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Spain

Health system review

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Preface

The Health Systems in Transition 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.

Health Systems in Transition 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; and
- 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 WHO Regional Office for Europe 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 differs across countries. However, it also offers advantages, because it raises similar issues and questions. The Health Systems in Transition 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 Health Systems in Transition series are most welcome and can be sent to: info@obs.euro.who.int.

Health Systems in Transition profiles and Health Systems in Transition 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 Health Systems in Transition profiles has been prepared by the research directors and staff of the European Observatory on Health Systems and Policies. The Observatory is a partnership between the WHO Regional Office for Europe, the Governments of Belgium, Finland, Greece, Norway, Spain and Sweden, the Veneto Region of Italy, the European Investment Bank, the Open Society Institute, the World Bank, CRP-Santé Luxembourg, the London School of Economics and Political Science and the London School of Hygiene and Tropical Medicine.

The Observatory team working on the Health Systems in Transition profiles is led by Josep Figueras, Director, and Elias Mossialos, Co-Director, and by Reinhard Busse, Martin McKee and Richard Saltman, Heads of the Research Hubs. Technical coordination is led by Susanne Grosse-Tebbe.

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The HiT refers to reforms and data available as at February 2006.

List of abbreviations

A&E	Accident and emergency
AC(s)	Autonomous community(ies)
AEMPS	Spanish Health Products and Medicines Agency
AEN	Spanish National Association of Neuropsychiatry
AIDS	Acquired immune deficiency syndrome
ANEFP	Health Self-Care Association
CERMI	National Committee of People with Disabilities
CISNS	Interterritorial Council of the NHS
CMBD	Minimum basic dataset
DMFT	Decayed, missing and filled teeth
DRG(s)	Diagnosis-related group(s)
EAP	Primary care team
EU	European Union
FCI	Interterritorial Compensation Fund
FEDIFAR	Spanish Pharmaceutical Distribution Companies Association
GDP	Gross domestic product
GM(s)	Generic medicine(s)
INE	National Institute of Statistics
INGESA	The Institute of Health Management
INP	National Institute of Social Insurance
INSALUD	National Institute of Health
IT	Information technology
ITE	State taxation revenue
MAG	Mean annual growth
NHS	National Health System
OECD	Organisation for Economic Co-operation and Development
OMC	Organization of Medical Colleges
PHC	Primary health care
SAD	Home care services
SECPAL	Spanish Society for Palliative Care
SESPAS	Spanish Society of Public Health and Health Management
SHI	Social Health Insurance

SIPES	Information System on Health Promotion and Education
SP	Supplementing provision
TP	Transitory provision
TRIPS	Trade-Related Aspects of Intellectual Property Rights
UPA	Weighted health care units
VAT	Value-added tax
WHO	World Health Organization
WTO	World Trade Organization

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Executive summary

Spain is a parliamentary monarchy. The 1978 Spanish Constitution followed a long period of dictatorship, after which the country underwent a deep transformation of the state and its political structure. Territorially, the political organization of the Spanish state is made up of the central state and 17 highly decentralized regions (*Comunidades Autónomas*, autonomous communities, ACs) with their respective governments and parliaments. Spain, with a population of 44 108 530 people (1 Jan 2005), covers 505 955 km^2 and has the third largest surface area in western Europe. The fertility rate is one of the lowest in the European Union (EU) (1.23 children per woman in 2003), which suggests there will be an ageing population in future. The life expectancy in Spain is one of the highest in Europe: 83.15 years for women and 76.42 for men in the year 2003. The circulatory system accounted for almost one third of all deaths in 2003. The second largest and increasing cause of death since the 1970s has been malignant neoplasms. Mortality from cancer of the trachea/bronchus/lung has doubled since 1970.

The basis for the current organizational structure of the Spanish health system was formed during the transition to democracy. Central government has the responsibility for promoting coordination and cooperation in the health sector. From 1986, the transition to a National Health System involved a reform of financing, which has transformed the former insurance-oriented system into a system financed by taxes, with almost universal coverage. The decentralization reform was completed in 2002 which resulted in governance of the system being decentralized to all 17 autonomous communities. In 2003, Spanish health care expenditure was 7.4% of gross domestic product (GDP).

The 1986 General Health Care Act outlines the main principles for the Spanish National Health System (NHS). This system, created from the social security health services and providing universal coverage with free access to

health care, is publicly funded – mainly through taxation – and has a regional organizational structure.

At central level the Spanish Ministry of Health and Consumer Affairs assumes responsibility for certain strategic areas, including general coordination and basic health legislation; definition of a benefits package guaranteed by the NHS; international health; pharmaceutical policy; and undergraduate and postgraduate education. The 17 autonomous communities in Spain hold health planning powers as well as the capacity to organize their own health services in their regions. The Interterritorial Council of the NHS (CISNS), composed of representatives of the ACs and the state, promotes the cohesion of the system. Health policy-making power in Spain lies at regional level, with health authorities and regional health governments playing a central, key role. All autonomous communities have drawn up a "health map" stipulating territorial subdivisions (health areas and zones). Each health area, responsible for the management of facilities, benefits and health service programmes within its geographical limits, should cover a population of no fewer than 200 000 and no more than 250 000 inhabitants. Basic health zones are the smallest units of the organizational structure of health care. They are usually organized around a single Primary Care Team (Equipo de Atención Primaria, EAP).

Currently almost all public health care expenditure (excluding civil servants' mutual funds) is funded through general taxation, which replaced the social health insurance (SHI) model. The new model of financing was adopted in 2001 and is intended to guarantee financial sustainability. The two main resources of the ACs are taxes and allocations from central government. Private health care financing consists of three complementary sources of finance: out-of-pocket payments to the public system, out-of-pocket payments to the private sector and voluntary health insurance (VHI). Private household out-of-pocket expenditure became significant (23.7%) in 2003.

According to the Organisation for Economic Co-operation and Development (OECD) database, health care expenditure expressed in US$ PPP (purchasing power parity) per capita in Spain was 1771 in 2003. Public health expenditure in 2004 was approximately 71%. Pharmaceutical expenditure has been the main cost increase factor in Spain in recent years. In 2004, for example, the growth of pharmaceutical expenditure was 6.26% and made up 20.56% of total public health expenditure.

Since 1984, the primary health care (PHC) sector has experienced an extensive process of institutional reform and capacity building. Primary health care is an integrated system composed of PHC centres and multidisciplinary teams and provides personal and public health services (single-handed practices are restricted to small towns and to the private sector). PHC in Spain

is predominantly publicly funded and run. General practitioners (GPs) have a gatekeeper role and are the first point of contact between the population and the health system.

The approach to public health services is their link to PHC. The integration of all public health responsibilities into a single level of government has led to the coordination and management of epidemiological surveillance at regional level. The bulk of preventive medicine and health promotion is integrated with PHC and carried out by GPs and practice nurses as part of their normal workload.

Specialized care is the central element of the Spanish health care system. The model of provision of specialized care varies across the autonomous communities. Most hospitals are publicly owned and the majority of staff are salaried employees. The main problems of the sector are coordination with PHC centres, duplication of clinical records and diagnoses, delays in treatment, and waiting times. In addition, there are a high number of emergency hospital admissions. Nevertheless, hospital care in Spain is assessed as being satisfactory by users. Social care services are the responsibility of the regions, while home care services are managed at local, municipal level. Long-term care services in Spain are underdeveloped. One of the major challenges in this area is the lack of coordination.

In 2002, there were 4.6 qualified doctors per 1000 inhabitants in Spain. The country displays the fourth lowest number of nurses per 1000 people in Europe. The national average of the distribution of the workforce between PHC and specialized care is 21% to 79% respectively. Most medical staff working in the NHS have a status similar to that of civil servants. Planning of human resources in health care has some deficiencies owing to human resources policies being oriented towards short-term issues.

Traditionally, hospital expenditure was retrospectively reimbursed with no prior negotiations with the third-party payer (National Institute of Health (INSALUD) or regional health services). Prospective financing of targeted activities (contract programmes – see Section 3.3 and Subsection 4.1.3) was introduced in the early 1990s. Hospitals in the NHS are funded through a global budget, set against individual spending headings. From 1991, aggregate measures of activity were defined which enabled comparison between hospitals, differentiated among four hospital production levels. GPs receive a salary plus a capitation component, which amounts to approximately 15% of the total. Private physicians are paid on fee-for-service basis. All specialists working at hospitals and in ambulatory settings are salaried. The basic salary for public sector physicians is regulated by the national government, although regions have the capacity to vary some components, which leads to considerable variations in salaries among the autonomous communities.

Since 1986, the public health system has undergone considerable development. The focus of reforms in the 1980s was on rationalization of the system and cost-containment, while in the 1990s efforts were put on managerial issues, the internal market and competition. During the period 2001–2003, the importance of governance and clinical management, among other issues, was highlighted.

Health system coverage in Spain has been expanded from 81.7% of the population in 1978 to 99.5% in 2005 and includes low-income inhabitants and immigrant adults and children. The basic benefits package of services for the whole health system is stipulated by the Cohesion and Quality Act adopted in 2003, following previous legislative instruments in this field. Decentralization of the Spanish NHS was accomplished in 2002 after almost 20 years of reforms and this resulted in the 17 ACs being responsible for provision and financing of health care in their territories. All regions have established a regional organization of the health care system through the integration of all public health services and centres.

Primary health care reform was initiated in 1984 and important achievements have been made, including the set-up of a network of PHC centres throughout the country. Nevertheless, this sector has not received adequate political attention, which has resulted in the relatively weak role of PHC in Spain.

Spain has presented an interesting experience of innovative hospital management (foundations) since 1997, when relevant legislation was adopted. Public hospitals with foundation status are self-governing units with less external bureaucratic control and emphasis on outcomes. Purchasing reform was formally introduced in both central and regional legislation during the 1990s. However, complete separation between these functions has not been achieved. Waiting lists and waiting times remain significant policy concerns and are major causes of user dissatisfaction, despite some efforts to tackle these issues.

A number of important health care reforms have taken place in Spain. However, systematic evaluation of their impact upon health outcomes is lacking. For future evidence-based policy-making it is therefore important to carry out a systematic evaluation of health reforms in Spain.

The Spanish NHS has been undergoing constant reform since 1986, including reforms focusing on universal coverage, primary health care, financing and management, public health and research. Health indicators of the population show continuous improvement since the 1970s, which is attributable not only to improvements in the health system but also to general changes in Spanish society.

Despite significant achievements, a number of challenges in the Spanish NHS should be addressed in the near future, such as cost-containment, further

strengthening of PHC and reform of long-term and social care services. Challenges in the context of the decentralized health care system include reform of the regional financing system, completing the establishment of a national information system, reducing regional inequalities in health and improving coordination mechanisms between central and regional levels.

1 Introduction

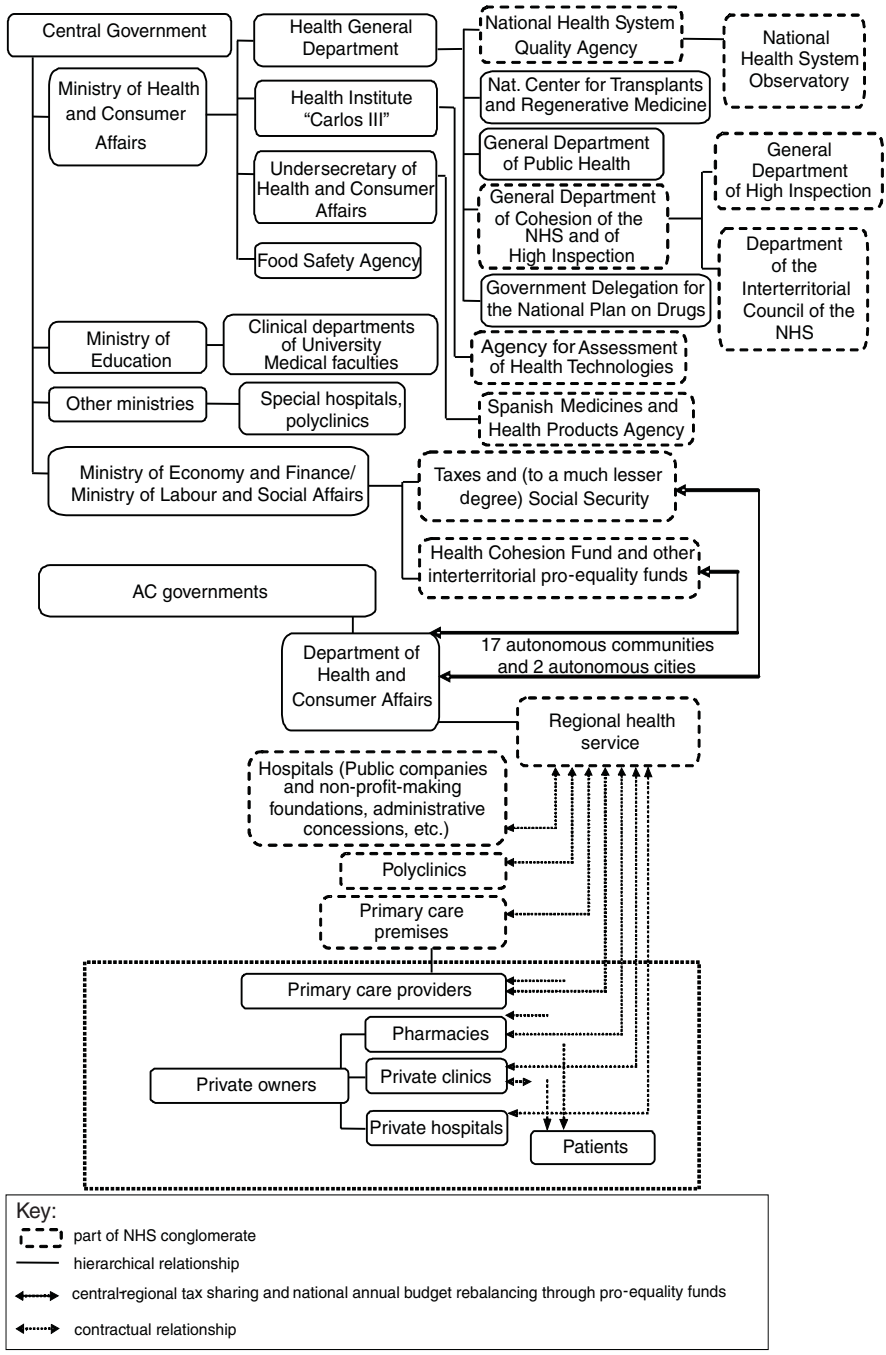
1.1 Overview of the health system

The Spanish health system is made up of a conglomerate of public and (with less influence) private organizations, resulting in a totally decentralized system. Fig. 1.1 shows the most relevant elements of the Spanish health system. Some departments and institutions have been deliberately omitted to give a clearer picture of the organizational set-up. The situation is further explained in Chapter 2 on the organizational structure of the health system.

1.2 Geography and sociodemography

As already mentioned, Spain has a population of 44 108 530 people (as at 1 January 2005) (INE 2006), covers 505 955 km^2 and has the third largest surface area in western Europe. With an average altitude of 660 metres above sea level, it is a country with highly varied geography and climate. The population, mostly Roman Catholic, tends to concentrate in the capital and along the coastline, while the central areas of the country are becoming increasingly underpopulated, with average population densities lower than 20 inhabitants per km^2. This distribution of the population is partly due to climatic and water conditions, and partly due to the historical pattern of industrialization. The difficult climatic conditions of most areas of central Spain, the scarcity of water and the early destruction of forest areas have progressively brought about a desert-like landscape in many areas of Castilla-La Mancha and Castilla-León, Aragon, Extremadura and Andalucia (see Fig. 1.2). Marked differences in economy, culture, language

Fig. 1.1 Overview of the health system



and politico-administrative traditions coexist within varying climatic and economic settings.

The Spanish territory also includes the Canary Islands, located to the west of Africa and two autonomous cities on the north side of the African continent: Ceuta and Melilla. The Spanish mainland is bordered by France to the north and by Portugal to the west. The Balearic Islands, in the Mediterranean, are the other relevant Spanish insular territory. Table 1.1 shows the country's main demographic indicators from 1970 to 2003 (selected years).

1.3 Economic context

In 2003, the Spanish GDP per capita in US$ PPP was 23 889, ranking 13th in the European Union (OECD 2005). Between 1986 and 1991, GDP growth in Spain was higher than the EU average. This trend was reversed in 1992 and

Fig. 1.2 Map of Spain

Source: World Factbook, 2006.

Table 1.1 Main demographic indicators, 1970–2003 (selected years)

	1970	1980	1990	1995	2000	2003
Population total millions[a]	33.779	37.386	38.836	39.200	40.500	44.109
Population ages 0–14 (% of total)	27.92	26.00	19.71	16.62	14.77	14.52
Population ages 65 and above (% of total)	9.7	11.2	13.4	15.27	16.86	16.89
Population density (people per km^2)	–	–	77.0	77.49	79.40	83.01
Urban population (% of total population)	66.0	73.0	78.0	77.0	77.6	78.0
Fertility rate, total (births per woman)	2.8	2.2	1.5	1.3	1.2	1.2
Live births per 1000 people	19.43	15.06	10.3	9.27	9.9	10.52
Death rate, crude (per 1000 people)	8.29	7.71	8.55	8.83	8.97	9.16
Age dependency ratio (dependants to working-age population)[b]	59.7	58.5	50.3	47.0	46.2	45.7

Sources: European Health for All database, January 2006; [a] INE 2006; [b] OECD 2005.

1993, owing to a severe economic downturn. After a quick economic recovery, by the end of the 1990s the GDP growth rate had resumed its previous level. Following a similar trend, the official unemployment rate peaked in 1994, remaining at levels higher than 20% during the period 1993–1997. However, since the mid-1990s, officially registered unemployment has been dropping and, in 2002, it had fallen to 11.4% of the active population.

The annual registered inflation rate constantly decreased during the 1990s. In 2001 and 2002 a slight slowdown in the GDP growth rate began (2.67% and 2.01% respectively). Recent data point towards growth recovery (estimates for the 2004 growth rate are 2.7 % (INE 2006)), and a further drop in unemployment (see Table 1.2). Table 1.3 shows macroeconomic indicators in the year 2003.

Table 1.2 GDP growth, 1994–2003

Year	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
GDP growth (annual %)	2.38	2.76	2.44	4.03	4.35	4.2	4.2	2.7	2.0	2.4

Sources: World Bank 2005; INE 2006 (based on 1995 figures to allow international comparison): http://www.ine.es/prensa/pib_tabla_cne.htm.

Table 1.3 Macroeconomic indicators in 2003

Macroeconomic indicators	2003 (or latest available year)
GDP (current $)	836 100 300 000
GDP, PPP (current international $)	17 040
GDP per capita (current $)	20 342
GDP per capita, PPP (current international $)	22 264
Value added in industry (% of GDP)	30.1[a]
Value added in agriculture (% of GDP)	3.4[a]
Value added in services (% of GDP)	66.5[a]
Labour force, total	18 228 100
Unemployment, total (% of total labour force)	11.37
Real interest rate (%, 2003 average)	4.25
GINI index (%)	32.7%

Sources: INE 2006; World Bank 2005; Holloway 2003; ISTAC 2005.

Note: [a] Latest available year: 2002.

1.4 Political context

One of the main elements of the country's transformation has been the profound political decentralization of state structures incrementally implemented since the transition to democracy. Spain joined the EU in 1986. It also belongs to other international organizations, such as the United Nations (UN), the European Economic Area (Agreement) (EEA), the World Trade Organization (WTO), the North American Treaty Organization (NATO) and the Council of Europe, among others, and has signed most major international treaties with a direct or indirect impact on health, such as the General Agreement on Tarrifs and Trade (GATS), the Convention on the Rights of the Child, and the European Convention on Human Rights.

At central level, legislative power is placed in a two-chamber parliament (Congress and Senate). In practice, however, the Senate has been rather weak for a prolonged period of time; several reforms to reinforce the Senate's role within the system have been discussed recently.

Each of the autonomous communities elects a regional parliament every four years, which in turn elects the president by majority. The president then names a regional government accountable to its regional parliament. There are also 50 provinces and almost 8000 municipalities. As already mentioned, Spanish territory also includes two cities with autonomous status in the north of Africa (Ceuta and Melilla).

The size of these political units differs considerably, with autonomous communities ranging from 293 553 inhabitants (La Rioja) to 7 687 518

(Andalucia). Municipal populations range from almost 3.1 million inhabitants in Madrid to fewer than 10 inhabitants in the isolated municipalities of central and north-western Spain. There are close to 6000 municipalities with fewer than 2000 people, and nearly 3800 with fewer than 500 inhabitants (INE 2006, 1/1/2004 data). The average size of municipalities in Spain being relatively small has traditionally been a significant obstacle to the decentralizing of responsibility in major policy areas to this level. For this and other reasons, during most of the 20th century, the provinces were usually the preferred target level for administrative decentralization. From 1978, however, political decentralization focused on the regional tier of government, represented by the autonomous communities, which are by far the most politically relevant subcentral level of government in contemporary Spain.

Since the approval of the 1978 Spanish Constitution, three political parties have held office at central government level. The centre-right Union of the Democratic Centre (*Unión de Centro Democrático,* UCD) led the transition process in the period 1976–1978 and governed between 1979 and 1982. The social democratic party, *Partido Socialista Obrero Español* (PSOE), was in office under the same Prime Minister from 1982 to 1996, while also holding office in almost two thirds of the regions (since 1993, under a minority government, the PSOE had to rely on the support of regional parties in order to pass legislation; during this time, five different ministers directed the Ministry of Health, each of whom formed their own high-level team). In March 1996, the centre-right Popular Party (PP) won the general elections and held office between March 1996 and March 2000 with the parliamentary support of two regional parties (the Catalan and Basque centre-right parties; the same groups previously supporting the PSOE between 1993 and 1996). In March 2000, the Popular Party won the general elections again, this time with a majority of votes and more than 50% of the seats in the two chambers of the central parliament. In March 2004, the PSOE returned to lead the government with 42.64% of the votes but with 12 seats fewer than necessary for an absolute majority. A minority government has been formed that negotiates with the rest of the political forces in the parliament on each initiative.

Currently, there are two nationalistic parties that run minority governments in their respective autonomous communities (Basque Country and the Canary Islands). The rest of the regional cabinets are governed by the two main central parties (PP and PSOE), either alone, in coalition with regional parties, or along with the third, smaller nationwide party, United Left (*Izquierda Unida*, IU). Since 2005, the Popular Party has held office in seven autonomous communities, while the PSOE is present in the eight remaining regions.

Each of the 17 ACs has one basic law (Statute of Autonomy), acknowledged by the 1978 Spanish Constitution. Together these 17 *Estatutos de Autonomía* are part of the constitutional framework of democratic Spain. The Spanish Constitution lays out the spheres of responsibility that are the exclusive responsibility of the central state, those that may be assumed completely by the autonomous communities, and those that are shared between the two. Regulation related to health care is endorsed as both primary and secondary legislation (see sections 2.1 and 7.1). In all matters that are not the exclusive responsibility of the state, regional laws have the same legal status as those of the state, and conflicts between the two must be settled in the National Constitutional Court. Health care and social security are shared areas of responsibility, although to varying degrees.

Nowadays, the autonomous communities enjoy considerable legislative freedom and autonomy with regard to health care policy, although they have restricted implementation powers in the field of social security. The devolution of powers to the regional tier of government varied between ACs until January 2002, when the decentralization process was reported to be finished. This process is described in more detail in the chapters on organizational structure, planning and regulation, and financing.

All 17 autonomous communities have important legislative and implementation powers in the fields of public health, community care and most social services. In some regions, the provinces and large city councils have owned historically, and still own, most of the psychiatric hospitals, mental health care centres and nursing homes, although their role in the management and regulation of these centres has been fairly limited during the 2000s. Some ACs have accomplished reform processes in mental health care and integrated this level of care to different degrees within the regional health systems. In some autonomous communities, municipalities still hold some managerial responsibilities in the fields of sanitation, environmental health, and public health.

Generally speaking, major health planning and legislative initiatives require fundamental consensus among political powers. Negotiations generally take into account not only the relative weights of the parliament seats, but also the composition and political situation of regional governments (autonomous communities). Both "strictly political/ideological" issues and regional relative powers are essential elements influencing the central government's political agenda, which has a strong influence on health policy-making.

According to Human Rights Watch (HRW 2005), Spain addresses the threat from terrorism almost exclusively through the criminal justice system, regarding itself as a leader on countering terrorism while respecting human rights (although after the devastating Madrid bombings of 11 March 2004,

and in view of the use of stronger pretrial measures, Human Rights Watch has warned that "leadership in confronting terrorism requires better rights protection for suspects"). Transparency International ranks Spain as being in 22nd place, together with France, in its 2004 "Corruption Perceptions Index", assigning a rating of 7.1 out of 10 (10 indicating no corruption).

1.5 Health status

Health indicators in Spain have been improving constantly since the 1970s (see Table 1.3). The average life expectancy in Spain is one of the best in the world and was 83.15 years for females and 76.42 for males in 2003. Life expectancy for women was the highest in the EU in 2003.

The main causes of death in Spain are diseases of the circulatory system, malignant neoplasms, diseases of the respiratory system and mental disorders (see Table 1.4). Mortality due to diseases of the circulatory system has been reduced twofold since 1970. Nevertheless, these diseases accounted for almost one third of all deaths in 2003. The second largest and increasing cause of death since the 1970s has been malignant neoplasms. Mortality from cancer of the trachea/bronchus/lung has doubled since 1970, which might be attributed to the smoking habits of the population. Mortality due to mental disorders and diseases of the nervous system has also been increasing since the 1970s, while mortality due to external causes shows a slight decrease during the same period. Table 1.5 shows the main causes of death per 100 000 people for the years 1970–2003 (selected years).

One of the reasons for the improvement in life expectancy indicators is lower infant mortality rates. Infant mortality has been rapidly decreasing since the mid-1970s, at a rate very similar to average EU levels. In 1970, the rate was 20.78 per 1000 live births, while in 2003 it was 3.92. According to the United Nations Development Programme (UNDP) Human Development Report for 2004 (UNDP 2004), the indicator on infant mortality in Spain is second only to Sweden worldwide, along with Denmark, Finland, France, Germany and Norway.

Traffic and occupational accidents are significant public health problems in Spain. During 2003, 5399 people died and more than 26 000 were seriously injured due to traffic accidents. It was estimated that economic costs resulting from traffic accidents amount to approximately 2% of GDP (Ministry of Health and Consumer Affairs 2005). Interventions to tackle the issue of traffic accidents include epidemiological studies, media and education campaigns, and intersectoral collaboration. As for occupational injuries, according to the

Table 1.4 Mortality and health indicators, 1970–2003 (selected years)

	1970	1980	1990	2000	2001	2003
Life expectancy at birth, in years, female	75.51	78.64	80.57	83.03	83.32	83.15
Life expectancy at birth, in years, male	70.14	72.46	73.42	75.95	76.28	76.42
Life expectancy at birth, in years	72.88	75.6	77	79.49	79.8	79.78
Crude death rate per 1 000 people	8.29	7.71	8.55	8.97	8.87	9.16
Crude death rate per 1 000 people, male	8.75	8.26	9.24	9.63	9.53	9.69
Crude death rate per 1 000 people, female	7.86	7.17	7.88	8.34	8.23	8.65
Infant deaths per 1 000 live births	20.78	12.41	7.6	4.38	4.08	3.92

Source: European Health for All database, January 2006.

Table 1.5 Main causes of death per 100 000 people, 1970–2003 (selected years)

	1970	1980	1990	1995	2000	2001	2003
Standardized Death Rate (SDR), all ages, per 100 000							
– all causes	978.7	819.50	735.10	674.50	610.70	596.50	600.06
– diseases of the circulatory system	435.23	378.12	287.64	241.69	197.90	191.04	187.37
– malignant neoplasms	156.10	162.56	175.90	179.81	170.40	171.40	167.06
– diseases of the respiratory system	101.52	76.20	68.44	60.48	62.91	56.04	61.63
– mental disorders and diseases of the nervous system and sense organ(s)	19.10	11.89	21.67	28.63	33.12	34.44	39.12
– trachea/bronchus/lung cancer	17.30	24.43	32.74	35.31	34.23	35.02	34.67
– external causes of injury and poisoning	42.96	42.94	45.76	37.43	35.72	33.74	33.58
– diseases of the digestive system	54.78	49.37	42.92	36.77	32.20	31.53	31.64
– infectious and parasitic diseases	22.52	10.89	8.88	8.68	11.97	12.12	12.63
– tuberculosis	–	4.19	2.27	1.54	0.89	0.86	0.78

Source: European Health for All database, January 2006.

2002 EU Social Situation Report (Eurostat 2003), Spain occupies the fourth position after Denmark, Sweden and Belgium (thus no longer having the highest incidence rate in the EU, as was the case in the mid-1990s).

AIDS and HIV are among the important health issues in Spain. The incidence of AIDS per 100 000 people in Spain in 2003 was 3.32, while the EU average was 1.42 (European Health for All database, January 2006). In Europe, only Portugal had a higher incidence of AIDS (7.82 per 100 000) in the same year. According to the National AIDS Registry in Spain there were 2071 AIDS cases diagnosed in 2004, 6.6% less than the previous year. Data at the time of writing suggest that the rate of HIV infection is beginning to fall; there is a drop in seroprevalence in intravenous drug addicts, the number of people infected through sexual practices has stabilized, and there has been a substantial decrease (amounting to 80% between 1995 and 1999) in mother–child transmission of HIV. The annual incidence of AIDS has declined since 1996 by 69%. Despite this decreasing annual trend in the incidence of AIDS, its prevalence continues to

rise. AIDS and related factors are responsible for the resurgence of tuberculosis in Spain and an increase in Sexually Transmitted Diseases (STDs) has also been observed.

Drug addiction in Spain is a significant public health and social problem. According to the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA), Spain has the second highest consumption of cocaine in Europe after the United Kingdom and shows the second highest demand for treatment of this type of addiction (EMCDDA 2006).

According to WHO, there were 28.1% of daily smokers in Spain in 2003 (European Health for All database, January 2006). According to national statistics, the prevalence of daily smokers was 31.0% and 36.1% in 2003 and 1993 respectively (Ministry of Health and Consumer Affairs 2004). Important legislative measures have been adopted since January 2006 in order to reduce the prevalence of smoking. Alcohol consumption and alcohol-related causes of death in Spain have been decreasing since the 1980s (Table 1.6). The proportion of the population with overweight and obesity problems in Spain, however, is increasing. In 1987, 7.4% of the Spanish population older than 18 years were obese (6.9 % men and 7.9% women), while in 2003, 13.3% of the population were affected by obesity (13.3% men 13.9 % women) (INE 2003). It was reported that 54.5% of the population are physically inactive during their leisure time (INE 2003).

Significant inequalities in health in Spain have been reported (SESPAS 2000; Ministry of Health and Consumer Affairs 2003). Despite the higher average life expectancy for females, their self-perceived health status is worse. This

Table 1.6 Factors affecting health status, 1970–2003 (selected years)

	1970	1980	1990	2000	2001	2003
% of regular daily smokers in the population, age 15+	–	–	–	–	31.70	28.1
Standardized Death Rate (SDR), selected smoking-related causes of death, per 100 000	–	266.96	236.07	193.07	186.83	183.63
Pure alcohol consumed, litres per capita, age 15+	11.61	13.63	10.78	9.82	9.79	9.99
SDR, selected alcohol-related causes of death, per 100 000	–	106.08	108.15	56.53	54.00	52.88
Overweight population, % of total population						
25>Body Mass Index (BMI)<30[a]	–	–	–	–	35.70	35.3
Obese population, % of total population BMI>30[a]	–	–	–	–	12.60	13.10

Sources: European Health for All database, January 2006; [a] OECD 2005.

difference between genders also persists throughout all age groups. In 2003, according to the latest available Spanish National Health Survey (ENSE), 75.68% of men and 71.31% of women said that their health status was good or very good. However, 32.92% of women compared with 24.32% of men declared that their health status was poor (a difference of 8.6 percentage points). As for self-perceived health status, 38.64% of the lowest social class compared with 22.07% of the higher social class declared in 2003 that their health was very poor. National Health Surveys in 1993 and 2003 show a decrease in self-perceived poor health in most ACs for both genders.

In the early 1980s, standardized mortality rates for manual workers were 30% higher than those of professionals and managers, while this difference had increased to 70% in the early 1990s. An increase in inequalities is also evident from 1987 to 1995, with both the level and the growth rate of inequalities being more marked in the poorer regions. As for self-assessed morbidity, the prevalence of chronic illnesses and disabilities is also greater among the poorer members of the population, with differences among social classes increasing over time. For instance, it was reported that in 1986 the percentage of physically disabled people among the illiterate was six times higher than among those with university education (European Observatory on Health Care Systems 2000). According to the Ministry of Health (2004), inequalities in self-perceived health status between social classes still exist (comparing manual with non-manual workers, the ratio is 1.33 in men and 1.27 in women). In terms of lifestyle, there is a significant pattern of social inequalities, which seem to increase with time, suggesting that the richer people benefit more from health promotion policies than the poorer. These differences occur in almost all ACs. Social class differences in health status tend to decrease for men and are increasing for women according to the same source in the period 1993–2001.

There seems to be a clear pattern of increasing inequalities in life expectancy for women but not for men between ACs in the north-east to those in the south-west. Further information and numeric statistics can be found in Annex VII on health indicators in the 2003 Annual Report of the NHS (Ministry of Health and Consumer Affairs 2004). López-Casasnovas et al. (2005) argue that although Spain may be seen as a heterogenous country in terms of health outcomes, the coefficient of variation is not large for most of the indicators available. Neither does significant difference exist between regions with devolved responsibilities and those that were traditionally centrally managed. In terms of avoidable mortality, estimates suggest that although there is a north–south pattern from better to worse, some regions, such as Catalonia, perform better in measures of premature mortality whereas other regions, such as Basque Country, have high mortality rates.

The health status of gypsies (who are not considered to be part of the migrant population, as they are in many other European countries) and other ethnic minorities has not been systematically assessed. Some studies seem to confirm the persistence over time of inequalities in health status compared to national averages (Ferrer 2003).

The estimate of the number of healthy years lost (calculated at birth) and the corresponding percentage of total life expectancy lost in Spain in 2002 was 6.2 years and 8.2% for males and 7.7 years and 9.3% for females (WHO 2004). In Spain, disability-adjusted life expectancy indicators in 2002 were 69.9 and 75.3 years for males and for females respectively (European Health for All database, January 2006). Table 1.7 shows dental information for children at 12 years old for the period 1984–2000 (selected years).

Table 1.7 Decayed, missing and filled teeth (DMFT) at age 12 years (mean value)

Year	1984	1994	2000
DMFT index	4.20	2.30	1.12

Source: European Health for All database, January 2006.

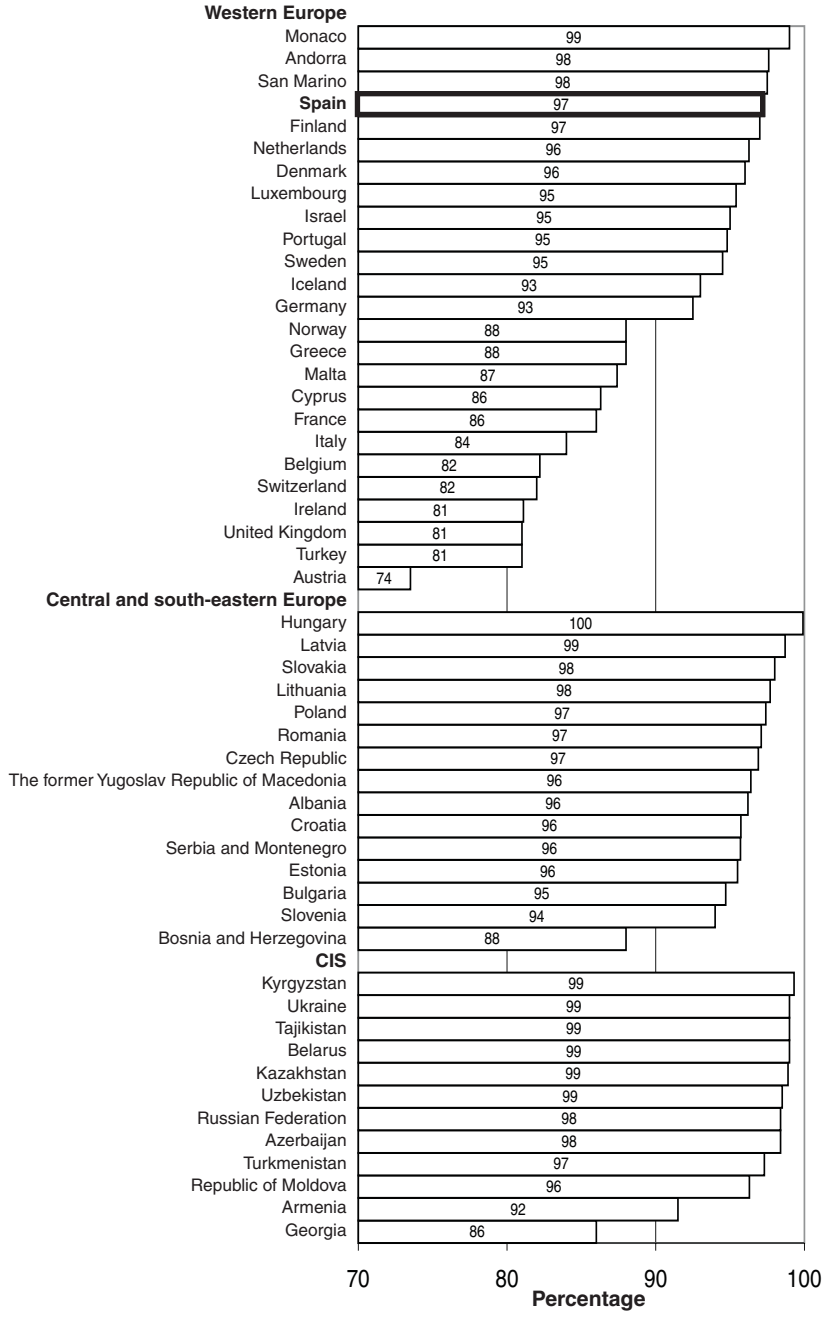
With regard to immunizations, Spain ranks as a number five in the world for vaccine coverage. Diseases preventable by vaccination have diminished remarkably since the 1980s. Fig. 1.3 shows recent levels of immunization for measles in Spain. According to the United Nations Children's Fund (UNICEF) data, in Spain in 2003 there was 98% immunization coverage for DTP3 and Pol3, 97% for measles and 83% for HepB3. The levels of child immunization in Spain show an increase since the 1980s (Table 1.8).

Table 1.8 Levels of child immunization

% of infants vaccinated against	1985	1990	1995	2000	2001	2003
-diphtheria	79.00	93.00	90.00	95.00	96.00	98.02
-tetanus	87.00	93.00	90.00	95.00	96.00	98.02
-pertussis	87.00	93.00	90.00	95.00	96.00	98.02
-measles	79.00	99.00	90.00	94.00	96.00	97.15
-poliomyelitis	73.00	94.00	88.00	95.00	96.4	98.23

Source: European Health for All database, January 2006.

