 4% price reduction whenever the generics market share is in the range above 60%

and below 70%; and a 3% price reduction in the cases where generics account for more than 70% of the market share (*Portaria* No. 300-A/2007). This policy has the aim of obtaining the largest gains when generics are more important. From a dynamic perspective, this introduces an incentive for companies to be more aggressive competitors, as generics gaining market share from brand name pharmaceuticals are “rewarded” with smaller price decreases.

6.7 Long-term 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, older people and other groups with special needs, such 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 older population and the pressure to provide social as well as medical care is increasing.

Some social services are provided in each region through the Ministry of Labour and Social Solidarity. However, *Misericórdias*, which are independent charitable organizations, are the key providers of social care services. Day centres, nursing homes and residences for the elderly provided 79 291 places in 1998. Over the last decade, this capacity increased steadily and, according to the Ministry of Labour and Social Solidarity, in 2005 there were almost 120 000 places for older people (Ministry of Labour and Social Solidarity, 2005). They provide a range of services including activities, meals, food to take home, laundry services, bathing and even assistance obtaining medication and attendance at PCCs. 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-making 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 Solidarity, 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 inter-ministerial 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 approximately 20–30 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, e.g. nursing care or home help. Although there are regulations for nursing homes, these are not evaluated or managed on a regular basis. Nursing homes in the private sector are very expensive and the majority of the population do not have the resources to pay for them.

Recent developments

The *Rede Nacional de Cuidados Continuados* (National Network for Long-term Care) was created by Decree-Law No. 101/2006 within the scope of the Ministry of Health and the Ministry of Labour and Social Solidarity due to evidence of a clear lack of resources in long-term and palliative care as a result of an increase in the number of people with incapacitating chronic diseases (see also Section 6.8 “Palliative care”). This network combines teams providing long-term care, social support and palliative activity with its origins in communitarian services, covering hospitals, PCCs, local and district social security services, the Solidarity Network and municipalities.

This network will provide services in the following areas:

- Convalescence (short-term recovery). This is an independent inpatient section, integrated within an acute hospital or other institution if it is associated with a hospital of this kind, to provide treatment and clinical supervision in a continued and intensive manner and to deal with clinical care as a result of an inpatient episode due to an acute clinical situation, reoccurrence of or imbalance in a chronic condition. Its main function is to stabilize patients in a functional and clinical manner, and to ensure the assessment and integral rehabilitation of patients with a transitory loss of autonomy that is potentially recoverable and that does not need acute hospital care. It assures permanent medical care, permanent nursing care, radiological, laboratorial and complementary diagnosis exams, prescription and administration of pharmaceutical products, physiotherapy, psychosocial support, hygiene, comfort, nutrition, socialization and leisure. The estimated maximum duration of stay is 30 days.

- Medium-term care and rehabilitation. This is an inpatient service with its own physical space, associated with an acute hospital for the provision of clinical care, rehabilitation and psychosocial support due to a clinical situation resulting from recovery from an acute condition or imbalance in a chronic pathological condition to people with a temporary loss of autonomy, which is potentially recoverable. It aims to stabilize the clinical condition, assess and integrally rehabilitate the patient. It guarantees daily medical care, permanent nursing care, physiotherapy and occupational therapy, prescription and administration of pharmaceutical products, psychosocial support, hygiene, comfort, nutrition, socialization and leisure. The estimated duration of stay is from 30 to 90 days.
- Long-term care. This is a temporary or permanent inpatient service with its own physical space, to provide palliative care to people with chronic conditions, with different levels of dependence that are not cared for at home. It aims to provide care that will prevent and retard increasing dependency, favouring comfort and quality of life for a period longer than 90 consecutive days. It guarantees maintenance and stimulation activities, daily nursing care, medical care, prescription and administration of pharmaceutical products, psychosocial support, periodic psychiatrist control, physiotherapy and occupational therapy, sociocultural animation, hygiene, comfort, nutrition, and support in activities of daily life.
- Palliative care (see Section 6.8).
- Day care and autonomy promotion. This service provides integrated support care to promote autonomy and give social support in an ambulatory regimen to people with different levels of dependence that are not cared for at home. It guarantees maintenance and stimulation activities, medical care, periodical nursing care, periodical psychiatric control, psychosocial support, sociocultural animation, nutrition and personal hygiene, when necessary.

As regards this long-term care network, in June 2006 the Government defined the prices to be paid for health care and social care provided within the pilot episodes of the newly created network (Article No. 12 of Decree-Law No. 101/2006, of 6 June 2006). The costs of health care provision are to be paid by the Ministry of Health, although the patient has to pay the co-payments, yet to be defined, for social care s/he receives. For hospital admission episodes, the convalescence and palliative care units are financed by the NHS. The medium-term and rehabilitation care units are co-financed by the Ministry of Health (70%) and the Ministry of Labour and Social Solidarity (30%), while long-term care is co-financed by the Ministry of Health (20%), the remainder being paid by the Ministry of Labour and Social Solidarity (*Portaria* No. 994/2006, of 19 September 2006).

The current situation of long-term care relies strongly on informal care and privately funded care. The development of the public long-term care network, at a lower cost, may lead to a movement from informal care to formal care, as a way to shift costs (direct and indirect) from families to the NHS.

6.8 Palliative care

The National Programme for Palliative Care was approved by the Ministry of Health in 2004 to be applied within the scope of the NHS. The palliative care organization is still incipient in Portugal, and there are therefore no available data that allow the estimation of unmet needs in this area. However, looking at international evidence, in countries where palliative care has developed in recent decades there are approximately 1000 sick people per 1 million inhabitants per year in need of differentiated palliative care. Palliative care is provided to patients suffering intensely due to rapidly progressive incurable diseases in an advanced stage. Its main goal is to promote, as far as possible and until the end, the well-being and quality of life of those patients. These are actively coordinated and global care services that include family support, provided by teams and specific units of palliative care, and provided as inpatient or home care, according to differentiated levels. The main goals of palliative care are to ease pain; reduce symptoms; give psychological, spiritual and emotional support to the patient, while always protecting their dignity; and support the family during the process and in grief, this implying the involvement of an interdisciplinary team with differentiated structures. Therefore, palliative needs are not determined by disease diagnosis but by the individual situation and patient needs. Thus, rapidly progressive diseases such as cancer, AIDS and severe neurological pathologies frequently require palliative care. The national health institutions that provide palliative care are listed here.

- *Instituto Português do Cancro do Porto* – Portuguese Cancer Institute from Oporto.
- *Serviço de Medicina Paliativa do Hospital do Fundão* – Palliative Medicine Service from the Fundão Hospital.
- *Serviço de Medicina Interna e Cuidados Paliativos do IPO de Coimbra* – Internal Medicine and Palliative Care Service of Coimbra's Portuguese Oncology Institute.
- *Equipa de Cuidados Continuados do Centro de Saúde de Odivelas* – Continuing Care Team of the Odivelas PCC.
- *Santa Casa da Misericórdia da Amadora*.

- *Santa Casa da Misericórdia de Azeitão.*
- *Equipa de Suporte em Cuidados Paliativos do Hospital de São João do Porto* – Support Team for Palliative Care of the São João's Hospital from Oporto.

The integration of volunteers in the palliative care teams is an important element for the quality of this service. The volunteers, supervised by the technical team, can be a fundamental link between the community, the sick, the family and the health care professionals.

The National Network for Long-term Care, set up in 2006, is responsible for ensuring provision of palliative care services. These are provided in an inpatient setting, with its own physical space, preferably in a hospital. The network aims to keep track of the treatment and clinical situation of suffering patients in complex situations that are severe, advanced, incurable and progressive, according to the National Plan for Palliative Care standards. It guarantees daily medical care, permanent nursing care, radiological, laboratorial and complementary diagnosis examinations, prescription and administration of pharmaceutical products, physiotherapy care, consultations, guidance and patients' health assessment, psychosocial and spiritual support, maintenance activities, hygiene, comfort, nutrition, socialization and leisure. These services are financed through the NHS.

6.9 Mental health care

Subsequent to Decree-Law No. 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 larger cities: Lisbon, Coimbra and Oporto. 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, Decree-Law No. 127 of 1992 integrated the mental health centres into the general hospitals. This highlighted the dysfunctions of the country's organization according to health regions headed by RHAs. Considering the recommendations of the United Nations and WHO with respect to the emphasis on community services, it was necessary to change this organization, with a focus on rehabilitation and social integration. Decree-Law No. 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 according to the following points.

- The referral model is that of community care.
- The local mental health services are the basis of the care system, joined to PCCs and hospitals.
- When local mental health services cannot be established, they are organized regionally.
- The teams are multidisciplinary, for a population of approximately 80 000.
- Ambulatory services are based in PCCs, and inpatient admissions and emergencies are treated in hospitals.
- Care for children and adolescents is given by specific teams at the local level.
- Social rehabilitation is carried out 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 provide residential services for 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 approximately 70% of patients have schizophrenia). To overcome the lack of adequate information, the first morbidity study is now being conducted. A nationwide census in psychiatry was carried out in the health care institutions in 2001. The pathology that most frequently recurred in health services was schizophrenia, with 3595 patients, followed by depressions, oligophrenia (2268), alcoholic disturbances (1502) and neuroses (1456) (Bento, Carreira, Heitor, 2001). In terms of inpatient care schizophrenia was the most common pathology, in terms of consultations it was depressions and in terms of emergency care it was alcoholic disturbances.

6.10 Dental care

The publicly funded oral health care system in Portugal is not comprehensive. There are very few NHS dental care professionals in this sector, so people normally use the private sector (see Section 5.2 “Human resources”). There is an increase in financing for oral care projects aimed at school populations (from €3 million in 2004 to €5 million in 2007), which has been associated with an increase in children without tooth decay (from 33% in 2000 to 51% in 2006). 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, although this must be carried out under the direction of a dentist. The great majority of dentists are self-employed and their activity is regulated by the OMD.

6.11 Complementary and alternative medicine

Some estimates suggest that in Portugal more than 2 million people regularly seek complementary and alternative medicine (FENAMAN, 2007). At the beginning of 2003 the Parliament passed legislation on the professional practice of techniques approved by WHO: acupuncture, homeopathy, osteopathy, naturopathy, phitotherapy and quiropraxy were specified. This made the practice of these alternative methods legal, and the health authority requires all specialists in these areas to be registered, but the practices are not regulated. However, in December 2006 another project for regulating alternative medicine was being discussed in the Ministry of Health, regarding the possibility of regulating the above-mentioned six nonconventional therapeutic practices, making Portugal the first European country with such extensive regulatory legislation in this field.

7 Principal health care reforms

7.1 Analysis of recent reforms

The recent past has been characterized by the introduction of a number of reform initiatives. This section concentrates on the major reforms since 2000. There are broadly five different areas of intervention, which have been under the spotlight: health promotion, long-term care, primary and ambulatory care, hospital management and inpatient care, and the pharmaceutical market. Table 7.1 shows the key policy areas from 2000 to 2006 and their objectives.

Health promotion reforms

The National Health Plan (2004–2010) (GDH, 2004) provides a road map for public health actions, usually under special programmes, to address general population health concerns. As the main areas for attention, the Plan has chosen cardiovascular diseases, oncology, mental health, health of older people, HIV/AIDS and health promotion, among others. There is a set of specific targets, and responsibility for monitoring progress towards these targets rests with the ACS. The indicators are published on the Internet. (See GDH (2005b) for the National Health Plan indicators.)

Long-term care reforms

Long-term care provision has been an area left mostly to private, non-profit-making institutions, though with an increasing role of profit-making nursing homes. This was identified by the Ministry of Health as one of the gaps in NHS coverage. The Ministry of Health defined its intervention in this area, taking advantage of the fact that some institutions already existed and sharing the financial responsibility with the Ministry of Labour and Social Solidarity.

Table 7.1 Major policy measures, 2000–2006

Policy measures	Objectives
Public–private partnerships (PPPs) for new hospitals (2002 onwards)	Improve efficiency; guarantee value for money in public investment
National Health Plan (2004)	Health gains (priorities being cardiovascular diseases, oncological diseases and HIV/AIDS)
Update in co-payments of public health care services (several years)	Moderate the consumption of health care; promote the value of NHS-funded care in the eyes of the citizens
Closure of delivery rooms in several hospitals (2006)	Increase clinical quality and safety; better organization of the hospital network
Merge hospitals management team (2003 onwards)	Increase efficiency (take advantage of scale and scope economies)
Provide hospitals with entrepreneurial-like statutes (2003 onwards)	Implement purchaser–provider split; cost-containment by better management
Contracting (2005 onwards)	Implement purchaser–provider split; pay by results; cost-containment
Reductions in public cost sharing for pharmaceutical products, administrative price reductions and reductions of margins in distribution (2005 onwards)	Cost-containment
Over-the-counter (OTC) products (both price and entry liberalization) (2005)	Better access to care; lower prices by increased competition
Closure of several primary care emergency services (in some cases, closure is only during the night period) (2006)	Increase clinical quality and clinical safety; better organization of the emergency care network
Primary care reform / Family Health Units (USFs) (2006 onwards)	Better access; greater satisfaction for professionals and citizens; more rational use of resources, namely regarding referral decisions
Price reduction in agreements with private providers (2006, effective 2007)	Containment of public spending
Long-term care network (2006 onwards)	More effective coverage; better access to care; shorter length of stay in acute care hospitals; health gains due to more efficient treatment

Ambulatory care reforms

Ambulatory care is another area that has been subject to reform (and reform proposals). The previous Government intended to open management of PCCs on a contracting basis. According to the Ministry of Health plans, management

of PCCs could be given to private entities and to associations of health professionals, although public management would continue in many cases. Payment according to performance is also one of the main aspects introduced by this change. The intended reform raised concerns among some groups about accessibility of care. However, this reform was not implemented, despite the launching of the HRA, as elections were called. The current Government (which entered office in March 2005) changed the direction of the reform of primary care services. First, it appointed a Commission to propose recommendations for policy intervention in primary care. The major innovation of the proposals was the creation of the USFs. The Commission was later empowered as a task force to implement the proposed strategy. At the time of writing, several USFs have already been set up (52 USFs are operating as of 12 March 2007). Hopes for wider USF coverage exist, as applications for new ones are still being reviewed. The task force has released an *ex ante* assessment of the financial impact of the reform, finding only slight cost savings in absolute terms. (See Gouveia et al. (2006) for more information.) Thus, the main expected benefit from this change seems to be concentrated on better health care services delivered to the population; however, to date there is no evidence of any improvement, as the USFs have only just started operating.