Fig. 1.3 Levels of immunization for measles in the WHO European Region, 2004



Source: European Health for All database, January 2006.
Note: CIS: Commonwealth of Independent States.

2 Organizational structure

2.1 Historical background

The development of Spanish social protection began during the last quarter of the 19th century, within the framework of the newly created Commission on Social Reforms. During the early 1900s, the National Institute of Social Insurance (*Instituto Nacional de Previsión,* INP) was created to coordinate the design and implementation of the first social insurance policies. The first attempt to develop social health insurance for low-salaried workers was launched by the INP during the era of the Second Republic (1931–1936). At that time, all political parties supported the introduction of a comprehensive social insurance scheme, although with different ideological and political motives. In 1936, the coup by General Franco started a civil war (1936–1939) that led to the establishment of an authoritarian regime, which lasted until 1975. After the civil war, many of the previous policy proposals were somehow recovered by the Francoist Government. Social security-related health care was run through the INP from 1942 by the Ministry of Labour and Social Security, until 1977.

The predominance of public provision within a social security system was the main feature of the Spanish health care sector. Until the approval of the Basic Social Security Act of 1967, the coverage of the population was rather limited. With the expansion to self-employed professionals and qualified civil servants, it rose from 53.1% in 1966 to 81.7% in 1978. The vast majority of PHC provision was therefore public when the transition to democracy occurred, with general practitioners having the status of civil servants. In addition, an extensive publicly owned network of centres and services for general medical care, and specialized outpatient as well as inpatient care was developed during the 1960s.

Such activity reached its highest point with the development of an extensive, modern public hospital network during the 1960s and 1970s by the Ministry of Labour and Social Affairs. From the mid-1960s, the public sector owned 70% of the available hospital beds, and employed 70–80% of the hospital doctors. These figures remained the same until the mid 1990s and public providers still spent 75–85% of the public health care budget during the period 1975–1995. Social security hospitals, in addition to providing health care to the bulk of the population, were also the driving force behind the training of specialists through a system of residency.

In terms of budget during and after the Francoist period, specialized care was considered a priority over general medicine. It was provided either in small clinics (*consultorios*) made up of individual family doctors, or in ambulatory polyclinics (*ambulatorios*) along with a few outpatient specialties. At organizational level, primary care was highly fragmented, and divided among the largely uncoordinated state authorities. A ministerial ordinance, approved in 1972 (*Ordenanza General sobre Régimen, Gobierno, y Servicio en las Instituciones Sanitarias de la Seguridad Social*), regulated the management of health care provision in the period prior to the transition. Provincial delegations were the highest government authority at local level, headed by a provincial director appointed by the corresponding ministry. Within provinces, both ambulatory clinics and hospitals had a similar organizational structure (a medical director and a government council, mainly comprising social security civil servants, together with some representatives of health care personnel, the Francoist trade union, and the *Organización Médica Colegial* (Organization of Medical Colleges, OMC), the political body of the provincial colleges of physicians).

Responsibility for public health services was historically attributed to the central government and, in particular, to the Ministry of *Gobernación*, equivalent to the Ministry of the Interior, the origin of which goes back to 1855. The role of the government was to attend to health problems liable to affect the overall population, leaving personal health care to several health care networks. The public health infrastructure and facilities varied only slightly, with some "tidal waves" of decentralization followed by recentralization. In addition, the network of general hospitals devoted to charity health care and infectious diseases, owned by municipalities and provinces, progressively reduced as the social security centres were taking over the pivotal role in health care provision. Mental health care in psychiatric hospitals, however, continued to be provided by local governments. Other health care networks included health care for the military (Ministry of Defence); university hospitals (Ministry of Education); and prison health services (Ministry of the Interior).

Overall, therefore, the main problems of the Spanish health care system at the start of the transition to democracy (1975) might be summarized as follows.

- First, the variety of health care networks and the number of different departments to whom the networks were accountable led to poor coordination and inadequate organization. For example, there were 53 ministerial departments with health care responsibilities at central level.
- Second, PHC and preventive care were underdeveloped. A significant proportion of health care (in particular, curative) services was provided by the social security system run by the Ministry of Labour and Social Affairs, while public health services were the responsibility of the state (Ministry of the Interior). Charitable health care and mental health care, which depended primarily on local government, supported individuals not covered by social security.
- Third, there was no universal coverage and there were inequalities between those with health care needs and restricted access to the charity-based network, the bulk of salaried workers covered by the social security network, and higher socioeconomic groups (mostly resorting to the private health care system, especially for primary and preventive care). In 1972, social security started providing health insurance to high-level workers (Freire 2005).

The focus in the late 1970s and early 1980s was on improvement of PHC and specialized ambulatory care. Social security hospitals tended to monopolize budgets for the introduction of technological and scientific advances, training and research, while general practitioners and specialized ambulatory physicians were overlooked. Public health was also underfunded, with limited disease prevention and health promotion activities, generally not integrated into the main social security health care network. The system suffered from problems of organization, coordination and financing, and failed to provide coverage for the whole population.

In 1977 all health-related programmes, departments and centres were integrated under the responsibility of a newly created Ministry of Health and Social Security. The 1978 Spanish Constitution established the right of all Spaniards to health protection and set out a new regionally based organizational framework. The basic constitutional objectives were defined as: recognizing the right of all Spaniards to a healthy environment and adequate public health services; defining the territorial division of powers in the fields of public health and health care; and achieving equity in the territorial distribution of health care resources as well as in access to health care. Ultimately this allowed universal coverage and significant decentralization of the health care system, although this process took time to implement.

More specifically, the central government launched four policy initiatives.

- First, in 1979 the responsibility for health care administration was given to a separate organization called INSALUD (National Institute of Health), which was subordinate to the Ministry of Health.
- Second, user co-payments for pharmaceuticals were introduced in 1978 for social security users below 65 years of age, initially covering 20% of the actual retail price of prescription drugs (it was subsequently raised to 30% in 1979 and to 40% in 1980).
- Third, the training process for general practitioners was modified, following the introduction of family medicine as a separate specialty in 1978.
- Fourth, the first stages of the process of decentralization to the regions were implemented (see Fig. 2.1).

In 1982, the social democratic party PSOE won the general elections, obtaining 58% of the seats in central parliament. The General Health Care Act (1986) developed by the first PSOE Government (1982–1986) meant the formal transition from a system of social security (Bismarckian model) into an NHS (Beveridge) model, with a progressive transition from payroll contributions to general taxation as the main source of financing. The exception was three publicly funded mutual funds, MUFACE, MUGEJU and ISFAS, which cater exclusively to civil servants in government departments, and occupy a unique quasi-public position; civil servants are free to choose between public provision within the social security network of centres, and fully private provision. The act confirmed and extended the recognition of the universal right to public health care established by the 1978 Spanish Constitution. It also defined the regionally based organizational framework and established the necessary provisions for the future integration of all public health care networks under the authority of regional governments. Notably, the law postponed some key decisions on financing, management, organization, decentralization and patterns of coverage. During the late 1980s and 1990s, most of the reforms prescribed by the General Health Care Act were progressively implemented (the evolution of the health system is further discussed in Chapter 7 on principal health care reforms).

2.2 Organizational overview

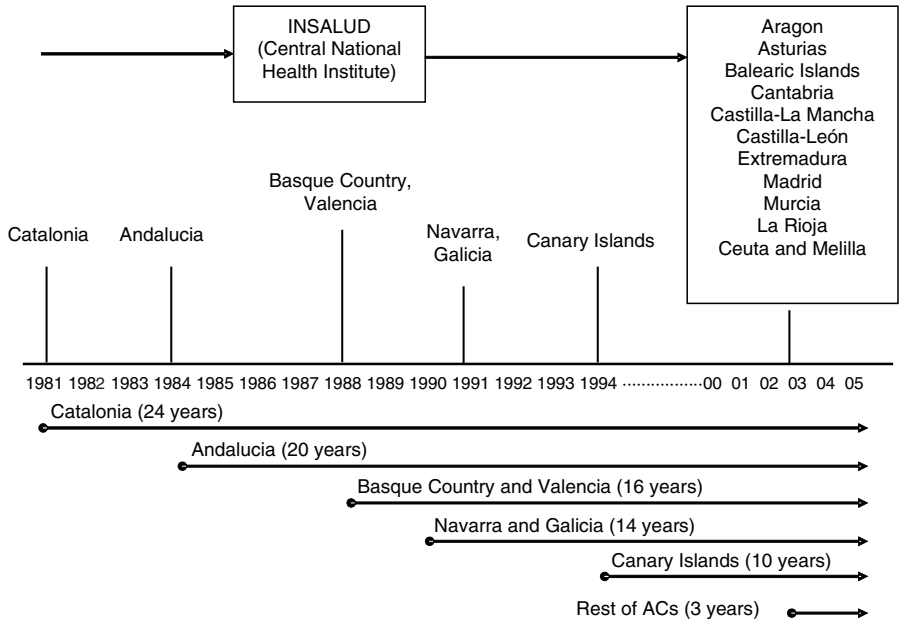
To a large extent, the current configuration of the Spanish NHS was formed during the transition to democracy. According to this design, the central government has the responsibility to promote coordination and cooperation in the health sector, as well as to ensure that the quality of all services is guaranteed

and equity exists in relation to access to health care throughout the national territory. The government also reserves for itself certain competencies regarding foreign health, international relations, pharmaceutical policies, research and high-level inspection. Public health and health care planning competencies were transferred to the autonomous communities between 1979 and 1981, as common law. All ACs were given constitutional responsibility over the multiple public health care networks, which coexisted prior to the inception of the social health insurance system (pre-SHI networks). These included public health, the previously existing networks for monitoring and treatment of infectious diseases, the charity-based system, most health promotion and prevention activities, the previous network for rural primary care, psychiatric care and some community care programmes. The operation of such networks represented approximately 15% of total public health care expenditure. Each AC then created a Health Service to manage health services, under a regional government department or health authority. The remaining 85% of expenditure corresponds to health care centres and personnel formerly included within the SHI system (SHI network). Until 2001, the central government had only devolved responsibility for the health care network to seven regions (Andalucia, Basque Country, Canary Islands, Catalonia, Galicia, Navarra and Valencia), which together cover approximately two thirds of the Spanish population. A central institution, INSALUD, effectively managed most health care services in the other 10 regions. The transfer of the main social security health care network took considerable time and effort and was far from free of problems, mainly owing to disagreements between the central state and regional governments on financing issues. It was only completed as recently as 1 January 2002 (Fig. 2.1).

The 1986 General Health Care Act defines the Spanish NHS, created from the social security health services and which during the 20th century constantly widened its coverage and services, as the ensemble of "all structures and public services at the service of health", and "the combination of state administration and autonomous communities health services". The general principles of the National Health System are:

- universal coverage with free access to health care for almost all inhabitants;
- public financing, mainly through general taxation;
- integration of different health service networks under the National Health System structure;
- political devolution to the autonomous communities and region-based organization of health services into health areas and basic health zones;

Fig. 2.1 Decentralization (devolution) chronology of health competencies to the autonomous communities



Source: Ministry of Health and Consumer Affairs 2004.

- a new model of primary health care, emphasizing integration of promotion, prevention and rehabilitation activities at this level.

The act designed the Interterritorial Council of the National Health System as "a means of coordination". Since its creation in April 1987 and until 2003, the CISNS was composed of a total of 34 members (17 representatives of the general state administration and 17 from the autonomous communities). From February 1997 the representatives of the autonomous cities of Ceuta and Melilla were also invited to assist, and from April 1999 the representative from Ceuta has full member status.

The Cohesion and Quality Act adopted in 2003 has changed the composition of the CISNS. Since then the CISNS has been composed of the Minister of Health and Consumer Affairs and the ministers responsible for health issues at regional level. Additional members of the central government or the regions can join CISNS discussions on specific topics by appointment of the central or regional ministers. Those guest members can take part in the discussions but have no vote. This current structure of CISNS reflects the current distribution of power in terms of health care responsibilities.

It is worth mentioning that there is no hierarchy between central government and the regional government in matters that have been transferred; since decisions of the CISNS must be adopted by consensus and they only affect matters that have been transferred to the ACs, they can only take the form of recommendations. In some cases, the ACs and central government can sign "covenants" or "agreements" that oblige both parties. This lack of real executive strength has been highlighted as a source of problems in terms of the efficiency of the Spanish health care system (Repullo, Ochoa et al. 2004; Elola 2004), as demonstrated by the difficulties encountered in guaranteeing equal access to deprived social groups, consolidating a stable system of financing, controlling the increase in health expenditure and coordinating and integrating the various services within the National Health System. Fig. 2.2 further details the different roles assumed by the various institutions in fulfilling the different functions of the statutory health system.

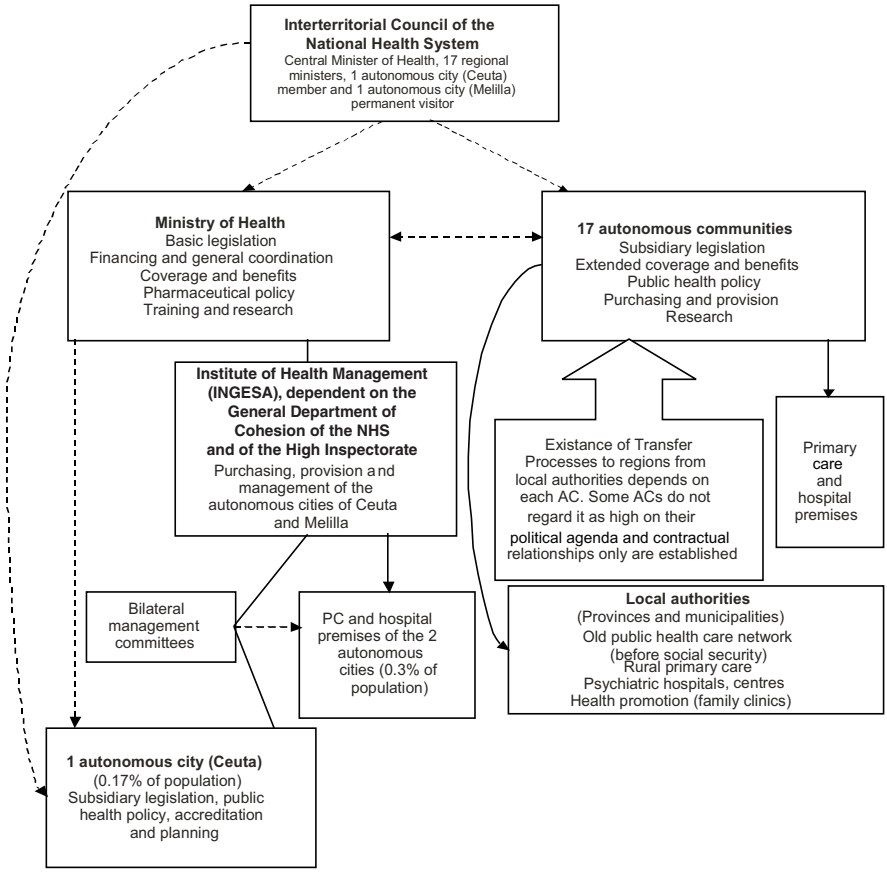
2.2.1 Central government

The central government in Spain assumes responsibility for certain strategic areas, including:

- general coordination and basic health legislation;
- financing of the system, and regulating the financial aspects of social security;
- definition of a benefits package guaranteed by the NHS;
- international health;
- pharmaceutical policy;
- undergraduate education and postgraduate medical training;
- civil service-related human resources policies.

Although the Ministry of Health and Consumer Affairs plays the most significant role in determining the parameters of health policy, it increasingly shares its policy formulation authority with regional governments. In addition, many financial matters, as well as the definition of benefits, still require the approval of the social security system and/or the Ministry of Economy and Finance, while most of the issues related to personnel are dealt with by the Ministry of Public Administration. A more detailed view of the power-sharing system can be seen in Fig. 2.2.

Fig. 2.2 Organizational chart of the statutory health system



2.2.2 The role of the Ministry of Health

The Ministry of Health and Consumer Affairs guarantees the effective right of all inhabitants to health protection. This is the key authority responsible for coordinating public health and health care services, and drafting health policy and any basic enabling legislation required. It must liaise with the Ministry of Labour and Social Affairs to ensure effective coordination of health and social services where there is joint responsibility. It is also the country's highest authority in the sphere of consumer affairs. The bodies referred to below are under the direct authority of the Ministry of Health and Consumer Affairs.

- *The Institute of Health Carlos III*, in charge of promoting and coordinating biomedical research; training of personnel in public health and health services management; provision of public health services; health information; health technology assessment (HTA); scientific and technical accreditation; and technical advisory functions. The institute performs these functions through the Agency for Assessment of Health Technologies (which scrutinizes new medical technologies for efficiency and effectiveness, piloting in October 1999, for example, the coordinated introduction of six new technologies within public benefits, including, among others, surgical treatment of epilepsy and non-pharmaceutical treatment for Parkinson's disease), the National School of Public Health, the Health Research Fund and a set of National Centres which cover a series of research and service areas (Epidemiology, Clinical Research and Preventive Medicine, Nutrition, Environmental Health, Health Information, Microbiology and Fundamental Biology).
- *The National Organization for Transplants*, in charge of coordinating the extraction and transportation of organs and the selection of recipient patients.
- *The National Institute of Consumer Affairs*, in charge of inspection, arbitration, research, training and other tasks related to the field of consumer affairs.
- *The National Plan on AIDS*, in charge of coordinating research, information, prevention and treatment of AIDS.
- *The Spanish Pharmaceuticals Agency*, in charge of ensuring that pharmaceutical products registered in Spain meet the criteria for quality, safety and clinical efficacy. The Pharmaceuticals Department of the Ministry of Health is in charge of determining which pharmaceuticals should be co-financed by the state budget, but since 1999 the Pharmaceuticals Agency is in charge of evaluating the clinical effectiveness of new brands and authorizing their commercial registration.
- *The Institute of Health Management (INGESA)*, the body that manages the social security health care services in the two autonomous cities located on the African continent (covering 0.3% of the Spanish population).
- *The Spanish Food Safety Agency*, an autonomous institution whose mission is to ensure the highest possible degree of safety in the food industry.
- *The Government Delegation for the National Plan on Drugs*, responsible for the management, implementation, coordination and supervision of those services related to the updating and implementation of the National Plan on Drugs, under the senior management of the General Secretary of Health.

The regulation of postgraduate training for medical professionals is carried out jointly by the Ministry of Health and the Ministry of Education. It is also worth mentioning that HTA is shared with the regions and that some of the autonomous communities have developed their own agencies (see Chapter 6 on provision of services). Given that some of these changes are quite recent, it is hard to assess at the time of writing whether these measures have succeeded in making the system more rational and efficient, as no systematic evaluation as such is available.

2.2.3 The role of other ministries

The health system draws on the input of a number of other ministries, which in March 2005 consisted of those detailed in this subsection.

- *The Ministry of Labour and Social Affairs* played an important role in defining the structure of the social security system, its package of benefits and its affiliation plans. In 2003, when the Cohesion and Quality of the NHS Act was adopted, these responsibilities were shifted to health administration. The 21/2001 Act on the new Financing System of the Autonomous Communities clarifies the situation regarding the flow of health care funding, and social security no longer has any role in paying or transferring health funds, except in the arrangements for civil servants.
- *The Ministry of Economy and Finance* is in charge of drafting the bill for the health care budget, the regulation of private insurance and the prices of pharmaceuticals. The National Council on Financial and Fiscal Policy, led by this ministry, plays an important role in negotiating reforms and strategies with the ACs.
- *The Ministry of Public Administration* is in charge of regulating most aspects of recruitment and employment of health personnel and, more generally, of civil servants.
- *The Ministry of Education and Science* is responsible for undergraduate training and, in association with the Ministry of Health, for postgraduate training and human resources planning. In addition, it has responsibilities in the fields of scientific research and technological development.
- *The Ministry of the Environment* deals with environmental health issues.
- *The Ministry of Defence, the Ministry of Justice and the Ministry of Public Administration* each sponsor an insurance scheme offering protection to their own civil servants (see also Section 2.1). These funds are the mutual companies for the Social Institute for the Armed Forces (ISFAS), the General Legal Mutual Company (MUGEJU), and the Mutual Fund for State Civil Servants (MUFACE). In addition, the Ministry of Defence is still in charge

of the network of military hospitals, health care centres and pharmacies, although most of these providers have been progressively contracted out to the regional health services.

- *The Ministry of Internal Affairs*, through its General Department of Prisons, is responsible for health care in prisons in most of the ACs.

2.2.4 The role of regional governments

Decentralization of the state in Spain is mainly based on the concept of devolution, which means that responsibility for health care is transferred from the central administration to lower levels of government, usually politically elected regions, in line with the basic constitutional structure of the country. Each region holds health planning powers as well as the capacity to organize its own health services to the level of decentralization that it considers most appropriate. This is expected to allow for more effective resource allocation in response to the sociodemographic and cultural characteristics of each autonomous community and to achieve a more balanced development of the country's health services. In fact, the pattern of power sharing among government tiers is still a fundamental issue in Spain, partly as a result of unresolved political disagreements with regard to the preferred territorial structure of the state. The distinction between symmetric and asymmetric federalism should be recalled here. Symmetric federalism consists of a territorial division of powers, which gives all regions the same constitutional powers. Asymmetric federalism, on the contrary, refers to a territorial structure of the state allowing for maximum political self-government by some autonomous communities alongside only administrative decentralization by the rest of the regions.

The prevailing power-sharing scheme in the health care sector directly results from the partial agreement reached between the defenders of both alternatives during the democratic transition and the drafting of Spain's Constitution. In several ACs with distinctive cultural traditions and language (most notably Catalonia and Basque Country) there are strong peripheral nationalistic groups and political parties that stand for asymmetric federalism. In the rest of Spain, however, there tends to be support for symmetric federalism.

Two reforms were implemented in 2001 and implied a profound change on the health policy-making scene in Spain. As explained in Section 2.2, in 2001 both the health financing agreement that was valid until then (1998–2001) and the general financing model for all the ACs (1997–2001) expired. The new financing system that was adopted under Act 21/2001 of 27 December 2001 included for the first time the management of the health sector within the general financing model for all the regions and a new tax-sharing scheme integrating

all health funds within a general financing scheme. Thus the co-responsibility between the central state and the regions has increased (see Chapter 3).

Simultaneously, the Royal Decrees 1471–1480/2001 of 27 December 2001 devolved the responsibility for the SHI network to the other 10 ACs. Health care resources were devolved to 10 regions that were previously managed by the central agency INSALUD (as explained before; Aragon, Asturias, Balearic Islands, Cantabria, Castilla-La Mancha, Castilla-León, Extremadura, Madrid, Murcia and La Rioja). The respective royal decrees put into effect the devolution of some 140 000 civil servants, 83 hospitals and 35 000 beds to those ACs (with a transition phase of three months, expandable to six months, to avoid any management problems during the transfer). The amount of money initially intended to be transferred was €10.217 billion, but the final agreements signed with the regional governments increased that amount to about €12 billion. This formally levelled the policy-making competences of all the regions. Overall, the expenditure of the regions as a proportion of the total public expenditure went up to 45% (compared with 40% for central administration and 15% for the municipalities).

These recent steps in the process of decentralizing the health system in Spain initiated a new phase in the reform regarding expenditure and fund raising. The transfers could be interpreted as the development of a quasi-federal state and as a few steps towards bringing an end to the disparity of power devolution to the different ACs. The transfer to the regions of what until December 2001 constituted the so-called "INSALUD territory" means an end to the asymmetric distribution of competencies that had existed since the creation of the modern Spanish "state of autonomies". Since January 2002, all regions have had the same management powers within the National Health System.

However, this assertion can be challenged. This is not only because specific asymmetries still exist regarding the financing model for two special regions that retain "historic" privileges (Basque Country and Navarra) and have full control over the levels of all public taxes in their territories (see the chapter on financing). Recently, other regions (notably Catalonia) have insisted on challenging the current situation. Catalonia claims it should have, for example, a new round of power transfers, explicitly expressing a wish to enjoy the same privileges as Basque Country and Navarra and advocates limiting the amount of resources that could be transferred to the central state from the taxes collected in the Catalan territory (Aizpeolea 2005).

2.2.5 The role of local governments

The Spanish Constitution attributes most local health responsibilities to the autonomous communities, with the significant exception of basic sanitation policies and some other environmental health activities. In addition, the 1986 General Health Care Act prescribes that local governments should continue to own and finance the health care networks inherited in the past, although both management and personnel have to be transferred to the ACs. This peculiar power configuration created considerable problems, with some local governments either blocking the transfers or refusing to finance the regionally operated health care services. In an attempt to resolve this issue, legislation concedes some rights to local governments to participate in the governance of the system, mostly with advisory functions, through their presence in regional health authorities. These regional health authorities are described in the General Health Care Act as community councils for management consultation and monitoring. The Catalan Regional Government, for example, resolved its long-standing conflict with the Barcelona City Council in 1989 through the creation of a consortium that allows joint management and operation of the city health care network. In 1999, this was transformed into a public corporation mainly subject to private law.

2.2.6 The role of insurance companies

Insurance companies play a relatively minor, but nevertheless relevant, role within the Spanish health system. The three above-mentioned publicly funded mutual funds, which cater exclusively to civil servants in government departments, enjoy a unique quasi-public position. As explained, civil servants are free to choose between public provision within the social security network of centres, and fully private provision. For service provision to those opting for private services, the mutual funds rely on private companies which integrate insurance and provision. It is worth noting that there is some evidence pointing to the tendency among this group of users to resort to public hospital providers for high technology interventions, although state regulation explicitly rules out this possibility.

Private voluntary schemes in turn cover some 10% of the population and since the mid-1990s several reforms have been targeted at expanding their role. Until 1996, occupational health services were managed either through the social security mutual funds themselves, or directly through the National Health System; since 1996 these services have progressively been contracted out to private insurance companies which were simultaneously given a mandate regarding sick leave (this measure was adopted after a sudden increase in

the – already high – rates of work-related illnesses and accidents registered, beginning in 1993). The second political initiative in this sector is that the Annual Budgetary Act of 1999 included a series of tax deductions for employer-purchased private insurance aimed at promoting this economic sector (the generic 15% tax break previously applied to all private health care payments was, however, simultaneously suppressed). More details on this policy measure are given within the chapters on financing and principal health care reforms.

2.2.7 Other providers

Although proposals for integrating the military health services under the Ministry of Defence and the prison health care services under the Ministry of Justice and the Ministry of the Interior into the NHS have been discussed for a long time, they still are run separately. In addition, the public system has traditionally contracted out some 15–20% of hospital provision with private (mostly non-profit-making) providers. The exception is Catalonia, in which two thirds of public hospital services are provided by private non-profit-making hospitals, with deep historical roots linked to a strong Catalan tradition of civil society mutualism. The 1986 General Health Care Act opened up the possibility for these hospitals to enter into long-term agreements with the public health care system under special (and intentionally undefined) circumstances. Usually, however, contracts with private hospitals are renewed annually.

2.2.8 The role of user groups

The General Health Care Act introduced participatory committees at all levels of the managerial structure of the health care sector. They are mostly made up of representatives of local governments and professional groups, with only a small percentage of membership reserved for local civic associations. This reflects an attempt to overcome the problems of coordination introduced by the pattern of power sharing among government tiers, and is partly due to the limited development of user associations and voluntary organizations in Spain. Participatory bodies exist at various levels. Health councils exist at district level ("health zone", see Section 2.3), to advise on the management of primary and community care. Hospital participation committees allow representatives of the municipalities and local consumer associations to provide input into hospital management. These committees were transferred in 1990 to the managerial structure of the health "areas" (see Section 2.3) in order to improve coordination of primary and specialized services at local level. A consultative committee has been created at central level, which provides information on the work of

the Interterritorial Council and allows for representation from trade unions, employers, consumers and experts.

In practice, the issue of lay participation has not always been effectively discussed, owing to a lack of activity on the part of Spanish consumer associations and the general community. Nevertheless, the topic of public participation is gaining more importance in regional politics and some regions, such as Castilla-La Mancha, are launching initiatives for community participation.

2.2.9 Professional representation

The weakness of civic networks in Spain, largely a result of their prohibition during the period of dictatorship, also affects professional associations. The only institutions during the dictatorship period were the provincial medical colleges, integrated into a vertical corporative structure, the General Council of Medical Colleges. This council was represented within health management structures by the OMC, a political body created to protect its vested interests and represent the profession within the state. In the initial years of the democratic period many professional associations with a political or ideological focus flourished but they achieved low membership levels among the medical profession (according to survey data, barely 20% of doctors were affiliated to professional associations). The main trade unions in the sector are the medical union CESM and the nursing association SATSE, as well as the socialist (UGT) and communist (CCOO) trade unions.

The professional associations with a higher political impact have been the above-mentioned conservative OMC; the left-wing Federation of Associations for the Defence of the Public Health Care System or FADSP (formerly linked to the socialist party); the professional association Spanish Society of Family and Community Medicine or SEMFYC, which played a leading role in the design, formulation and implementation of primary health care reforms; and, more recently, the scientific association Spanish Society of Public Health and Health Management (*Sociedad Española de Salud Publica y Administracion Sanitaria*, SESPAS), which has been increasingly influential in political, managerial and professional fields. In addition, the above-mentioned unions, UGT and CCOO, have often supported the FDASP and the SEMFYC in their attempts to promote the development and improvement of the public health care system. The professional trade unions CESM and SATSE have also been highly influential in the field of wage agreements.

Finally, there is one professional society per medical specialty that plays a very important role in the self-regulation of the profession, recruitment and professional training through the National Council of Medical Specialties,

which exerts some regulatory powers and plays an advisory role. In the field of primary care, the SEMFYC, which represents GPs with specialist training in family medicine, coexists with two other associations (SEMG and SEMERGEN) representing other sectors of the profession.

The existing nationwide association of private providers (*Federación Española de Clínicas Privadas*) is rather weak both in organizational and political terms, except in Catalonia. Two powerful, resourceful provider associations, the Union of Catalan Hospitals and the Catalan Hospital Consortium, rival each other for representation of the private contracted-out sector in Catalonia. Their degree of influence, both as groups with a vested interest and as independent consultants, has been considerable, especially during the 1990s.

2.3 Decentralization and centralization

As already explained, the Ministry of Health and Consumer Affairs is responsible for the management of health policy and retains some exclusive competencies, while the system is strongly decentralized to the regions. The Interterritorial Council of the NHS acts as the coordinating body for the state and the regions in the field of health, with advisory functions only. Partly owing to the way in which the process of decentralization took place, the transfer of services was carried out under different conditions resulting in a complicated system of health care financing and, ultimately, in significant problems regarding control of global health care expenditure (see the chapter on financing).

In 2003, regional elections in 13 of the autonomous communities led to changes in the organizational structures of all the Regional Health Departments concerned. The ACs usually have their health competencies separated between a health authority (*la Consejería*) and a health service management body (*Servicio regional de Salud*). Health authorities in general are structured with appointed deputies (*vice-consejero*) holding direct responsibilities for assessment and coordination of the health care activities in the region, and a secretariat supported by general directorates plus a network of provincial health offices. Twelve health authorities (Andalucia, Aragon, Asturias, Balearic Islands, Castilla-La Mancha, Castilla-León, Catalonia, Extremadura, Galicia, Madrid, Murcia and Basque Country) have planning offices, four have a pharmaceutical office at the top level and one AC has one under the health resources office. Most regional health authorities have abandoned the competencies related to social and consumer affairs, which have been passed on to another regional ministry. General managers of hospitals and primary care centres are appointed by the autonomous governments.

In many cases the AC has drawn up a "health map" stipulating territorial subdivisions (health areas and zones) which often do not correspond with local governments or other politico-administrative landmarks. Administration is in the hands of managerial teams, appointed by the regional government, which, according to the 1986 General Health Care Act, should operate at health area level, led by an area manager. These managerial teams are accountable to the *Consejería* and their specific organizational arrangements depend on the region. Such an integrated area management scheme has not, however, been implemented so far and two separate managerial tiers – one for primary care and the other for hospital care – remain. Since 2002, some ACs (Extremadura, Aragon, Valencia) have initiated innovations of integrated care management. In addition, the administration of secondary and tertiary care is still based on hospitals, each with its own managerial team. This means that in those areas in which there is more than one public hospital, several hospital management authorities operate within one single health area, which often leads to coordination problems.

2.3.1 Health areas

According to the 1986 General Health Care Act, health areas are defined according to geography, socioeconomic standards, demography, employment, epidemiological factors, cultural concerns, transportation and the existing health facilities. Each health area, responsible for the management of facilities, benefits and health service programmes within its geographical limits, should cover a population of no fewer than 200 000 inhabitants and no more than 250 000.

Both primary health care and specialized care services are provided in the health areas. Primary health care is defined as care of individuals, families and the community at large through health promotion programmes, prevention, curative care, and rehabilitation. Within specialized (outpatient and inpatient) care, each health area is linked to, or has, at least one general hospital. Specialized ambulatory care is provided through an integrated public network, which is dependent on hospitals, and in some cases staffed with the same teams (with members who rotate to cover ambulatory visits).

2.3.2 Basic health zones

Basic health zones are the smallest units of the organizational structure of health care. Each is defined in accordance with the degree of concentration of the population, the epidemiological characteristics, and the facilities and health resources of the area. A maximum distance of 30 minutes between communities and the location of services, as standard travelling time, gives rise

to basic health zones covering between 5000 and 25 000 inhabitants. They are usually organized around a single primary care team, which is also the main management unit of the zone, coordinating prevention, promotion, treatment and community care activities. 2498 basic health zones have been designed, within which the resources of PHC are organized and the corresponding health centres deliver care to the local population. The leader of the EAP (termed "coordinador") reports to the area manager while simultaneously holding a direct line of accountability to regional government authorities (which reflects the limited managerial autonomy given to health care areas).

The governance structure in hospitals is made up of a medical division, a nursing division and an administrative division, all hierarchically subordinated to the general manager, who directly reports to the corresponding regional authorities. This management system was created through central legislation during the 1980s. The autonomous communities, however, are free to modify this organizational model, and to choose a higher or lower degree of decentralization of powers within their respective territories.

For a description of the reform and decentralization process in more depth, refer to Chapter 7.

2.4 Population coverage

Population coverage by the Spanish NHS is almost universal (99.5%) and assures a reasonably comprehensive benefits package to all inhabitants, regardless of their personal wealth. The other 0.5% of the population consists of high-income, non-salaried workers who are not obliged to join the social security system as per the 1088/89 Royal Decree. Some 95% of those covered by the statutory system are covered by the common social security system and the health services of the NHS, while 5.1% (civil servants and their dependants) are covered by their own (publicly financed) health insurance policies, as mentioned in Section 2.1.

All autonomous communities, without exception, include within their regulations the principle of universality of personal and collective health care, extending it to all inhabitants. Most of the ACs reproduce the basic central legislation (Spanish citizens living in the region, plus temporary residents and non-residents in the terms provided in the Spanish state legislation are included, while EU and non-EU citizens are covered depending on the international agreements and treaties signed by the Spanish Government). Five of the seven regions that assumed the management of the health system from INSALUD before 2002 have regulated universal coverage to include the poor or people

not covered by a public insurance system. Health regions include Spanish and foreign residents, regardless of their legal or administrative situation, which is one step up from Spanish immigration legislation, since no legal accreditation is required for having the right to be covered. Coverage parameters are represented through the use of an Individual Health Card in the form of a smart card.

From 1998 to 2003 the Spanish population has increased by 7.71%, owing mainly to immigration. According to the National Institute of Statistics (INE), 3 691 547 immigrants live in Spain (as at January 2005). It is worth mentioning that in 2004 35% of immigrants were included in municipal registries but were not legal residents (Spanish law allows the existence of some non-shared data among different administrations to protect inhabitants' privacy). These people are covered by the health system but do not contribute financially to it via taxes or social security affiliation. Moreover, even immigrants that are not locally registered are covered by emergency health care services. Children and pregnant women have explicit full coverage regardless of their legal situation. Most immigrants come from Morocco, Ecuador (more than 13% from each), Romania and Colombia (7–8.5%), the United Kingdom, Argentina, the rest of Europe and the United States. Migrants' "regularization campaigns" have been held in 1985, 1991, 1996, 2000, 2001, 2004 (specially designed for the victims of the Madrid bombings of 11 March 2004 and their close relatives) and 2005. During the 2005 campaign 691 059 applications were received (El País 2005).

2.4.1 Voluntary health insurance

Private insurance coverage is directed towards supplementing services offered by the NHS (e.g. dental services which are not covered, preventive gynaecological services which are subject to significant problems in terms of access), or providing an alternative modality of care. According to the 2004 National Health System Survey (*Barómetro Sanitario*) (Ministry of Health and Consumer Affairs 2005a), up to 7.9% of the Spanish population had private health coverage through voluntary insurance at that time. The privately insured are unevenly concentrated in big cities: some 20–25% of the population of Madrid and Barcelona are covered through voluntary insurance. Most insurance policies are taken out directly with private for-profit insurance companies (Ministry of Health and Consumer Affairs 2005a).

Compared with other European countries, Spanish private insurance has the important special characteristic of integrating the provision of health care services with insurance services, either through shared ownership or long-term contracts. Employer-purchased health care insurance schemes, according to survey data, covered 3.8% of the Spanish population in 2004. Jointly considering

these categories of private insurance (purely voluntary and employer-purchased insurance for a total of 11.7% of the population) with the above-mentioned (publicly funded) civil servants' mutual funds, the percentage of the Spanish population covered by private insurance goes up to around 15%.

Several reforms were introduced in this field in the late 1990s. First, in 1998 responsibility for the provision of health care and for the management of sickness leave in the case of accidents at work and work-induced illnesses was contracted out to private sickness insurance companies (and more concretely, to employers' mutual funds). Second, the 1999 Annual Budgetary Act introduced a series of significant tax discounts for employer-purchased health care insurance. As a result, general growth rates in the sector have been in the range 2–4% in recent years, while those concerning private insurance excluding civil servants' mutual funds have been in the range 6–8%, according to data provided for 2002–2005 by the Association for Joint Research among Insurance Companies and Pension Funds. More details on these policy measures are given in the chapter on principal health care reforms.

2.5 Entitlements, benefits and patient empowerment

2.5.1 Entitlements and benefits

The NHS offers a comprehensive package of health care services. As in other European countries, a widening of services has occurred thanks to a gradual process in response to advances in scientific medicine and technology. A debate was raised during the 1990s regarding the lack of sufficient evaluation of new interventions and the negative consequences this might have on the quality of health care and consequently on the effort to control health expenditure. The 63/1995 Royal Decree for Services Provision drew up a list of services guaranteed by the public health system (maintaining those already in existence and including those not available to all inhabitants under universal coverage) while trying to apply security, effectiveness, quality and efficiency criteria to control those newly introduced services and technologies. It defined benefits as detailed below.