Another intervention related to ambulatory care involves the redefinition of the network of emergency services provided by both PCCs and hospitals. Network redefinition plans proposed the closure of some existing units (as well as opening new ones, and changing the type of care provided in others). This redefinition faced strong opposition from local populations and authorities, anchored on wide media coverage. The increase of co-payments has also faced negative public opinion, but overall it has been possible to increase them on a more or less regular basis.

Inpatient care reforms

Hospital care has been subject to two sorts of reforms. On the one hand, there has been a redefinition of the existing NHS supply of hospital services. On the other hand, changes have been made to the public hospital model, namely to management rules and the payment systems. On the first issue, three high-visibility measures have been taken: closing of several hospital maternity departments (although obstetric consultations and antenatal care do continue to take place at those hospitals), based, according to official documents, on clinical safety criteria; putting two (or more) nearby hospitals under the same management team; and announcement of new hospitals to be built under PPPs.

The closing of child delivery units in several hospitals was decided on the basis of a technical report (MoH, 2007b). Despite this, the decision was seen by many as mainly a political decision and it faced strong local opposition. Several appeals on the Government's decision to close these services were filed with the civil courts. Decisions by judges have upheld the right of the Ministry of Health to conduct its policy.

The merging of hospital management teams occurs smoothly over time and faces no open challenge. This reorganizes hospital care within regions.

The third policy, the use of PPPs, is still under way, even though it was launched several years ago, in 2003. The PPPs are managed by a task force (*Parcerias Saúde*). The first attempt to set up a PPPs project to build a new hospital in the outskirts of Lisbon failed for procedural reasons to move to the final stage of negotiations and subsequent contract signing. The whole process for that hospital had to be restarted, after recognition that existing procedures and proposals were not standardized enough to allow a clear decision to be made. Meanwhile, several other PPPs projects have been launched and are under review. The rehabilitation hospital at S. Brás de Alportel, near Faro (Algarve region) is the first PPPs hospital, and it started receiving patients in April 2007. The use of the PPPs approach was also followed for CAS, the NHS Call Centre.

Major problems appeared in the procedures to select the partners for the hospital PPPs, although several have been launched anyway. The Portuguese PPPs have, as their main distinctive feature, the award of two contracts: one for construction and maintenance of infrastructures and the other for clinical activities management. From the initial 10 new hospitals to be built under the PPPs system, the current Government is still defining the specific format to be followed in the second wave of (six) hospitals, namely the inclusion of the management of clinical activities in a contract. The PPPs have made their way into the press, with two lines of discussion: on the one hand, criticism of the Government on the length of the procedure and on the other hand, mutual accusations by applicants on incomplete proposals.

The other line of reform is related to the way the Ministry of Health establishes the payment to the NHS hospitals. The main element of that reform was the change in statutes of hospitals, providing them with corporate-like statutes. The reform was implemented on 1 January 2003 for roughly half of the hospitals, and has been extended to other hospitals over the years. In the first phase, the hospitals were considered to be a public company, with capital provided solely by the Government, and were named "*Hospitais SA*". To make it clear that privatization of hospitals was not on the political agenda, they were later changed to public enterprises ("*Hospitais EPE*"). The hospitals that did

not go through this transformation process continue to be managed by civil service rules (and are known as “*Hospitais SPA*”). Over time, more hospitals have been transformed from “*SPA*” to “*EPE*” status, including some of the largest hospitals in the country (Hospital de Santa Maria, in Lisbon; Hospital de Santo António in Oporto). The main objective of the reform was to provide autonomy and management accountability to hospital boards. This was part of a general trend towards an effective purchaser–provider split. The next step has been the introduction of explicit contracting of services to be provided by hospitals, which is to be carried out in 2007 for both “*Hospitais EPE*” and “*Hospitais SPA*”.

Pharmaceutical reforms

A final area of reform to be discussed was the pharmaceutical market. Interventions have occurred both at the level of regulated prices and margins, and in ownership and entry rules. Several changes in price and margin regulation have been introduced in recent years: reduction in co-insurance rates by the NHS, administrative reduction of prices (6% both in 2006 and 2007) and administrative reduction of retail margins. The main objective seems to be containment of public expenditure on pharmaceuticals.

On the ownership and entry rules, the Government introduced a double liberalization in the OTC market: the existing price ceiling was removed, and entry is now subject to registration and compliance with technical conditions for the sale of OTC products. A major feature of this reform of the OTC market is the loss of exclusive ownership of sales locations by pharmacists. The new locations selling OTC products can be, and are in many cases, owned by non-pharmacists. The motive behind this change was the improvement of accessibility to OTC products and the promotion of a more competitive environment. The effects of this double liberalization have been the subject of a heated debate, although most of the arguments neglect to encompass the fact that a double liberalization occurred, and therefore fail to separate which effects can be attributed to price liberalization and which were caused by entry liberalization. Several reports on the issue have been produced, with conflicting conclusions, and on this reform it can be said that “the jury is still out”.

Regulatory reforms

Another major reform in the Portuguese health system was the creation of the HRA in 2003. At the root of the creation of this body was the concern, at the time, about the effect of private management in PCCs (in the sense that application of the new law governing PCCs management was made conditional on the

existence of such an agency). The first year of the new HRA was essentially dominated by the uncertainty about its role, and disputes about funding and location. The resignation of its first president opened the way for a rethinking of the intervention of the HRA, which in 2006 started to issue recommendations and proposals.

The HRA has produced a number of studies and recommendations in the period January 2006–March 2007. The first one, in 2006, assesses the NHS model of contracting with private providers. Its conclusions recommend changes in the model, towards a more open “any willing provider” system; increased and more effective monitoring; and the revision of the price-setting mechanism. The second recommendation, in early 2007, relates to the mandatory posting in a visible location of the internal regulations of private providers. The third study evaluates the transport of patients, and recommends to the Ministry of Health the revision of legislation: it should be unified, simplified and clarified. Finally, the HRA produced a study on the licensing procedures for private providers of health care, and recommends to the Government changes in order to render them effective and timely.

7.2 Future developments

As described throughout this report, recent years have been rich in the number and scope of reforms initiated. A few have restarted, developing in a new direction (i.e. the primary care reform). Others have been continued under different governments, while some were only recently launched. It is expected that in the near future the system will be characterized mainly by the consolidation of current reforms. The main political challenges will come from implementation steps, as some are likely to provoke protests from special groups (health care professionals, sector associations, patients associations). At the macro level, the Ministry of Health faces the issue of coping with pressures for higher health care spending in a context of containment of public spending, due to the excessive budget deficit of the Portuguese Government.

8 Assessment of the health system

In this chapter, the situation with the Portuguese health system is summarized, based on the information provided in previous chapters.

8.1 The stated objectives of the health system

The goal of the health system is to protect the health of the population living in Portugal. To achieve this goal, the Government may act directly as a provider of health care or contract with private providers. Health policies should promote equality of access to health care for the citizens, irrespective of economic condition and geographic location, and should ensure equity in the distribution of resources and use of health care services (Law 48/90, 24 August 1990, with changes introduced by Law 27/2002, 8 November 2002). The health system is the cornerstone to ensure that the Constitution of the Portuguese Republic provisions on rights to health are respected (Article 64).