- *Primary health care* includes general medical and paediatric health care provided at health centres and during home visits, programmes for prevention of disease, health promotion, and rehabilitation.

- *Specialized health care* in the form of outpatient and inpatient care covers all medical and surgical specialties in acute care.
- *Pharmaceutical benefits* are organized so that the user pays 40% of the price of prescription drugs. Exceptions include inpatients and the retired, the handicapped, and people who have suffered occupational accidents, for whom there are no co-payments. There is a range of drugs for chronic diseases, for which only 10% of the cost is paid, with a ceiling of about €3, updated annually. From December 1995, this reduced contribution was also extended to AIDS patients. All users of civil servants' mutual funds pay 30% of pharmaceutical costs.
- *Complementary benefits* include prostheses, orthopaedic products, wheelchairs, health care transportation, complex diets and home-based oxygen therapy. Recently, children's hearing aids were also included in this package. In general, the user does not pay for these complementary benefits, except for certain orthopaedic products or prostheses.

A number of services have been explicitly excluded from financing:

- psychoanalysis and hypnosis;
- sex-change surgery (with the exception of some regions, which have included it);
- spa treatments;
- plastic surgery not related to accidents, disease or congenital malformation.

Exclusion criteria for other benefits not covered by the public system include:

- lack of evidence on safety or clinical effectiveness, or evidence that the intervention has been made redundant by other available procedures (for example, a negative list of pharmaceuticals was introduced for the first time in 1993 and updated in 1998 excluding all products of unproven clinical effectiveness from public funding);
- classification of the intervention as a leisure activity, relating primarily to rest and comfort, e.g. sports, aesthetic or cosmetic improvement, water therapy, residential centres or spas.

Expenditure on social care only amounts to 1% of GDP in Spain, a considerably small figure for western European standards. It should be noted again that, historically, health care benefits in Spain do not include social and community care, which is partly in the hands of the Ministry of Labour and Social Affairs and partly decentralized to the autonomous communities (they usually include social care within a government department separate from the one in charge of health care), which creates coordination difficulties.

However, the Royal Decree for Services Provision of 1995 allowed the autonomous communities to incorporate health activities and services provided that they would charge these to their own resources. A certain amount of diversity in services and techniques between regions was thus favoured. The Cohesion and Quality Act of 2003 stipulated services which should be provided by the NHS in addition to those contemplated in 1995. The Cohesion and Quality Act included the following services: public health; primary and secondary health and social care; emergency care; pharmaceuticals; orthoprosthesis; nutrition services; and transport in relation to health services (sanitary transport). It also specified which services should be agreed upon by the Interterritorial Council of the NHS, thus overcoming some of the lack of precision in the terminology that had been hindering progress and a clarification of the difference between services and techniques or procedures, for some time. The NHS services portfolio is awaiting approval by royal decree, which should come into force late in 2006. The 1995 Royal Decree will be in force until the new royal decree on the benefits package is approved.

Financial liability for the above-mentioned services is now a responsibility of the autonomous communities. In any case, they can approve their respective portfolios within their new areas of competence, which will include at least the NHS services portfolio. The existence of a common package of services should not be incompatible with the development of differential services in the regions, thus reflecting the different preferences of their inhabitants. Additionally, it should not be implied that this diversity presents an inconvenience in terms of access for those inhabitants that need to travel, for example, or in terms of equity. The benefits package has indeed been augmented to varying extents in some ACs. In 2005 the situation could be summarized as follows.

- *Pharmaceutical benefits*: Navarra and Andalucia (extension of the list of co-paid drugs).
- *Orthoprosthesis*: Andalucia (orthopaedic insoles), Galicia, Valencia and Basque Country (light materials wheel chairs).
- *Dental care*: Andalucia, Aragon, Balearic Islands, Cantabria, Castilla-León, Castilla-La Mancha, Extremadura, Murcia, Navarra, Basque Country.
- *Sex-change surgery*: Andalucia.

Regional governments may re-evaluate the benefits package depending on their respective financial and political situation.

2.5.2 Patient empowerment

Patient rights

The 1986 General Health Care Act pays specific attention to the public health system users' rights, including: respect for the users' personality, human dignity and intimacy; information about the health services accessible to them; confidentiality; warning about the usage of prognostic, diagnostic and therapeutic processes as well as written authorization to undergo any tests; assignment to a particular doctor; participation in health activities; existence of complaint and suggestion procedures; and provision of the necessary drugs and health products to promote, preserve or re-establish his/her health status.

The main rights mentioned here are also applicable to private health services, while respecting the particular practices of each type of health service institution.

The General Health Care Act also included five more rights, later either abolished or redefined by the 41/2002 Patients' Freedom, Rights and Duties on Information and Clinical Documentation Act. The latter regulates in a more precise way the right to information within the NHS. Such information is not strictly health orientated, but also concerns administration pathways (related to services, available health care units, and requirements to gaining access to them). The new law allows users to put into practice other rights, such as the freedom to choose a doctor or centre, and to receive information on waiting lists, second opinions, etc. It also urges autonomous communities to establish an adequate organizational system to permit these rights to be exercised.

It is well known that the EU, of which Spain is a Member State, does not impose further obligations in this matter. Central state or regional ombudsmen's reports have a certain influence, owing to their impact on the media, in reinforcing patients' rights.

Patient choice

As indicated, some autonomous communities have developed their Rights and Duties Regulations beyond the rights that have been established by the central administration. Some have also developed this right in a different way for primary health care and for specialized treatment, through "ad hoc" regulations. Others have issued regulations only for PHC, while some simply cite this right in their health legislation. Needless to say, the development of legislation and regulations within the ACs has clearly been conditioned by the date on which the health care competencies were assumed in each region. In general, the

possibility of choosing a specialist and a hospital is relatively underdeveloped, compared to having this option within PHC, which is more common.

Information for patients and medical records

The initial lack of regulations regarding medical records in the General Health Care Act provoked a proliferation of regulations in the regions, thus leading to diverse information systems and clinical documentation. In 1986 Basque Country approved a decree that regulated medical records. The 41/2002 Act, apart from establishing a basic concept and a minimum content that should be adhered to and developed by the autonomous communities, set up a method for coordinating medical records by way of putting into place a system compatible across all ACs. This should help patients avoid having to go through the same tests and procedures more than once when receiving care or treatment in different centres. Four regions have so far regulated this issue through specific laws on medical records and other clinical documentation. Basque Country has set up a Clinical Documentation Commission.

Regarding access to information for people with disabilities, Spain fulfils the new EU directive 2004/27/CE, along with the rest of the EU Member States, obliging the country to include Braille information in medicine boxes before 30 October 2005. In fact, the Spanish Pharmaceuticals Act (25/1990) had already addressed this issue.

Complaint procedures (mediation, claims) and patient safety and compensation

Complaints and suggestions are integrated into Article 10.12 of the General Health Care Act (which in fact reflected the content of the documents concerning patients' rights and obligations already in place at the stage at which it was introduced). The above-mentioned article recognizes the right of any citizen to issue a complaint, but also guarantees the protection of such rights. This is in line with the general social security legislation and in the regulations determining the internal running of the PHC centres and hospitals. The societal changes as a consequence of economic, legal and technological evolution in recent years have been reflected in the generalization of legal procedures assuring those rights. In fact, these are conceived not only as a legal imperative but also as an opportunity to improve service delivery by way of connecting complaint procedures and suggestions with quality improvement in health centres, services and units.

In practice, the method to guarantee that inhabitants have a way to exercise their rights is ensuring that all autonomous communities' health services centres have guidelines (or a list of services) stating users' rights and obligations, the

centre's available services, their characteristics and also the procedure for submitting suggestions or complaints.

Until now a limited number of regions have published these rights and obligations by way of legal or regulatory norms. Most of them have simply edited the central regulations for internal use and placed them at the disposal of professionals within centres and health care services. Some regions, like Catalonia for example, offer this information on the Internet.

In case of litigation, the health centres provide insurance coverage to professionals both in the public and private sectors. Indeed, the possibility of exercising patients' and users' rights within the NHS is determined by the effectiveness of the work of the body in charge of answering the allegations made. It is becoming increasingly common for the different health services to create specific units at different organizational levels that represent the patients' protector, such as Patient Support Services (*Servicios de Atención al Paciente*) or User Complaint Units (*Unidades de Atención al Usuario*). Problems with the quality of services and in particular medical mistakes receive wide press coverage. Asturias, Balearic Islands, Castilla-La Mancha, Extremadura, Galicia, Madrid and La Rioja have each created positions of Patients' Ombudsman.

According to the National Health System Survey of 2000 (CIS 2000), the main causes of formal complaints were waiting times (29%), disagreement with care procedures (19.4%), incorrect clinical treatement (17.9%) and unsatisfactory personal treatment (11.4%).

Patients' participation/involvement

The issue of patients' satisfaction is receiving an increasing amount of attention in Spain. A substantial amount of information is available regarding patient assessment of different aspects of the health system, for example at the locations detailed below.

- Eurobarometers: Standard Eurobarometer Spain, October 2004: http://europa.eu.int/comm/public_opinion/archives/eb/eb62/eb62_es_nat.pdf.
- Special barometer on Health in Adults, 2002 (but not on satisfaction with health care/system): http://europa.eu.int/comm/public_opinion/archives/ebs/ebs_183.7_en.pdf.
- Special barometer on Health, Food and Alcohol and Safety, 2003 (but not on satisfaction with health care/system): http://europa.eu.int/comm/public_opinion/archives/ebs/ebs_186_en.pdf.
- An additional source of valuable information (less up to date regarding Spain (1996)): http://www.bma.org.uk/ap.nsf/Content/Healthcare+funding+revie

w+Research+report+6~Healthcare+funding+review+research+report+6+-+patient#3questionwording.

Table 2.1 presents the results of the latest health system survey carried out by the Ministry of Health and Consumers Affairs' "Barometer of users' satisfaction".

Table 2.1 Patients' or inhabitants' satisfaction with health care and/or the health system

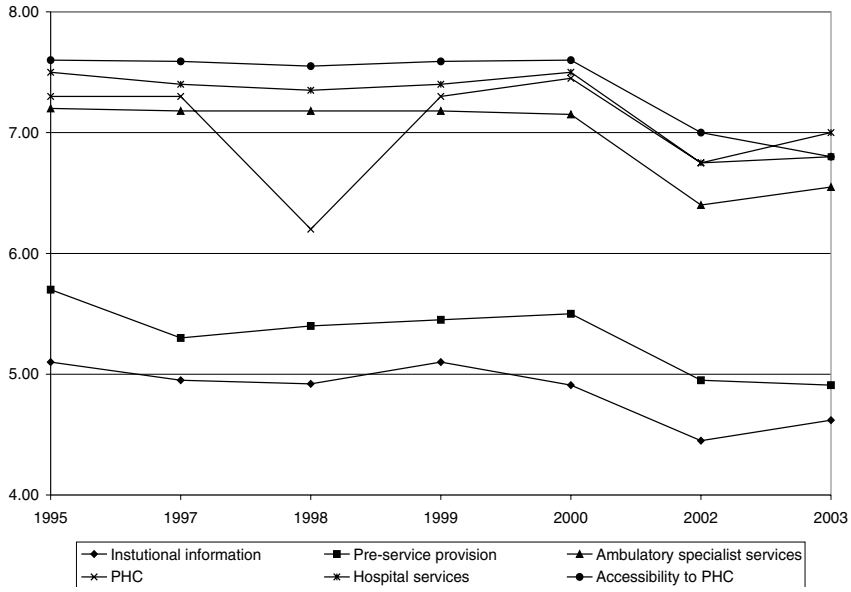
	2004	Variations since 2003	
		Absolute	Relative
In general, health system functions well enough	19.8%	1.22%	6.50%
The health system functions well, but some changes are needed	47.1%	-0.51%	-1.07%
The health system needs profound changes, though some aspects of it function well	27.1%	0.14%	0.50%
Our health system should be redesigned completely	5.0%	-0.60%	-10.70%
Does not know	0.8%	-0.28%	-25.90%
Does not answer	0.1%	-0.06%	

Source: Ministry of Health and Consumer Affairs 2005a.

The majority of respondents (67%) felt that the system "functioned quite well or well" with 47.1% of them stating that "some changes are needed". While the first category showed an increase compared with the values reached in 2003 (6.5%), in the second case a decrease occurs (1.07%). The number of those who stated that the system is in need of fundamental changes has increased slightly (0.5%). However, there is a decrease in those polled who believe that there should be a total overhaul of the system (10.7%). A longer-term perspective of the previous evolution from 1995 to 2003 is also available (see Fig. 2.3).

User satisfaction with PHC has been gradually increasing as the new system has been introduced. In 1985, average satisfaction levels were below 50%, a figure that had increased to 70% in 1990 and came close to 80% in 1995. Although figures are not totally comparable across years, health care levels or autonomous communities, they seem to suggest that average satisfaction levels with PHC almost doubled during the period, in contrast with the hospital sector, in which levels of satisfaction remained relatively constant between 1985 and 1995. The evolution of satisfaction, however, has followed varied trends in different ACs. Of particular concern is the smaller increase apparently registered in Andalucia, one of Spain's poorest regions, which has also been below average in terms of health care resources. At national level, satisfaction seems to have remained rather constant from the middle to the end of the 1990s, according to comparable satisfaction surveys carried out by the state central

Fig. 2.3 Evolution of patients' or inhabitants' satisfaction with health care and/or the health system



Source: Ministry of Health and Consumer Affairs 2004.

survey bureau (CIS). With satisfaction being measured on a 1 to 7 scale, the average numbers corresponding to both the general performance of primary care and the different dimensions of service (access, information, trust in the doctor, equipment, home care, etc.) remained relatively stable between 1994 and 1998. In particular, general satisfaction with the services received a 5.23 score in 1994, which evolved to 5.29, 5.24 and 5.26 in 1995, 1997 and 1998, respectively. It should be remembered here that by 1994, two thirds of the population were already covered by the new primary health care network, a percentage that increased to nearly 80% in 1998. Three aspects of the delivery of care experienced net increases in their average satisfaction scores during the period, namely: the average consultation time per visit; the information received from the doctor; and technological equipment and installations.

About 70% of the population are satisfied with outpatient and hospital services; a level already achieved by 1985, with 1995 average figures being only slightly higher than 10 years before. In the case of hospitals, the evolution during the decade and by regions was as follows: in 1985, about 70% of the population were satisfied with hospital services in the three selected autonomous communities (Andalucia, Catalonia and Basque Country), while the equivalent figure in the INSALUD territory was only 55%. From 1985 to 1990, overall

satisfaction dropped to 50%. This might have resulted from the significant cost-containment efforts carried out during the period, with health care expenditure decreasing in real terms between 1985 and 1987, which, in turn, led to a period of prolonged strikes among public health care professionals. Between 1990 and 1994, a period of significant increase in public health care expenditure, inhabitants' satisfaction with hospital care reached the level of 70% throughout the entire national territory. In the period 1994–1998, satisfaction remained fairly stable (average scores on the 1 to 7 scale were 5.2 for 1994, and 5.3 in 1995, 1997 and 1998). Technological equipment and installations, which were already the most highly valued dimensions of care, also experienced similar trends in that period. However, three dimensions of hospital care (out of the nine being evaluated) suffered a net drop: waiting times, the number of people sharing each hospital room, and the administrative procedures needed to obtain access to services.

After years of relatively stable appraisal of the situation, comparing the different degrees of satisfaction with the different components of health care, a lowering in the aggregated satisfaction indexes since 2000 can be found. The drop affects the different care levels (PHC, ambulatory care and hospitals) and in particular is associated with the waiting time to receive the service. Waiting lists are indeed the main cause of patient dissatisfaction with the NHS (more than a third of complaints by health system users result from this issue). From 2000 to 2004, patients' perception of this issue has worsened: in 2000, 32% of the population thought that the problem was "in the process of improving", a proportion that in 2004 dropped to 24.2%. Perceptions regarding the accessibility of an appointment with the doctor and waiting times to enter the doctor's office once the patient is on the premises have also worsened, both in PHC and specialized care. Issues related to information have a lower scoring. In particular, institutional information has experienced the biggest decrease (more specifically, information regarding rights and complaint procedures (see also the subsection on complaint procedures, within Subsection 2.5.2) as well as the current measures and legislation adopted by the health authorities). This all seems to suggest that the main problems of the sector in terms of patient satisfaction still require further attention by policy-makers.

Physical access

Since the Royal Decree 556/1989 of 19 May 1989, which regulates minimum accessibility criteria for public buildings, a number of regulations of different categories have been approved, promoting physical access in public use buildings. Each autonomous community has the power to improve on the national regulations, and to this end regional acts have been approved in various regions since 1981 in order to improve accessibility and/or finance the

corresponding reforms in older premises. Moreover, the 2003 Cohesion and Quality Act explicitly includes among the health services quality indicators accessibility to health facilities. On 24 February 2004, the director of the Quality Agency for the NHS presented the accessibility guidelines for hospitals and PHC centres to the National Committee of People with Disabilities (CERMI), providing the criteria that all health premises are obliged to fulfil and establishing a new national minimum.

3 Financing

Health care in Spain was financed from public and private sources (71.2% and 28.9%, respectively) in 2003 (Table 3.1 and Fig. 3.1 show details of health expenditure in Spain in 2003).

Fig. 3.2 shows an outline of financial flows within the system (see Section 3.1 for details).

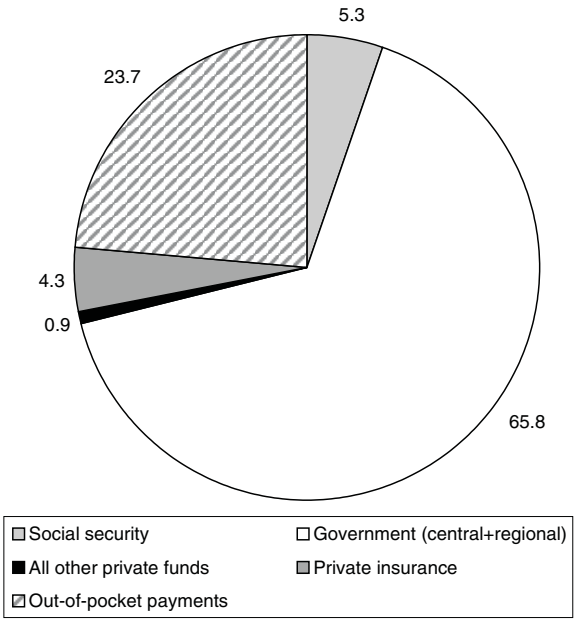
Table 3.1 Sources of revenue as a percentage of total expenditure on health, 1991–2003 (selected years)

Sources of revenue	1991	1995	1999	2000	2001	2002	2003
Public	77.50	72.20	72.00	71.60	71.20	71.30	71.20
Government (central + regional) excluding social security funds	55.70	55.10	65.20	64.80	64.60	66.00	65.90
Social security funds	21.80	17.10	6.80	6.90	6.50	5.30	5.30
Private sector	22.50	27.80	28.00	28.40	28.80	28.70	28.90
Private insurance enterprises (other than social insurance)	2.90	3.40	3.80	3.90	4.00	4.10	4.30
Private household out-of-pocket expenditure	18.70	23.50	23.30	23.60	23.90	23.70	23.70
All other private funds	0.90	0.90	0.90	0.90	0.90	0.90	0.80

Source: OECD 2005.

Note: Rounding errors may mean that percentages do not exactly add up to 100%.

Fig. 3.1 Percentage of total expenditure on health according to source of revenue, 2003



Source: OECD 2005.

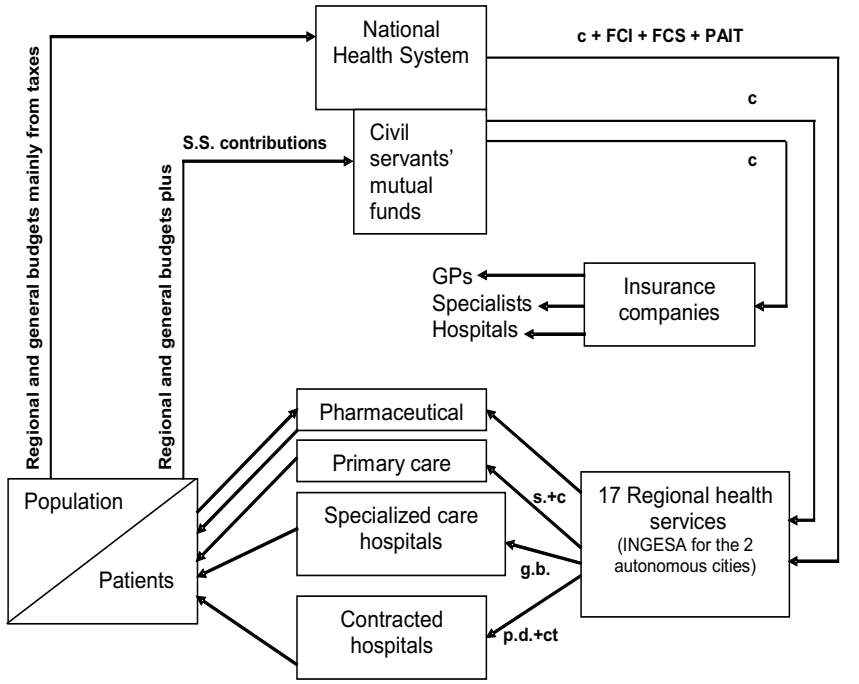
3.1 Revenue mobilization

Currently, almost all public health care expenditure (excluding civil servants' mutual funds) is funded through general taxation, while a residual amount is generated by care provided for patients with other types of coverage. The biggest proportion of private financing is out-of-pocket household expenditure.

3.1.1 Main source of finance – taxes

Historically, the Spanish health care system was funded mainly by insurance contributions, which were supplemented with funds from the state budget (in the mid-1970s, for example, the social security system covered about two thirds of the total health care expenditure). The transition to an NHS, initiated in 1986, led to a major shift of health care financing from social security payroll

Fig. 3.2 Financial flow chart, 2004



contributions to direct state funding. Thus, in 1989, state funding increased to 70% of the total while social security contributions dropped to about 30%. The role of social security contributions in health care financing steadily decreased during the 1990s (Table 3.1).

Since the transition to democracy, most health care-related taxes have been centrally raised, owing to the limited fiscal autonomy of the Spanish regional and local governments. The revenue-related resources for the regions were formatted as taxes that were either totally or partially allocated by the state. Legislation stated that the funds related to the previous SHI health services network should be transferred to the autonomous communities according to the regional financing model in force at that time. Each AC would thus increase its health expenditure budget on an annual basis, including at least the amount established by the regional financing system in force. The budget, once approved, has to be sent to the central state administration, in order to determine the total amount that will be allocated for health care.

The state began to transfer responsibility for some taxes to the autonomous communities during the 1980s, while the major taxes remained in the hands of the central administration. The transfer consisted of devolution of taxes collected at central level and limited tax-raising powers for some direct taxes. In the 1990s, the state agreed to assign a portion of personal income tax to the ACs, plus a portion of indirect taxes on consumption generated within their territories. In December 2001, the three main regional financing systems in force until then expired simultaneously (common transferred entitlements, transferred health services and social services and (different) agreements for Basque Country based on historical considerations). This situation strengthened the need to adopt an integrated financing model. A new system was approved by the National Council on Financial and Fiscal Policy and was published, with only slight modifications, as an act (Act 21/2001, 27 December 2001, on the new Financing System of the Autonomous Communities). The model aimed at guaranteeing financial sustainability, although it maintained three submodels with different allocation variables and different dynamics. Some progress was made in terms of fiscal independence and solidarity among the regions. However, the continued increase in health expenditure and the requests for control over financing (not only for health sector) by some ACs have triggered negotiations between the central government and the regions on a new financing scheme.

As regards fiscal independence, the changes in the 21/2001 Act included:

- the transfer to the autonomous communities of a part of the tax revenues raised within their territories;
- an increase in their authority to modify some taxes;
- the beginning of the participation of the ACs in the Central Tax Agency.

In terms of resource sufficiency, the following aspects stand out:

- a new distribution of resources among the autonomous communities according to certain variables and calculations;
- the existence of other sources of finance, such as special allocations from the state's general budgets;
- the establishment of guarantees in public funding of the health sector.

Finally, as regards solidarity with other regions, the changes listed below were introduced.

- A new regulating system for the resources of the Interterritorial Compensation Fund (FCI) was introduced.
- Resource allocation formulae for the regions included criteria that improved on basic per-capita criteria. Weighting elements such as elderly population and insularity were introduced.

The resources of the autonomous communities in the common system from 2002 onwards, which originated from the financing resolution of the National Council on Financial and Fiscal Policy, can be grouped into two large blocks: tax-related resources and allocations stemming from the general state budgets.

This redesign of the taxation system included regional control of taxes on gifts and inheritances, properties and property transfers, gaming, around 35% of personal income tax and value-added tax (VAT), 40% of hydrocarbon-based products, tobacco and alcoholic beverages, electricity, and the retail of hydrocarbon-based products. The degree of regional control over the taxes depends on the type of tax, i.e. regional governments have the authority to regulate certain types of taxes and in other cases they simply receive the agreed part of the taxes.

These taxes are allocated to each of the autonomous communities based on residence of the taxpayer (in the case of personal income tax), and the location of a given property (when taxes on property-related transactions are applicable). As regards the tax on consumption (VAT), payment is made according to the place where such consumption has occured or according to consumption parameters calculated on a statistical basis.

The tax assignments stemming from the state's general budgets are structured in the manner explained below.

- The Sufficiency Fund, established within the new Act on Financing of Autonomous Communities in December 2001, is intended to provide regions with the resources necessary to fully cover their needs. This fund is calculated individually for each autonomous community owing to a difference between the amount of funds required and the funds they have each obtained from tax revenues.
- In addition, public health funding has been incorporated into the general financing model. This means that the social security allowances that were once transferred to the ACs to fund services are now being phased out, i.e. the services are funded in a similar manner to other services provided by the regions. Nevertheless, owing to the peculiarities of public health services, two restrictions are in place.
  a) A certain amount of resources must be allocated to funding public health in the autonomous communities. This figure is obtained by applying demographic and geographic indicators adjusted to health needs, and is to be increased on an annual basis by the same amount as that of the whole State Taxation Revenue (ITE). Thus, in practice, a minimum budget for each AC is set out.

b) Specific health funds have also been created in order to cover certain expenses, to be able to increase efficiency and reduce inequalities. Examples of these funds are the Temporary Disability Savings Programme Fund and the Health Cohesion Fund. The agreement, signed in 2001, allocated approximately €240 million to the Temporary Disability Savings Programme Fund to be distributed among the autonomous communities according to the number of the population covered. The aim of the Health Cohesion Fund is to guarantee equity in access to health care services in Spain for individuals who receive health care outside their region of residence, those who come to Spain from other EU countries, and people from other countries that have signed reciprocal public health care agreements with Spain. The Ministry of Health and Consumer Affairs should implement policies through the Health Cohesion Fund guaranteeing cohesion and equity in health care.

- The Interterritorial Compensation Fund, created in 1984, was designed to finance investment projects to remedy economic imbalances among the different regions (thus implementing a principle of solidarity among them). Following the reform of this fund in 1990, only the ACs with low-income per-capita benefit from the FCI, which is calculated annually and made explicit in the state's general budgets each year. The current financing programme has also modified several aspects of the FCI. First, the revised plan allows the cities of Ceuta and Melilla to benefit from the fund. Second, it sets forth that part of the FCI may be assigned to finance investment-related overheads, in such a way that 25% of the funding may be allotted to general expenses. In 2005, 10 ACs and the cities of Ceuta and Melilla benefited from the fund. The FCI section of the state's general budgets for 2006 assigned different amounts linked to the regional health authorities of several ACs (Andalucia, Canary Islands, Castilla-La Mancha, Murcia, Valencia, and Melilla), ranging from €1.9 million to €51 milion, mostly for infrastructure projects.
- The financing plan also includes allowances aimed at creating economic equality, so as to guarantee a minimum standard of quality in basic public services when the covered population increases at a certain rate and exceeds some limits, as well as helping those regions where the growth rate of registered students is especially high. Until now, these allowances have not been actually used, since the specific criteria to apply for them are too restrictive and have made their implementation difficult.

The above-mentioned Act 21/2001 of 27 December 2001 stipulated the rules for calculating the minimum expenditure that regions can allocate to health care services, excluding the Temporary Disability Savings Programme Fund. According to data provided by the Expenditure and Budget State Secretary, the minimum levels for 2002 and 2003 were respectively €26 554 million and

€27 815 million. Table 3.2 shows the data on minimum expenditure that each AC should allocate to health care services. Significant differences between the figures are determined by the proportion of elderly people in the regions. The basic allocation formula is based on the following criteria: 75% of the population, 24.5% of the population over 65 years, and 0.5% insularity. The numbers reflect health care services transferred to the regions from the previous SHI network and do not affect services that the autonomous communities were already financing with their own resources prior to Act 21/2001of 27 December 2001.

In September 2005, the National Council on Financial and Fiscal Policy agreed to the introduction of some changes in the financing scheme as well as a substantial ad hoc injection of financial resources to the regional governments to reduce the deficit of the regional health accounts. This transfer of funds consists of direct payments from the central government and payments in

Table 3.2 Minimum amount of funding that a region should allocate to health care (in million €)

Autonomous communities	2002 Act 21/2001 6th TP	2003 Act 21/2001 6th TP (SP Act 53/2002)
Andalucia	5 142	5 390
Aragon	939	1 001
Asturias	869	909
Balearic Islands	596	646
Canary Islands	1 235	1 285
Cantabria	447	467
Castilla-León	1 864	1 928
Castilla-La Mancha	1 265	1 318
Catalonia	4 600	4 802
Valencia	2 875	3 011
Extremadura	811	840
Galicia	2 020	2 121
Madrid	2 871	3 025
Murcia	781	823
La Rioja	236	249
Total	**26 554**	**27 815**

Sources: Ministry of Health and Consumer Affairs 2003a: based on 2003 statistics from the Budgets and Expenditure Secretary of the Spanish Ministry of Finance.

Notes: (1) The figures do not include the Temporary Disability Savings Programme Fund or FCI; (2) The regions Madrid and Aragon had their health resources amplified as from 1 January 2003. For this reason and because they do not have the same level of competencies/powers, a homogenous comparison between 2002 and 2003 is not possible; TP transitory provision; SP: supplementing provision.

advance of the shared taxes to be collected in the future. Some of the changes in the financing scheme include an increase in the taxation rates on alcoholic beverages and tobacco, and the consolidation of measures for guaranteeing that health financing increases at least in line with the growth of GDP. Part of this injection of financial resources will be managed directly by the Ministry of Health and Consumer Affairs, through the National Quality Plan for the NHS. In this way the ministry will receive a boost of €50 million in 2006 (see Section 7.2 on future developments).

As a matter of principle, the financing of the National Health System is characterized by the principle of solidarity: through taxes the population should contribute to the financing of health according to their own level of wealth and should have access to health care according to their own particular needs. The growth in health care financing from 1980 to 1990 increased equity, as total health care financing was slightly regressive in the early 1980s. However, the 1986 reform of the indirect tax system to introduce VAT after joining the EU changed things again. In spite of the income tax system doubling its progressive nature during the period, the overall progression of general taxes halved. A well-known cross-national comparative study on equity in health care financing (Wagstaff et al. 1999) shows that the introduction of the VAT system meant shifting from near proportionality to regression in the indirect tax system (which was targeted at luxury goods prior to 1986). In addition, the estimated share of indirect taxes in total health care finance increased from 6% to 25%. Thus, social security contributions changed from being regressive in 1980 to being progressive in 1990, but their effect upon financing was increasingly less important over the years as the reliance on taxes increased. With time, private insurance became less regressive, but the effects of out-of-pocket payments shifted from near proportionality to clear regression.

A study in the mid 2000s, aimed at finding the associations between health inequalities, access to health care services and financing, revealed significant intra-territorial inequalities in Spain (Costa and Gil 2006). The higest levels of inequalities and inequities in health were found the Canary Islands, Murcia, Galicia and Extremadura and the lowest levels were in Asturias, Navarra, Basque Country and Castilla-León. In addition, a positive significant correlation was found between inequalities in health and income inequalities. It was also reported that total health expenditure is progressive and equitable in most of the ACs. Navarra, Castilla-León and Andalucia are the ACs with the most progressive total health expenditure.

3.1.2 Second most important source of finance

Civil servants' mutual funds are 70% funded by the state (through taxation) and 30% through contributions from the civil servants to their own mutual funds. There is a standardized structure throughout the country to collect these contributions. The funds protect their members from risks other than health risks and the specific financing scheme for health care services is therefore not well known. When members exercise their right to opt to be covered by the NHS, the mutual funds pay a per-capita sum directly to the national system. However, if the civil servant chooses to join the private health care system for civil servants, the sum paid to the private insurance companies is in line with the prearranged stipulations of the mutual fund. Health care expenditure by social security funds for civil servants has represented about 6% of total public health care expenditure in recent years.

3.1.3 Out-of-pocket payments

Data on private expenditure in Spain (user co-payments, out-of-pocket payments and voluntary insurance) contain a number of problems (for example, data from different sources, such as the General Household Budget Survey and accounts from the Ministry of Finance's Department of Private Insurance, differ).

Cost sharing

The situation regarding cost sharing in Spain deserves some analysis. There is no cost sharing in access to primary or specialist care services in the public sector. However, cost sharing in the area of pharmaceuticals, as well as medical aids and prostheses (including hearing aids and corrective lenses) has been significant since the late 1990s. In 1998, for example, according to the official accounting system for pharmaceutical expenditure, total out-of-pocket payments to the public system were estimated to be approximately €476.4 million. This represented 7.7% of the total public pharmaceutical bill, or 1.5% of total public health care expenditure. From 1999 to 2003 there was a significant increase in the population covered, as well as a gradual increase in the number of prescriptions, and the share of public expenditure on pharmaceuticals was 6.88% and 6.85% in 2002 and 2003 respectively (Ministry of Health and Consumer Affairs 2005d). These cost-sharing policies were introduced without any explicit objectives, but rather as a combination of raising revenue for the health sector, reducing inappropriate demand, containing costs and encouraging consumer responsibility. A study (Ibern 1999) concluded that in Spain 39.5% of the population participate in pharmaceutical co-payment. However, the highest co-payment amounts are concentrated among a very small proportion

of the population, i.e. 2% of those with the highest co-payments total 33.0% of the sum of co-payments. Ibern (1999) suggested that adopting the co-payment mechanisms, with annual limits, would allow for those in need to have access to unlimited health care services.

According to the General Household Budget Survey prepared by the INE, including cash expenditure by Spanish families (obligatory health insurance such as MUFACE for civil servants excluded), the annual family expenditure in health increased from €9056 million in 1995 to €14 651 million in 2002, a slight increase from 3.5% to 3.7% of the total household expenses.

The method of cost sharing applied comprises direct co-payments, with mechanisms to protect vulnerable groups of people. For people under 65 years of age who do not suffer from permanent disability or chronic illness, 40% co-payments are required for prescription pharmaceuticals. Protection mechanisms are implemented through the use of an identification card. There is anecdotal evidence of abuse, but not of serious fraud, within the exemption mechanisms.

One of the decisions in the field of cost sharing and protection mechanisms made at national level (within the framework of the Interterritorial Council of the NHS) is that there should be no regional variations in cost sharing. However, since – as already explained – regions have introduced some changes in the coverage of services and entitlements in recent years, it is conceivable that the overall picture in the field of cost sharing may have undergone slight changes.

Informal payments are virtually non-existent in Spain (beyond occasional gratitude payments linked to cultural traditions, predominantly in rural areas).

3.1.4 Voluntary health insurance

VHI as a method of protecting people from cost sharing is not widespread in Spain. In 2001, there were 5.48 million inhabitants who had private health insurance; 2.26 million with public health insurance and 3.22 million with private personal insurance providers. This insurance is in essence supplementary.

There is no eligibility for substitutive VHI in Spain (other than in the case of civil servants, as explained). Details of the insurance market are difficult to ascertain, owing to significant problems with information systems. According to official government data, in 1998 the insurance market, by type of insurance provided, was structured as set out here.

- The *health care insurance* subsector, based on direct provision of services by the insurance companies, was clearly dominant, with a market share of 89.6%.
- *Sickness insurance*, based on reimbursement, and with services delivered by independent providers, represented the remaining 10.4% of the market. The latter, however, has been increasing its share since 1988, when it held 7.1% of the total premiums.

The proportion of spending on VHI in Spain increased from 23.7% of private expenditure in 1986 to 30% in 1995. The number of insured people has increased relatively slowly since the 1990s; in 2000 VHI covered only 25% more people than in 1990. In contrast, VHI premiums have experienced a sharp rise, with the average premium per insured person increasing by 250% during the same period (Mossialos and Thomson 2004).

As regards the financial size of the VHI sector, estimates differ depending on the data source used, from 3% to 9% of total health care expenditure. The "Health Insurance 2001 Statistics" produced by Insurance Companies Corporative Research, mentioned in the Spanish NHS 2003 Annual Report, says that €2507 million was spent by families on private insurance premiums. Data from the OECD on total expenditure on private health and accidents insurance give the figure of €2798 million for 1997. The official accounting system of the Ministry of Finance's Department of Private Insurance estimated in 1998 that expenditure on private insurance premiums (excluding civil servants' mutual funds and all accident insurance not included within the more general sickness insurance policies) amounted to €2244 million. "Under-reporting bias" affecting all income and expenditure surveys, together with the exclusion of employers' contributions from this source, should be kept in mind here.

3.2 Allocation to purchasers

Third-party budget setting and resource allocation in the Spanish public sector, understood as the transfer of funds from the central state to the regions, are discussed in Section 3.1. In many ways, however, revenue collection and purchasing are integrated in Spain and there is no proper mechanism of resource allocation to purchasers, but simply a transfer of funds. As already explained, each region now has a regional health service (e.g. the SAS in Andalucia, Osakidetza in Basque Country, the ICS in Catalonia, etc.) responsible for organizing specific types of health care for the population in the region.

The arrangement is a global annual budget set for overall spending and linked to the annual allocation of resources from the central state to the regions

(calculated/politically negotiated according to historical precedent and based on an independent measure of health care need, i.e. risk-adjusted capitation). Regions usually set budgets for specific programmes or initiatives, and present them for approval to their regional parliaments. In theory, the funds are earmarked and regional health services are not expected to overspend (and, since 2002, if they do so they are expected to cover those expenses from their own funds). Regions fund their service provision institutions, making some adjustments (e.g. to account for supply-side factors, such as the number or type of hospitals and based on actual and historical expenditure). Contracting and payment of providers are dealt with in sections 3.3 and 3.4.

In general, not all the budgets transferred are used for providing services with the public resources in an integrated manner; there is also some purchasing of privately produced services (*Conciertos*), a particularly significant phenomenon in Catalonia (see also Subsection 3.4.2 on paying for health services).

3.3 Purchasing and purchaser–provider relations

As explained, historically most relationships between payers and service producers in Spain have been integrated, but different contractual forms have been introduced in recent years.

During the second half of the 1990s, the entire system and in particular the autonomous communities of Andalucia, Basque Country and Catalonia initiated pilot testing of more sophisticated prospective payment systems based on diagnosis-related groups (DRGs) or Patient Management Categories with "shadow programme budgeting". To that end, some institutions (mostly hospitals but also some emergency services) were transformed into public trusts, with more space for management. However, they still cannot bear financial risk, i.e. they cannot carry over a deficit or a surplus, or borrow money. In 1998, a new system of hospital financing was introduced in Catalonia, which relied on yardstick competition schemes.

Hospital funding in the public sector is now generally carried out prospectively through negotiation of a contract programme between the hospital and the regional authority third-party payer, setting out the objectives to be achieved by the hospital and attaching financing to these objectives. The purchaser organizations monitor contracts according to a time scale agreed upon between the signatories.

The generalized use of contract programme schemes for hospital funding has led to the use of a number of indicators, including the Minimum Basic Dataset (*Conjunto Minimo Básico de Datos*, CMBD) that should allow risk adjustment in financing and, through it, a more equitable allocation of resources. Until 1997, most hospital contract programmes were not adequately linked to activity levels or to quality issues, they did not take into account coordination with primary care or existing health care plans, they were not monitored and real risk decentralization to professionals and managers had not occurred. In fact, only weak economic incentives for the accomplishment of contractual objectives were in place. Contracts agreed between the purchaser organizations and provider organizations were in essence shadow contracts with only limited financial implications. They were developed through detailed negotiations between the payer and the hospital and put into place as a mutually agreed document with specifications for one year. Despite being structured with very detailed calculations (almost as cost and volume contracts), in reality contracts essentially functioned as block contracts, with additional "allowances" made available by the provider to compensate for the volume of funds expected by the facilities.

During the late 1990s, however, important developments in this area took place, incorporating more adequate effectiveness and quality indicators and trying to effectively link contracts to regional health plans. Contracts were also expanded to psychiatric and other long-term care hospitals and significant changes along the same lines were introduced in several regions (Basque Country, Catalonia, etc.). The first strategic INSALUD plan, approved in 1998, involved the inclusion of a plan for quality improvement within contracts, designed with the help of scientific professional associations, the introduction of a plan coordinator at hospital level, and the development of clearer economic incentives linked to the accomplishment of quality targets. Around the same period hospitals were also allowed to have another source of financing, albeit of minor importance, by providing health care services or risk coverage to people or schemes not covered by the NHS. However, no known cases exist (as yet at the time of writing) in which deviations from the agreed contract or performance agreement have had major implications on the funding of the hospitals (other than the occasional removal of the hospital management team).

Hospitals outside the National Health System which rely on their own source of financing (from private health care or from other public administration bodies) may also provide services to the NHS, regulated through agreements or contracts (*Conciertos*). The economic conditions of these agreements are determined by the NHS depending on the nature of the particular activity. This activity was normally measured in terms of bed-days, but from the mid-1990s, case payment has been introduced. The conditions of the agreements

are revised annually and may take the form of a contract programme with an overall budget. Contracts to private providers tend to be stricter in terms of their repercussions than those signed with public providers. In fact, the role of private contracted-out hospitals has tended to increase since the mid-1990s, owing to the emphasis given to reducing waiting times. The new scheme has included financial compensation for public hospital doctors choosing to work in the afternoons to shorten waiting lists, as well as the right of patients waiting for more than a given time (six months at first, but new figures were developed in regions such as Andalucia, ranging from 30 days to 60 days depending on the nature of the illness) to choose another public or private contracted-out hospital (see the chapter on provision of services).

More analysis of the proposals to introduce further changes to the system of resource allocation is included in Subsection 3.4.2, and in Section 7.1 on recent reforms.

3.4 Payment mechanisms

This section provides an overview of payment mechanisms as shown in Fig. 3.2. A distinction is made between the method of paying health care personnel and the method of paying for services.

3.4.1 Paying health care personnel

In primary health care, the general practitioners in the new EAP system receive a salary plus a capitation component (amounting to about 15% of the total) which takes into account the nature of the population they care for, its density and the percentage of the population over 65 years of age. In Catalonia, an additional adjustment is also made for the socioeconomic conditions of the respective population. Those PHC doctors still working under the traditional single-handed practice model are paid according to capitation. Private physicians are paid on a fee-for-service basis.

By contrast, all hospital doctors and specialists in ambulatory settings are almost totally salaried. The basic salary for public sector physicians, who have a status similar to civil servants, is regulated by the national government, although the regions have the capacity to vary some of the components which make up the total salary. The salaries of physicians who work for hospitals foundations or other forms of public companies under private labour law are formally regulated by the market. There is considerable variation among the autonomous communities, both in the type and amount of salary complements applied. No

extra billing by health care personnel to generate income is permitted within the public sector anywhere in Spain.

In 2004 the average annual salary in the country was €18 260, with an average of 1.52 salaries per household, while the legal minimum salary was only slightly higher than €6870. According to a study in the 2000s (Hidalgo and Matas 2004), the annual salary of physicians ranged from €33 449 to €68 573 (i.e. from two to four times higher than the average annual salary). Table 3.3 shows the different ranges of salary for public hospitals and PHC doctors depending on the types of contract.

Table 3.3 Public hospitals and PHC doctors' annual salaries in € by type of dedication and contract

	"Civil servant"[a] no exclusive dedication[b] / "on duty" hours		"Civil servant"[a] exclusive dedication[b] and 50 "on duty" hours		Stand-in doctor[c] with exclusive dedication[b] and 50 "on duty" hours	
	Hospital	PHC	Hospital	PHC	Hospital	PHC
Average	38 338.39	39 733.59	56 881.27	53 653.98	51 661.34	48 434.03
Maximum	47 845.78	49 450.39	68 573.02	62 509.54	60 877.00	55 293.97
Minimum	33 448.54	34 095.82	50 565.94	48 232.70	44 517.88	37 858.28

Source: Hidalgo and Matas 2004.

Note: [a] The status of most public health professionals is analogous to that of civil servants, however they are not formally civil servants; [b] Exclusive dedication means that the professional's terms of reference do not allow private practice outside of his/her working hours in the public sector, receiving compensation for that; [c] Stand-in doctors have temporary contracts until a civil servant occupies that job position.

Other categories of health care professionals are also paid by salary. This applies to PHC and hospital nurses, midwives, social workers and public health professionals (including both specialists in public health trained as doctors and other public health professionals) but no updated figures on their incomes are available. Public employee pharmacists in both PHC settings and hospitals are salaried, whereas dispensing pharmacists that own a pharmacy are private entrepreneurs (though they may employ other pharmacists as their salaried staff). General managers of health institutions are no longer required to have a medical degree to hold a senior public health position but many of them are still doctors; managerial staff are in essence salaried, sometimes supplemented by incentives.

Rates and methods of payment are determined by payer dictation, sometimes supplemented by bilateral negotiation. The payment system for hospital professionals is very controversial at present and seems to fail to satisfy both the system's payers and the physicians. It is believed that financial and non-financial incentives in place for health care professionals in secondary care institutions

do not clearly reward efficient activity or improve quality and health outcomes, something which is related to the civil servant relationship and tenure of "jobs for life" in the public sector. Between 1970 and 1986, hospital doctors' salaries were particularly tightly controlled by state authorities. Staff dissatisfaction reached a peak in 1987 when there were widespread strikes among INSALUD hospital physicians and in several regional health services, followed by salary increases of 20%. From 1987 to 1991 doctors experienced a moderate rise in real terms but then hospital doctors' salaries decreased again in real terms and a new strike took place in 1995, resulting in a 10% increase. The 1995 strike ended after a basic agreement was reached aiming towards reforming both the management structure in hospitals and the overall incentive system. A further result of the strike was a plan to reduce waiting times that has continued so far without great variation.

The country's experience with linking financial incentives to the meeting of objectives has not been particularly effective. This might be due to the fact that the rewards available for meeting efficiency targets only constitute a very small percentage of a physician's overall salary. In addition, mechanisms for evaluating health care delivery are still very rudimentary and the measures geared towards assessing efficiency have proved difficult to apply. Formulas for satisfactory supplementary payments are still to be developed.

Contract programmes were a pilot initiative in INSALUD hospitals in 1992, with objectives to strengthen the relations between the public purchaser and public hospitals. The hospital contract programme included three main strategies: define the benefits package; outline the objectives of quality, quantity and activity; and determine financing related to specific activities at a public hospital. There is some empirical evidence suggesting a significant increase in efficiency of the INSALUD hospitals during the first few years of the contract programmes system (González López-Valcárcel 1998).

3.4.2 Paying for health services

Hospitals in the National Health System are funded through a global budget, set against individual spending headings. Traditionally, hospital expenditure was retrospectively reimbursed on a routine basis, with no prior negotiation between the third-party payer (INSALUD or regional health services) and providers, and no formal evaluation. Since the early 1990s, however, some regional health services (mainly through pilot tests) have changed the way in which hospital budgets are allocated. The Catalan Government pioneered these reforms and other managerial and organizational innovations introduced during the decade, partly as a result of the prevalence of a hospital sector dominated

by private non-profit-making providers, which gave higher priority to sound contracting practices.

From 1991, crude, aggregate measures of activity were defined which enabled comparison among hospitals, differentiated among four hospital production levels. The first aggregate unit defined for use in financing public hospitals was the UPA (weighted health care unit), adapted from the Catalan system by the Ministry of Health for application within the hospitals, centrally managed by INSALUD at that time. The UPA was subsequently slightly modified by some regions for financing their public hospitals.

The UPA, and similar aggregate units developed from it, is based on converting all hospital activity into multiples or sub-multiples of an activity-based standard (the length of stay), after analysing average costs in each type of hospital service, which mainly depend on hospital technology and equipment. Particularly sophisticated activities (e.g. transplants), expensive activities (e.g. dialysis), or activities which are regarded as priority interventions because of the length of waiting lists (e.g. major outpatient surgery) remain outside the general UPA rate and have their financing calculated separately. The cost of treatments in these categories is added to the financing of overall activity by the UPA formula, to give the total prospective budget for each hospital. Table 3.4 shows details of the UPA system in the financing of public hospitals.

3.5 Health care expenditure

This section looks at how much money is spent on health care in Spain and where the money is spent in terms of health care expenditure distribution between sectors and regions, within an international comparative perspective.

Table 3.4 Weighted health care units (UPA) in financing of public hospitals

Activity	Weight
Medical stay	1.00
Surgical stay	1.50
Obstetrics stay	1.20
Paediatrics stay	1.30
Neonatology stay	1.30
Intensive care stay	5.80
Emergencies	0.30
First outpatient contact	0.25
Outpatient revisions	0.15

Source: Bestard et al. 1993.

Mention must be made of the occasional differences found, depending on the reporting agency, regardless of the fact that the national health accounts are based on, and comparable with, the OECD approach to health accounts. The official figures for the period 1998–2003 published by the Ministry of Health and Consumer Affairs are presented in Table 3.5.

Table 3.5 Health care expenditure indicators, 1998–2003

	1998	1999	2000	2001	2002	2003
GDP (current prices)	527 975	58 5419	609 734	66 3289	69 8208	743 045
Public Health Expenditure (PHE)	28 815	90 680.8	32 670.8	35 131.3	38 171	40 107.2
Private Health Expenditure (PrHE)	10 978	11 969	12 942	14 082	15 158	–
Total Expenditure (THE)	39 504	42 550	45 613	49 193	53 329	–
Covered Population (CP)	37 621 820	38 142 500	38 280 779	38 597 848	39 770 057	40 498 538
Total Population (TP)	39 852 651	40 202 160	40 499 791	41 118 842	41 837 894	42 717 064
% PHE/GDP (in €)	5.4	5.4	5.4	5.4	5.5	5.4
% PrHE/GDP (in €)	2.1	2.1	2.1	2.2	2.2	–
% PHE/CP (in €)	760.6	804.4	859.5	903.2	959.8	990.3
% PHE/TP (in €)	718.0	763.2	806.7	854.4	912.4	938.9
% THE/CP (in €)	1 052.4	1 115.5	1 191.5	1 264.7	1 340.9	–
% THE/TP (in €)	903.5	1 058.4	1 126.2	1 196.4	1 274.7	–
GDP/TP (in €)	13 248.2	14 064.4	15 055.2	15 888.6	16 640.8	17 394.8

Source: Ministry of Health and Consumer Affairs 2004.

Note: Figures in million € unless otherwise stated.

According to this source, therefore, the total health expenditure was 7.7% of the GDP in 2002. The initial publicly funded NHS global budget was estimated at €40 107 million in 2003 for a GDP of around €743 046 billion, up from €38 171 million and €696 208 billion respectively the year before. Public health expenditure per person covered by the health system was reported to be €990. The OECD reports slightly different figures. Trends in health care expenditure for the period 1980–2002 are shown in Table 3.6.

Table 3.7 shows the trends in expenditure in each of the regions in the period 1997–2001. The increase in total health expenditure during the 2000s is evidence of the enormous economic importance of health policy-making at all public administration levels.

Fig. 3.3, Fig. 3.4 and Fig. 3.5 show the Spanish health care expenses in an international context.

Table 3.6 Trends in health care expenditure, 1980–2002 (selected years)

	1980	1985	1990	1995	2000	2002
Total expenditure on health, US$ PPP per capita	363	491	865	1 195	1 493	1 646
Total expenditure on health as % of GDP	5.4	5.5	6.7	7.6	7.5	7.6
Public expenditure on health as % of total expenditure on health	79.9	81.1	78.7	72.2	71.5	71.4
Private insurance as % of total health expenditure	3.2	3.7	3.7	3.4	3.9	4.1
Out-of-pocket payments, US$ PPP per capita	–	–	–	281	353	388

Source: OECD 2005.

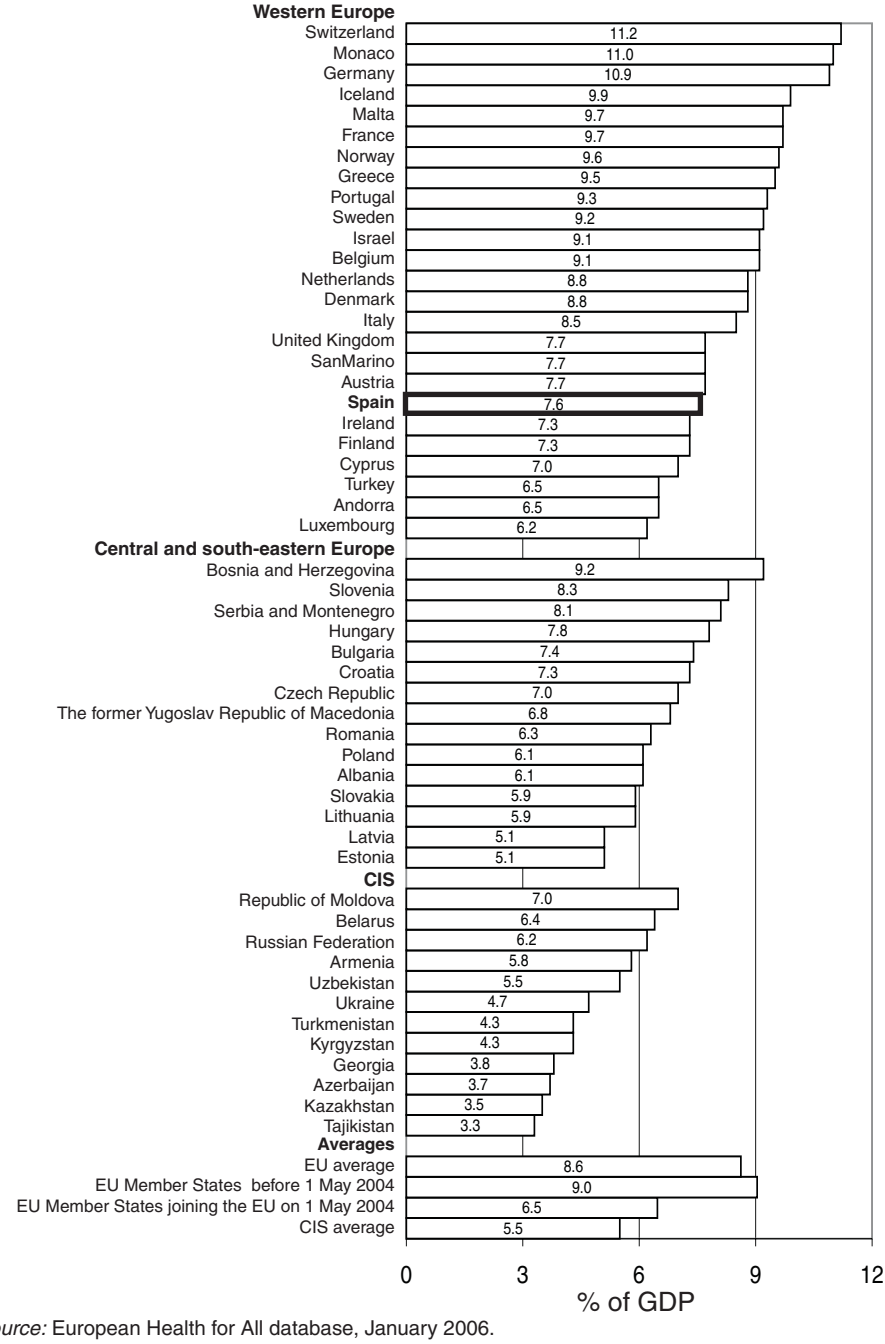
Table 3.7 Trends in health care expenditure in the autonomous communities, 1997–2001

AC expenditure	1997–2001 % increase in TPE	1997 PEpC	1998 PEpC	1999 PEpC	2000 PEpC	2001 PEpC
Total National Expenditure	**31.36**	**639**	**676**	**718**	**758**	**815**
Andalucia	22.68	643	660	694	731	775
Aragón	34.49	682	737	779	825	909
Asturias	30.57	663	707	761	815	874
Balearic Islands	45.63	543	582	616	624	702
Canary Islands	44.46	632	714	717	802	841
Cantabria	40.59	674	721	774	837	932
Castilla-León	31.77	638	682	734	800	850
Castilla-La Mancha	36.62	586	631	678	725	785
Catalonia	32.33	638	659	706	743	814
Valencia	33.30	582	630	680	703	748
Extremadura	29.01	648	687	735	796	837
Galicia	31.14	646	690	739	787	851
Madrid	30.18	651	691	719	738	799
Murcia	40.67	623	648	705	754	819
Navarra	30.37	778	823	871	912	961
Basque Country	30.84	698	757	806	851	911
La Rioja	37.07	626	677	723	787	847
Ceuta and Melilla	34.92	758	787	815	852	923

Source: Ministry of Health and Consumer Affairs 2003a.

Notes: Total Public Expenditure (TPE); Public Expenditure per Capita (PEpC) in €.

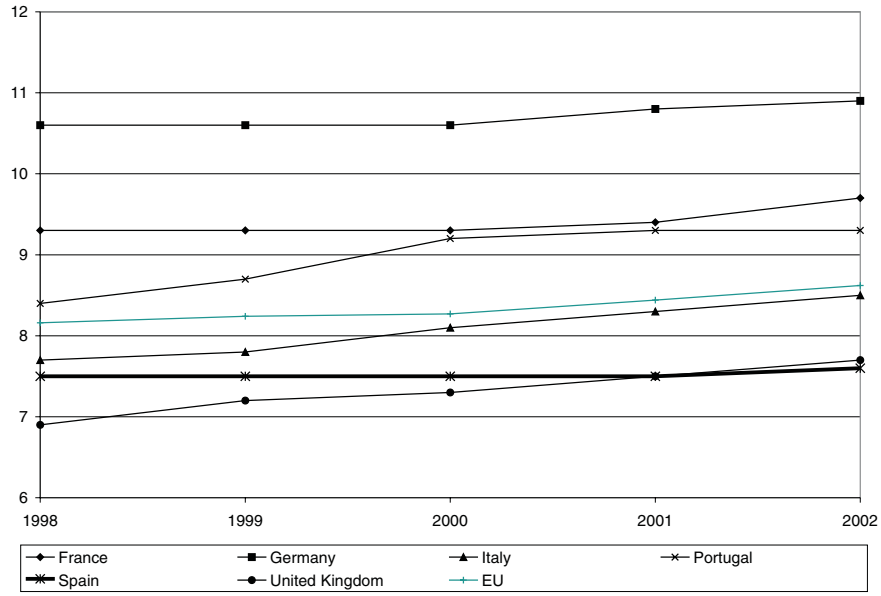
Fig. 3.3 Total expenditure on health as a share of GDP (%) in the WHO European Region, 2002, WHO estimates



Source: European Health for All database, January 2006.

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

Fig. 3.4 Trends in health care expenditure as a share of GDP (%) in Spain and selected other countries, 1998–2002, WHO estimates



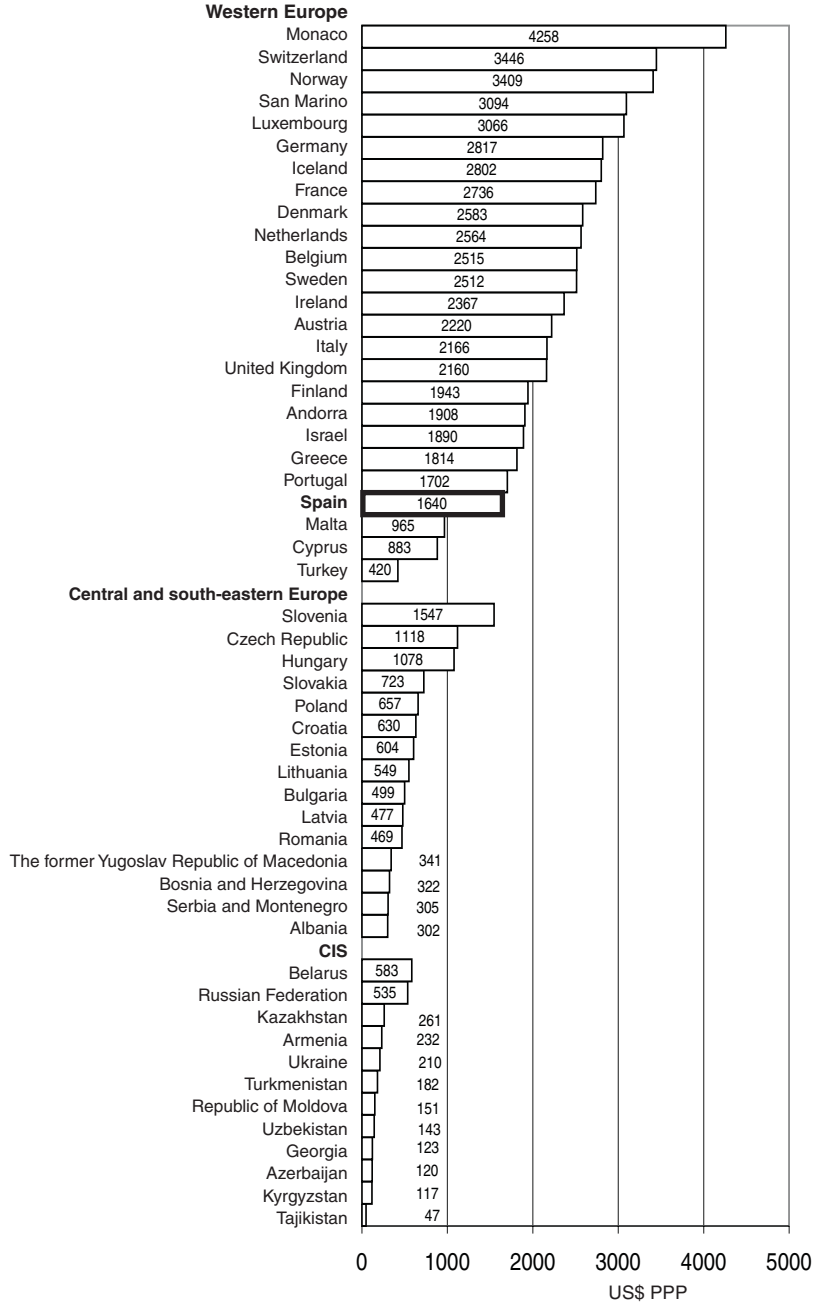
Source: European Health for All database, January 2006.

Table 3.8 shows health care expenditure as a percentage of the total 2001 expenditure, according to service category.

The most solid available analysis of health expenditure is based on final data up to 1999 and estimations for 2000 and 2001. Around 55% of the €35 131 million total public health expenditure in 2001 was spent by the seven autonomous communities that had the previous SHI services transferred at that time. The remainder of the old SHI system represented some 33.75% of the total public health expenditure (around 30.36% was managed by the INSALUD, and the remaining 3.39% by Occupational Illness and Work Accident Mutual Insurance Companies, Special Seamen's Insurance Scheme and other public organizations). Another 4.15% of the total public health expenditure was managed by the ACs without fully devolved SHI expenses. The civil service-related insurance schemes represented another 3.73%, with 2.42% spent by the civil servants' mutual funds and 1.18% by the Social Institute for the Armed Forces.

The highest single item in health expenditure consisted of the hospital and specialized services, which in 2001 amounted to 52.6% of the total expenditure. Pharmaceuticals represent the second highest item for expenditure increase. In 2004, the growth of expenditure on pharmaceuticals was 6.26% in comparison

Fig. 3.5 Health care expenditure in US$ PPP per capita in the WHO European Region, 2002, WHO estimates



Source: European Health for All database, January 2006.
Note: CIS: Commonwealth of Independent States.

Table 3.8 Health care expenditure by service category, percentage of total expenditure on health care in 2001

Personal health care service category	Total current health expenditure (%)
Inpatient care	**29.3**
Curative and rehabilitative care	27.2
Long-term nursing care	2.1
Day care services	**0.9**
Curative and rehabilitative care	0.9
Long-term nursing care	–
Outpatient care	**36.4**
Home care	**0.4**
Curative and rehabilitative care	0.4
Long-term nursing care	0.0
Ancillary services	**3.4**
Medical goods	**25.8**
Pharmaceuticals/non-durables	22.2
Therapeutic appliances	3.7
Total expenditure on personal health care	**96.2**
Prevention and public health services	**1.4**
Health administration and health insurance	**2.3**

Source: OECD 2004.
Note: Rounding errors might mean that percentages do not exactly add up to 100%.

with the growth of 12.84% in 2003. In 2004, expenditure on pharmaceuticals made up 20.56% of public health expenditure (Ministry of Health and Consumer Affairs 2005e).

Analysis of health care expenditure during the period 1999–2003 was carried out, including the two years (2002 and 2003) when the responsibility for health was first transferred to the autonomous communities. The average increase in total health expenditure was 8.6%, with a total of €42.591 million in 2003. The composition of health expenditure indicates that demographic evolution explains 21.4% of the cost increase (of the mean annual increment rate in that period). The rest of the cost increase could be attributed to the quality and prices of health care services in the regions, rather than to the ageing population, as claimed. Health care debt has been increasing since 2001 and at the end of 2003 reached €5.266 million (Ministry of Health and Consumer Affairs 2005d; Diaz 2005). Table 3.9 shows public health expenditure for the period 1998–2001, arranged according to function.

Table 3.9 Public health expenditure by function, in million €, 1998–2001

	1998	% 1998/ 1997	1999	% 1999/ 1998	2000[a]	% 2000/ 1999	2001[a, b]	% 2001/ 2000	% 2001
Specialized care	15.529	5.4	16.440	5.9	17.364	5.6	18.488	6.5	52.6
Primary health care	4.534	5.1	4.865	7.3	5.129	5.4	5.518	7.6	15.7
Public health services	0.347	13.8	0.409	17.9	0.517	26.6	0.546	5.5	1.6
Collective health services[c]	0.788	5.8	0.832	5.6	0.897	7.8	0.965	7.5	2.7
Pharmacy	5.999	7.4	6.600	10.0	7.110	7.7	7.680	8.0	21.9
Patient transport, therapeutic equipment	0.467	10.3	0.495	5.9	0.538	8.7	0.564	4.8	1.6
Capital expenditure	0.953	23.3	1.040	9.2	1.116	7.3	1.371	22.9	3.9
Total	**28.616**	**6.5**	**30.681**	**7.2**	**32.671**	**6.5**	**35.131**	**7.5**	**100**

Source: Ministry of Health and Consumer Affairs 2003a.

Notes: [a] Provisional data; [b] Advance estimated data for local corporations; [c] Collective services include administration, research, etc.

It is worth noting that, from an equity point of view, the health expenditure per capita in 2001 showed serious differences between the autonomous communities, ranging from 18% above to 15% below the national average value (a range of 33%). There are indications that the ACs that have been given managerial powers have improved their situation after the devolution process occurred in January 2002. However, in the initial budgets of 2003 and 2004 differences still remain. In fact, in 2003, with approved budgets in all ACs, the relative expenditure per person was 20% higher than the mean value in the AC with the highest expenditure, while others had an expenditure which was 13% lower than the mean value (with the same range of 33%).

Pharmaceutical expenditure seems to have been the main cost increase factor in Spain in recent years. Publicly funded health drugs expenditure reached €9079.45 million in 2003 for a total of 697.63 million prescriptions, an annual increase of 12.84% compared with 2002. The mean expenditure amount per prescription was €13.01, a 5.86% increase compared with 2002. In fact, the inter-annual growth rate of pharmaceutical expenditure outside hospitals in the period 1992–2002 has been 3% greater than the recent GDP growth rates and it has also surpassed the substantial growth in health care expenditure (Ministry of Health and Consumer Affairs 2003a).

The main factors involved in this evolution of the pharmaceutical expenditure outside of hospitals in the NHS from 1992 to 2003 are related to the increase

in the amount of prescriptions (accumulated annual rate TAA 2.74%) as well as to the increase in the mean price per prescription (TAA 6.43%).

This has been mainly due to an increase in the number of users exempt from co-payments, both pensioners and other active population subgroups. As a consequence, the total amount collected from patient co-payments has decreased from 11.01% of the pharmaceutical expenditure outside of hospitals in 1992 to 7.36% in 2003. As can be seen in Table 3.10, the increases in both the number of prescriptions and the mean expenditure per prescription have been remarkable, especially in some autonomous communities.

Table 3.10 Pharmaceutical expenditure increase ratios: main elements 1992–2004

Year	Number of Prescriptions	Number of Packages	Prices	Co-payment	Expenditure	Expenditure/ Prescription
1993/1992	-2.49	-2.48	7.33	3.46	7.76	10.50
1994/1993	-2.37	-2.70	6.06	1.62	6.53	9.11
1995/1994	6.29	6.06	11.88	8.11	12.27	5.63
1996/1995	5.19	4.86	11.18	6.89	11.60	6.10
1997/1996	1.82	1.55	4.98	1.37	5.31	3.43
1998/1997	-0.17	-0.41	9.77	3.09	10.36	10.55
1999/1998	1.36	1.05	9.40	4.26	9.83	8.36
2000/1999	4.67	4.24	7.86	4.41	8.13	3.31
2001/2000	4.02	3.39	8.81	7.25	8.92	4.71
2002/2001	5.02	5.44	9.51	8.80	9.57	3.54
2003/2002	6.59	6.32	12.70	10.85	12.84	5.86
2004/2003	3.4	3.17	5.70	-1.90	6.26	2.76
2004/1992	39.25	34.42	173.30	75.40	184.08	104.00
TAA						
2004/1992	3.06	2.73	9.57	5.24	9.96	6.70

Source: Ministry of Health and Consumer Affairs 2005e.

Note: TAA: accumulated annual rate.

4 Planning and regulation

4.1 Regulation

Chapter 2 of this report explains from an organizational perspective many of the key regulatory arrangements in Spain (e.g. the relationships between the public and the private sectors, the respective roles of the central and regional governments, population coverage, entitlements and benefits, patients' rights, etc. This chapter reviews some additional regulatory aspects.

4.1.1 Regulation and governance of third-party payers

As shown in Fig. 2.1 of the chapter on the organizational structure of the health system, the health policy-making power in Spain lies at regional level, except for a few issues. This approach is intended to involve the citizens more actively in health policy-making, but it also makes stewardship and coordination at national level more important than ever if problems with coverage imbalances as well as quality problems and inequities in access, for example, are to be avoided. One of the benefits of decentralization is that it allows innovation, owing to different policy-making processes in each region. Diversification of policies could give way to "exporting" those policies that prove to lead to better health system performance, which should in turn lead to increased efficiency in public services provision (Rose-Ackerman 2000).

Analysis of reactions to health regulation acts in the Spanish regional parliaments in fact shows some signs of behaviour that could be named "public policy learning" (Ministry of Health and Consumer Affairs 2004). An evaluation of the regulatory activities in the regional parliaments during 2001 and 2003 (when each AC had received the above-mentioned transfer of financing and

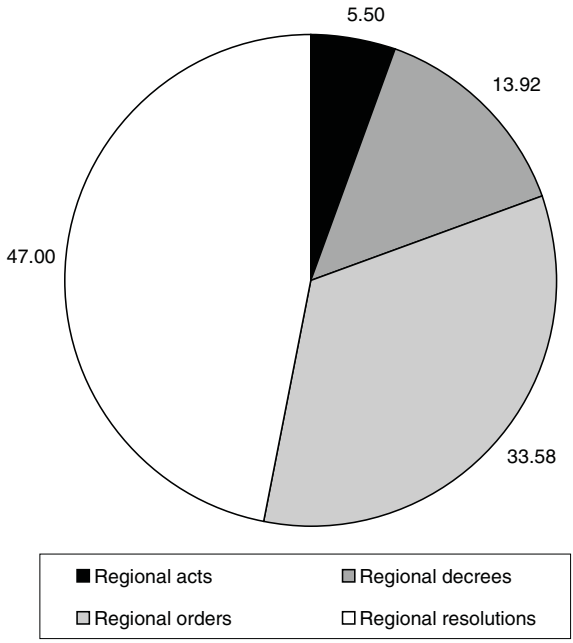
competencies) indicates that most parliamentary speeches include references to the way other regions create their policies, regulate their entitlements and manage their services. In other words, regional parliaments show their knowledge of the current legislation in other ACs, which in some cases is used as a role model to develop their own articles or as examples to reinforce their arguments. The issues that most frequently appear in the debate on the regional health acts are outlined below.

- Political parties in opposition have often criticized the regional governments in power for exerting excessive control, concentrating on a number of important issues in the Regional Health Department, or keeping the power to appoint the Patients' Ombudsman. Usually this criticism has been linked to the low level of participation of different groups (inhabitants, health workers, trade unions, etc.), both in the process of act elaboration and in the different participation structures formally included in the new regional organization.
- Another issue that has been high on the regional parliamentary agendas is the role of private health services provision, as well as the accreditation and control of private health premises.
- The debate on the working conditions of staff within the regional health system of the former INSALUD territory, including the issues of legal working status, categorization within the system and homologation of labour rights, has also been heated. (The negotiation between the ACs and the central government took place within the Working Relationships Regulatory Framework mandated by the 1986 General Health Care Act. It was approved in December 2003.)
- Mental health issues, the powers of local authorities (provinces and municipalities) and their participation in the new regional health organization structures have also been subject to much discussion.

From a qualitative viewpoint and according to their normative rank (see Fig. 4.1), analysis of the regulations in the regions shows that the acts totalled 5.5% of the total regulatory structure, followed by decrees (13.9%), orders (33.5%) and other lower rank regulations (47%). In terms of the content of the regulations (see Fig. 4.2) most of the approved regulations dealt with organizational issues (mainly "structure and organization") "human resources", and "economic and financial regulation".

The process of devolution and the relationship between the central administration and the regions have not been free from conflicts either. From 1982 until January 2004 the National Constitutional Court accepted 87 "appeals of non-constitutionality" for discussion, in order to assess whether actions or regulations dictated by either the central administration or the ACs had eroded

Fig. 4.1 Regional-level regulations by rank, approved in 2001

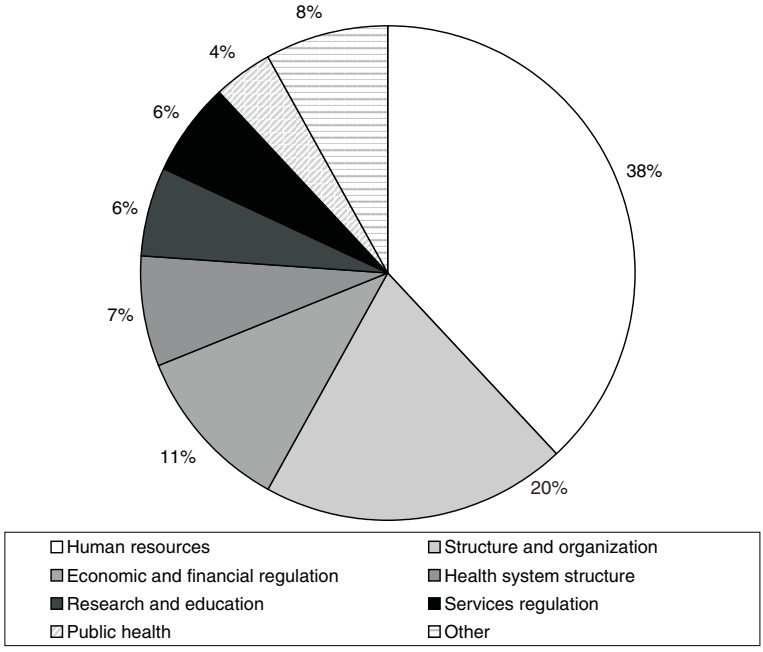


Source: Ministry of Health and Consumer Affairs 2003.

the boundaries of the powers of either the Ministry of Health and Consumer Affairs or those of the ACs. Up to January 2004 the Constitutional Court had taken 59 firm decisions, 34 regarding central regulations and 25 regarding regional regulations. The issues under dispute have been of varying nature, e.g. regional regulatory acts on pharmacies, membership of professional colleges, health services, drugs, general budget, taxes and administrative acts, continuous training for health professionals, overseas health, subsidies, assisted reproduction, embryos, etc.

A particularly critical element of the devolution process is how regions have set up the regulation and governance of third-party payers. As mentioned in Chapter 2 on the organizational structure of the health system, regional governments usually have their health competencies separated between a health authority (*la Consejería* or regional health ministry) and a third-party payer (the health service management body). Regional health ministries in general are composed of the deputies and a secretariat supported by general directorates plus a network of provincial health offices. As already mentioned,

Fig. 4.2 Regulations approved by the autonomous communities, by issue, 2001–2003



Source: Ministry of Health and Consumer Affairs 2004.

10 of the 17 regional health ministries have planning offices and another four have a pharmaceutical office. Regarding the legal status of the regional health services management bodies, 11 of them take the form of "autonomous body of an administrative nature", assigned by their respective regional health ministry. Another five have adopted the form of "public entities", and the remaining regional health service is a "regional public company". In short, it can be said that there is not any definitive organizational model for regional health services in Spain.