8.2 The distribution of the health system's costs and benefits across the population

The NHS by definition covers all residents in Portugal. It can therefore be said that universal coverage has been achieved in the Portuguese health system. Nonetheless, the existence of a considerable proportion of the population enjoying double coverage (estimates between 20% and 25%), either by subsystems or by VHI (bought in the private insurance market), suggests that barriers to access exist. In the absence of any barriers to access, there would

be no reason to purchase VHI, and since beneficiaries have to contribute from their own wages, there would be complaints about this payment. Moreover, the extensive use of health subsystems, namely specialist visits, supports this view. Not all VHI necessarily corresponds to a barrier to access. In a well-designed NHS, some instruments must exist to ensure that only necessary care is provided. Some people may see it as a “barrier” and decide to contract VHI as a way to overcome it. Pharmaceutical cost sharing is an example of this. The NHS may wish to impose cost sharing to avoid unnecessary consumption, but some groups of the population may wish to cover this cost with extra insurance, which would not reflect, in itself, a barrier to access. However, the existence of barriers to access can also result in people having to resort to VHI, although there is a lack of empirical evidence on this issue. Still, the existence of explicit rationing at several points in the system (as manifested in waiting lists for consultations and surgery) suggests that the more likely reasoning for VHI lies with access barriers. It should also be recalled that VHI plays a minor role in terms of funding of health care expenditure, contrasting with what might be believed as a result of the number of people that insurance companies claim to cover. The two elements are reconciled by the observation that most cases of coverage provided by VHI are limited in their scope and breadth.

The NHS also aims at comprehensive coverage. However, despite this general objective there are several areas where coverage is limited. The most obvious one is dental care, where most of it (over 90%) is provided by the private market. In the pharmaceutical market, the “fourth-hurdle” approach (economic evaluation assessment before inclusion in the NHS coverage) also excludes pharmaceuticals from NHS coverage that do not pass this evaluation.

Primary care is being restructured in order to improve quality and accessibility. Still, some barriers to access seem to exist. For example, the Ministry of Health reports, in a statement to the media, that approximately 750 000 residents (approximately 7% of the population) are estimated to have no GP. (See http://dn.sapo.pt/2006/08/04/cidades/mais_114_utentes_medico_familia.html for details.)

The main source of funding is general taxation. It is slightly progressive due to progressive income taxation (indirect taxation is slightly regressive but is compensated by income taxation progressivity; Pereira, Pinto 1992). OOP payments, on the other hand, introduce a regressive element. Subsystems, although based on income-related contributions, tend to have regressive properties as more affluent people are more likely to benefit from their coverage.

The major indicator of barriers to accessing health care services is the waiting time for surgical interventions. The median waiting time has been decreasing

over the last few years, with a drop from 8.6 to 6.9 months. The reduction in median waiting time has been accompanied by a reduction in the total number of patients on waiting lists (both the total number and the number of patients waiting more than six months) (MoH, 2007a). This indicates a reduction in access barriers to surgical interventions.

For retail pharmacies, a recent assessment has been commissioned by the *Ordem dos Farmacêuticos* (the Pharmaceuticals Association), where it is shown that retail pharmacies provide a very good coverage of the country. No major inequities are reported in the study, which is likely a result of the existing legislation. Although commissioned to an independent entity, the report cannot be decoupled from the debate on the new legislation on pharmacy ownership, which the *Ordem dos Farmacêuticos* opposes (Rodrigues et al., 2007).

Oliveira and Pinto provide a broad review and assessment of the Portuguese health system in the period 1970–2002. Their main argument is that “the NHS model has never been fully implemented and many policies have diverted the system from its original objectives” (Oliveira, Pinto, 2005, p. 203). In particular, the system, according to their view, does not meet its goals for equity of access and utilization. They argue that “despite huge improvements in health outcomes, the system is nonetheless lacking to meet its goals, particularly in terms of the equity of access and utilization. ... Accountability problems, inadequacies in the use of operational reforming tools and a lack of mechanisms to promote efficient behaviour, are all associated with cost-containment problems.” (Oliveira, Pinto, 2005, p. 203).

The Portuguese health system is also subject to a yearly review by the OPSS, the so-called Spring Report. The spring 2006 report (OPSS, 2006) states that health administration lacks a clear strategic focus, and that there have been decisions made that change significantly the health system’s structure without a straightforward plan for the announced transformations. The report also refers to the quick and useful use of the media by the Ministry of Health, despite the lack of some information transparency. Finally, it criticizes the deficit of political investment in primary care reform when compared with investments made for Expo 98 and the European Championship football, in 2004, for example.

Other access indicators include the proportion of first consultations, measured both at the hospital (25%) and the PCC (20.7%) levels. A higher proportion of first consultations is seen as an indication of better access. All have increased in absolute numbers (+8.8%). In relative value, they have increased (+3.4%) (over total number of consultations) in primary care but not in hospitals (value from the year 2006).

Since the coverage of the NHS is universal and comprehensive, in principle benefits from health care provision should be equitably distributed across the

population. However, since several barriers to access exist, inequalities arise. Compared to other OECD countries, Portugal has among the highest levels of inequity by income in the use of doctor services (both in terms of total doctor visits and GP visits), and the highest inequity in specialist care among the 21 countries under analysis in van Doorslaer, Masseria and OECD Health Equity Research Group (2004).

8.3 Efficiency of resource allocation in health care

Financial resources directed towards health care have reached a high level relative to the country's wealth. The value of approximately 10% of GDP devoted to health expenditure puts Portugal among the countries with the highest level of health spending within the EU and the OECD. However, this effort does not appear to have led to improved population health. The tradition since the mid-1990s has been one of steady and fast growth in public health expenditure, with private expenditure remaining relatively constant (i.e., growing in line with GDP growth). It is still to be seen whether a change in the trend has occurred, towards lower public expenditure growth due to the containment of costs in 2006 in the NHS.

There has been a move away from historical-based allocation of funds towards an approach close to needs-based allocation. This was the trend in primary care, but recent years have seen the re-adoption of an historical budget approach. Hospital care, on the other hand, is moving towards a contract-based approach, where an explicit target for "production" and the corresponding payment are spelled out. Whenever the levels of activity defined the approximate health care needs of the population, the system moves closer to a needs-based approach.

Human resources in Portugal have been characterized by a higher emphasis than most other countries on specialist hospital care, coupled with a relative scarcity of nurses. The more recent years have shown a movement towards corrections of these imbalances. In particular, an increase in the ratio of GPs over specialists in hospitals, as well as an increase in the ratio of nurses to doctors, at national level, is observed. Some of these changes have been the result of government policy regarding vacancies for training for different specialties in NHS institutions.

It is also the case that consultations have increased faster than emergency department episodes, which, given the high proportion (by international

standards) of the latter, probably constitutes an improvement in the allocation of resources.

8.4 Technical efficiency in the production of health care

The recent evolution of the Portuguese health system suggests that improvements have been made in terms of providing value for money. In particular, health gains and increased activity in the NHS were obtained without extra resources, indicating both an improvement in value for money provided and that large inefficiencies were (and still are) present in the system. The increases in productivity, measured by a higher growth in activity than in expenditure, have been present over recent years, although usually at the cost of continuous growth in spending – a situation that has been contained in 2006 and the Government expects to repeat in 2007 (MoH, 2007a). Of course, this type of evolution has natural limitations, and in the near future productivity gains will most likely entail an increase in spending (as opportunities for waste reduction become exhausted).