Formally, the third-party payers are expected to plan their actions to respond to the health needs of the population with almost total freedom. In reality, however, "purchasing" decisions are more related to the running of the existing facilities and staff in an incremental manner. In other words, priorities identified in plans are rarely translated into explicit purchasing strategies, since the regional health services usually find the inherent obligations towards the existing network to be almost insurmountable difficulties.

4.1.2 Regulation and governance of providers

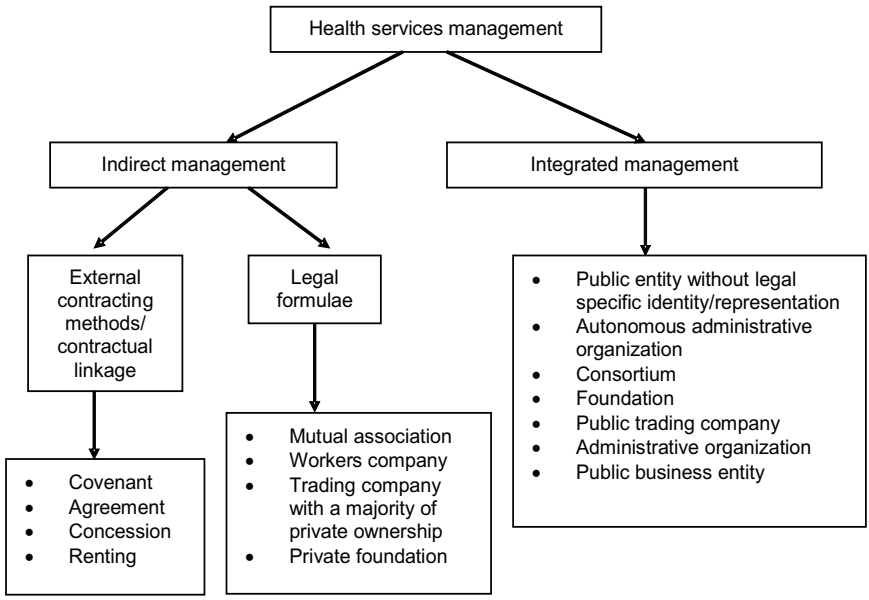
The managerial model adopted by regional health services shows an interesting relationship between the time at which devolution took place and the managerial modality that has been adopted. The regions that made up INSALUD until January 2002 have been more homogeneous in maintaining the key features of the "inherited" integrated arrangement, as they retain all the service functions, i.e. financing, regulation, resource generation and service production, under the same structures. This "integrated direct management", which has been more or less modified according to the contract programme, prevails with a rather bureaucratic edge: public service production centres have no separate legal standing and the personnel make-up has statutory civil service features. As a matter of contrast, those ACs which first received the devolved health services have launched some organizational reforms in their managerial models, separating functions within the degree of freedom permitted by the current law. As shown in Fig. 4.3, the managerial formulae found within the National Health System can thus be classified in two large blocks: integrated and indirect (or "contractual") management.

One key issue here is how resources are allocated. Integrated systems usually segregate resource allocation by lines of activity or by sector, i.e. primary health care has totally separate budgets from specialized care, according to health needs assessments. Most regions use this approach and directly manage service delivery centres without their own legal entity. Indirect or "contractual" management systems, as a matter of contrast, may also use health needs assessments but they sometimes allocate resources to service providers in one single package, more or less equivalent to a capitation formula. However, mixed systems abound; Catalonia (among others) assigns resources along direct management lines through the regional institute of health, for example, combined with indirect management (contracts with institutions that are not directly part of the public system which they relate through agreements).

4.1.3 Regulation and governance of the purchasing process

In fact, a careful review of the different organizational and managerial arrangements of the purchasing process shows that traditional integrated management models have also undergone some changes from their original bureaucratic status. They started being refined in Spain as early as in 1992. In an attempt to separate the functions of purchasing and providing, a contract programme was designed based on the "management by objectives" approach. This allowed for some objectives to be made explicit and the necessary resources agreed upon between the public fund and the service delivery organization.

Fig. 4.3 Health care management models



Source: Modified from Ventura Victoria 2004.

However, these contract programmes suffered from many drawbacks (e.g. restrictions to the capacity of effective management by the managers, owing to the need for them to adhere to strict public sector budgetary practices; lack of clear consequences in case of non-fulfilment, while the achievers would be "punished" by receiving more demanding conditions in subsequent contracts without any financial reward, etc.). Nevertheless, these "shadow contracts" led to noticeable improvements in the measurement of health care products. Significant efficiency improvements have also been reported. In addition, the arrangements have highlighted the need for improvement in the coordination between primary health care and specialized care, a chronic problem of the organization of the Spanish health system at the time of writing.

As the system has matured, new contract programmes include much better designed clauses. In many cases, the legal nature of the providers and their relationship with the purchasers has been modified by giving some providers a specific legal entity, almost always without exceeding the limits of the public administration field. The creation of public "health trusts", a modality mostly used in the regions of Andalucia and Catalonia, is an additional step towards taking integrated management to its very limits (their employees are governed under labour legislation).

A particular variant is the establishment of public foundations under the 30/1994 Act on Foundations and Fiscal Incentives for private participation in activities of general interest. Hospital foundations are entities with their own legal status, which are ruled by a board supervised by the public health authorities (the same bodies that contract their services and thus decide on their income). The Regional Health Department sets an overall budget and issues guidelines to be followed by the regional health services (or the INGESA in the case of the two Spanish autonomous cities located on the African continent), which have delegated powers for using pre-established resources. Then the regional health services or INGESA have to contract the provision of services of those hospital foundations within those guidelines.

The formula of Health Consortia (Associations) has also been used as a legal mechanism of collaboration between different administrations that share a common goal, especially in Catalonia, owing to the existence of various centres dependent on different administrations. Some examples are the Consorcio Hospitalario de Vic, the Consorcio Sanitario de Barcelona or the Corporación de Salud del Maresme y la Selva, all of them in Catalonia.

Some organizational innovations have also come about aimed at ensuring quality in care and involving professionals in the decision-making process. Professionals have been given decision-making powers to reach a consensus on the methods and objectives to be met. Several clinical institutes (grouping together different services subject to internal coordination) and clinical units have been created. They have generated an ample catalogue of experiences on different forms and ranges of power and on responsibility delegation to clinical groups. Examples of clinical institutes are the Cardiovascular Institute of the Ramón y Cajal Hospital in Madrid, the Oncology Institute of the Virgen de la Arrixaca Hospital in Murcia, and the Heart Institute of Hospital Juan Canalejo in La Coruña, Galicia.

However, it remains to be seen if and how the above-mentioned changes influence medical practice and resource allocation and open the way to a new design for the organizational architecture (function refinements, effective incentives, etc.). There is a lack of rigorous research by independent bodies on the advantages and disadvantages of each approach. The new direct management methods are also being used in some centres created for this purpose, responding to new planning criteria, and this hinders the comparison with previous hospitals under more traditional management methods. One of the issues that calls for urgent clarification is the margin of efficiency gained with this sort of hospital autonomy and labour (as opposed to civil service) employment, compared to enforcing effective control on behalf of the health authorities when new hierarchical levels are introduced into the organizational structure. For some,

the above-mentioned arrangements seem to have had only a limited impact on the habits and working methods of the main organizations. In particular, a profound lack of knowledge and trust seems to persist between primary and specialized care (Ministry of Health and Consumer Affairs 2004).

Regarding indirect management mechanisms, three different types stand out: association-based entities; administrative concession; and agreement with private providers in their different fields (the most common of them all). Common characteristics include the provision of publicly funded services by way of contracting mainly private companies that are either for-profit or non-profit-making organizations. As a result, these reforms widen the gap in the separation of functions.

In Catalonia association-based entities were introduced in experimental format during the 1990s to offer primary health care services. These entities have their own legal identity and are mostly, if not totally, controlled by health professionals. The relationship with the purchaser is purely contractual and they may also be given a budget for purchasing intermediate products and outpatient consultations. There are explicit co-responsibility mechanisms for costs.

The most radical innovative experiences in offering health care services developed by autonomous communities (and the most controversial model as well) can be found in the "administrative concession" model. The model was introduced in the Ribera region in Valencia first to offer hospital care, but the concession was subsequently reformulated to include the management of both primary care and ambulatory specialized health care for the inhabitants of the region. In 1999 the government granted a concession of a temporary union of companies led by a private insurer, Adeslas, during a 10-year period, in exchange for the building of a hospital. However, the original concession was altered in 2003, when it was renewed for another 15 years but this time included PHC in the hospital's sphere of influence. Payments to the concessionaire are made on a per-capita basis. Other less radical and controversial schemes include private companies providing only secondary and tertiary care, or just building the hospital (being paid a royalty for its use) and providing non-health care services (classic private finance initiative models).

The most obvious and frequent form of indirect management, however, is contracts with private providers (for-profit or non-profit-making organizations) with an enormous degree of variation in the contractual details. This had been for decades the format for complementary use of private services by INSALUD and by virtually all regional health care systems. These agreements may be either one-off in nature or they may have continuity. In the latter case, contracts have to be capable of introducing efficiency in service provision, simultaneously ensuring financial viability and the capacity for mid-term investments needed

to address the purchasers' needs with regard to medical technology. Catalonia has virtually integrated private centres in its "public services network".

4.2 Planning and health information management

A remarkable feature of the Spanish health system is that the Ministry of Health and Consumer Affairs and all autonomous communities have developed "health plans" (HPs) which are defined as the principal instrument for identifying actions and planning resources for the achievement of previously defined health goals. This was a mandate of the General Health Care Act in 1986 and the regional health acts in the ACs. Although there is a great deal of variability between the design and contents of the different regional HPs and the one prepared in 1995 by the Ministry of Health and Consumer Affairs, they all share the purpose of responding to identified health needs and offering strategies for health systems actions, inspired by the World Health Organization's Health for All and HEALTH21 strategies. At the time of writing all ACs have published at least one health plan, and some have edited as many as four reviews, though perhaps not enough has been done to make them publicly known. Table 4.1 shows the different HPs developed by autonomous community.

In those HPs published in recent years (known in the literature as "second generation plans"), more realistic objectives are being proposed, both in number and in scope, along with more refined indicators and some evaluation systems. Other items being explored are mechanisms to link the proposed objectives to real practice in health centres and hospitals, services portfolios, management contracts for clinical units, contracts with providers, accreditations, joint responsibility of managers and professionals and the link between incentives and objectives. Constant monitoring of results will give a sense of the HPs' progress as operational health planning instruments (SESPAS 2002a).

In spite of the proliferation of HPs, it is hard to get any sense of efficiency measured by the achievement of the objectives that they proposed (which was never properly taken into account). Also, it cannot be established to what extent they have served to modulate health policy in Spain (Durán 1995). Although the official literature makes abundant reference to epidemiology and demographic needs-based planning, there are plenty of examples in which infrastructure/capital investment decisions (e.g. number and type of facilities, beds, etc.) have taken place challenging the existing regulation-based planning (especially in the case of small "*comarcal*" hospitals). Something similar can be said regarding human resources planning (e.g. number of doctors, nurses, etc.).

Table 4.1 Health plans by autonomous community

Autonomous community	Health plans
Andalucia	1993–1998, 1999–2002, 2003–2008
Aragon	1999–2003
Asturias	2003–2007
Balearic Islands	2003–2007
Canary Islands	1997–2001, 2003–2007
Cantabria	1996–2000
Castilla-La Mancha	1995–2000, 2001–2010
Castilla-León	1991–2000, 1998–2007
Catalonia	1993–1995, 1996–1998, 1999–2001, 2002–2005
Extremadura	1997–2000, 2001–2004
Galicia	1998–2001, 2002–2005
Madrid	1995–2004
Murcia	2003–2007
Navarra	1991–2001, 2001–2005
Pais Vasco	1988–2000, 1994–2000, 2002–2010
La Rioja	1995–1999
Valencia	2001–2004
Spain	1995

Source: Ministry of Health and Consumer Affairs 2004.

4.2.1 Health technology assessment

A number of HTA agencies have been created in Spain to provide technical support to policy-makers and to inform clinical practice, through a systematic and structured assessment of new technologies. At national level the Health Technologies Assessment Agency (AETS) is located within the Carlos III Health Institute. These agencies have been developed at regional level in Andalucia (Andalusian Health Technologies Assessment Agency, AETSA, under the General Department of Training and Processes Organization Department of the regional health services); in Basque Country (Health Technologies Assessment Service, OSTEBA, under the General Department of Health Planning and Regulation of the Regional Health Department); in Catalonia (Technology Assessment and Medical Research Agency, AATM, functioning as a public company within the regional health service); in Galicia (Galician Health Technologies Assessment Agency, AVALIA-T, also under the regional health service); and in Madrid (Technologies Assessment Unit of the Laín Entralgo Agency for Health Studies, Training and Research, under the General Department of Health Care Quality, Public Health and Consumer Affairs).

The main activities of these HTA organizations cover a huge range and it is very difficult to assess in any homogeneous way the methods they use (priority setting mechanisms, selection of topics for evaluation). In the first few years of the new millennium the AETS has published 20 public reports; seven reports on new technology assessments were produced in 2004, along with other on-demand reports. In addition, 33 reports have been produced by the above-mentioned five agencies since 1999 at the request of the CISNS (Ministry of Health and Consumer Affairs 2005b). Guidelines for "Decision-making in the Incorporation and Acquisition of New Technologies in the Health Care Centres" (GANT), for "Decision-making in the Incorporation of New Medicines to the Pharmaceutic-Therapeutical List" (GINF) and for "Users' support in health-related decision-making: available tools and synthesis of the evidence in Andalucia" are other types of documents being produced by these agencies.

Coordination between agencies is established through the Benefits Subcommittee of the CISNS and especially through the "Health Technologies Assessment Working Group"/"Tutelary Use Monitoring Group" of the CISNS. Collaboration with international agencies is also a permanent feature (for example throught membership of INAHTA, EuroScan, HTAI, or HEN).

4.2.2 Information systems

The situation regarding health information systems in Spain is fairly paradoxical. Individual Health Cards in the form of smart cards are well established throughout Spain and there is plenty of legislation in place governing freedom of information, protecting the rights of patients and ensuring professionals' access to, and sharing of, information. However, there is not one single card model. Currently, seven card models coexist; one for the 10 regions previously managed by INSALUD plus the Canary Islands and six other models corresponding to the other six autonomous regions. Each member of the covered population holds a card, and this is the day-to-day key to accessing the health care system. A technical platform has therefore been developed to be shared by all regions. This consensus initiative is intended to avoid not only duplications in treatment of the covered population but also discrepancies over whether individual inhabitants are covered. It also helps to manage financing issues and interterritorial budget transfers in case of health care services provided to residents of other ACs.

The information system linking autonomous regions is particularly complex. The shift towards contract programmes and the related negotiations revealed the need for an agreed set of performance measures to be defined allowing comparisons between hospitals. Those performance indicators are intended to take into account the differences in services offered by different centres, and the

nature of each hospital (varying case mix, rate of outpatient activity compared with inpatient care, etc.). This led to the generation of a new, significantly improved information system for hospitals, the CMBD, which started to be developed in the early 1990s. By 1999, the CMBD covered most Spanish hospitals. However, claiming their right to set up their own systems based on the devolved competencies, some regional health services' activities reports use different indicators, and even when they coincide they are sometimes expressed in different ways.

The importance of building a truly shared information system for the Spanish National Health System cannot be overemphasized. This is one of the key responsibilities of the Interterritorial Council of the NHS. Adequate information management systems need to be designed to allow organizational learning between ACs. This should open the way for improved risk-adjustment mechanisms in prospective financing and, therefore, for a more equitable and transparent allocation of resources.

One of the endeavours to improve information in the Spanish NHS includes the creation of the Information System on Health Promotion and Education (SIPES). This programme was initiated by the Interterritorial Council and the ACs, is intended to provide information with regard to planning, management, and evaluation of health promotion and education and has a strong information technology (IT) element, as it uses the Internet to provide access to this programme.

The National Quality Plan for the NHS starting in 2006 includes, as an important part of its programme, the improvement of the NHS information system, through the coordination of the existing regional information systems, among other methods. In addition, the Cohesion and Quality Act of 2003 provides the funding opportunities for studies of new technologies through the Health Cohesion Fund.

4.2.3 Research and development

Although socioeconomic and health status indicators in Spain show significant improvement, a wide range of diseases remains, such as cardiovascular, neoplasic, and neurodegenerative, as well as infectious diseases. Regarding these disease groups, the critical mass of researchers in Spain is low, constituting only small and fragmented groups. In addition, the cooperation and coordination mechanisms between basic and clinical researchers and research structures in the different institutions of the NHS, universities and public research organizations are still weak.

According to the report on Indicators of the Spanish Science and Technology System 2003 of the Ministry of Education and Science, €4414.2 million (€2144.5 million if credits for research projects in companies are excluded) would be devoted to promote research in 2004, meaning around 5% of this budget would be used for health research (10% if the budget for research projects in companies is excluded).

Scientific and technological research at NHS level is coordinated by the Carlos III Health Institute, whose mandate is described in Chapter 2. The common frame of reference for research is established in the National Plans regarding Scientific Research, Development and Technological Innovation ("I+D+I" Plans, set for 2004–2007) by the Ministry of Education and Science. Public research entities are allowed to collaborate with private health sector companies on strategic issues. This also promotes coordination with and between ACs.

Part of the competencies of the Carlos III Health Institute is the coordination of Cooperative Research Thematic Networks (RTICs), which are formed by organizations belonging to different public administrations or to the private sector, and located in a minimum of four autonomous communities. They follow the priorities established in health areas by the I+D+I Plans and aim to transfer the knowledge to practical use in medical practice. There are two types of RTIC, networks of centres and networks of groups, whose main characteristics are shown in Table 4.2.

Spain, as an EU Member State, must also adapt its biomedical scientific policy to the VI Framework Programme for Research and Technological Development (2002–2006). The two main goals are bringing together basic and clinical research, and promoting the role of hospitals as research centres. To this end and to stimulate future participation of Spain in EU research projects, a unit for EU management projects was created in the Institute of Health Carlos III in 2005.

Table 4.2 Thematic Research Networks: networks of centres and networks of research groups

	Networks of centres	Networks of research groups
Number of networks	13	56
Specific research area	Wide range	Specific range
Minimum number of autonomous communities	4	4
Minimum number of centres	5	5
Minimum number of groups per centre	3	1

Source: Ministry of Health and Consumer Affairs 2005g.

Other public quality assurance entities such as the National Normalization and Certifying Association have developed in parallel with the certification protocols of the I+D+I Plans.

Through the Health Research Fund, the Ministry of Health and Consumer Affairs allocated €69 million in 2005, while in 2004 €45 million was allocated. In total, in 2005, 35% of the projects submitted were financed, which is 12% more than in 2004. The Ministry of Health and Consumer Affairs has established the following strategic areas for research: cancer, rare diseases, obesity, health and gender issues and HIV vaccination.

5 Physical and human resources

5.1 Physical resources

5.1.1 Infrastructure and capital investment

Planning and distribution of infrastructure

As discussed throughout this report, the decentralization of the health care sector has shifted most managerial and policy-making powers to the regions. The autonomous communities are thus in charge of making their own decisions with regard to health policy and planning in their regions. In other words, although health system planning rules accepted at central level exist in Spain, there is no agency in charge of the overall infrastructure and planning (e.g. whether a primary care institution or a hospital is needed), other than the Interterritorial Council of the NHS. Coordination is the main issue. The private sector, on the other hand, is ruled by market forces and it is business decisions that govern the distribution of infrastructure.

Currently, the National Health System has 2889 health centres. Numbers are not always reliable, as information regarding the regions that received the transfers in the period before 2001 is not sufficiently detailed. In other words, most available information refers to the ACs that received the managerial powers in the latest devolution step, the so-called previous INSALUD territory. Within this territory, the population covered by each of the PHC premises shows huge differences depending on the region. Castilla-La Mancha, for example, has a ratio of 9581 people per PHC centre, while Ceuta, Melilla and Madrid have more than double this ratio. There are also variations regarding the ratio between PHC premises and PHC teams. Madrid, for example, has a "morning

PHC team" and an "afternoon PHC team" in each of the premises. Regarding premises' space, the mean surface available per inhabitant has tended to increase with the years, from 70 m^2 in 1997 to 85 m^2 in 2001 (as a result of the effort to improve the premises, mainly in rural and suburban areas, owing to a greater availability of building land).

There were 783 hospitals in Spain in 2003, of which 319 belonged to the NHS, which, together with public specialized ambulatory services, directly employ around 336 000 people. Since less than half of all hospitals are publicly owned and public entities own two out of every three beds, there are big differences in the sizes of public and private hospitals (public hospitals usually are much bigger than private ones).

In 2002 Catalonia was the region with the highest number of hospitals (a total of 188), some five times the national average and twice as many as in Andalucia, with 90 hospitals. Another region with a large number of centres is Madrid with a total of 70 hospitals. Catalonia also stands out as the region with the greatest tradition of private care, with nearly 80% of the total number of hospitals being privately owned.

In 2002 the total number of hospital beds available was 158 500 (some 3.86 beds per 1000 inhabitants). Table 5.1 shows the total number of beds available per 1000 inhabitants in each autonomous region. Catalonia, Aragon and Cantabria seem to have the highest numbers of beds, whereas Valencia, Castilla-La Mancha and Andalucia have the lowest, though the differences in beds available per 1000 people are in general small.

In 2002 the average number of publicly owned beds per 1000 inhabitants was 2.5 and only five autonomous regions (Balearic Islands, Murcia, Andalucia, Valencia and Catalonia) were below this average. Catalonia and Valencia (1.9 and 2.2 public beds per 1000 inhabitants respectively) have the lowest proportion of public beds; at the other end of the scale Aragon and Extremadura have 3.8 and 3.6 public hospital beds per 1000 inhabitants respectively.

The distribution of these beds between acute care and other forms of care has varied substantially since the 1980s as, for example, some regions have proceeded to close down psychiatric hospital beds on a massive scale, owing to mental health care reform processes in those regions. Table 5.2 shows the number of beds in various types of care institution for the period 1980–2003.

Fig. 5.1 and Fig. 5.2 can be used to compare the evolution of hospital acute care beds in Spain with those in other parts of the European Region.

All Spanish regions have worked in recent years (most since 1994) to reduce their average length of hospital stay. Obviously, those that began with lengthier stays had a larger reduction margin. The Canary Islands, for example, introduced

Table 5.1 Number of hospital beds per autonomous community, 2000–2002

Autonomous community	2000		2001		2002	
	Beds	Beds/1000 inhabitants	Beds	Beds/1000 inhabitants	Beds	Beds/1000 inhabitants
Andalucia	23 153	3.13	23 258	3.11	22 954	3.02
Aragon	5 645	4.70	5 564	4.56	5 574	4.53
Asturias	4 445	4.13	4 464	4.16	4 366	4.06
Balearic Islands	3 504	3.99	3 536	3.86	3 689	3.89
Canary Islands	8 422	4.73	8 491	4.60	8 237	4.35
Cantabria	2 604	4.84	2 521	4.65	2 419	4.40
Castilla-La Mancha	5 413	3.08	5 343	3.00	5 341	2.94
Castilla-León	9 995	4.03	10 101	4.07	9 981	4.01
Catalonia	30 731	4.83	30 577	4.70	30 581	4.56
Valencia	12 509	2.98	12 430	2.87	12 503	2.80
Extremadura	4 383	4.08	4 336	4.04	4 205	3.91
Galicia	11 022	4.03	10 903	3.98	10 760	3.91
Madrid	22 286	4.15	21 578	3.90	21 092	3.69
Murcia	4 076	3.42	4 242	3.46	4 260	3.36
Navarra	2 531	4.55	2 410	4.23	2 321	4.01
Basque Country	8 923	4.25	8 804	4.17	8 645	4.09
La Rioja	1 032	3.82	1 035	3.67	1 003	3.49
Ceuta and Melilla	569	3.94	569	3.91	569	3.97
Average		**4.03**		**3.94**		**3.80**

Source: Ministry of Health and Consumer Affairs 2004.

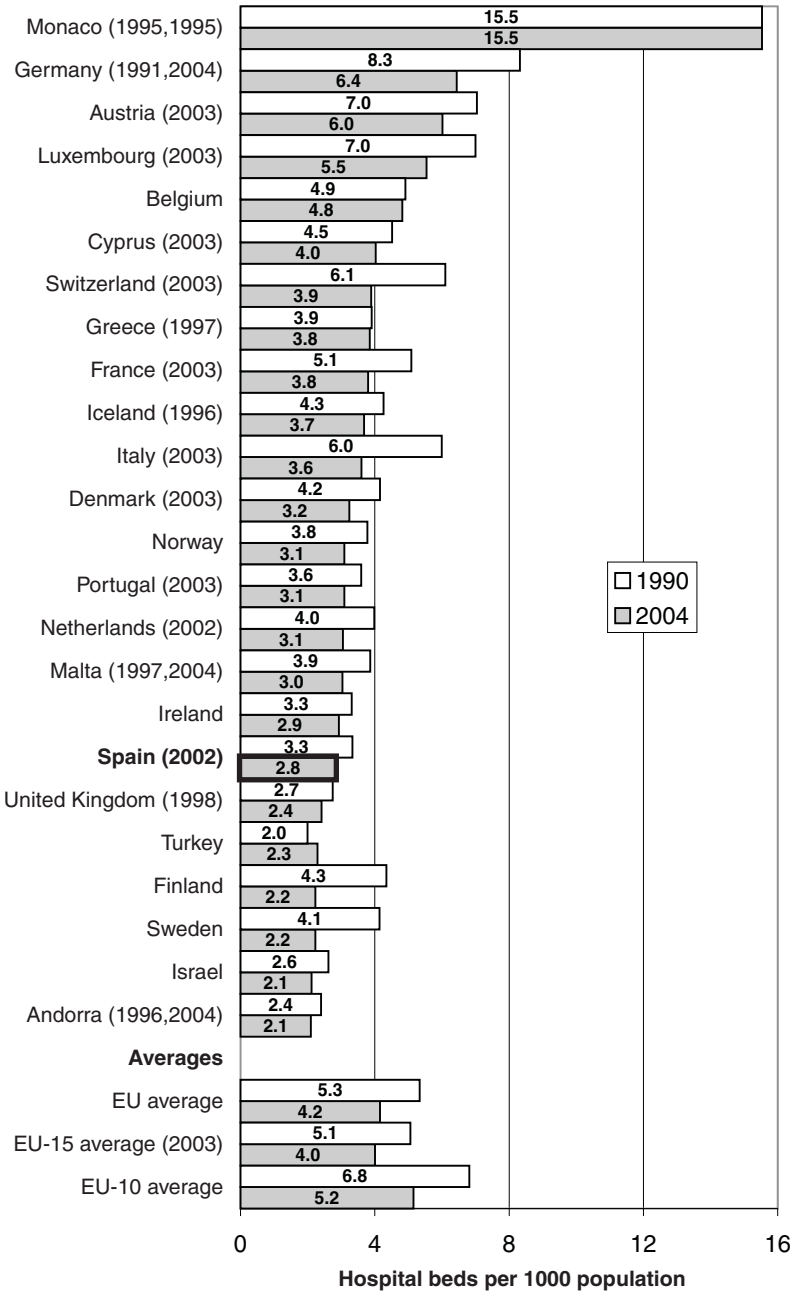
Table 5.2 Number of beds per 100 000 people in acute care hospitals, psychiatric hospitals and long-term institutions, 1980–2003

	1980	1985	1990	1995	2000	2003[a]
Acute care hospital beds per 100 000	398.40	350.92	333.43	303.66	284.06	301.55
Psychiatric hospital beds per 100 000	114.44	91.79	70.67	60.29	52.23	36.74
Nursing and elderly home beds per 100 000	22.65	12.85	21.72	30.45	32.54	26.21

Sources: 1980–2000: European Health for All database, January 2006; WHO 2003: calculations by the authors based on Ministry of Health and Consumer Affairs 2004a.

Note: [a] Comparison between data is difficult owing to the differences in data homogeneity among ACs. In some of the ACs the "psychiatric hospitals network" per se has disappeared and been fully integrated into the general health care (community and hospital) network. Thus, 2003 figures have been calculated using the functional care classification of beds rather than their location, subtracting mental health care and nursing and elderly care beds from the total number of available beds.

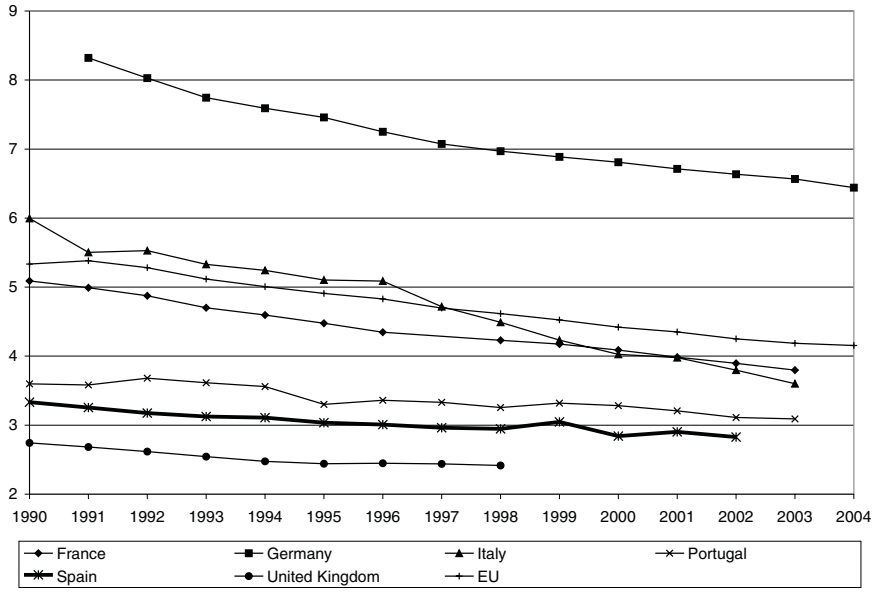
Fig. 5.1 Hospital beds in acute hospitals per 1000 population in western Europe, 1990 and 2004 or latest available year (in parentheses)



Source: European Health for All database, January 2006.

Notes: EU: European Union; EU-15: Member States before 1 May 2004; EU-10: Member States joining the EU on 1 May 2004; countries without data not included.

Fig. 5.2 Beds in acute hospitals per 1000 inhabitants in Spain and selected other countries, 1990–2004



Source: European Health for All database, January 2006.

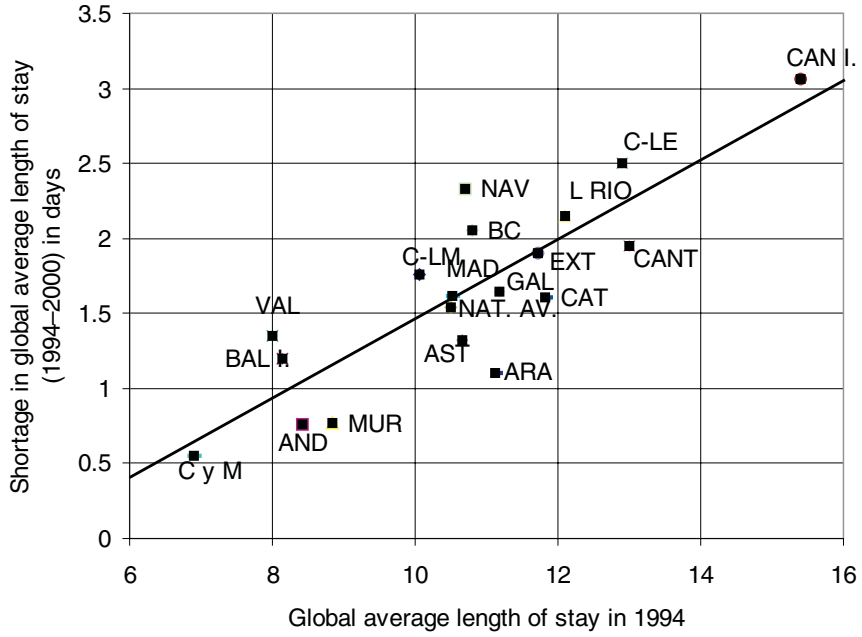
drastic reductions. A good number of surveys have estimated the percentage of admissions and inappropriate stays in hospitals, classifying the detected inadequacies by cause. As a consequence, convergence in average length of stays between hospitals and autonomous regions, in different specialty groups, has taken place (as shown in Fig. 5.3) as hospitals started applying remedies to those causes. Further reductions in hospital stays became more difficult simply through the effect of the law of diminishing returns (Peiró et al. 1996; Negro Álvarez et al. 1998; Zambrana García et al. 2001; Navarro et al. 2001; Negro Álvarez et al. 2003a; Rodríguez-Vera et al. 2003; Negro Álvarez et al. 2003b).

Capital investments

As already indicated, there is no agency in Spain with overall, single responsibility for the planning of infrastructure, so information on capital investments regarding various levels of care (primary, secondary, tertiary, social, etc.) is scarce.

Capital investments in the public sector are generally funded from reimbursement for service delivery through direct transfers from the government, which aims at ensuring equitable geographical distribution of

Fig. 5.3 Changes in average length of stay (1994–2000)



Source: Ministry of Health and Consumer Affairs 2004.

capital. The controls on capital investment are those set up by the respective regional funding authority, without any difference regarding type of institution, i.e. irrespective of whether this involves capital investment in hospitals, primary care facilities, intermediate care, or social and mental health care facilities. It is worth mentioning, however, with reference to the SESPAS report 2002, that investments in the building or renewal of PHC centres went down from 4.5% of the total health expenditure during the first expansion phase in 1991 to 2.7% in 1996 (Ministry of Health and Consumer Affairs 1999). There is abundant anecdotal evidence that 20 years after the reforms started many premises are still inadequate from the construction point of view and that maintenance of the initially refurbished premises has not always been ideal. There is a recent renewed trend of building new premises that subsitute the older ones.

The role of the private sector in capital investments in the NHS is increasing. One of the first cases of public–private partnerships for capital investment facilities was the Alzira hospital in the autonomous community of Valencia, with an innovative hospital management mechanism. Other initiatives include a recently launched private financing initiative in the autonomous community of Madrid with a plan to build eight new hospitals (see Chapter 4 on planning and regulation).

5.1.2 Information technology

Information technologies within the health system have improved substantially in recent years in Spain, albeit in a rather uncoordinated manner. Insufficient regulations in the General Health Care Act regarding medical records led to a proliferation of regional rules that in turn gave way to a heterogeneous mix of clinical information and documentation systems. As already explained (see Subsection 3.2.2), before the passing of the 41/2002 Act, only Basque Country had approved a specific decree to regulate the use of medical records, in 1986. Other autonomous regions include this issue in their health laws/acts, albeit with different degrees of development. The Individual Health Card was seen as a useful instrument to this end, through its legal validity throughout the entire NHS, but it has suffered from the above-mentioned drawback of lack of compatibility.

Legislation (41/2002 Act) provides the foundations for a national IT strategy for the health sector and introduces a basic concept and a minimum content that should be adhered to and developed by the autonomous regions. A coordination mechanism for medical records is intended to make information systems compatible among the regions in Spain, so that patients seen in different hospitals can avoid having physical examinations and procedures carried out more than once. The assignment to each inhabitant of a unique identification code for the entirety of their contact with the NHS should permit substantial progress in computerized access to clinical information placed anywhere within the system. However, the common technical and operational foundations for the Individual Health Card that would permit full exchange of data between all regions and the assignment of codes for specific data have not yet been finalized. Until now four autonomous regions have specifically regulated this issue by way of an act in relation to medical records and other clinical documentation (for more measures on information improvement see Section 7.2).

Regarding PHC, the computerization of centres and consulting rooms has advanced with difficulty and not always in agreement with expert recommendations. That is why, along with important achievements, significant failures have occurred (SICAP – Integrated System for Project Accounting and Management, TAIR – Autonomous Device for Prescription Identification). At present the IT programmes that are the most widely introduced (TASS/DIRAYA – Health and Social Security Card/Unified Citizen Health Record, in the Andalusian territory; OMI-AP – Primary Care Informatic Organization and Management, in Catalonia and INSALUD; and SIAP-WIN – Primary Care Information System, also in the former INSALUD) have simplified the undertaking of common procedures in PHC: managing agendas, issuing prescriptions or appointments for diagnostic tests, filling in electronic clinical

reports, etc. The generalization of computerization, or its compatibility with hospital programmes and emergency care (permitting bi-directional access to relevant information such as the results of tests), is pending.

There is no common electronic prescription system that would allow inhabitants to move about without the need to obtain a prescription at the destination point. As a consequence, it is currently virtually impossible to know the value of the prescription or the medication dispensed to patients outside the geographical boundaries of their usual territory. The lack of shared information also distorts any joint plan to improve the management of this service within the National Health System.

However, in the hospital field the information system for hospital admissions known as the CMBD (see Chapter 3) functions reasonably well. It needs to be improved so that outpatient care is more precisely controlled, although it is the more traditional types (such as consultations, tests) or the increasingly important outpatient treatment (such as diagnostic and therapeutic procedures), which have traditionally been more hospital orientated.

In relation to patients, it is not known how many patients in Spain use the Internet for health purposes. According to the INE survey on equipment and use of household information and communication technology in 2004 (INE 2006), there were 4 544 751 homes in Spain with access to the Internet in 2004 (1 million more than the previous year, 30.8% of Spanish homes and 6 out of 10 homes with a computer). 44.7% of the connections are via broadband. In terms of total population it is worth noting that a total of 13 534 664 people (8 out of every 10 PC users, 45.5% of those aged over 15 years and 68% in the age group between 10 and 14 years) have used a computer, with 37.5% of those aged over 15 years and 60.2% of those between 10 and 14 having surfed the World Wide Web. The services most used on the Internet are e-mail (75.5% of the total of users) and searches for information regarding goods or services (73.2% of the total). Other services frequently used are securing information from web pages from public administration services (53.5% of users), looking at news and communication mediums (newspapers, magazines, television, radio, etc., 52.1%) and leisure activities (games, music, etc., 48.6%).

5.1.3 Medical equipment, devices and aids

The purchasing of equipment in Spain is subject to the individual decisions of policy-makers and not always well regulated, which is contrary to what the Technological Evaluation Agencies have recommended (see also the subsection on capital investments). There are complaints that the purchase of technology (SESPAS 2002) is often linked to money left over from the budget within the

political framework of institutional incentives, or even to informal agreements with the pharmaceutical industry.

The authorization to use certain techniques, technologies and procedures in order to determine if they can be included within the publicly funded services benefits package, is regulated by Article 22 of the 16/2003 Law on Cohesion and Quality of the NHS, which contains the points cited below.

- "The Ministry of Health and Consumer Affairs, by its own initiative or by proposal of the corresponding public health authorities and with the agreement of the Interterritorial Council of the NHS, can allow the use of certain techniques, technologies or procedures."
- "The aim of this supervised use will be to establish the degree of safety, efficacy, efficiency or effectiveness of the technique, technology or procedure before deciding on the convenience or need of its inclusion within the services benefits package offered by the NHS. Everything will be made following a research protocol, limited in time and only in specifically authorized premises, according to specific protocols in order to guarantee its safety, bioethics and relevant learning results that increase knowledge within the NHS. In any case, having the informed consent of the patients to be treated with those techniques, technologies or procedures will be compulsory."