There is clearly room for further efficiency gains in the delivery of health care in Portugal. The role of health technology assessment is currently limited to pharmaceutical products. If ensuring that good value for money is obtained in health care provision, a more systematic approach will have to be taken.

Technical efficiency is to be further enhanced by the changes in the payment mechanisms set for providers, even within the NHS. Performance-related pay is currently being implemented in primary care (for the new USFs) and prospective budgets (*contratos programa*) are being used for hospital care. For the former, an *ex ante* assessment suggests that some minor cost gains are expected, while for the latter the (unpublished) report produced by an independent commission indicates that cost gains in the range of 8% were obtained (at no cost for quality indicators) (Comissão de avaliação dos Hospitais SA, 2006). In both cases, the way providers are paid seems to have some bearing on their efficiency level.

8.5 Quality of care

Quality of care can be measured in many different ways. The focus here is a set of indicators used by the Ministry of Health to assess the evolution of quality of care. Most of these concentrate on hospital care, and show a positive evolution

in recent years (2004–2006) on average length of stay and the readmission rate. The average length of stay decreased from 6.96 days in 2004 to 6.84 in 2006, while the readmission rate (within 30 days) in the same period decreased from 9.0% in 2004 to 8.5% in 2006.¹⁴

A common measure of quality of care in the Portuguese NHS relates to waiting lists, both waiting time and size of the list. In this respect, the more recent numbers show a decrease for both indicators. Only since 2005 does the Portuguese health system have a central register for people on waiting lists, and therefore data from before its creation are questionable (and have often been the subject of heated political debate). According to the central register, the number of patients on waiting lists decreased from 241 425 in 2005 to 225 409 in 2006, and the median waiting time for intervention shifted from 8.6 months in 2005 to 6.9 months in 2006.

8.6 The contribution of the health system to health improvement

At the time of writing it is not possible to provide an estimate of improvements in health status that can be attributed to the health system, making a distinction between alternative sources of improvement (health care, public health, lifestyle changes, income, environmental factors, etc.). To the authors' knowledge, there are no studies establishing a causal link (or even a mere association) between health policy or health care interventions and health improvements. Establishing evidence on this issue remains a challenge for health policy-makers and analysts in Portugal. In terms of international comparisons, based on the concept of “amenable to health care” avoidable mortality (that is, mortality sensitive to health care system initiatives), Nolte and McKee (2003; 2004) reveal that Portugal performs relatively poorly in comparison with 19 other OECD countries, using 1998 data. Although some progress has been made since 1998, it is plausible to consider that there is still significant room for improvement.

¹⁴ Average length of stay has been often taken as a measure of quality, though it may decrease for various reasons, including the use of new drugs and technology. This should be kept in mind when assessing the decrease in the length of stay.

9 Conclusions

The Portuguese health system has been under the political spotlight for several years. Since the early 1990s, a considerable increase in total expenditure on health care has occurred, driven mainly by the growth of public health care spending.

Despite improvements in the health of the population, a growing concern about spending levels and an increasing awareness that a fair amount of waste in terms of utilization of resources exists have motivated many policy measures.

All policy measures adopted constitute attempts to improve the current health system. No radical change has been proposed by the successive governments, or by the parties represented in the Parliament. Of course, some of the policy measures aim at more ambitious goals than others. Some aim at long-term impact, while others focus on short-term effects.

Although costs have been an important driver for some of the government interventions, other measures have actually been taken without a careful and detailed analysis of cost implications. There is no broad area in the health system that has seen no change at all: primary care, hospital care, long-term care, the pharmaceutical market, PPPs, regulation, human resources, and new investments in capacity have all been affected, to a different extent, by policy measures.

In terms of the health of the population, the National Health Plan is a major landmark, as a guide for public action aimed at obtaining health gains for the population. The National Health Plan covers the period 2004–2010, and implementation is well under way, although the pace seems to be slower than anticipated. A major challenge for the Portuguese health system is, therefore,

to implement fully the National Health Plan and to monitor the achievements in terms of health gains.

Primary care was subject to a major change, with the ongoing implementation of USFs, multidisciplinary teams formed voluntarily and aimed at providing better care to the population. The two basic elements underlying this reform are proximity to the population and a performance-based remuneration system. The policy measures are too recent to enable an evaluation, although *ex ante* assessments suggest that cost savings will be marginal. Accordingly, any evaluation of future success (or failure) must be assessed in terms of populations' health and access to care.

Since the mid-1990s, hospital care has also received attention from policy-makers. A general movement towards performance-based payments and explicit contracting within the public sector is very clear. A major impetus for this movement can be traced back to the 2002 set of policies. Even if some gains, in terms of cost savings, have been achieved, this did not change the overall trend of increased hospital spending. The role of the hospital as the centre point of health care delivery has hardly changed. This seems to be true both from the point of view of patients and that of professionals. On the part of the patients, there is continued intensive use of hospital emergency departments, instead of accessing primary care facilities. As for professionals, hospital physicians have continued to grow in number and still command a higher prestige and social status. Pressures for new hospitals and new equipment are likely to remain. The main challenges in this area are the reducing waste of resources, without harming quality of care, and redefinition of hospitals' role in the health system, according to the recent developments in primary care and in long-term care.

Traditionally, long-term care has seen little public sector involvement. Policy measures since 2005 were designed to change this picture. Taking advantage of existing institutions, many non-profit-making and private, the development of a network of integrated long-term care is envisaged. It aims at reducing costly acute hospital care episodes and admissions by substitution for care that is of lower cost and closer to the community. Given that such policies have only been enacted recently, it is too early to assess the situation in full.

The pharmaceutical sector was also a target for several measures, aiming primarily at cost-containment.¹⁵ They have had mixed success. While it is true

¹⁵ In no particular order, these measures have included, for example, promotion of the use of generic drugs; revision of price-setting rules for new products; administrative price reductions; introduction of economic evaluation analysis for the introduction of new pharmaceutical products in hospitals; a change in cost-sharing values; introduction of a reference price mechanism; liberalization of prices and entry conditions in the OTC market; and the intention announced by the government to alleviate constraints on ownership of pharmacies (currently restricted to pharmacists).

that generics have increased their market share, pharmaceutical consumption has, to a large extent, kept its historical growth pace. This motivated harsher measures, such as the reduction of prices decreed administratively and ceilings on pharmaceutical expenditure funded by the NHS.

Human resources policies have to deal with three main issues: imbalance between hospital care and primary care, imbalance between nurses and physicians and the imminent retirement of health care professionals, whose replacement has been limited by the severely restricted admissions to medical schools in recent years. Correcting these imbalances will take time and progress will have to be monitored. The other main change has taken place within the NHS, with the introduction of individual labour contracts, deemed essential for the use of systems rewarding performance of professionals.

Other policies, such as PPPs and regulation by the HRA, have so far produced few results (but lots of “noise”). The clarification of their role remains an issue.

For many of the reforms, the two main points to be considered are: (a) they mostly aim at improving efficiency of the health system, namely public provision; and (b) the jury is still out, as they are too recent for a fair appraisal to be made. The legal changes that have occurred are still yet to materialize in changes in the health system. As has happened in the past, there is the risk that many of them may not translate into actual changes, and that unanticipated effects may emerge. This may be especially true for long-term care. Although an initial increase in costs may occur, it is expected that substitution of acute care beds with recovery beds and palliative care introduced into the long-term care network will help to drive down cost increases. Could the resistance to reducing hospital beds undermine this objective? There is no clear answer at the moment. Similar observations can also be made as regards primary care changes. For most of the ongoing reforms, the jury is still out, as mentioned above. Challenges remain, namely in implementation. Nonetheless, a better health system and improved health for the population are potential gains.

10 Appendices

10.1 References and further reading

Barros P (2005). *Economia da saúde – conceitos e comportamentos [Health Economics – concepts and behaviour]*. Coimbra, Livraria Almedina.

Bentes M, Dias CM, Sakellarides C, Bankauskaite V (2004). *Health care systems in transition: Portugal*. Copenhagen, WHO Regional Office for Europe on behalf of the European Observatory on Health Systems and Policies.

Bento A, Carreira M, Heitor M (2001). *Censo psiquiátrico de 2001. Síntese dos resultados preliminares [Mental health census – preliminary report]*. Lisbon, General Directorate of Health (<http://www.essp.pt/siteasmp/pdf/divul/cp.pdf>, accessed 23 June 2007).

Cardoso C (2006). *Tomografia por emissão de Positrões – Tecnologia e Avaliação Económica [PET – Technology and economic evaluation]*. Lisbon, Universidade Católica Portuguesa Editora.

Comissão de Avaliação dos Hospitais SA (2006). *Resultados da Avaliação dos Hospitais SA, Síntese dos Resultados [Results from the Assessment on the creation of enterprised hospitals]*. Unpublished report (16 January 2006).

Court of Auditors (2003). *Relatório de Auditoria n.º 10/2003 [Auditing Report No. 10/2003]*. Lisbon, Court of Auditors.

Court of Auditors (2005). *Relatório de Auditoria n.º 21/2005 [Auditing Report No. 21/2005]*. Lisbon, Court of Auditors.

Dixon A, Mossialos, E (2000). Has the Portuguese NHS achieved its objectives of equity and efficiency? *International Social Security Review*, 53:49–78.

ERS (2007). *Estudo sobre o processo de licenciamento de prestadores de cuidados de saúde [Analysis on the health care provider's licensing process]*. Oporto, Entidade Health Regulatory Agency (<http://www.ers.pt>, accessed 23 June 2007).

European Commission (2002). *Key figures on health*. Luxembourg, Office for Official Publications of the European Communities, European Commission.

FENAMAN (National Federation of Medicine Associations) (2007). *Medicinas alternativas – a escolha vai aumentar [Alternative medicine – options will increase]*. *Revista Farmácia Distribuição*, 1 February 2007:5–9.

Ferreira PL, Raposo V, Godinho P (2005). *A voz dos utilizadores dos centros de saúde [The opinion of primary care centre users]*. Lisbon, Institute for Health Quality.

GDH (2002). *Ganhos de saúde em Portugal [Health gains in Portugal]*. Lisbon, General Directorate of Health (Report from the High Commissioner and Director-General for Health).

GDH (2004). *Plano Nacional de Saúde 2004–2010 [National Health Plan 2004–2010]*, Vol. I and Vol. II. Lisbon, General Directorate of Health (<http://www.dgsaude.min-saude.pt/pns/capa.html>, accessed 23 June 2007; English version available <http://www.dgs.pt/upload/membro.id/ficheiros/i006666.pdf>, accessed 23 June 2007).

GDH (2005a). *Guia do utente do Serviço Nacional de Saúde [Guidelines for NHS users]*. Lisbon, General Directorate of Health.

GDH (2005b). *National Health Plan Indicators [in Portuguese]*. Lisbon, General Directorate of Health (<http://www.acs.min-saude.pt/acs/resources/metaspns/main.html>, accessed 23 June 2007).

Gouveia M, Silva S, Oliveira P, Pinto LM (2006). *Análise dos custos dos centros de saúde e do regime remuneratório experimental [Analysis on the costs of primary care centres and experimental remuneratory regime]*. Lisbon, Unidade de Missão dos Cuidados de Saúde Primários (Primary Care Task Force) (Report to the Primary Care Task Force) (<http://www.min-saude.pt/portal/conteudos/a+saude+em+portugal/publicacoes/estudos/cahsa.htm>, accessed 23 June 2007).

Government of the Republic of Portugal (2006). *PEC – Programa de Estabilidade e Crescimento [Stability and Growth Programme]*. Lisbon, Ministry of Finance.

IGIF (2005). *Estatísticas do movimento assistencial [Health care delivery statistics]*. Lisbon, Institute for Financial Management and Informatics.

INE (2001). *Census*. Lisbon, National Statistics Institute (www.ine.pt, accessed 23 June 2007).

INE (2003). *Projeções da população residente em Portugal 2000–2050 [Projections on population in Portugal for 2000–2050]*. Lisbon, National Statistics Institute.

INE (2004). *Anuário estatístico Portugal [Portugal's annual statistic review, 2004]*. Lisbon, National Statistics Institute.

INE (2005a). *Estatísticas da saúde 2005 [Health-related statistics, 2005]*. Lisbon, National Statistics Institute.

INE (2005b). *Estatísticas demográficas [Demographic statistics]*. Lisbon, National Statistics Institute.

INE (2005c). *Indicadores sociais [Social statistical figures]*. Lisbon, National Statistics Institute.

INE (2006). *Conta Satélite da Saúde [National Health Accounts]*. Lisbon, National Statistics Institute.

INE (2007). *Estimativas de população residente, Portugal, NUTS II, NUTS III e municípios [Estimates for the population living in Portugal by geographical unit]*. Lisbon, National Statistics Institute.

INFARMED (1998). *Orientações metodológicas para estudos de avaliação económica de medicamentos [Guidelines for pharmaceutical economic evaluation]*. Lisbon, National Pharmacy and Medicines Institute (www.infarmed.pt, accessed 28 June 2007).

INFARMED (2007). *Mercado de medicamentos genéricos [The Market for generics]*. Lisbon, National Pharmacy and Medicines Institute.

INSA (2007). *4th National Health Survey – 2005/2006*. Lisbon, National Institute of Health, Dr Ricardo Jorge.

Instituto de Seguros de Portugal (2005). *Relatório do sector segurador e fundos de pensões 2004 [Report on the insurance and pension funds 2004]*. Lisbon, Portuguese Insurance Institute.

Instituto de Seguros de Portugal (2006). *Estatísticas de Seguros 2005 [Insurance Statistics 2005]*. Lisbon, Portuguese Insurance Institute (<http://www.isp.pt>, accessed 23 June 2007).

MoH (1998). *Carta dos equipamentos da saúde [Health equipment chart]*. Lisbon, Ministry of Health.

MoH (2000). *3º Inquérito Nacional de Saúde (1998/99) [3rd National Health Interview Survey (1998/99)]*. Lisbon, National Health Observatory, National Institute of Health, Dr Ricardo Jorge.

MoH (2006a). *Estatísticas do movimento assistencial – Serviço Nacional de Saúde [Statistical information on care provided by the NHS]*. Lisbon, Ministry of Health.

MoH (2006b). *4º Inquérito Nacional de Saúde (2005/06) [4th National Health Interview Survey (2005/06)]*. Lisbon, National Health Observatory, National Institute of Health, Dr Ricardo Jorge.