There is not any other regulation of technologies in the private sector than that of market forces (and obviously the technical specifications of the equipment concerned).

In terms of type of care, the availability of "big ticket technologies" is visibly biased towards secondary care compared to primary care/ambulatory care. This is not only true in the sense that hospital care is by definition more reliant on technology but also because hospital care is better funded in relative terms than PHC (see Chapter 3 on financing). In PHC, access to diagnostic tests has increased thanks to the purchasing of certain equipment (ophthalmoscopes, otoscopes, electrocardiograms, spirometers) but diagnostic elements that are routine procedures in GP surgeries in some surrounding countries (such as ultrasound scans, endoscopies or image related technologies) are still sometimes rather inaccessible in PHC centres.

As a consequence of the above-mentioned mechanisms for purchasing technologies (and as usually seen at world level) the distribution of technological availability in Spain shows complex patterns.

It should be mentioned that given that the available source for the information in Table 5.3 is the National Catalogue of Hospitals, the population rates shown relate to technology installed in centres qualified as, or dependent on, hospitals (be they public or private), and do not include those technologies which are

Table 5.3 Items of functioning diagnostic imaging technologies per 1000 people in 2005

Items	Per 1000 people
CAT (Computerized Axial Tomography)	0.014
MRI (Magnetic Resonance Imaging)	0.008
GAM (Gammagraphy)	0.005
HEM (Hemodynamics)	0.004
DSA (Digital Subtraction Angiography)	0.003
ESWL (Extracorporeal Shock Wave Lithotripsy)	0.002
Cobalt Bomb (Cobalt Beam Therapy Unit, CBTU)	0.001
ALI (Particle Accelerator)	0.003

Source: Ministry of Health and Consumer Affairs 2005f.

within centres not recognized as hospitals (although their inclusion would not significantly vary the values). In fact, the National Register of Centres and Services will constitute (in the near future) a more complete source of information on both the amount of equipment (mammography scans, haemodialysis, etc.) and where it is placed.

The major differences between autonomous regions at secondary health care level can be appreciated in the advanced technology equipment used by each of them (see Table 5.4).

Table 5.5 gives an international perspective on advanced technological equipment in selected countries according to a recent Canadian report (Esmail et al. 2004).

5.1.4 Pharmaceuticals

Section 3.5 deals with pharmaceuticals financing. This subsection addresses the issues of availability, use and expenditure of pharmaceuticals.

Pharmaceuticals expenditure in Spain is rather high in relation to the total health expenditure, its pharmaceutical market being the seventh in international ranking, constituting 25.3% of national health expenditure in 2003. In the late 1990s some regulations were established: limiting prices, reimbursement of parts of the profits by the industry (mainly in new product prescriptions), exclusion of some drugs from publicly funded lists, and promotion of generics (López Bastida and Mossialos 1997). It should be noted in this regard that Spain, being an EU Member State, and also as a WTO member, endorsed the 30 August 2003 WTO Trade-Related Aspects of Intellectual Property Rights (TRIPS) agreement on legal changes, which allowed easier import of cheaper generics made under compulsory licensing if countries are unable to manufacture the medicines themselves. Spain, as well as 22 other developed countries, announced that they

Table 5.4 High technology equipment per autonomous community ranked by number of inhabitants, 2002

Autonomous Community	CAT	MRI	GAM	HEM	DSA	ESW	CBTU	ALI	Population
Andalucia	77	27	30	25	20	11	10	11	7 606 848
Catalonia	71	31	29	28	24	13	13	14	6 704 146
Madrid	68	49	42	34	26	9	6	22	5 718 942
Valencia	57	29	20	19	15	9	4	12	4 470 885
Galicia	46	23	11	10	12	4	3	5	2 751 094
Castilla-León	32	13	10	5	7	3	3	4	2 487 646
Basque Country	31	16	12	8	11	5	2	7	2 112 204
Canary Islands	24	10	12	9	8	6	3	4	1 894 868
Castilla-La Mancha	20	11	5	4	3	3	0	1	1 815 781
Murcia	18	8	6	5	4	0	0	3	1 269 230
Aragon	18	7	7	4	6	2	2	2	1 230 090
Asturias	18	8	4	3	4	1	2	2	1 075 381
Extremadura	15	4	5	2	2	1	2	1	1 073 904
Balearic Islands	18	11	7	5	5	4	1	2	947 361
Navarra	8	5	7	2	2	2	1	4	578 210
Cantabria	6	3	2	2	2	0	1	3	549 690
La Rioja	2	1	1	0	0	0	1	0	287 390
Ceuta	1	0	0	0	0	0	0	0	74 931
Melilla	1	0	0	0	0	0	0	0	68 463

Sources: Ministry of Health and Consumer Affairs 2004; INE 2006.

were not going to use this exception rule, since it was intended as an emergency measure, suitable for countries with exceptional circumstances (WTO 2003).

A fact probably related to the high pharmaceutical expenditure in Spain is that unfortunately, pharmaceutical "planning" in real terms is concentrated in the pharmaceutical industry and in the pharmacies. The process of purchasing/procuring pharmaceuticals and the supply chain, including distribution, wholesale and retail, are completely in the hands of the private sector, from which the public sector purchases the pharmaceuticals it needs. However, this case is not too different in many aspects from what happens in other EU countries with a lower percentage of public expenditure in medical prescriptions; the key question that needs to be asked is whether investment in training, research and quality monitoring really has an impact on excessive pharmaceutical health expenditure.

By law, the autonomous communities hold extensive power over the implementation of centrally issued legislation in the pharmaceutical field. In principle, the Spanish Pharmaceuticals Act specifies the system for public

Table 5.5 Medical technology per million inhabitants in OECD countries, 2001

Country	MRI	CT scanner	Radiation therapy	Lithotripters
Austria	11.6	26.3	4.6	1.8
Belgium	3.2	–	6.4	–
Denmark	6.6	13.2	5.4	–
Finland	11.0	13.7	15.4	0.4
France	2.6	9.6	6.1	1.0
Germany	6.2	17.1	4.6	1.7
Greece	2.0	13.8	4.2	4.7
Iceland	14.0	17.5	14.0	3.5
Italy	8.6	21.9	3.8	–
Luxembourg	4.5	24.9	4.5	2.3
Portugal	2.8	12.1	2.9	1.2
Spain	5.7	12.5	3.8	1.8
Sweden	7.9	14.2	–	–
Switzerland	12.9	17.6	9.7	4.1
United Kingdom	4.6	6.2	4.9	–
OECD average	**6.3**	**16.9**	**6.7**	**2.2**

Source: Esmail et al. 2004 (calculations by the authors of the article based on OECD data for 2003).

Note: Data for the year 2001 were not available for all countries. Earlier years have been substituted where noted. (MRI 2000 data: Denmark and France. MRI 1999 data: Sweden and United Kingdom. MRI 1998 data: Greece. MRI 1997 data: Belgium, Germany and Portugal. CT Scanner 2000 data: France. CT Scanner 1999 data: Sweden and United Kingdom. CT Scanner 1997 data: Germany, Greece and Portugal. Radiation Therapy 2000 data: France. Radiation Therapy 1999 data: Greece. Radiation Therapy 1997 data: Belgium, Canada, Germany and Portugal. Lithotripter 2000 data: France. Lithotripter 1999 data: Greece. Lithotripter 1997 data: Germany and Portugal.

reimbursement of pharmaceuticals and their price setting (i.e. economic evaluation, reference prices, price controls). The central government has the right to establish the reference price for all pharmaceutical types (groups or products), whereas over-the-counter products are only regulated based on quality and safety. Article 54 of the 1990 Spanish Pharmaceuticals Act differentiates the registry of a medicine from its inclusion in the list of publicly funded drugs within the NHS, and establishes the criteria for financing them. The law also stipulates that the government "can modulate its participation in co-payment depending on its expenditure capacity, therapeutic and social utility of the medicine, specific needs of some groups of patients, seriousness of illnesses, and budgetary limitations" (1990 Pharmaceuticals Act, Article 95). However, such differences are not particularly well applied, so in reality almost all public prescriptions are financed by the NHS (only "advertising" specialties, those that can be bought without medical prescription, and can be advertised directly to the final consumer, are excluded in practice).

The autonomous communities thus undertake the planning of the location of pharmacies, fixing the criteria for the opening or relocation of outlets, while regional health services are in charge of the day-to-day administration of pharmaceutical benefits, setting the conditions of the agreements with pharmacies, and implementing cost-containment programmes. In terms of expenditure, in 1998, the total public pharmaceutical bill amounted to €6151.30 million (some 7% of which corresponds to medical supplies other than drugs). This figure includes user co-payments and is known as "public consumption" to differentiate it from "public expenditure", which is equivalent to public consumption minus user co-payments. Out of this total, the National Health System paid €5676.76 million, while user co-payments absorbed the remaining €474.54 million (7.7% of the total in 1998). In 2002, public consumption amounted to €8648.94 million.

The highest increases in expenditure tend to concentrate in the late 1980s and early 1990s, while growth rates slow down thereafter, reflecting the increased emphasis on cost-containment within pharmaceutical policy.

In December 2005, the central government approved a bill on pharmaceuticals that should replace the 1990 act and is currently under parliamentary discussion. This bill, named the "Bill on Guarantees and Rational Use of Medicines and Medical Devices", includes a decrease of 20% in the price of medicines that have been on the market for more than 10 years and do not have a generic of lower price within the European Union. The bill includes a new reference price system, making it clearer, more predictable and more suitable for planning purposes, promoting generics in a more effective way. The economic measures included in the act will not be in force until 2007.

Medicines prescribed in hospitals are acquired directly from the manufacturing laboratories, in line with the therapeutic guidelines approved by each hospital. The percentage of user co-payments over total public consumption (there are no co-payments for inpatients) has been decreasing since 1986, experiencing an accumulated reduction of almost 50%. This explains the fact that public expenditure has increased at a higher rate than total public consumption. The main reason for the overall drop in user co-payments from total pharmaceutical consumption is the increase in the percentage of the population over 65 years, as well as the increase in life expectancy in this group.

During the same period, the average price per prescription in current currency units more than tripled. In constant currency units, average prices almost doubled. During the period 1991–1998, in addition, the number of per-capita prescriptions experienced a 5% accumulated increase. The number of total prescriptions, in turn, grew at double the rate of the equivalent per-capita figures. These trends suggest that the global growth in public pharmaceutical

expenditure during the 1990s was mainly due to raised prices, not to an increase in the volume of prescriptions.

The significant year-by-year growth in pharmaceutical expenditure during the 1980s and early 1990s led to the adoption of a number of cost-containment measures from 1993 onwards, targeted at different areas of the pharmaceutical sector. The most important policy change has been the introduction of a negative list of pharmaceuticals excluded from public funding by the 83/1993 Royal Decree on selective pharmaceutical financing, which was expanded and updated through the 1663/1998 Royal Decree. The 1993 list excluded specific groups of drugs for minor symptoms, in particular: hygienic products; dermatological products; nutritional supplements; anabolic drugs; and anti-obesity products. In total, 892 pharmaceutical products were excluded from public funding. The 1998 list, in turn, excluded 831 additional pharmaceutical products considered to be of low therapeutic value and for minor symptoms. The combined effect of both decrees led to the exclusion from public funding of 29% of the total pharmaceutical brands registered on the market. Over the years the government has been trying to introduce specific measures including collecting comparative doctor-specific information on individual prescription patterns. Accordingly, separate drug "budgets" have been assigned to individual physicians in order to foster professional awareness of expenditure.

The negative lists aimed to reduce costs while simultaneously increasing the quality of public prescription patterns. Research on the economic impact of these measures underlines their limited cost-containment effects in the medium term. As regards the 1993 decree, there was only a small decrease in the growth rates of drug expenditures in 1993–1994, followed by a significant rise in 1995–1996. Shifts in prescription patterns towards substitute and more expensive drugs constitute one of the most likely explanations for this, as well as an increase in the number of prescriptions. As for the 1998 decree, it has been estimated that it generated savings equivalent to €50.39 million between September 1998 (when it came into effect) and December 1998.

Other cost-containment policies have been applied within the pharmaceutical sector. In 1993, a reduction in the VAT rate from 6% to 3% was applied to medicines, while in 1995 the rate was fixed at 4%. In addition, an agreement with the pharmaceutical industry to reduce the commercial prices of drugs by 3% on average annually was reached the same year and remained in force until November 1999. This reduction was scaled differently for drugs in different price categories in a way that did not allow pharmaceutical companies to choose which type of drugs should be subject to sharper reductions. In addition, in July 1995, a further agreement was reached with the pharmaceutical industry; this set down a system of profit reduction in the sales to the public sector with an annual growth ceiling (7% for the next three years) and committed

Farmaindustria (the national employers' association in the sector) to encourage the use of generic products.

In addition, since January 2005, pharmaceutical companies must pay a progressive royalty on their total billing of NHS prescriptions on a four-monthly basis. Half of these contributions are devoted to biomedical research, while the other half are used for the development of cohesion policies in health, and both medical doctor and population training programmes on rational and responsible medicine consumption.

The agreement of July 1995 was revised in 1996 and again in 1998. In addition, pharmacies have been encouraged to include discounts (approximately 2% of global profits) in their agreements with regional health services and INSALUD. These agreements were no longer in force from 1997 onwards, when the 165/1997 Royal Decree made compulsory a reduction of 2% over the maximum allowed profit margins, which dropped to 27.9%. In November 1999, a new cost-containment regulation was approved, which prescribed a 6% average decrease in the maximum allowed prices of all brands available on the market. This measure replaced all previous agreements with the pharmaceutical industry that have already been mentioned. Finally, the 1990 Pharmaceuticals Act was modified through the 13/1996 and 66/1997 Acts, which opened the way for the introduction of generic drugs and global reference prices within the Spanish health care market. In particular, the first generic brands were registered for commercial distribution in July 1997, while reference prices were effectively introduced through the 1035/1999 Royal Decree. Between July 1997 and November 1999, 343 generic brands were authorized, which yielded sales of €1.56 million in 1998, a figure which by October 1999 rose to total sales of €9.53 million. An evaluation of the introduction of generics estimates that global savings achieved up to December 1998 amount to around €5 million, despite the fact that this type of drug only absorbed 0.2% of total public pharmaceutical expenditure in 1998. An additional cost-containment initiative introduced in the late 1990s was the reduction of wholesalers' profit margins (over wholesale prices) from 12% to 11% in March 1997, and down to 9.6% in June 1999.

As a result of these regulatory strategies, the rate of growth in the prices effectively paid by the public sector has been decreasing since the early 1990s. Increases over the previous year in constant currency units dropped to the range of 1.1–2.5% between 1995 and 1997, although a rebound is perceptible thereafter. In fact, as already mentioned, the main driving force behind the considerable increase in public pharmaceutical expenditure until the mid-1990s has been the rising average cost per prescription, mainly owing to the increase in the market share of new, more expensive drugs. For example, in 1996, the percentage of the total that was spent on drugs registered within the

five previous years was 40%, while those recently introduced brands accounted for only 20% of the total quantity purchased. In addition, in 1998, the average price per prescription was equivalent to €10.55 (current currency), while the average price for a prescription of drugs registered between 1996 and 1998 amounted to approximately €31.85. Official data indicate that these latter types of drugs accounted for almost 14% of the 1998 public pharmaceutical bill (around €803.76 million). The corresponding increase in expenditure completely overrode the reductions of €5.02 million and €50.40 million achieved respectively through the introduction of generics and of the 1998 negative lists; we should keep in mind here, however, that the full economic impact of these policy measures has not yet been realized. In addition, it has been estimated that only 50% of the expenditure on these most recent brands corresponds to drugs of high or medium clinical effectiveness, which therefore implies a level of quality improvement on already existing brands.

Table 5.6 Comparative evolution of pharmaceutical-related Consumer Price Index (CPI) components (annual averages, base: 1992=100)

	1998	1999	2000	2001	2002
General CPI	123.8	126.7	131.0	135.7	103.5
Medicines and other pharmaceutical products	113.2	115.2	116.8	119.0	100.2
Medicines	109.4	111.3	111.0	109.3	–
Prescription medicines[a]	96.3	95.5	95.5	95.5	100.0

Source: Reproduction of data from Farmaindustria 2004 based on INE and Farmaindustria estimates.

Note: [a] Index based on general official price reviews and changes in the VAT rate.

The evolution of prices and that of consumption and expenditure from the end of the 1990s are shown in Table 5.6 and Table 5.7.

Another important area is that of generics. A generic medicine (GM) can only be put into the market when its patent has expired. European legislation establishes that this period must be at least 10 years (11 if the pharmaceutical company shows its value in a new notice) since its approval by the European Agency for Evaluation of Medicinal Products or the Spanish Health Products and Medicines Agency (AEMPS) (Regulation 2001/83/CE). Between the different available bio-equivalent alternatives, the government can establish which will be financed by the NHS, depending on the price (13/1996 Act, Article 169, Section 6). All GMs must have a price lower than the reference one (Law on Cohesion and Quality of the NHS). Medicines over the reference price will

Table 5.7 Public consumption and expenditure on prescriptions, 1999–2002

	1999	2000	2001	2002	Relative annual increment 2002/2001 (%)	MAG 1999–2002
Number of prescriptions (millions)	569.50	596.80	621.40	661.10	6.38	5.10
Public consumption (mill. €) (RP+VAT)	6 753.71	7 307.15	8 005.69	8 648.94	8.03	8.60
Spending on proprietary medicinal products (mill. €) (RP+VAT)[a]	6 106.30	6 585.10	7 272.35	8 246.03	13.39	10.50
Spending on pharmacists' form (mill. €) (RP+VAT)[a]	331.08	87.98	376.09	53.29	-85.83	-45.60
Spending on accessories (mill. €) (RP+VAT)[a]	310.48	328.61	350.89	349.62	-0.36	4.00
Co-payment by patients (mill. €)	496.96	520.57	559.72	584.11	4.36	5.50
Expenditure on prescriptions (mill. €)[b]	6 256.75	6 786.57	7 445.97	8 046.17	8.06[c]	8.70[c]
Patient contributions as a % of total outlay	7.36	7.12	6.99	6.75	—	—

Source: Reproduction of data from Farmaindustria 2004.

Notes: Mean Annual Growth (MAG); Retail Price (RP); Value-Added Tax (VAT); [a] The figures do not include the cost of prescriptions for toxin syndrome, workplace accidents, professional complaints, hospital diagnosis or health care campaigns. Accordingly, the sum of contingencies reflected is less than total public spending on pharmaceuticals; [b] Cost prior to pharmacy rebates and pharmaceutical industry contributions; [c] Increases in the cost of prescriptions, including pharmacy discounts, are 7.9% and 8.4%, respectively.

be sold at the reference price if there are no other equivalents available. The pharmacist is obliged to sell the lowest priced generic pharmaceutical medicine (Article 94.6 (new) within the 1990 Pharmaceuticals Act).

As already mentioned, the new bill on medicines under parliamentary discussion reinforces generics promotion. It includes the Bolar clause, allowing for infringement of patents in cases when research on active principles is devoted to generics development.

The 25/1990 Pharmaceuticals Act of 20 December 1990 does not allow online selling of medicines. On 11 December 2003, the European Court declared legal, according to European Community law, the selling of medicines when fulfilling two basic conditions: that they are authorized both in the country of the seller and that of the consumer, and that they are allowed by legislation in

both countries to be acquired without prescription. The Spanish Pharmaceutials Act was thus overridden on this point. However, the industry sector in Spain did not welcome the new scenario. The Health Self-Care Association (ANEFP), representing the industrial sector of producers of non-prescribed medicines, thinks that the lack of information on the consumer side makes this new selling channel a non-secure one and that information provided online can never be a substitute for the assessing and advisory role of the pharmacist (Farmaindustria 2004a). According to the same source, other industry collectives and some professional associations also stress the importance of patients receiving face-to-face information in the pharmacy premises and the role of the professional pharmacists in promoting patients' safety. No data have been found on the actual evolution of the online selling process in Spain since the European Court created jurisprudence.

Regarding prescribed medicines, each autonomous community has taken different measures in order to regulate post-sale delivery to the consumer via mail/courier, etc. As an example, the autonomous community of Galicia put into force the Galician Pharmaceutical Regulatory Act on 21 December 1999, allowing the delivery of prescribed medicines to the patients' home after the prescription has been received and paid for in the pharmacy office. This kind of service focuses on specific groups of consumers, such as chronic patients, elderly people, etc., and always ensures that the direct relationship between the pharmacist and the consumer is not lost.

The new bill under discussion includes new regulations on online sales of over-the-counter medicines, making it explicit that it must be based on an authorized pharmacy office and under pharmacists' counselling.

In broader terms, the remaining key issues are prescription patterns and choice of pharmaceuticals. It is a challenge for the NHS to manage effectively the prescriptions and use of 6500 types of pharmaceutical.

5.2 Human resources

5.2.1 Trends in health care personnel

Staffing levels

Currently the NHS directly employs around 420 000 people of which 80% work in specialized health care. There were 4.6 qualified doctors per 1000 inhabitants in 2002 (Ministry of Health and Consumer Affairs 2004). Of these, 40% were women, an increase of 8 percentage points from 2001. In the case of

odontologists and dentists, 40% were also women (0.47 per 1000 inhabitants). The percentage of female pharmacists is 67.4% (1.34 per 1000 inhabitants) and female nurses make up 80.4% (5.26 per 1000 inhabitants).

Table 5.8 shows the evolution of health care personnel in Spain since 1980 according to WHO. National sources show slightly different figures with regard to health personnel. This divergence can be explained by the fact that some sources include non-active professionals while others do not (usually professional official associations give data about all registered professionals regardless of their current professional activity). This is relevant due to the high number of unemployed doctors in Spain (24 512 in 1999, or 15% of male registered doctors and 30% of female). According to one of the main professional associations within the sector (CESM), the total number of active doctors in 1999 was 83 534, or 2.2 per 1000 inhabitants). Two other factors also need to be considered. First, changes in the population denominator related to immigration may substantially change the resulting rates. Another factor that needs to be taken into account is the (quantitatively unknown but by anecdotal evidence substantial) migration of Spanish doctors and nurses to countries where they have found employment, notably Portugal and the United Kingdom. Overall, comparisons of figures on active physicians with European data should be considered with caution.

Table 5.8 Health care personnel per 100 000 people, 1980–2003 (selected years)

Health care personnel per 100 000 people	1980	1990	1995	2000	2001	2003
Physicians	–	369.8	247.4	316.4	307.5	322.1
Physicians, medical group of specialties	–	30.9	33.4	39.7	39.7	n/a
Dentists	10.5	26.6	35.7	43.7	45.6	50.1
Pharmacists	62.1	59.0	63.5	81.2	100.9	85.2
Nurses	316.2	406.8	295.9	367.2	–	n/a

Source: European Health for All database, January 2006.

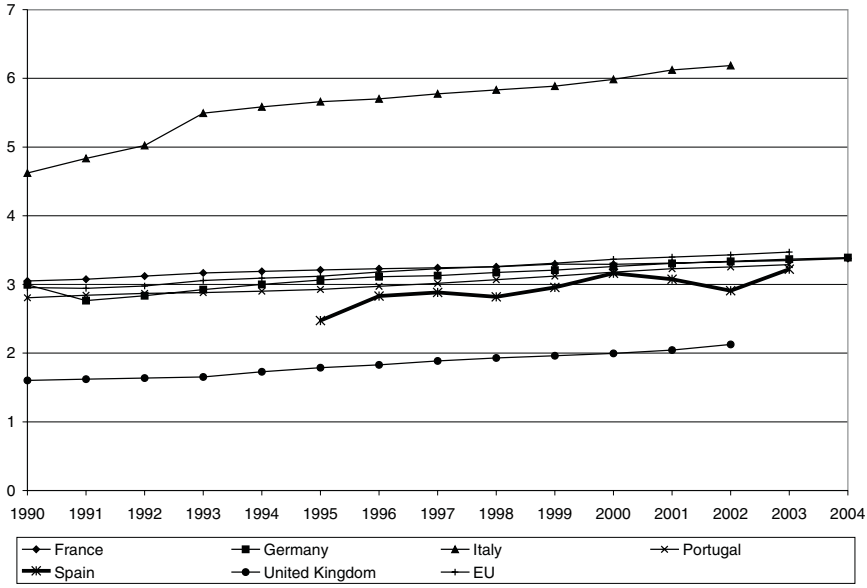
Administrative personnel constituted almost one third of the total public health care system workforce, while the equivalent figure for high-level managers and directors was 1%. Regional data show that Catalonia deviates the most from the national average in the field of specialized care, owing to the important role played by the private non-profit-making hospitals in this region. Otherwise, the rates of health care personnel hardly vary across regions, with the exception of Navarra, which shows higher ratios in all categories of health care personnel. The national average of the distribution of the workforce between primary and specialized care is 21% to 79%, based on publications by the Health Information Institute (IIS 2005).

The group of professionals within the health sector that shows the smallest variation between autonomous regions is that of physician specialists (around 79% of the total amount of doctors), whereas odontologists and dentists show the largest gap between autonomous regions (although the way services are offered should also be taken into account). With regard to trained nurses, some regions offer a number per 1000 inhabitants which is more than two points above the national average.

As a specific service, publicly funded dental health care is integrated within the PHC networks. However, the benefits offered differ from region to region, the private sector being the main provider of services. Some ACs offer coverage for children from 7 to 15 years within their public services (Basque Country) or from 6 to 15 years (Andalucia), while in Cantabria coverage depends on the parents' income criteria. Other regions, such as Navarra, have developed special programmes for promoting dental health among children.

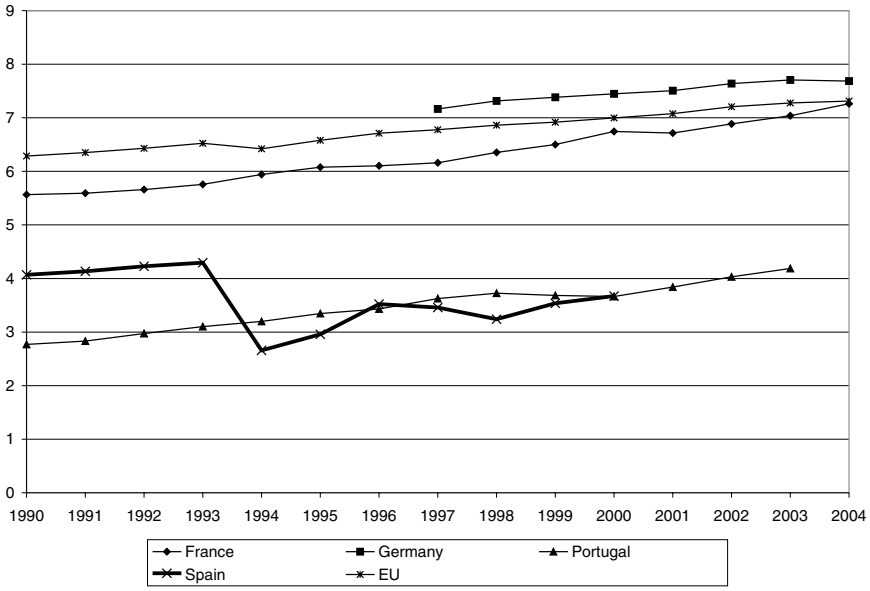
In comparison with western European standards, the relative number of doctors in Spain is the second highest after Italy. In contrast, Spain displays the fourth lowest number of nurses per 1000 inhabitants, after Greece, Italy and Portugal. Fig. 5.4 to Fig. 5.8 present the numbers of different health care personnel in various sectors, across a variety of contexts.

Fig. 5.4 Physicians per 1000 inhabitants in Spain and selected other countries, 1990–2004



Source: European Health for All database, January 2006.

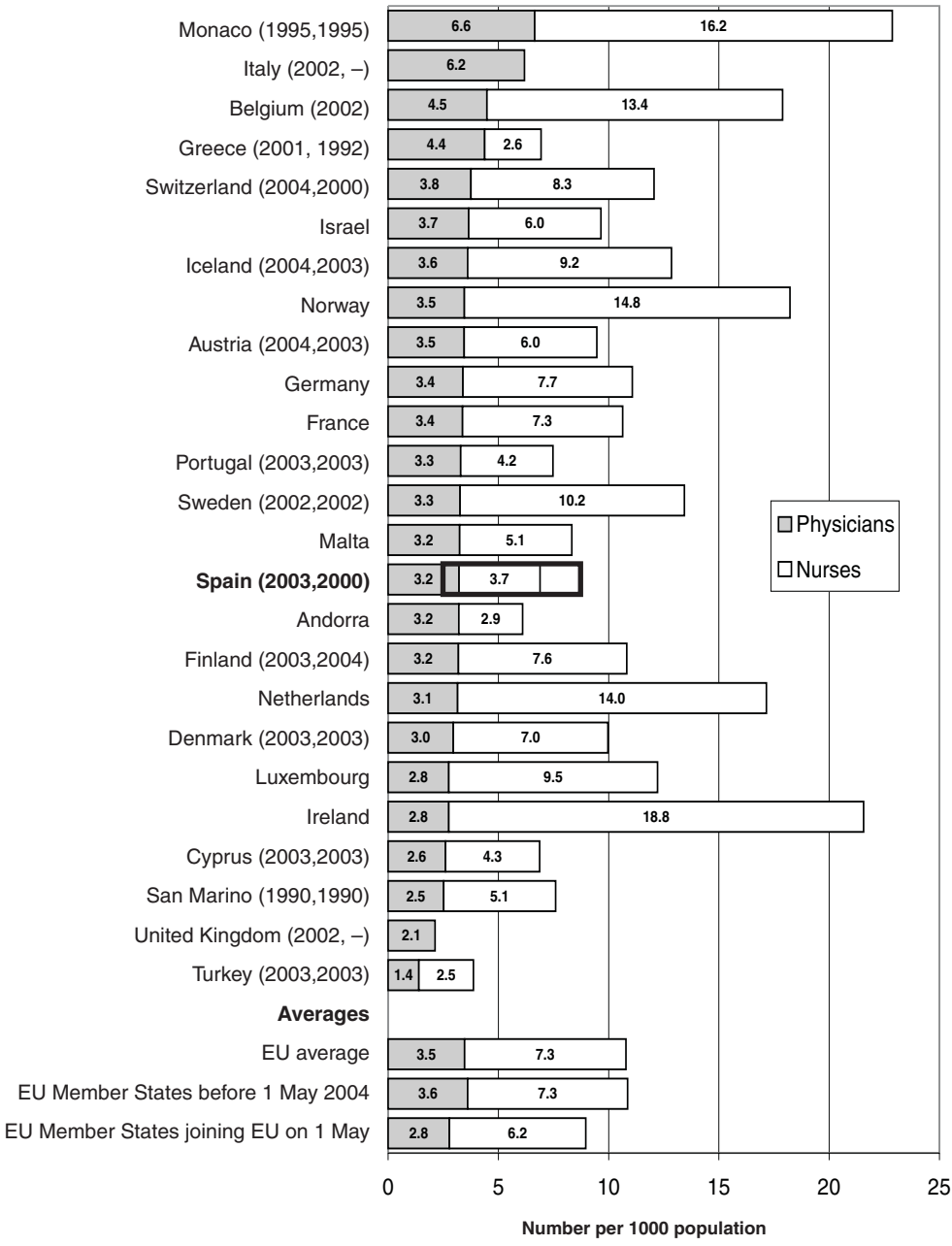
Fig. 5.5 Nurses per 1000 inhabitants in Spain and selected other countries, 1990–2004



Source: European Health for All database, January 2006.

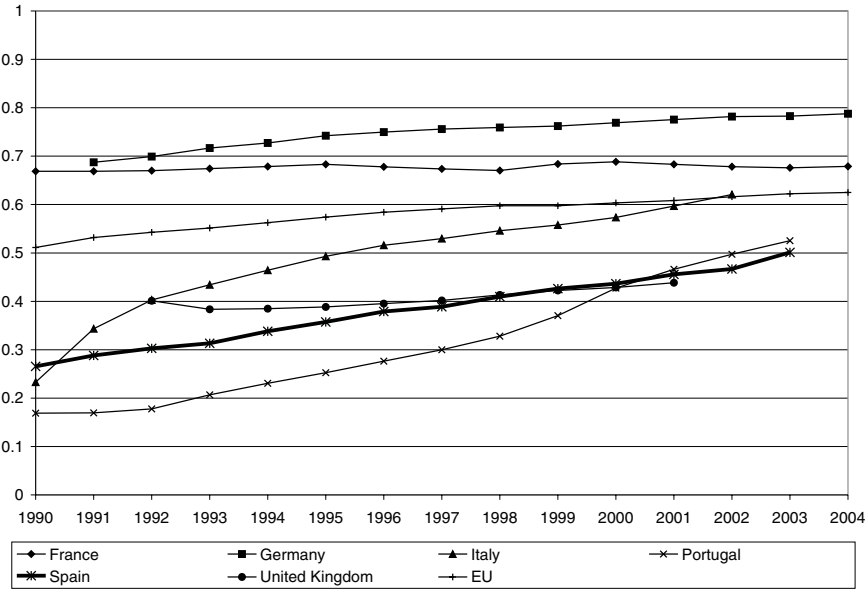
In terms of employment, most medical staff working in the National Health System have a status similar to that of civil servants. Professional recruitment into the health system is contingent on passing an entry examination which in turn confers permanent employment status. In addition to that, four years' specialist training (three years for primary health care doctors) is required in order to enter the public sector. This requirement was introduced in the early 1980s for both public and private specialized care, and in 1995 it was extended to public primary health care, following a 1991 EU directive. All negotiation of working conditions is carried out by regional administrations, while health centre managers have a markedly limited capacity to negotiate salary incentives. This makes a flexible staffing policy difficult and hampers managers' attempts to harness professionals to the objectives of the particular institution. While a sizeable proportion of health professionals still work in both the public and private sectors, there have been attempts to encourage full-time commitment to the public sector using limited economic incentives. However, as the devolution process to the regions has evolved, the salaries of all professional levels throughout the health system have increased (Ministerio de Salud y Consumo 2005d).

Fig. 5.6 Number of physicians and nurses per 1000 population in western Europe, 2004 or latest available year (in parentheses)



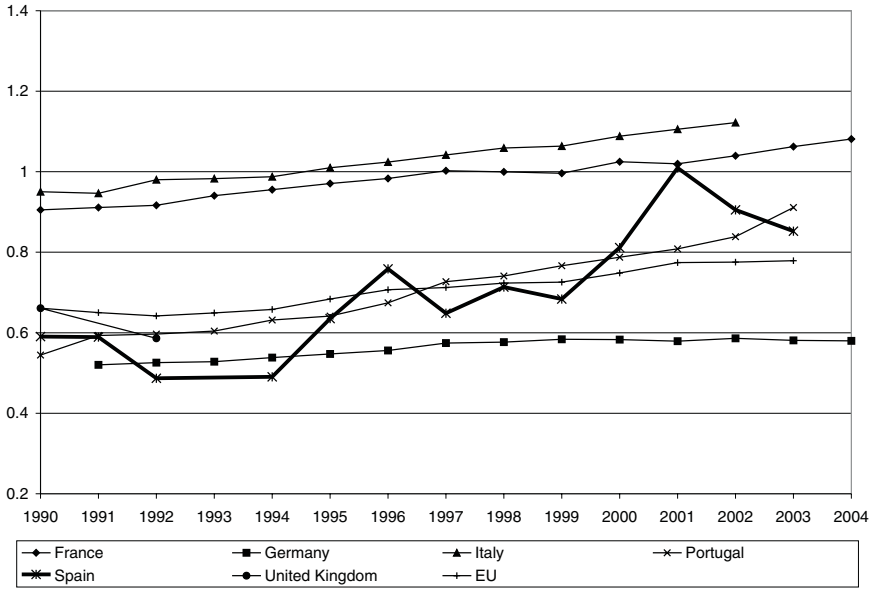
Source: European Health for All database, January 2006.
Note: EU: European Union.

Fig. 5.7 Dentists per 1000 inhabitants in Spain and selected other countries, 1990–2004



Source: European Health for All database, January 2006.

Fig. 5.8 Pharmacists per 1000 inhabitants in Spain and selected other countries, 1990–2004



Source: European Health for All database, January 2006.

5.2.2 Planning of health care personnel

The question of whether there is an excess or lack of health professionals is constantly raised in health and medical journals, mainly at times when deficit or surplus are seen as a social or professional problem (González López-Valcárcel 2000). In order to answer the question, a reference level is needed, e.g. European ratios, as a result of matching resources and market demands, or country-based needs.

It is well documented that Spain has more medical doctors and pharmacists but fewer nurses and odontologists than other European countries. The nurse to doctor ratio is much lower than in other western European countries (1.08 compared to 2.7). This imbalance in the relative available resources of nurses and doctors in Spain has consequences that transcend the working framework, reflecting and generating in a two-way street some distortions in the educational system.

First, the better position of nurses in the job market induced an increase in the academic qualifications in secondary schools required to access nursing education, owing to the limited number of vacancies in nursing schools. This effect has been reduced due to the increase in available nursing school vacancies, but it is still significant.

Second, the distribution of vacancies in medical schools has had a deep impact upon the Spanish health sector because during the 1970s and early 1980s a significant overproduction of medical doctors took place. In fact, in the mid-1970s, the average number of students enrolled in first year undergraduate medical studies was around 20 000. Since then, there have been significant reductions in the number of entrants to medical schools owing to restrictions introduced in the number of places in 1978, and a 1987 agreement of the University Council to further limit admission and introduce postgraduate compulsory specialization. In the late 1980s, the number of students entering medical schools decreased to fewer than 10 000 each year. The production of excessive numbers of doctors in the past has left a legacy of difficulties. The examination entry system for residents could not absorb the high numbers of graduates coming out of the universities and this has caused unemployment among physicians who were unable to specialize. It has also affected the distribution of medical specialties, creating overloads in some ranges of the medical doctors' population age pyramids. The result in terms of specialization has also been heterogeneous. Specialties such as allergology, radiology, nuclear medicine and maxilofacial surgery, for example, have an overload of young professionals owing to the high offer of postgraduate training system (MIR) vacancies in the early 1990s.

In Spain there is an imbalance between educational and employment opportunities, which creates intergenerational equity problems. In 1984 there was one MIR vacancy for every five graduated medical students, while now the offer covers around 100% of each year's graduates. However, recently some positions have remained empty because of unattractive locations or specializations offered. These dynamic imbalances are a consequence of short-term educational/labour policy-making.

This lack of sense of anticipation suggests the need for a review of the recruiting and selection process for future health professionals and would advise against policies that are too uniform. The present mechanism, based on secondary school qualifications and the public universities' common exam, is perhaps not best suited for a vocational profession such as medicine. Besides, the geographic distribution of medical schools' vacancies together with the norms regulating university education ("the Single and Shared University Districts") clearly discriminate against young people in some territories, who have fewer opportunities than those living in others.

Moreover, health professionals themselves have been at least partially the cause of difficulties in human resources planning. The consensus about the need to transform the large public bureaucracies, which traditionally had produced and distributed the bulk of public services that characterize the Spanish modern welfare state, was highly opposed by doctors and other statutory personnel.

In fact, the 15/1997 Law on new management forms of the NHS, not excluding any concrete legal arrangement for administering health facilities as the "indirect management of services", explicitly mentioned that facilities should maintain their public nature and position as "public services", safeguarding the rights of workers.

Statutory health personnel rights in Spain are regulated by a law adopted in 2003 (Law 55/2003). The current framework is rigid and entails difficulties for personnel mobility. This rigidity and centralization of labour regulation (statutory and civil servants) give centre stage to politicians and labour unions. The autonomous communities are thus managing their human resources to their maximum benefit, supported by the jurisprudence of the Supreme Court, which has in general legitimized acts based on the "principle of autonomy" in the context of a strongly decentralized state. Regions have developed regulations on personnel issues, such as wages and payment systems, only loosely respecting the basic state legislation.

As a consequence, human resources policies have been oriented towards short-term issues and the political pressures of the day. The final round of transfers to regions in January 2002 triggered a negotiation process between politicians and union representatives, provoking a cost increase owing to health

personnel-related issues, similar to the cost increase that took place earlier on in Andalucia, Basque Country, Catalonia and other "first-round" decentralized regions (Martín 2003).

- In the case of doctors, for example, Balearic Island doctors secured an annual salary increase of €4197 during the years 2002–2003, Castilla-León €3582 (a 25% increase each year up to 2005), Asturias €3550 (40% during 2002 and 2003 plus another 20% applicable in 2004) and Castilla-La Mancha €2945 with 50% spread out in 2003 plus a further 25% during the following two years.
- Similar trends took place in terms of the workforce. Regions announcing big increases in their workforce included: Balearic Islands, an increase of 500 employees; Murcia, 180 new doctor posts; and Castilla-La Mancha, 131 new doctor posts plus 2500 new vacancies during the next five years. In some regions measures have also been adopted that have clear expenditure consequences, such as the application of a 35-hour working week, or the lowering of the maximum number of health cards per doctor (GPs and paediatricians).
- The worrying third characteristic is that most remuneration increases have occurred in the fixed components of payment, thus strengthening the importance of the fixed payment compared to income obtained through better performance.

Virtually all forms of contract tried in Spain since the 1980s have had health personnel stability as their paramount point of interest and any other consideration has been subordinate. Thus, comparing current available human resources with present and future market demands and country needs becomes a much more difficult task.

Unemployment of medical doctors has existed in Spain since the 1980s, and there is evidence of precarious employment in the health sector in more recent years. If the European environment is again used for comparison, Spain would have a considerable margin for increasing human resources within the health sector, because both the population to health professional ratio and the health staff to total employment ratio are lower than in most western European countries.

Among the other challenges of human resources is the large number of medical specialties. The 44/2003 Law on the regulation of health professionals, adopted in 2003, aims to tackle this issue (Ley 44/2003). This law outlines general norms, rights and duties of health, principles of education and training of health professionals. This law is an important and positive step in this field.

5.2.3 Training of health care personnel

Health sector staff fall into one of three categories:

- *university-qualified health care personnel*, including physicians, dentists, pharmacists, biologists, chemists and clinical psychologists;
- *intermediate graduate health care personnel*, including social workers, qualified nursing staff, midwives, physiotherapists, occupational therapists, specialist technicians, hygienists, dental nurses, and auxiliary nursing staff;
- *other personnel*, including technical, special service, maintenance and other staff in health institutions.

The Ministry of Education is responsible for undergraduate education and training of all health personnel. Basic medical studies last six years in all universities, public or private, with many NHS hospitals and a limited number of PHC institutions taking part in teaching (there are not significant differences in the training of medical staff being trained in or working in quasi-public, private for-profit and private non-profit-making institutions). Most other undergraduate health care studies last five years. Nurses and physiotherapists are trained at specialist university schools, and their studies last three years. Now there is a process of implementation of nursing specialties, such as obstetric nurse, mental health nurse, occupational health nurse, community nurse and others. The Law 44/2003 on the regulation of health professionals provides regulatory background on this issue.

Specialized medical training

The postgraduate training of medical specialists and general practitioners is carried out through the MIR, and is based on a period of paid practical work of between three and five years – depending on the specialization – in centres and services which are specifically accredited for training delivery. Each specialization is governed by a national commission, made up of representatives of the scientific associations, academics, health professionals, residents, and medical colleges, and they define the training programmes for each specialization as well as the duration of training. Any centre, public or private, may request accreditation for training delivery, conditional on their compliance with rigorous standards, which are audited by a team of medical inspectors. The centres that pass the accreditation process obtain authorization to provide training for a certain number of graduate students for a maximum of three years, after which time they must be reaccredited. The accreditation process is run jointly by the Ministry of Health and the Ministry of Education in collaboration with the National Council for Specialties.

Since 1978 the number of available places for postgraduate medical training is fixed annually and candidates are selected through a competitive entry examination. In general, during the early 1980s, some 2000 places were offered annually, with an average of 8000 new doctors graduating per year. During the second half of the 1980s the number of places doubled, while the number of new graduates halved. The same trends continued during the 1990s, although the increments were much more moderate. The total number of places available varies from year to year, generally between 4500 and 5000 per annum since the mid-1990s. The number of places available for specialized training (including family medicine) in 2005 was 5406 (BOE 2004).

As for specialist training in family medicine, the number of places has grown from 500 places per year in 1981 to 1682 in 2005, with approximately 2000 places in 1996. Table 5.9 presents the ratio of training places for family medicine and total places. This represented between 10% and 30% of the total number of specialist training places being offered throughout the same period.

Table 5.9 Family medicine training places as a percentage of the total number of specialized training places, 1994–2004

Year	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Family medicine/ Total places (%)	26	28	41	40	39	39	40	39	38	36	34

Source: Calculations by authors based on the different national official bulletin orders (BOE).

Note: The ratio is calculated with respect to the total number of places in health care centres, excluding those related to professional schools (forensics, etc.).

Professional standards in public health have been significantly enhanced through specialized training. In 1990 there were only 131 specialists enrolled for training in the newly created specialty of Preventive Medicine and Public Health (out of a total of approximately 5000 specialist training positions being offered annually) while in 1997 this figure rose to 281 registered specialists (SESPAS 2000).

Specialist training of nursing staff

Specialization in nursing is still in the development phase, with specialties in only mental health and midwifery having started since 1996. On 22 April 2005, the government approved a new Royal Decree on nursing specialties. The following specialties that have now been included are midwifery, mental health, geriatrics, occupational health, medical-surgical care, family and community care and paediatrics. The decree has received positive assessment from the Human Resources Commission (CRH) of the NHS, the Nursing Specialties Advising Board and the General Board of Official Professional

Nursing Associations. There is also a general consensus of approval among the trade unions (SATSE, UGT and CCOO) after a long period of pressure from them and the threat of strikes in the sector. The new decree establishes a residence training system similar to that of doctors, and regulates the procedures for accreditation of current experienced nursing staff in order to access each specialty degree.

The total number of places for general nurses was also limited in the late 1990s to about 7000 per year despite the severe shortage of nurses in Spain. The number of specialty places offered in recent years in midwifery and mental health has been increasing continuously (Table 5.10).

Table 5.10 Dynamics of the number of nursing specialty training places offered, 2002–2005

Specialty	2002	2003	2004	2005
Midwifery	204	229	297	314
Mental health	82	84	101	107

Source: Calculations by authors based on the different national official bulletin orders (BOE).

Training of health care managers

There are no official degree programmes in health care management, although a number of Schools of Public Health and other public and private teaching bodies do offer training courses in health management. The health care system does not demand specific management qualifications of those contracted to carry out management functions, although in general, health managers must have a university degree and management training is valued. Health care managers in Spain may have a medical background or training in public health. A number of public health courses have been developed in Spain in the Schools of Public Health but there is no health care manager career as such.

5.2.4 Registration/licensing

Registration and licensing of health professionals in Spain are governed by the Law 44/2003 on the regulation of health professionals. Its main goal is to improve the quality of health care through guaranteeing the necessary levels of competence for health professionals to assure the right of the population to health protection. The law recognizes as "health professions" those that the universities' regulations admit as degrees in the health sector and that have a Corporative Professional Organization recognized by the public administrations. There are two university levels: *Licenciado* (high-level graduate, e.g. medical doctors) and *Diplomado* (mid-level, generally more technical graduate, e.g. nurses).

In order to work as a health professional, on a solo basis or as a member of an organization, it is a requirement to officially graduate and to follow the regulations established by the corresponding Corporative Professional Organization. In addition, it is necessary to undertake continuous training for reaccreditation of professional competence. Health Centres are obliged to verify that their health professionals fulfil the requirements for the correct performance of their jobs, at least every three years. Thus, professional reaccreditation is compulsory every three years. The specific evaluation measures depend on the legislation in each region. The Law on the regulation of health professionals also establishes the need for identification systems for professionals. Thus, and in order to facilitate the patients' rights, the corporative professional organizations, regional councils and general councils will provide public registries of qualified professionals for the population, which will also be available to the health authorities. These registries will contain names, degrees, specializations and other data that the act declares are public access areas.

The development of a professional career is voluntary, and requires motivation and commitment to the institution in which one works. There are several levels of professional development, regarding knowledge, competences, valid continuous training, teaching activities and research. Between each level, at least five additional years of experience are needed to apply for a higher level. The CRH of the NHS, including central government and regional representatives, deals with homologation, mutual acknowledgement of accreditation levels and free movement of professionals within the Spanish NHS.

The corporative professional organizations enforce the Professional Associations Act in full; their main role is in deontological issues and they are also responsible for the professional registries that will be put into place once the Interterritorial Council of the NHS establishes the regulating criteria.

6 Provision of services

6.1 Public health

The Spanish Ministry of Health and Consumer Affairs is in charge of the overall health care system, policy design and evaluation. Responsibilities for public health have been passed over to a large extent to the autonomous communities from the state (see Chapter 2 on organizational structure and Chapter 4 on regulation). Some core areas of public health have remained the exclusive responsibility of the state, including external relations, the management of the Nutrition Alert Network, and the Environmental Surveillance Network. The state also retains a coordinating role over regional public health functions, which it exercises through the Interterritorial Council of the NHS, conditional upon a voluntary regional endorsement. In the field of public health, devolution from the central administration was completed by 1986 but the transfer of powers to local governments may have slowed down the process somewhat.

The integration of all responsibilities regarding public health into a single level of government has led to the coordination and management of epidemiological surveillance at regional level. In parallel, an extensive, reformed public primary care network with operational duties in public health has been developed. In Spain public health services are integrated within PHC. The bulk of preventive medicine and health promotion is integrated with primary health care and carried out by general practitioners and practice nurses as part of their normal workload (see also Section 6.3 on PHC). During the 1980s and 1990s a series of specific programmes – supported by books and other training materials – was produced by the national and regional authorities for PHC professionals, targeting population groups (from maternal and child health care to care of the elderly) and specific illnesses (e.g. hypertension, etc.) with the intention of providing a broad public health scope to the regular PHC activities.

Some ACs went through a quick reorganization of decentralized services, and several inspectorates on health issues, previously dispersed among different sectors (health, agriculture, industry, environment, etc.), were soon integrated. However, some other regions kept their former organizational structure (Segura, Villalbí et al. 1999), with the only exception being food safety inspection services which were always integrated within the public health services (a requirement of the European Directive in force at the time). This reorganization has been extremely important and has improved the inspection of food production and food retail premises and the promotion of competence of inspectors (previously, there were fundamental risks regarding the independence of the inspection authority, since many inspectors had economic links with the industries they audited). In most cases environmental issues have also been concentrated in specific environmental services departments, which have been much developed since the 1990s.

Overall, substantial improvements in public health have been achieved, even if effective organizational integration has not occurred sometimes, owing to the fragmentation of public health responsibilities among different departments of the regional administrations. Some problems of coordination have also been identified regarding the decentralized governmental structure and the weak enforcing capacity of the Interterritorial Council of the NHS. In addition, it is important to take into account that the Spanish NHS is clinically oriented, rather than prevention oriented.

The issue of inequalities in health is an interesting feature of the Spanish public health situation. Spain has produced a number of policy statements (see sections on organizational overview and on planning and health information management) emphasizing unambiguous safeguarding of the principle of equity in health. However, beyond non-contributory social subsidies, the impact of poverty on health is mainly addressed through emphasizing access to health services (PHC) and there have been few differentiated targeted initiatives to identify and tackle equity-related issues (there are, for example, no explicit means-related exemptions related to co-payments for pharmaceuticals, other than that of being a pensioner).

6.1.1 Core programmes

Epidemiological surveillance

At present, every physician is required to notify the health authorities of all diagnosed cases of communicable diseases (national and international). Notification is carried out through the regional authorities who then communicate the results to the Ministry of Health, where a central record of communicable

diseases is kept. On 1 July 1996, new regulations came into force with the creation of a National Epidemiological Surveillance Network. Implementation of these regulations involved, among other measures, the development of guidelines for the prevention, diagnosis and treatment of infectious diseases, the creation of a network of national epidemiological laboratories linked to similar institutions at international level. A telematic network ("*PISTA*") has been developed to facilitate the transmission of epidemiological information across health care authorities. Also, field epidemiology training is a Master of Science programme at the National School of Public Health and at the National Centre of Epidemiology.

AIDS

Responsibility for care of people with AIDS is shared between the central government and the autonomous communities. The Ministry of Health is the key sponsor of the National Plan against AIDS, which currently covers the period 2001–2005 and has been mandated to carry out the following tasks:

- analyse the situation of the epidemic;
- develop prevention programmes (information campaigns, needle exchange, prevention of sexual transmission, methadone substitution programmes);
- refine training and support programmes for health care staff including recommendations on treatment, screening, etc.

Monitoring indicators have been reviewed in order to adjust them to the new objectives and improve the plan's performance (Ministry of Health and Consumer Affairs 2003). AIDS patients are included in the group which pays a reduced charge for medicines in Spain.

It is worth mentioning here that drug addiction is a major health problem in Spain. There is a National Anti-Drug Plan, which was previously run by the Ministry of the Interior and since 2004 has been under the responsibility of the Ministry of Health and Consumer Affairs, coordinating the fight against drugs, including drug substitution programmes in health centres with explicit authorization and closely regulated by law. In the late 1990s, Andalucia first launched a policy proposal of administering heroin to drug addicts who have tried and failed several rehabilitation programmes, but the measure was vetoed by the central authorities on grounds of a lack of legal coverage.

Immunization

As already mentioned, PHC plays an important role in implementing immunization programmes, planned and managed by autonomous communities. Each region agrees on an immunization schedule and ensures that it is

implemented, while the region may also choose to offer additional immunization beyond the package agreed on nationally. From 1999, a unified schedule was agreed upon by the Interterritorial Council of the NHS. Programmes are clearly successful and a drop in preventable illnesses has been observed (see Section 1.5 for the relevant figures on immunization levels). There have been no cases of diphtheria since 1987, and only four cases of poliomyelitis since the period 1989–1999. The latter reflects the significant efforts made through the Plan for the Eradication of Poliomyelitis, which started in 1996, following the recommendations of WHO. All immunization levels for the basic diseases are well above the western European average for children, except for hepatitis B, and its incidence is well below the average, at 1.8 per 100 000 inhabitants in 2003. The prevalence ratio of measles has dropped from 22.57 per 100 000 inhabitants in 1995 to 0.2 per 100 000 in 2002 (with an increase up to 0.62 in 2003).

Health education and other health programmes

The Ministry of Health and Consumer Affairs launches national information campaigns for specific problems, such as alcohol, drugs, AIDS or occupational diseases at central level on a regular basis. Autonomous communities undertake health education programmes within their own geographical regions. Until 2000 there was no national body specifically responsible for health promotion and education, when the Department of Health Promotion and Epidemiology under the General Department of Public Health was created. In addition, there is an agreement with the Ministry of Education through which health education has been introduced into the school curriculum.

Spain has also made substantial progress in legislating on tobacco and alcohol, putting emphasis on regulating sales, consumption and advertising at national level. The 2005 Anti-tobacco Law is particularly strict. The Ministry of the Interior has also been extensively working with sensitization campaigns on road safety, with specific emphasis on drinking and driving.

With respect to screening, there are programmes focused on specific segments of the population, almost always from a regional perspective, including programmes for breast and cervical cancer, lung cancer, early detection of child deafness, etc. Luengo and Muñoz (2002) carried out a comprehensive study on the different regional programmes and concluded that all ACs have well-established population screening programmes for early detection of breast cancer, which include carrying out a mammography. Some ACs have already covered all the women in the target population. The early detection programmes for cervical cancer are established, to a certain extent, in certain regions and

these perform Papanicolaou's test. Most are opportunistic screenings and usually include primary care equipment for their development.

In 2005, the Ministry of Health and Consumer Affairs launched a strategy for nutrition, physical activity, and obesity prevention, through the Spanish Agency for Food Security. The objectives of this strategy include improvement of nutrition habits and encourage regular physical activity for all inhabitants, with special attention given to obesity prevention among children.

Occupational health

Occupational health in Spain is organized through specific organizations. The key occupational health institutions in Spain are the Work and Social Security Inspectorate and the National Institute of Occupational Safety and Hygiene, and both are reported to suffer from having inadequate resources. While the number of occupational inspectors slightly increased between 1999 (679) and 2001 (748), its number (6 per 100 000 workers) is clearly insufficient to deal with the many occupational health problems (traditional and emergent) in an increasingly segmented labour market.

In Spain the incidence of occupational diseases, injuries and other health outcomes is not equally distributed across social groups, occupations, genders and enterprises. In addition, poor coverage of workers is revealed by different sources (Benach et al. 2004; Benach et al. 2004b). A recent nationwide survey mentioned by Benach that looked at the situation in workplaces with the highest reported occupational accident rates (i.e. medium-sized companies that must have preventive services under Spanish law) found that 31% did not set up preventive services and that in only 3% of these cases did the employer perform its functions. Most of the firms with no preventive services are found in companies employing fewer than 10 workers. This implies that many companies are lacking in the area of legislation enforcement. In addition, even where prevention activities are organized, they are often of poor quality. For example, in the region of Asturias, the Institute of Occupational Health found that 45% of risk assessments carried out were incomplete. Only 17.5% of the inspected workplaces had carried out a satisfactory assessment; nearly 40% had an inadequate one or none at all; in 13.5% the assessment had not been updated; and in 18% of cases it did not cover all jobs.

A comparative study by the European Foundation for the Improvement of Living and Working Conditions (Benach et al. 2002) confirmed the finding that in Spain temporary workers showed much higher levels of occupational accidents compared to permanent workers (Durán et al. 2001). The Netherlands, France, Spain and especially Greece (25.4%) showed low levels of full-time

permanent employment, and when health indicators were investigated they showed differences by country. Greece, Spain and Finland showed the highest percentages of health indicators (see Table 6.1). However, absenteeism in Greece and Spain was low, but very high in Finland (23.9%) followed by the Netherlands (20.6%). Relevant findings were also evident in other southern European countries. For example, Spain showed 22.2% job dissatisfaction, followed by Italy (20.1%), France (19.6%) and Portugal (18.1%).

Table 6.1 Some work-related health indicators (frequencies and percentages) by country, 2000

	Job dissatisfaction		Health-related absenteeism		Stress		Fatigue		Backache		Muscular pains	
Country	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Belgium	165	11.7	206	14.6	415	29.2	323	22.8	381	26.8	343	24.2
Denmark	65	5.1	151	11.9	358	28.0	135	10.6	368	28.8	500	39.2
Germany	181	13.0	241	17.8	342	24.5	221	15.8	487	34.9	362	25.9
Greece	393	35.1	66	5.9	588	52.4	715	63.7	472	42.1	456	40.6
Italy	285	20.1	108	7.9	500	35.1	331	23.3	457	32.1	348	24.5
Spain	307	22.2	142	10.6	386	27.8	496	35.7	545	39.3	488	35.2
France	274	19.6	173	12.6	457	32.5	478	34.0	551	39.2	436	31.0
Ireland	109	8.1	102	7.7	176	13.1	120	8.9	152	11.3	141	10.5
Luxembourg	59	12.4	74	16.4	180	37.7	81	16.9	170	35.6	117	24.5
Netherlands	165	12.1	274	20.6	357	26.1	275	20.1	369	27.0	395	28.9
Portugal	238	18.1	94	7.5	262	19.9	260	19.8	411	31.3	351	26.7
United Kingdom	148	10.9	154	11.6	315	23.1	225	16.5	345	25.3	310	22.8
Finland	91	7.0	303	23.9	445	34.3	342	26.4	513	39.6	754	58.1
Sweden	223	15.3	229	16.0	584	39.9	188	12.8	522	35.6	693	47.3
Austria	120	9.4	214	16.0	264	19.6	65	4.8	399	29.6	275	20.4

Source: Benach et al. 2002.

Since the Framework Directive 89/391/EU became a part of Spanish legislation according to Law 31/1995 on occupational risk prevention, the main activities of occupational health administrations have focused on:

- defining the minimum level of resources to implement prevention services;
- definition of the occupational health information system; and
- elaboration of health surveillance protocols.

Since the approval of the 39/1997 Royal Decree on Preventive Services Regulations, Spain has predominantly had two-track provision of services, comprising company preventive services and external preventive services. Companies that do not have an in-house preventive service usually sign up for an external preventive service provided by an insurance company (Mutuas) that is responsible for compensating work accidents and diseases. This results

in large-scale outsourcing of preventive services, which in turn often leads to prevention being seen as a product and an activity separated from the company, with no commitment or involvement required from the employer. Often workers' participation is lacking and prevention is only formal in nature, which disregards emergent risk factors (García Jiménez 2003). In practice it is not always easy to distinguish clearly between the services covered by the insurance company (Mutuas) and those covered by the NHS. As a consequence, part of the expenditure for occupational accidents and diseases which should be covered by Mutuas is in reality covered by the NHS.

6.2 Patient pathways

The concern over health care quality in Spain has led to a number of initiatives aimed at reducing the variability of practice and implementing evidence-based medicine. These efforts include clinical protocols, clinical guidelines, built-in guidelines, etc., to standardize the process to be followed in dealing with certain diseases. Furthermore, the built-in guidelines are intended to tackle care processes from a longitudinal perspective of the illness, defining the procedure that should be followed at each level of care and thus achieving a greater level of coordination between primary health care and specialized care.

Since the 1980s there has been a significant improvement in the research into patients' de facto pathways, through the introduction of DRGs, a patient classification system available in Spanish hospitals. This has allowed modifications that have also influenced the contractual purchasing models in order to incorporate the real case mix of inpatient services. The main limitation of this patient grouping and information-gathering care system is that it has been developed almost entirely for acute hospitalization (González Juárez 1999).

In some regions the standardization process has received full institutional support from the health authorities. A significant effort has been made to set up clinical pathways in the Andalusian public system. A Quality Assurance Plan, focused on the improvement of clinical management processes with an integral approach, including the definition and monitoring of performance indicators, is being enforced since 2000 in order to ensure continuity and performance in patient care. In the medium term this should lead to the identification of the best clinical pathways and their establishment as best practices within the public network (Junta de Andalucía 2000). In October 2005, 52 relevant health care processes were identified and guidelines are available online in order to guarantee evidence-based care. Also, methodological guidelines for identification, design and description of new relevant processes are available

to health care professionals. Suggested new processes are evaluated for their explicit inclusion in the system.

6.3 Primary/ambulatory care

Since 1984, the primary health care sector in Spain has experienced an extensive process of institutional reform and capacity building. PHC is an integrated system composed of PHC centres and multidisciplinary teams and provides personal and public health services. Single-handed practices are restricted to small towns and to the private sector. There are very few group practices as the term is understood in the British NHS (independent contractors who work together and own their premises, etc.) in Spain, except in Catalonia.

In terms of ownership, PHC in Spain is to a great extent publicly funded and run. Health professionals are employed within the public system only after passing an entrance examination, through which they acquire a special status similar to that of civil servants. The only public–private mix is the formula of Health Consortia (Associations) used in Catalonia by delegating powers to private companies within certain geographic areas (see Chapter 4 on regulation for further analysis). Data from household surveys point to the existence of non-negligible private practice at PHC level, though no systematic survey of its real size has been conducted. According to the 2004 general health system survey (Ministry of Health and Consumer Affairs 2005a), 69.8% of the population visited a PHC doctor during the period 2003–2004, using public services on average 4.88 times and the services of a private practitioner 3.71 times.

Functions formally assigned to public system primary care teams are comprehensive and cover a broad range of services: general medical care (including children, the adult population and the elderly), diagnostic services, minor surgery, family planning, obstetric care, perinatal care, first aid, dispensing of pharmaceutical prescriptions, certification, 24-hour availability, home visits, ambulance services and patient transport, nursing care for the acute and chronically ill, palliative care, specific services for the mentally ill, preventive services (e.g. immunization, screening) and health promotion services (e.g. health education).

PHC professionals play a gatekeeper role for more specialized services. General practitioners are the first point of contact between the population and the health system; they should screen patients and provide both diagnosis and treatment if appropriate. They may also refer patients on to specialized services if necessary but a referral is not needed for patients wishing to see either an

obstetrician, dentist, or in certain cases an ophthalmologist, e.g. for an eyesight examination, in case of emergency, etc. Patients having received specialist care are expected to return to the primary care physician who then assumes responsibility for follow-up treatment, repeat prescriptions, etc. Nearly all the autonomous communities have developed programmes that include home visits, though not all of them focus on the same health problems or patient groups. For example, in Andalucia "people with specific problems" are those that need home visits by PHC professionals, including those who have recently returned home after leaving hospital, terminally ill patients, or elderly people with more than one pathology and who might be immobilized, etc.

Since the 1986 General Health Care Act came into force, patients have had the right to choose their physician within the health area. This right was extended in 1993 to the choice of physicians working in other health areas, with the sole requisite that the general practitioner chosen would actually accept the new patient on his or her list. Some ACs, however, have developed more detailed patients' choice regulations; in 2001 Andalucia put into force the 206/2001 Regional Decree in which public sector PHC professional salaries are linked to the electronic Individual Health Cards of their patients and a free choice of GP, thus promoting the practical application of the law within the available information system.

In 2001 Spain had some 50 general practitioners per 100 000 inhabitants, one of the lowest figures in the EU and considerably far from the standards prevalent in other nearby countries such as France (160 general practitioners per 100 000), Italy (100 per 100 000) and the United Kingdom (60 per 100 000) (OECD 2005; Ministry of Health and Consumer Affairs 2004). Table 6.2 shows the latest available data on the number of people per GP in each region in Spain in 1996–2001.

In Catalonia, for example, primary care teams were created at the beginning of the reform period in 1986. Sixteen years later, in 2002, a public body (the Institute of Health of Catalonia) is the major provider of these services, responsible for the management of such services in 78% of cases, while in 22% of cases, primary care teams are managed by other providers (Ponsà et al. 2003).

In comparative terms, GPs in Spain tend to bear greater workloads than in other nearby countries, in spite of efforts to increase the infrastructure and personnel in this field. Greater workloads correlate with shorter consultation times. Deveugle et al. (2002) found that of the six European countries examined, Belgium and Switzerland had the longest GP consultation times, while Germany and Spain had the shortest consultation times (Table 6.3).

Table 6.2 Number of inhabitants per GP by region, 1996–2001

Autonomous community	1996	2000	2001
INSALUD territory			
Aragon	1 353	1 334	1 339
Asturias	1 835	1 771	1 858
Balearic Islands	2 095	2 259	2 478
Cantabria	1 857	1 816	1 814
Castilla-La Mancha	1 489	1 499	1 509
Castilla-León	1 117	1 082	1 082
Extremadura	1 644	1 431	1 429
La Rioja	1 497	1 511	1 564
Madrid	1 935	2 033	2 086
Murcia	2 082	2164	2 255
AC with devolved powers before 2002			
Andalucia	2 138	1 443	1 698
Canary Islands	2 237	2 252	2 322
Catalonia	2 079	2 276	2 327
Valencia	2 066	1 989	2 048
Galicia	1 887	1 738	1 602
Navarra	1 685	1 794	1 837
Basque Country	2 139	2 142	2 014

Sources: Ministry of Health and Consumer Affairs 2004; elaboration on own data and ACs' reports.

The frequency of visits to the doctor or use of GP services in Spain in 2001 was on average 5.5 visits to a GP per inhabitant per year, with a range from 3.7 to 8.5 visits, depending on the autonomous community, and 5 visits on average to a paediatrician per year. In terms of workload, the number of visits received per professional per day in PHC for the country as a whole is 25.4 visits for GPs, 15.94 for paediatricians and 28 visits per day for nursing staff (including activities such as dressing wounds, injections, etc.) (Ministry of Health and Consumer Affairs 2004).

Table 6.3 Length of consultation with GP

Country	Mean time in minutes (SD)
Germany	7.6 (4.3)
Spain	7.8 (4.0)
United Kingdom	9.4 (4.7)
Netherlands	10.2 (4.9)
Belgium	15.0 (7.2)
Switzerland	15.6 (8.7)

Source: Deveugle et al. 2002.

Note: SD: standard deviation.

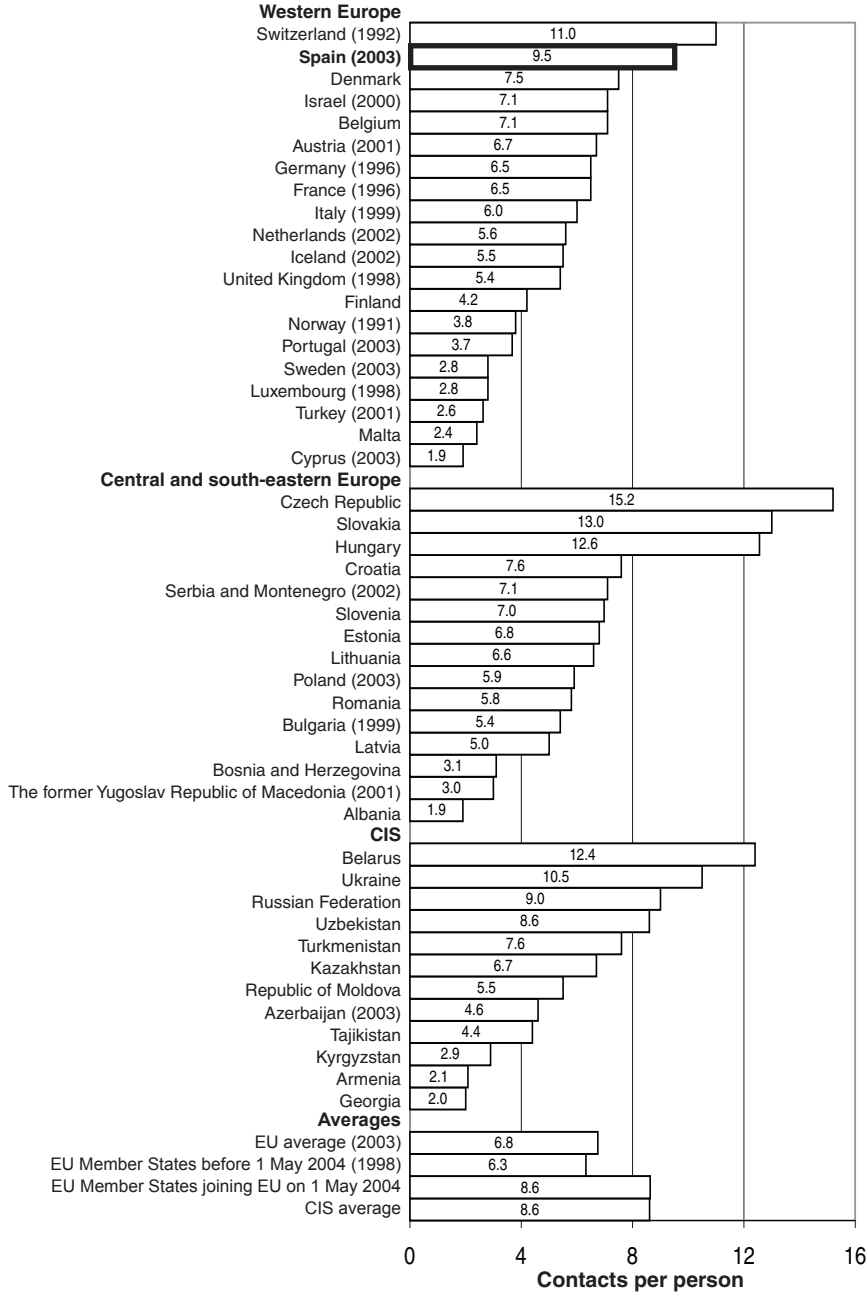
Although the reports from some regional health services do not differentiate home visits from visits to a health centre or unit, the frequency in visits seems to vary substantially from one region to another. In general, regions with a greater workload for family doctors also have a heavy workload for paediatricians. The variability in paediatrician rates between regions is similar to that of GPs, with a coefficient variation of 0.18. If visits to GPs and nurses are compared, the data available suggest that the role played by nurses is not the same in all regions, neither is the distribution of tasks between the two health professions. Some ACs have established in their PHC reform home visits and care as being the responsibility of nursing personnel, which has changed the way this type of care has often been approached. On the other hand, it is not known if the reports on the different regional health services are comparable as in some cases these types of service are referred to as home "visits" and in others as "consultations".

The equity of accessibility and rate of utilization of the primary health care sector markedly differs across different programmes and services. While visits to GPs are more frequent among the lower social classes, the people with higher socioeconomic status use preventive and dental services more frequently. Fig. 6.1 shows outpatient contacts per person in 2001.

Some studies show positive outcomes after 10 years of PHC reform in Catalonia in terms of health, efficiency and satisfaction of the population (Durán et al. 1999); however, comprehensive evaluation of the impact of PHC reforms is missing. This could imply a low political priority given to primary care, which is reflected by a marked bottom-up policy-making system, with GPs taking the lead throughout the reform process. In addition, there is a low proportion of GPs compared to the total number of doctors in Spain. It is true that the lower number of GPs is counterbalanced by higher corresponding numbers of specialized physicians, but this situation is inconsistent with the attempt to tip the balance of the health care system towards the primary level, explicitly embodied in the 1986 General Health Care Act.

A particularly worrying indicator is the high and increasing proportion of patients who enter the system directly through the accident and emergency (A&E) departments of hospitals. According to a General Health System survey, only 30% of emergency hospital admissions were the result of a professional referral in 2003 and 21.5% in 2004. This may reflect a structural and/or managerial problem brought up in the previous literature (European Observatory on Health Care Systems 2000). More than one third of admissions in A&E departments occur during the working hours of primary care centres. Moreover, the main reason behind the decision to access care through a hospital, skipping the PHC "filter", is that 37.3% of the population think that A&E departments are better equipped and solve their problems in a more efficient way, according

Fig. 6.1 Outpatient contacts per person in the WHO European Region, 2004 or latest available year (in parentheses)



Source: European Health for All database, January 2006.

Notes: CIS: Commonwealth of Independent States; EU: European Union; countries without data not included.

to the above-mentioned survey. 32.8% of respondents did not want to wait for their GP referral and did not consider the idea of presenting to a PHC emergency service. Among the possible reasons for high A&E admissions are patients' perceptions of problems with accessibility and efficacy of primary care, a specialist referral system that is perceived to not function well, good quality services provided in emergency, and traditions in society. Finally, there have been substantial practical difficulties in putting the right to choose a physician into effect, linked to the compulsory home visit services for GPs. Since the capitation fee that the GPs receive is rather small compared to the rest of their income components, there is evidence that they tend to reject patients from other health areas.

6.4 Secondary/inpatient care

Secondary/inpatient care is provided in Spain through inpatient hospital services, outpatient ambulatory centres, A&E services, day care hospitals and major ambulatory surgery located in hospitals and the so-called "centres of medical specialties". The public–private ownership mix of hospital services (public, quasi-public, private for-profit and private non-profit-making) is discussed in Chapter 5. As explained there, the key elements of the public network at this level of care were developed during the 1970s and 1980s and have been well maintained, so the specialized health care network is solid and modern.

Across most of the country, both outpatient and inpatient care are formally regarded as functioning at a single level. However, the Francoist government placed emphasis on ambulatory specialized care, with specialist doctors fully dedicated to outpatient care in ambulatory clinics (what could be called "model 1"). This is the reason why the prevalent mode of specialized service provision varies across autonomous communities and hospitals in Spain. In some cases, this traditional model is still prevalent. These specialized ambulatory health centres usually have a medium level of equipment (e.g. they have radiology and ultrasound services, equipment to carry out lung function tests, dry chemical strips for testing urine and glycaemia in emergency cases, and an electrocardiograph, but they are not necessarily clinical analysis laboratories, so samples collected at this level are sent to the nearest hospital laboratory). In other cases (reformed model or "model 2"), the members of specialist teams at the clinical departments of general hospitals rotate to cover outpatient care in the ambulatory clinics included within the same health area. This model was introduced initially by the central government from the late 1980s onwards, followed by some ACs with devolved powers. In both cases, hospitals maintain

their own outpatients visits, which are targeted to those patients referred to the hospital from the ambulatory clinic and, accordingly, correspond to a highly specialized modality of care. The third model, "model 3", exists in some regions, i.e. Castilla-León, where ambulatory centres have been closed and hospital polyclinics have taken over all outpatient specialized care.

The way the system is currently structured has functional repercussions. As already explained in this section, significant coordination problems remain between primary care and specialized care, which are further complicated by the relationship between ambulatory care settings and hospitals. This is true to a varying degree depending on the prevalent model of service provision in each particular area. Under model 1, more specifically, it is more difficult to guarantee adequate coordination between the ambulatory clinic and the hospital, and ambulatory specialists often find it difficult to maintain their professional training standards at the same level as hospital specialists. Under model 2, by contrast, the higher degree of integration ensures that specialized outpatient care is provided by professionals who are effectively linked to the corresponding hospital service, which favours high-quality care. The fact that the members of the hospital clinical team rotate to cover ambulatory services, however, often generates problems regarding adequate continuity of care to each patient.

Hospitals within the system largely confine themselves to acute care and have 24-hour emergency services. They have as a minimum the following basic services: internal medicine, general surgery, core surgical specialties (ophthalmology, ear, nose and throat), orthopaedics, obstetrics and gynaecology, paediatrics, physiotherapy, radiology and laboratories. Larger hospitals, mainly those which are located in the provincial capitals, offer highly specialized services (cardiovascular surgery, neurosurgery, organ transplants, etc.) which would not be cost-effective in smaller areas, dealing with what would be called "tertiary care". Most public general hospitals in Spain are (or can become, after due accreditation) teaching hospitals for the postgraduate level, although medical schools usually work with prestigious hospitals in which undergraduate and postgraduate activities are developed. There are comparatively very few single-specialty hospitals (e.g. maternity, orthopaedics) in Spain and in general, they are integrated into broader hospital complexes (*Ciudades Sanitarias*), with which they share many common services.