MoH (2007a). *Indicadores de desempenho SNS 2004–2006 [NHS's Statistical performance report 2004–2006]*. Lisbon, Ministry of Health.

MoH (2007b). *Relatório final da comissão técnica de apoio ao processo de requalificação das urgências [Report on the process of reorganizing emergency room services]*. Lisbon, Report of the Commission on Emergency Room Services to the Ministry of Health (January).

MoH (2007c). *Response from Portugal to the commission consultation on community action on health services*. Lisbon, Ministry of Health (http://ec.europa.eu/health/ph_overview/co_operation/mobility/docs/health_services_co276.pdf, accessed 23 June 2007).

MoH and Ministry of Labour and Social Solidarity (2005). *Health care and long-term care*. Brussels, European Commission (Preliminary report, Social Protection Committee, European Commission) (http://ec.europa.eu/employment_social/social_protection/docs/hc_ltc2005_pt_en.pdf, accessed 23 June 2007).

Ministry of Labour and Social Solidarity (2005). *Carta social – rede de serviços e equipamentos sociais 2005 [Social chart – network of social services and equipment 2005]*. Lisbon, Ministry of Labour and Social Solidarity (<http://www.dgeep.mtss.gov.pt/estudos/cartasocial.php>, accessed 28 June 2007).

Ministry of Law and Order (2006). *Sinistralidade rodoviária – elementos estatísticos [Statistical information on road accidents]*. Lisbon, Ministry of Law and Order.

Mossialos E, Thomson S (2004). *Voluntary health insurance in the European Union*. Copenhagen, WHO Regional Office for Europe, on behalf of the European Observatory on Health Systems and Policies.

Nolte E, McKee M (2003). Measuring the health of nations: analysis of mortality amenable to health care. *British Medical Journal*, 327:1129–1132.

Nolte E, McKee M (2004). *Does health care save lives? Avoidable mortality revisited*. London, The Nuffield Trust.

OECD (2006). OECD health data [online database]. Paris, Organisation for Economic Co-operation and Development (October 2006 update) (<http://www.oecd.org>, accessed 20 June 2007).

Oliveira, M (2006). *Deinstitutionalisation of mental health care in Portugal: barriers and opportunities*. January 2006: Report prepared for the European Mental Health Economics Network II – project prepared for the European Commission.

Oliveira M, Pinto CG (2005). Health care reform in Portugal: an evaluation of the NHS experience. *Health Economics*, 14:203–220.

OPSS (Portuguese Health System Observatory) (2006). *Um ano de governação em saúde: sentidos e significados [A year of government in health: directions and interpretation]*. Coimbra, Centre for the Study and Research in Health of the University of Coimbra (CEISUC) (http://www.observaport.org/NR/rdonlyres/ebkvphcy4nxyspcp3whgfag73gynjmrmg7dqpswhvh22y4plc2hwy7yrx7dw6axt2ssimbhwgxczp/RP_2006.pdf, accessed 28 June 2007).

Pereira J, Pinto CG (1992). Equidade no financiamento da saúde em Portugal [Equity in health care financing in Portugal]. *Economia*, 16:105–135.

Portela C, Pinto M (2005). *Contribuição do sistema de preços de referência para a concorrência no mercado farmacêutico em Portugal [Reference pricing as a competition trigger on the Portuguese pharmaceutical market]*. Speech presented at 9th Conferência da Associação Portuguesa de Economia da Saúde [Portuguese Association of Health Economics]. Coimbra, 22 November 2005.

Portuguese Central Bank (2006). *Relatório anual [Annual report]*. Lisbon, Portuguese Central Bank.

Rodrigues A, Marques FB, Ferreira PL, Raposo PL (2007). *Estudo do sector das farmácias em Portugal [Study on the pharmacy sector in Portugal]*. Coimbra, Centre for the Study and Research in Health of the University of Coimbra (CEISUC) (Report to the Ordem dos Farmacêuticos).

Santana P (2000). Ageing in Portugal: regional inequities in health and health care. *Social Science and Medicine*, 50:1025–1036.

Santana P (2005). *Geografias da saúde e do desenvolvimento [Health and development geography]*. Coimbra, Edições Almedina.

Simões J (2004). *Retrato político da saúde - dependência do percurso e inovação em saúde: da ideologia ao desempenho [Political portrait of health – path dependency and innovation in health: from ideology to performance]*. Coimbra, Livraria Almedina.

Van Doorslaer E, Masseria C, OECD Health Equity Research Group (2004). *Income-related inequality in the use of medical care in 21 OECD countries*. Paris, Organisation for Economic Co-operation and Development (Health Working Paper, 14).

Vertrees JC, Manton KG (1986). A multivariate approach for classifying hospitals and computing blended payment rates. *Medical Care*, 24:283.

Viegas V, Frada J, Miguel JP (2006). *A Direcção-Geral da Saúde: notas históricas [General Directorate of Health: historical notes]*. Lisbon, General

Directorate of Health (<http://www.dgsaude.pt/upload/membro.id/ficheiros/i007477.pdf>, accessed 23 June 2007).

Wagstaff A et al. (1999). Equity in the finance of health care; some further international comparisons. *Journal of Health Economics*, 18:263–290.

WHO (1986). *Ottawa Charter for Health Promotion*. Geneva, World Health Organization.

WHO Regional Office for Europe (2007). European Health for All database [offline database]. Copenhagen, WHO Regional Office for Europe (January 2007 update).

World Bank (2006). *World development indicators 2006*. Washington, DC, World Bank.

Further reading

Nolte E, Wait S, McKee M (2006). *Investing in health: benchmarking health systems*. London, The Nuffield Trust.

OECD (2004). *Economic Surveys – Portugal 2004*. Paris, Organisation for Economic Co-operation and Development.

OECD (2006) *Economic Surveys – Portugal 2006*. Paris, Organisation for Economic Co-operation and Development.

Oliveira MD, Magone J, Pereira JA (2005). Nondecision-making and inertia in Portuguese health policy. *Journal of Health Politics, Policy and Law*, 30(1-2):211–230.

OPSS (Portuguese Health System Observatory). *Relatório de Primavera [Spring report]*, several years.

Pereira J, Campos AC, Ramos F, Simões J, Reis V (1999). Health care reform and cost-containment in Portugal. In: Mossialos E, Le Grand J, eds *Health care and cost-containment in the European Union*. Aldershot, Ashgate: 635–660.

10.2 Principal legislation

Decree-Law No. 35822 of 22 August 1946 on Social Security.

Decree-Law No. 56/79 on the Fundamental Principles of the National Health Service.

Constitutional Law No. 1/89 of 8 July.

Decree-Law No. 48/90 of 24 August 1990 on the Fundamental Principles of Health, with changes introduced by Decree-Law No. 27/2002 of 8 November.

Decree-Law No. 401/98 of 17 December, changing Decree-Law No. 11/93 of 15 January on the National Health Service Statutes.

Decree-Law No. 92/2001 of 3 March on the remuneration of physicians' overtime working hours.

Decree-Law No. 129/2005 of 11 August, changing Decree-Law No. 118/92 on pharmaceutical co-payment mechanisms.

Decree-Law No. 101/2006 of 6 June, creating the Rede Nacional de Cuidados Continuados (National Network for Long-term Care).

Governmental Regulation No. 994/2006 of 19 September, defining prices for health care delivery in the National Network for Long-term Care.

Decree-Law No. 44/2007, changing Decree-Law No. 73/90 on the legal environment for physicians' careers.

Constitution of The Republic of Portugal, Article 64 on the social rights and duties concerning the health sector.

Forwarding Normative No. 9/2006 of 16 February on the regulation of the Family Health Units.

Council Directive 93/42/EEC of 14 June 1993 concerning medical devices.

Decree-Law No. 185/2002 of 20 August.

Decree-Law No. 235/2006 of 6 December concerning hospital pharmacies.

Decree-Law No. 72/91 of 8 February concerning the authorization, manufacturing, sale and co-payments of pharmaceuticals, changed by Decree Law No. 272/95 of 23 October.

Decree-Law No. 127 of 3 July 1992 concerning mental health care centres.

Decree-Law No. Law 36 of 24 July 1998 on the foundations of mental health care delivery.

10.3 Useful web sites

<http://www.acs.min-saude.pt>

<http://www.acss.min-saude.pt>

<http://www.anacom.pt>

<http://www.chks.co.uk/index.php?primarycare>

<http://www.dgs.pt>

<http://www.ers.pt>

<http://www.insarj.pt>

<http://www.infarmed.pt>

<http://www.min-saude.pt>

<http://www.min-saude.pt/portal/conteudos/a+saude+em+portugal/ministerio/comunicacao/artigos+de+imprensa/diario+economico.htm>

<http://www.observaport.org>

<http://www.portaldasaude.pt/portal/conteudos/informacoes+uteis/lista+de+inscritos+para+cirurgia/convencoes+privados.htm>

10.4 HiT methodology and production process

The Health Systems in Transition (HiT) profiles are produced by country experts in collaboration with the Observatory's research directors and staff. The profiles are based on a template that, revised periodically, provides detailed guidelines and specific questions, definitions, suggestions for data sources, and examples needed to compile HiTs. While the template offers a comprehensive set of questions, it is intended to be used in a flexible way to allow authors and editors to adapt it to their particular national context. The most recent template is available online at: http://www.euro.who.int/observatory/Hits/20020525_1.

Authors draw on multiple data sources for the compilation of HiT profiles, ranging from national statistics, national and regional policy documents, and published literature. Furthermore, international data sources may be incorporated, such as those of the Organisation for Economic Co-operation and Development (OECD) and the World Bank. OECD Health Data contain over 1200 indicators for the 30 OECD countries. Data are drawn from information collected by national statistical bureaux and health ministries. The World Bank provides World Development Indicators, which also rely on official sources.

In addition to the information and data provided by the country experts, the Observatory supplies quantitative data in the form of a set of standard comparative figures for each country, drawing on the European Health for All (HFA) database. The HFA database contains more than 600 indicators defined by the WHO Regional Office for Europe for the purpose of monitoring Health for All policies in Europe. It is updated for distribution twice a year from various sources, relying largely upon official figures provided by governments, as well as health statistics collected by the technical units of the WHO Regional Office for Europe. The standard HFA data have been officially approved by national governments. With its January 2007 edition, the HFA database started to take account of the enlarged European Union (EU) of 27 Member States.

HiT authors are encouraged to discuss the data in the text in detail, especially if there are concerns about discrepancies between the data available from different sources.

A typical HiT profile consists of 10 chapters:

1. Introduction: outlines the broader context of the health system, including geography and sociodemography, economic and political context, and population health.
2. Organizational structure: provides an overview of how the health system in a country is organized and outlines the main actors and their decision-making powers; discusses the historical background for the system; and describes the level of patient empowerment in the areas of information, rights, choice, complaints procedures, safety and involvement.
3. Financing: provides information on the level of expenditure, who is covered, what benefits are covered, the sources of health care finance, how resources are pooled and allocated, the main areas of expenditure, and how providers are paid.
4. Regulation and planning: addresses the process of policy development, establishing goals and priorities; deals with questions about relationships between institutional actors, with specific emphasis on their role in regulation and what aspects are subject to regulation; and describes the process of health technology assessment (HTA) and research and development.
5. Physical and human resources: deals with the planning and distribution of infrastructure and capital stock; the context in which information technology (IT) systems operate; and human resource input into the health system, including information on registration, training, trends and career paths.
6. Provision of services: concentrates on patient flows, organization and delivery of services, addressing public health, primary and secondary

health care, emergency and day care, rehabilitation, pharmaceutical care, long-term care, services for informal carers, palliative care, mental health care, dental care, complementary and alternative medicine, and health care for specific populations.

7. Principal health care reforms: reviews reforms, policies and organizational changes that have had a substantial impact on health care.
8. Assessment of the health system: provides an assessment based on the stated objectives of the health system, the distribution of costs and benefits across the population, efficiency of resource allocation, technical efficiency in health care production, quality of care, and contribution of health care to health improvement.
9. Conclusions: highlights the lessons learned from health system changes; summarizes remaining challenges and future prospects.
10. Appendices: includes references, useful web sites, legislation.

Producing a HiT is a complex process. It involves:

- writing and editing the report, often in multiple iterations;
- external review by (inter)national experts and the country's Ministry of Health – the authors are supposed to consider comments provided by the Ministry of Health, but not necessarily include them in the final version;
- external review by the editors and an international multidisciplinary editorial board;
- finalizing the profile, including the stages of copy-editing and typesetting;
- dissemination (hard copies, electronic publication, translations and launches).

The editor supports the authors throughout the production process and in close consultation with the authors ensures that all stages of the process are taken forward as effectively as possible.

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- to learn in detail about different approaches to the financing, organization and delivery of health care services;
- to describe accurately the process, content and implementation of health care reform programmes;
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Bosnia and Herzegovina (2002^g)
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Georgia (2002^{d,g})
Germany (2000^e, 2004^{e,g})
Hungary (1999, 2004)
Iceland (2003)
Israel (2003)
Italy (2001)
Kazakhstan (1999^g)
Kyrgyzstan (2000^g, 2005^g)
Latvia (2001)
Lithuania (2000)
Luxembourg (1999)
Malta (1999)
Mongolia (2007)
Netherlands (2004^g)
New Zealand (2001)
Norway (2000, 2006)
Poland (1999, 2005)
Portugal (1999, 2004, 2007)
Republic of Moldova (2002^g)
Romania (2000)
Russian Federation (2003^g)
Slovakia (2000, 2004)
Slovenia (2002)
Spain (2000^h)
Sweden (2001, 2005)
Switzerland (2000)
Tajikistan (2000)
The former Yugoslav Republic of Macedonia (2000)
Turkey (2002^{g,i})
Turkmenistan (2000)
Ukraine (2004^g)
United Kingdom of Great Britain and Northern Ireland (1999^g)
Uzbekistan (2001, 2007^g)

Key

All HiTs are available in English.
When noted, they are also available
in other languages:

- ^a Albanian
- ^b Bulgarian
- ^c French
- ^d Georgian
- ^e German
- ^f Romanian
- ^g Russian
- ^h Spanish
- ⁱ Turkish
- ^j Estonian



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HITs are in-depth profiles of health systems and policies, produced using a standardized approach that allows comparison across countries. They provide facts, figures and analysis and highlight reform initiatives in progress.