In general, all the ACs have at least one general hospital for acute cases with the full range of specialties available and a benefits package that reflects all the most recent medical advances. Access to these services is only granted through referral by other specialized health care services and not through referral from general practitioners. This implies that patients in need of hospital care have to go through three levels of care (GP, ambulatory specialists and hospital physicians), which are not always well coordinated. Duplication of

clinical records and diagnoses is actually far from rare, generating considerable economic inefficiencies, delays in treatment and discomfort for patients. As also indicated, another important problem here is the high number of emergency hospital admissions: 60% of total hospital discharges correspond to patients who entered the hospital through the accident and emergency department.

Although public secondary and tertiary care services are different in size and complexity, central legislation issued during the 1980s requests that all services be organized according to the same principles with a medical director, a nursing director and an administrative director, all hierarchically subordinated to the general manager, who directly reports to the corresponding regional authorities. The methods of providing hospital services under the statutory system (i.e. excluding the voluntary insurance system) are explained in Chapter 3 where the process of transition from the integrated method (directly employed) to the contracted (indirect) method is addressed.

Private hospitals, as indicated in Chapter 5, are usually smaller than public ones and have different levels of technology and varying structures.

The most frequent diagnoses per age group in Spanish hospitals are shown in Table 6.4.

Hospital activity in 2001 within the NHS amounted to 107 inpatient entries per 1000 inhabitants, with an average stay of nine days in 2000 (the latest year found for disaggregated data per autonomous community was 2000, although some information studying the divergence among regions is given in the 2003 Annual Report of the Spanish NHS based on 2001 data). There is a slight increase in total surgical activity (10.5%) if 1997 and 2000 figures are compared. In recent years hospitals have undergone a shift towards ambulatory care, increasing major ambulatory surgery from 10.4% of total interventions in 1997 to 16.4% in 2000. Outpatient hospital care has suffered an even bigger increase (917.2 per 1000 inhabitants in 1993 compared to 1589 in 2000). Some surgical interventions, such as cardiac catheterization and coronary stenting have increased notably in just a few years. Autonomous communities present important divergences both in hospital utilization rates and in the use of some procedures as shown in Table 6.5. Detailed data on procedure divergences can be found in the 2003 Annual Report of the Spanish NHS (Ministry of Health and Consumer Affairs 2004).

The organization called Red IRYSS is an integrated network of 18 centres located in seven ACs and with a mission to coordinate and encourage investigation of health services. This organization regulary publishes reports on variations of clinical practice among ACs, e.g. *Atlas de Variaciones en la Práctica Médica* (IRYSS 2005).

Table 6.4 Most frequent diagnoses in acute hospitals of the National Health System, by age group, 2002

Diagnosis code	Diagnosis	Number of cases	Average stay (days)
	Age under 1 year		
V29.0	Under observation due to suspected infectious disease	8 653	2.9
466.11	Bronchiolitis due to respiratory syncytial virus	7 560	6.1
466.19	Acute bronchiolitis due to other infectious elements	6 971	5.4
765.18	Neonates before expected date between 2000 and 2499 g	6 088	10.9
774.6	Newborn/fetal jaundice without further specification	4 982	3.1
	Age 1 to 14 years		
558.9	Non-infectious/non-specified gastroenteritis/diarrhea	7 668	3.0
540.9	Acute appendicitis without mention of peritonitis	7 659	4.2
474.12	Adenoids without further specification	6 127	1.4
486	Pneumonia, infecting organism not specified	5 954	5.8
474.10	Tonsils with adenoids	5 338	1.7
	Age 15 to 44 years		
650	Normal birth	65 532	2.7
658.11	Preterm premature rupture membranes (PPROM). Birth with or without pathology	33 770	3.3
645.11	Post-term pregnancy, with or without further antenatal specifications	29 764	3.1
632	Failed abortion	24 116	1.7
540.9	Acute appendicitis without mention of peritonitis	17 206	3.6
	Age 45 to 64 years		
V58.1	Maintenance chemotherapy	13 363	4.6
550.90	Inguinal hernia without obstruction or unilateral gangrene	11 946	2.2
414.01	Coronary atherosclerosis. Native coronary artery	11 504	7.3
491.21	Acute exacerbation of chronical obstructive bronchitis	9 741	9.2
454.9	Varicose veins	8 622	1.6
	Age 65 to 74 years		
491.21	Acute exacerbation of chronical obstructive bronchitis	22 047	9.7
414.01	Coronary atherosclerosis. Native coronary artery	11 378	9.1
366.9	Cataracts without further specification	10 798	1.1
71536	Osteoarthrosis, localized in a leg, not specified whether primary or secondary	10 635	10.4
486	Pneumonia	10 222	10.4
	Age 75 years and over		
491.21	Acute exacerbation of chronical obstructive bronchitis	32 519	9.4
428.0	Congestive cardiac insufficiency	25 404	9.8
486	Pneumonia	21 103	10.3
366.9	Cataracts without further specification	14 912	1.0
820.20	Closed fracture of the neck of the femur	12 330	14.6

Source: Ministry of Health and Consumer Affairs 2004 based on the CMBD for 2002.

In general, hospital care in Spain is satisfactorily assessed by the population and it indeed enjoys a higher degree of social prestige than PHC. However, improvement in care in PHC is perceived as higher than in hospitals, as can

Table 6.5 Hospital utilization rates between autonomous communities, 2001[a]

	Max./Min.	Variation Coefficient
All diagnoses	1.50	0.11
Malign tumours	1.83	0.17
Mental disorders	2.00	0.20
Eye diseases	4.76	0.39
Circulatory diseases	1.68	0.14
Cerebrovascular disease	2.00	0.18
Respiratory disorders	1.92	0.15
Urinary disorders	2.20	0.17
Osteoarticular and conjunctive tissues diseases	2.79	0.29
Fractures	1.99	0.15

Source: Ministry of Health and Consumer Affairs 2004, based on 2001 Hospital Morbidity Survey.

Note: [a] Entries are assigned to the autonomous community where the patient lives, not to the location of the hospital.

be seen from Table 6.6, based on the most recent health barometer at the time of writing.

The higher assessment of hospital care is particularly true regarding specific sectors, such as organ transplantation, in which Spain enjoys a leading position worldwide (Matesanz and Miranda 2002). Cadaveric organ donors increased in number from 550 in 1989 to 1334 in 1999, a 142% increase; cadaveric kidney transplants from 1021 to 2005 (96% increase); and total solid organs transplanted from 1302 to 3330 in 10 years (156%). The rates of cadaveric organ donation per million inhabitants (33.6) and of kidney and liver transplantation (50.6 and 24.2) in particular are the highest in the world.

Despite the image of quality and success, a number of challenges have been identified in specialized care in Spain. The first is related to the "jobs-for-life" relationship between hospital staff and the state and the relatively young age

Table 6.6 Trends in user satisfaction in different levels of care, in %, 2003–2004

	2004			Variations since 2003			
				Absolute		Relative	
	Improved	Worsened	No change	Better	Worse	Better	Worse
PHC	51.7	4.5	36.4	1.03	-0.71	2.00	-13.6
Outpatient specialized care	44.4	5.7	38.2	3.75	-0.83	9.23	-12.7
Hospital care	47.0	4.8	36.4	2.95	-0.90	6.70	-15.8

Source: Calculated from *Barómetro Sanitario 2004* and *Barómetro Sanitario 2003*, Ministry of Health and Consumer Affairs 2005a.

structure of hospital staff; this could lead to productivity problems and difficulties regarding career opportunities. The second is linked to the devolution of health services to the regions which has led to decentralized planning and strategizing of services with a regional scope, perhaps at the expense of a balanced picture at countrywide level (the usual way in which the regional governments have faced the "completion" of their health services map has been the creation of rather small "district" hospital facilities – around 200 beds – sometimes with low occupancy rates). A particularly arguable consequence of regional-level planning is thus the loss of economies of scale. The disaggregate planning and purchase of technology may diminish the advantages that a certain technology to population ratio would offer in terms of cost-containment and research (see Chapter 5 on physical and human resources). An additional challenge is related to large numbers of tourists visiting Spain every year and therefore contributing to increased health expenditure.

6.5 Pharmaceutical care

6.5.1 The pharmaceutical sector

The financing and organization of the pharmaceutical sector are outlined in Chapter 3 and Chapter 5. This section describes additional aspects, with emphasis on the delivery of the pharmaceutical service to the population.

As already mentioned, the public sector in Spain is mostly involved in regulation and funding, whereas the manufacture and distribution (i.e. by manufacturers, importers, wholesalers and pharmacies) of pharmaceuticals are in the hands of private bodies. The main actors of the pharmaceutical sector are set out below.

- *Pharmaceutical industry*: there were approximately 377 private companies in 2002 (manufacturing laboratories) in Spain, supplying medicines to the National Health System (including specialist drugs and anti-allergy immunizations); trends on the number of pharmacists are reported in Chapter 5 on physical and human resources.
- *Wholesalers* and *privately-owned pharmacies*: according to the Spanish Pharmaceutical Distribution Companies Association (FEDIFAR), in 2002 there were 191 wholesaler storage facilities that belonged to 99 wholesaler companies supplying drugs to pharmacies. Pharmacies are in charge of preparing and dispensing prescriptions as issued by the system's physicians. The law requires that pharmacies must be owned by a qualified pharmacist

and the number of pharmacies is determined by central planning. According to the Official Professional Association of Pharmacists, in 2003 there were 20 384 pharmacies in Spain; all of them have agreements with the public National Health System. Table 6.7 shows the number of pharmacies by autonomous community.

- *National Health System prescribing physicians*: these are present in both primary and specialized health care and they prescribe publicly financed pharmaceutical products by official prescription. The issuing of publicly funded medicines, the existence of negative lists, generic drugs and generic substitution are discussed in Subsection 5.1.4 on pharmaceuticals.
- *Health authorities*: at both national and autonomous community level, health authorities take on a range of regulatory responsibilities. As explained in Chapter 5, a series of strict regulations govern the licensing of pharmaceuticals and market access. Governmental authority over pharmaceuticals can be divided into three levels (central state, autonomous community and regional health services) with the relevant health authority taking charge at the appropriate level.

Table 6.7 Number of pharmacies and number of people per pharmacy by autonomous community, 2003

Autonomous community	Number of pharmacies	Pharmacy/population
Andalucia	3 494	2 177
Aragon	682	1 804
Asturias	443	2 427
Balearic Islands	388	2 442
Canary Islands	692	2 738
Cantabria	239	2 300
Castilla-La Mancha	1 155	1 572
Castilla-León	1 550	1 605
Catalonia	2 935	2 284
Extremadura	677	1 586
Galicia	1 264	2 176
Madrid	2 706	2 113
Murcia	540	2 350
Navarra	527	1 097
Valencia	2 057	2 173
Basque Country	807	2 617
La Rioja	146	1 968
Ceuta	23	3 258
Melilla	23	2 977
National	**20 348**	**2 099**

Source: Organización Farmacéutica Colegial (Spanish General Council of Pharmacists and Pharmaceutical Associations) 2005.

- *The state*: as a central actor, the state regulates and authorizes clinical trials; issues marketing authorizations for pharmaceuticals; controls the advertising of drugs and health care products directed towards the general population; licenses pharmaceutical laboratories; regulates the quality and manufacture of pharmaceutical products; fixes the price of drugs; sets co-payments; and decides on the inclusion or exclusion of pharmaceuticals on the list of publicly financed medicines. The Pharmaceuticals Act of 1990 forms the basis of pharmaceutical policy in Spain and most legislation regulating the pharmaceutical market has been updated since then in line with the act's requirements. The creation of the National Medicines Agency in 1997 and its effective implementation in 1999 have promoted the diffusion and implementation of guidelines and protocols. Subsection 3.2.1 explains that whereas safety, efficacy and effectiveness are well established as criteria, the use of cost–effectiveness criteria is much more restricted. There has also been some discussion on the potential decentralization of budget management to primary health care centres, with any savings made reverting back to the centres, thus creating incentives to reduce costs. However, these policy proposals are still in initial pilot stages. In addition, programmes on the rational use of medicines have been introduced, including drug therapy guides, treatment protocols and prescription profile analyses. The autonomous communities are in charge of implementing such policies at regional level through regional laws and decrees, thus creating the practical regulatory framework. The regional health services pay the balance of drug costs by reimbursing pharmacies through their professional colleges on a monthly basis (professional colleges are also in charge of computerizing prescriptions).
- *Patients* are the other important player in the pharmaceutical field. Coverage in the public benefits package is explained in Subsection 5.1.4. In reality, only over-the-counter drugs are not covered as part of the public system. Pensioners, people with permanent disabilities and special groups (e.g. AIDS patients) have full access to the subsidized pharmaceuticals of the public system and are fully exempted from pharmaceutical co-payments, whereas the rest of the public has a 40% co-payment for drugs.

6.6 Rehabilitation/intermediate care

Intermediate care is not a well-developed area anywhere in Spain. Intermediate care is distributed among PHC, hospital rehabilitation services and day care centres. However, there is evidence that the key role in delivering these services

is still played by extended family networks. Community care services do not differentiate between specific groups of patients (e.g. mentally handicapped, physically disabled, social cases, etc.) and there are great differences in service coverage and delivery among regions. As an example, the 2003 National Ombudsman Report (Mugica 2003) highlighted the depth of the problems in mental health care networks, especially in the field of rehabilitation, as well as the lack of resources and imbalances in services offered by the different regions.

6.7 Long-term and social care

There is no standard definition of long-term and social care in Spain. The 2003 Law on Cohesion and Quality of the NHS comprehensively defines provision of social care. Nevertheless, the interpretation of these concepts varies significantly among the regions, which in turn implies large variarions in regulation and benefits. Currently, regions are completely responsible for the management and financing of social services in their regions. Many regions have adopted legal acts regarding social and long-term care. Basque Country, for example, approved legal acts on geriatric policy for 1994–2001 and a new strategic plan for 2003–2007 with special focus on social services for patients with chronic diseases (Ministry of Health and Consumer Affairs 2004b).

Lack of coordination between various actors in this area is an important challenge for the Spanish NHS. Regions have opted for diverse options. For example, in Catalonia the network of centres and institutions ensuring coordination for social care was created in 1999. Further legislation in 2000 stipulated the establishment of the deparment of social care. In Navarra, there are two different organizational structures for health and social care. The position of coordinator of the plan for social care has recently been established within the framework of the General Department of Public Health.

The efforts to improve integration of health and social services in long-term care provision also take place at central level and include the establishment of some coordination systems between the Ministry of Health and the Ministry of Labour and Social Affairs. In addition, the Interterritorial Council of the NHS set up a "Long-term Care Commission" in the NHS that produced a draft document in 2001 setting the basis for a long-term and social care model (Ministry of Health and Consumer Affairs 2001).

At the end of December 2005, the government approved a preliminary draft law on long-term care which states that no citizen will remain uncovered by the system. It establishes some bases for progressive co-payment depending

on income and wealth. Although it is a huge step forward in the regulation and widening of coverage of long-term care, the government bill raises some doubts on the effort required to deploy service provision induced by the draft law. Major reforms in long-term social and health care service provision infrastructures are considered a must among the professional associations.

Social services, as mentioned earlier, are managed by the autonomous communities, whereas home care services (SAD) are managed at local municipal level. Some studies (Navarro 2001) have argued that the main characteristic of long-term care in Spain is its limited development. Along with the rest of the family care policies, the degree of coverage is very low and the issue is gaining importance in the public agenda. According to a previous study, the number of people who needed social care in Spain (including the elderly and adults with some kind of dependence) was approximately 1 166 643 in 1999. Some 203 913 were covered in that year by some kind of services (home care, residence in social care centres with economic subsidies). Within this group, 98 965 were the elderly receiving home care (Rodríguez Cabrero 1999).

More recent studies by the Observatory for the Elderly of the Social Services and Migrations Institute of the Ministry of Labour and Social Affairs indicate that the situation has been improved by 2004, though it is far from covering the needs of the population (Sancho Castiello 2005). According to the report the number of the population covered by some kind of home care service (whether domiciliary or telephone assistance) was 377 717; 33 709 attended day care premises; and 275 113 received residential care.

Other types of social services exist for people in need, including the elderly. Aznar López (2000) summarizes the services delivered by the public sector.

- Economic subsidies for people in need of continuous care: a contributive pension in case of a high degree of disability and a complementary subsidy for the non-contributive disability pension.
- Non-economic services: social home care services (home visits, tele-care) and intermediate services (day care premises, tutelary housing, temporary residence in social care centres).
- Subsidies for informal care providers: the contributive pension for people with a high degree of disability is explicitly designed for the informal provider of care. A subsidy designed for descendants and siblings of retired or disabled pensioners also exists.
- Taxation measures: these include tax deductions on personal income tax, as well as some VAT exemptions.

In historical terms, one of the first elements in understanding the main obstacles to coverage for dependent people is the difference between the social security subsidies framework and the care services delivered by social affairs departments. The economic subsidies are regulated by the social security system, and thus are under common law and centrally managed. As a matter of contrast, social care services are not under such clear regulation. The unequal access to services perhaps reflects the existence of different levels of power (central, regional and local), as well as issues of decentralization and lack of coordination. A second element in both types of coverage (social security subsidies and social affairs care service delivery) would be the lack of a generic concept of coverage for dependency, independent of a permanent disability situation, and thus with its own entity not linked to production, age, and previous income or economic means. Third, those older than 64 cannot access disability subsidies (in fact, most cases of dependency originating after that age are left out of the system).

All these factors help to explain the low coverage in Spain of the home care services, both in terms of the amount of people covered and the number of average weekly hours of care delivered. In 2001 the ratio of SAD coverage among the elderly was only 1.4%, while the average weekly hours of care per person delivered was 4.7. According to the previously mentioned report by the Observatory for the Elderly, the ratio of coverage had increased up to 3.14% by 2004.

Table 6.8 shows the territorial distribution of coverage of the different types of services as well as the monthly intensity in hours. Coverage ranging from 1.67% to 7.41% for SAD, from 0.43% to 4.68% for 'phone assistance, from 0.18% to 0.95% for day care centres and from 6.12% to 14.09% for residential services show important differences that should be addressed.

The median projection shows that public health expenditure will increase by about 40% by 2050, which is an average annual increase of 0.74%. There is a 10% chance that the expenditure will increase by more than 60% during the projection period, which corresponds to an annual increase of 1.1%. The main part of the increase in total expenditure is driven by the increase in the average per-capita expenditure due to ageing. The average per capita increases by 33%, from €980 in 2004 to €1307 in 2050. One factor that could reduce the expenditure pressure in the future is that with the decreasing mortality rate there will be fewer people in their last years of life. This, combined with the fact that a major part of health expenditure is driven by descendants, could reduce future health expenditure. Our estimation suggests that distinguishing hospital costs by survival status could somewhat reduce (by about 8%) total hospital expenditure in 2049 (Ahn et al. 2005).

Table 6.8 Hourly intensity and coverage ratio of home care services (SAD) and other services by autonomous community per month, 2004

Autonomous community	Monthly intensity (hours) of SAD	Coverage ratio				
		SAD	'Phone assistance	Day care centres	Residential services	Total
Andalucia	8.00	3.48	1.79	0.33	2.84	8.45
Aragon	10.00	3.07	2.66	0.34	4.46	10.54
Asturias	13.00	3.26	1.76	0.37	4.06	9.44
Balearic Islands	12.80	2.09	1.89	0.24	2.84	7.06
Canary Islands	10.00	2.69	0.62	0.23	2.89	6.43
Cantabria	20.53	1.92	0.48	0.35	4.01	6.77
Castilla-León	19.00	3.12	2.54	0.35	6.12	12.13
Castilla-La Mancha	19.24	4.87	3.93	0.24	5.06	14.09
Catalonia	14.00	3.87	0.79	0.95	4.37	9.98
Valencia	10.82	1.67	1.87	0.25	2.52	6.31
Extremadura	22.00	7.41	1.34	0.44	3.68	12.87
Galicia	29.00	1.91	0.67	0.18	2.08	4.84
Madrid	16.85	3.37	4.57	0.70	4.56	13.20
Murcia	17.00	1.76	1.35	0.42	2.25	5.79
Navarra	8.76	3.56	4.68	0.38	5.32	13.95
Basque Country	25.00	1.77	2.26	0.55	3.90	8.48
La Rioja	13.00	3.41	1.25	0.48	4.71	9.86
Ceuta	22.00	3.44	0.43	0.30	1.67	5.84
Melilla	21.20	3.15	2.97	0.34	2.72	9.18
Spain	**16.43**	**3.14**	**2.05**	**0.46**	**3.78**	**9.43**

Source: Sancho Castiello 2005.

6.8 Palliative care

In December 2000, a National Plan for Palliative Care was approved. It established that the health care structure must give an appropriate response to terminal patients. However, it never became operative, but one of the objectives of the National Quality Plan for the NHS in 2006 is to reactivate it. The proposed strategies benefit from the reprofiling of existing resources instead of generating new ones. The existing health care network assumes responsibility for the provision of palliative care, enhancing its response capacity through training, teamwork and shared (formal plus informal) care (Ministry of Health and Consumer Affairs 2001a). In 2000 there were around 2000 professionals (most of them nurses) working in palliative care in Spain (Centeno 2000).

According to the Pallium project, a study funded by the European Commission reviewing the concepts of palliative care and related policies in seven western European countries, developments in palliative care in Spain did not start as a grassroots hospice movement as in most other countries, but were initiated by the national health care system, as pioneering centres located in tertiary care hospitals.

Table 6.9 gives an idea of the state of palliative care services in those seven western European countries, including Spain, in 1999.

Table 6.9 Palliative care in western Europe and in Spain, 1999

	Belgium	Germany	Italy	Netherlands	Spain	Sweden	UK
Population (millions)	10.1	81.9	57.4	15.6	40.0	8.8	57.1
Inpatient hospice	1	64	3	16	1	>69	>219
Inpatient unit	49	50	0	2	23		
Hospital and nursing home teams	55	1	0	34	45	41	336
Home care	45	582	88	286	75	67	355
Day care	2	9	0	0	0	13	248

Source: Ten Have and Janssens 2001.

More recent data can be found at the Spanish Society for Palliative Care (SECPAL) web site. SECPAL provides a directory of palliative care services that is periodically updated. According to the directory, there are 126 palliative care units in hospitals and 140 domiciliary units. It also reveals important diferences between autonomous communities. Table 6.10 shows the distribution of units per region.

As can be seen in Table 6.10, Catalonia shows the most developed palliative care networks. It provides not only higher coverage but also deeper integration of palliative care in the whole health care system.

6.9 Mental health care

Mental health care has traditionally been one of the most neglected aspects of the Spanish health system. Historically there has been a pronounced over-reliance on hospitalization for chronic psychiatric cases, inadequate provision of outpatient care and a notable lack of social health care resources. There has also been an excess of division of responsibility for services among various

Table 6.10 Palliative care units per autonomous community, 2005

Autonomous community	Hospital units	Domiciliary units	Population
Andalucia	21	18	7 849 799
Aragon	2	5	1 269 027
Asturias	3	3	1 076 635
Balearic Islands	3	3	983 131
Canary Islands	7	2	1 968 280
Cantabria	1	2	562 309
Castilla-La Mancha	1	6	2 510 849
Castilla-León	10	10	1 894 667
Catalonia	54	44	6 995 206
Valencia	2	8	4 692 449
Extremadura	1	7	1 083 879
Galicia	3	3	2 762 198
Madrid	8	16	5 964 143
Murcia	0	3	1 335 792
Navarra	3	1	593 472
Basque Country	6	3	2 124 846
La Rioja	1	4	301 084
Ceuta and Melilla	0	2	140 764

Sources: SECPAL 2006; INE 2006.

public administration bodies and a lack of coordination among parallel networks providing care in this field. With this background, in the 1970s several mental health care teams in some provinces began to promote on their own initiative a community-centred approach to mental health care, creating special units in sharp contrast with the existing psychiatric hospital-centred "mental health network". The increase in the demand faced by those teams was almost automatic signalling the existence of severe unmet need within the community (García et al. 1998; Lara 2005).

In response to the very real problems detected, the Ministerial Commission for Psychiatric Reform was set up in 1983, which drafted a document laying down the framework and broad criteria for reforming psychiatric services. The General Health Care Act (1986) then went on to confirm that mental patients should be treated as users of worth equal to the rest of the population and made provision for the integration of mental health within the general health care system.

As the autonomous communities received the transfer from the central state of powers and resources in the health field, some of them established mental health teams (with different denominations), usually made up of a psychiatrist,

a psychologist, a nurse and a social worker. Some specialized psychiatric units were created within the general hospitals networks. Asturias, Andalucia and Navarra were pioneers in this field, albeit using different approaches. Since the early 1980s and the early days of the health system reform in Spain after Franco's death, special PHC programmes on mental health have been progressively created within the INSALUD territory (although mental health care was not explicitly included in the benefits package). The programmes included mental health units (USMs) served by a psychiatrist, a psychologist and a nurse. Only in 1995, when the wider health system's benefits were fully regulated, was the content of mental health care and psychiatric care defined. Clear legislation is now in place to protect those with mental health problems and to ensure access to services, including: diagnosis and clinical follow-up; treatment; drug therapy; individual, group or family psychotherapy; and, where applicable, hospitalization of acute cases.

According to the 2002 Mental Health Care Assessment National Report (Ministry of Health and Consumer Affairs 2002), the degree of integration of public and private services provision resources within the public network was high, but far from homogeneous. Table 6.11 shows the degree of integration and the consolidation of different public networks (provincial, regional, etc.) within a single network in 2002.

The psychiatric system has thus been integrating its resources, creating mental health centres, extending the number of psychiatric day care units and allowing for the hospitalization of acute cases in general hospitals, while reducing beds in psychiatric hospitals. New beds have also been created in general hospitals and other locations, such as tutelary homes and residential premises, etc. Efforts have been made to coordinate action among the different levels of the health system and the various public networks, based on the following priority measures:

- training of PHC professionals in handling and evaluating mental disorders, thus guaranteeing the care of psycho-emotional disorders at this level;
- encouraging general hospitals to admit cases of acute mental disorders;
- establishing coordination systems and integrating these with health and social services;
- facilitating community care and rehabilitation of psychiatric patients in their normal environment;
- promotion of social care and occupational integration (only in some ACs);
- increasing the coordination of different public networks which care for the mentally ill, in order to make their work more effective.

Table 6.11 Degree of integration within the public of the mental health care network per autonomous community, 2002

Autonomous community	Degree of integration in the public network	Consolidation	Rank of mental health regulation
Andalucia	X	1991	L
Aragon	P	1986	A
Asturias	X	1986	A
Balearic Islands	P	1997	A
Canary Islands	X	2000	A
Cantabria	X	2000	A
Castilla-La Mancha	P	1987	A
Castilla-León	X	1989	D
Catalonia	I	1999	D
Valencia	P	2000	A
Extremadura	O		
Galicia	X	1998	
Madrid	X	1997	A
Murcia	X	1993	O
Navarra	X	1986	
Basque Country	X	1985	
La Rioja	X	1986	A
Ceuta	X		
Melilla	O		

Source: Ministry of Health and Consumer Affairs 2002.

Notes: X: completely integrated network; P: partially integrated; I: an integration plan exists; N: no mental health care network exists; L: Regional Law; D: Regional Decree; O: Order of the Regional Ministry of Health; A: by agreement between the networks.

Regarding the safeguard against inappropriate compulsory treatment and/or detention, the 13/1983 Law expressed that any compulsory treatment or hospital admission should be mandated by a judge. When very urgent treatment is needed, 24 hours is the maximum time limit allowed in order to obtain judicial approval; otherwise the will of the patient should be respected and the usual procedure for a judicial request should be followed. No legal obligations are imposed on the families unless a judge declares a patient to be dependent and unable to decide on his/her own (in which case a tutor is designated by the judge). Some ACs (Andalucia, Madrid, Asturias, Basque Country) have promoted initiatives to create tutelary non-profit-making institutions, but the level of development and implementation of those initiatives is uneven. There is an increasing movement of informal carers' associations (mainly comprising relatives) and some mentally ill groups are beginning to create their own patients' associations, though the phenomenon is at a very early stage of development.

A study conducted in the 1990s by the Ministry of Health reported the following figures and trends within the sector: in 1996 there were 555 mental health care outpatient centres (477 in 1991), with an average coverage rate of 70 757 inhabitants per centre (79 061 in 1991) and a utilization rate of 92 annual visits per 1000 inhabitants (53 in 1991).

Regional differences were significant, with coverage rates ranging from 139 333 inhabitants per centre in Madrid to 35 676 inhabitants per centre in Basque Country, and utilization rates ranging from 238 annual visits per 1000 inhabitants (Basque Country) to 13 per 1000 (Castilla-La Mancha). In addition, there were 145 (inpatient and outpatient) psychiatric day care units in 1996, which offered 3916 places (or 11 places per 100 000 inhabitants). Comparison is actually difficult, owing to the differences in human resources allocation across health care centres.

For inpatient care, the transition from psychiatric to general hospitals meant that psychiatric beds within general hospitals increased from 2107 to 2407 during the period, while the number of beds in psychiatric hospitals decreased from 1694 to 1564. As reflected in utilization rates, the productivity of general hospitals was considerably higher (1.4 per 1000 inhabitants versus 0.5 per 1000 in psychiatric hospitals), partly due to shorter lengths of stay (16 versus 25 days). These figures correspond to the main hospital psychiatric network. In addition, there was a special network of care for those patients requiring very long hospital stays due to particularly severe conditions. The number of beds located within these special hospital units decreased from 20 040 in 1991 to 13 226 in 1996.

Psychiatric consultations differ from other specialties by having a higher successive/first consultation ratio. This is obviously so because mental health problems are chronic by nature and the solution can take a long time and more than one visit. Standards that can define the optimum value of such a ratio simply do not exist. It would therefore be useful if mental health information systems could distinguish between new patients and returning patients for a first consultation after a new symptom or cause has occurred. Also, the way regions have approached psychiatric care is very diverse and information systems are for the most part in the early stages of construction, which makes interregional comparisons nearly impossible. Some regions are strongly promoting information systems such as the Cumulative Registry of Psychiatric Cases in Murcia (initiated around 2000), the Mental Health Information System in Andalucia and the one in Asturias (both initiated in the early 1980s). Other regions such as Galicia are still in the strategic design phase.

In October 2002 the Ministry of Health and Consumer Affairs published a report on mental health in the autonomous communities. It was based on

the answers to an open questionnaire distributed to the regions regarding the resources devoted to mental health care services provision. It does not contain detailed quantitative data on the number of visits, frequency, etc., although it mentions that the amount of visits varies considerably between regions (a frequency in some regions three times higher than in others). In any case, the report provides a useful insight into understanding the situation and highlights important outstanding deficiencies in infrastructure and human resources, in quantity and quality, and in organizational issues.

The demand for mental health care seems to have increased over time, mainly regarding visits to the doctors (Márquez y Meneu 2003). The current number of visits to psychiatric specialists in Galicia is similar to the total amount of these kinds of visits in the whole INSALUD territory in 1988 (at that time the only devolved autonomous communities were Catalonia, Andalucia, Valencia and Basque Country), a fact that shows extremely well how the demand has increased. The amount of adult psychiatric patients per 1000 inhabitants that attended USMs in 2002, excluding special programmes, was 32.9 in Basque Country, 30.7 in Navarra and 22.8 in Andalucia (but these figures underestimate the real attendance because the calculations are based on the total population, including children as denominators, owing to the absence of a common minimum age between programmes in different ACs).

As indicated, there are strong differences in mental health subprogrammes across autonomous communities. For adult USM patients treated outside of hospital, the ratio is 17.7 for Navarra and 14 for Basque Country, while it is 4.5 in Andalucia and 5.7 in Galicia (the ratio is an average number of patients with mental disorders per 1000 inhabitants). When considering children and teenagers the ratio is much higher (7.5 in Galicia, 8.4 in Andalucia and 31.2 in Navarra). The ratio is also high in outpatient care in acute hospitals and external units. In Galicia, adding children and teenagers to the equation almost doubles the USM ratios, perhaps indicating that hospital pathologies are more persistent.

In Murcia, in 2002, the most frequent adult diagnosis was neurosis (41.6% of the total amount of first visits and 30% of all the visits, followed by affective disorders with 20.6% of first visits). As already mentioned, it is useful to distinguish between first and repeating visits. The Basque Country mental health information system reflects that 27.3% of patient visits in 2002 were first visits. Approximately 30% of first visits are caused by a new episode. However, the Murcia mental health information system only considers as first visits those in which the patient is introduced for the first time in the system, thus not being able to provide information on new episodes if they occur within the first six months after the last episode visit. Comparison between autonomous communities can only provide estimates.

A more recent study by the Spanish National Association of Neuropsychiatry (AEN) published in December 2003 (AEN 2003) provided the data shown in Table 6.12 on the number of teams and their potential workloads, organized by autonomous community. Table 6.13 shows details of care activity per 1000 people in 2003, across the various ACs.

Table 6.12 Number of adult mental health care teams and population of reference, 2003

Autonomous community	Number of teams/centres	Team or centre/population
Andalucia	71	101 703
Aragon	20	52 722
Asturias	15	69 670
Balearic Islands	8	95 825
Canary Islands	17	101 067
Cantabria	6	70 757
Castilla-La Mancha	21	65 754
Castilla-León	37	68 056
Catalonia	68 +10 peripheral premises	71 200
Basque Country	37	49 181
Extremadura	14	76 357
Galicia	35	67 116
Madrid	36	160 579
Melilla	1	63 000
Murcia	14	85 027
Navarra	9	61 758
La Rioja	5	56 646
Valencia (2002)	62	117 000

Source: Spanish National Association of Neuropsychiatry (AEN 2003).

In summary, there has been a shift away from institutional care to community care and a change in the organizational structure of mental health care services, meaning that they now are better integrated with other health and social care services. The main challenges faced by the system are the lack of alternatives to institutionalization and the shortage of community care resources. Although it should be highlighted that the mental health networks make a real effort to meet the increasing demand with the resources available, it is clear that this eventually will lead to serious distortions. According to some future perspectives, in several ACs the adult USMs are reaching or have reached saturation point. PHC-level work, GP sensitization programmes and the partial absorption of the previous neuropsychiatry workload have influenced the process, but it has not been followed by a corresponding human resources increase. A report on

Table 6.13 Care activity (adult care) per 1000 inhabitants, 2003

Autonomous community	1st visits	2nd visits	Total consultations
Andalucia	12.20	78.20	90.40
Aragon	8.77	63.19	71.96
Asturias	–	–	–
Balearic Islands	15.79	77.33	97.20
Canary Islands	14.63	105.40	120.03
Cantabria	–	–	–
Castilla-La Mancha	11.60	50.50	62.10
Castilla-León	13.33	84.95	102.80
Catalonia	9.61	127.00	137.00
Basque Country	9.19	195.40	208.79
Extremadura	8.36	35.38	44.21
Galicia	15.30	86.40	101.70
Madrid	8.43	118.30	126.73
Melilla	19.00	41.00	60.00
Murcia	14.90	79.90	99.00
Navarra	8.70	165.70	174.40
La Rioja	17.25	103.61	120.86
Valencia (2002)	16.00	102.60	118.60

Source: Spanish National Association of Neuropsychiatry (AEN 2003).

Catalonia regarding the implementation of a decree on the public mental health network (AEN 2001) warns that the increase in demand has largely surpassed the increase in the mental health network premises. Important elements that can explain part of the increasing demand in some ACs include the improvement in access and the fact that mental illnesses are progressively losing their social stigma, meaning that a previously existing but not previously expressed demand is emerging.

There are also major concerns about the uneven development of psychiatric reform in the autonomous communities and the ongoing difficulty of coordinating health and social services in this area. Programmes and educational initiatives to tackle discrimination and social exclusion are scarce.

7 Principal health care reforms

7.1 Analysis of recent reforms

The objectives of the health reforms of the 1980s were to extend and rationalize the public health sector and improve coverage and access to health care services, while the focus of reforms during the 1990s was on cost-containment. The health system has undergone considerable development since 1986. The period 1987–1991 witnessed rapid growth in public health care expenditure owing to increased physician salaries and extended coverage. During the late 1980s and the 1990s, most of the reforms prescribed by the General Health Care Act were progressively implemented (Table 7.1). Rural primary care, and hospitals which belonged to local governments and universities, were gradually integrated along with the social security centres into a single public network within each autonomous community. During the 1990s concerns dominated regarding the expenditure growth, increasing waiting lists, user dissatisfaction and the lack of incentives to implement reforms. The general economic crisis, public budget deficit and the Maastricht Treaty, along with the above-mentioned concerns, forced the Spanish Government to introduce the *Programa de Convergencia* (Convergence Programme) for the health sector, which set out proposals for structural and management reforms.

The reforms during the 1990s focused on the organizational and managerial improvements within the extended public sector emerging from the reforms of the 1980s. A commission was appointed in 1990 to evaluate the main problems and formulate proposals. The report of the committee in 1991 (*Informe Abril*) included a number of cost-containment and organizational proposals. However, a sudden outburst of public opposition to the report arose, owing to the perception that it aimed to privatize the health system. The first reaction to such opposition was the official announcement by the government in 1992 that the conclusions

of the report would never be implemented. Nevertheless, later on in the 1990s some proposals were effectively introduced in regional and central legislation, such as changes in the organization and management of hospitals, innovative contracts and prospective payment systems, measures to contain pharmaceutical costs and increased roles of private management and ownership within the public health care sector.

In 1996 a parliamentary commission was created in order to review the health care system and formulate proposals. In 1997, a law on the self-governing status of health care centres was approved. The report of the parliamentary commission was approved in December 1997 and included some vague recommendations, e.g. to facilitate new management methods and to ensure the quality and promotion of service provider competition. Two practical conclusions resulted from this process. First, the majority of politicians and the general population in Spain were against radical proposals such as competition among private insurance funds, higher co-payments and a transfer of major public responsibilities to the private sector. Second, the centre-right government made a firm commitment to respect the basic principles of universal access and equity of care, while keeping pro-competitive regulation to a minimum.

Other relevant policy changes during the 1990s, already described throughout, focused on cost-containment. The regional resource allocation system was reformed for seven of the ACs in 1994, focusing in particular on tightening budget limits, linking expenditure growth to GDP rates and making previous arrangements more homogenous. An explicit package of benefits to be provided by the entire public sector was specified and approved. Several measures were adopted in the pharmaceutical sector and on the role of the private sector.

During the period 1999–2000 the extension of coverage to non-Spanish residents took place. Another issue was a renewed emphasis on the implementation of public coverage of children's dental care, as well as the expansion of the role of social and community care within the health system. In fact, both main national parties (socialist and Conservative) included proposals along these lines within their electoral programmes in the March 2000 general elections (the Conservatives remained in power until March 2004).

During 2001–2003 a number of reforms took place. Towards the end of 2001 health care issues were included for the first time in the new financial system for autonomous communities, approved by law. At the same time an agreement was reached to complete the decentralization process and shift the responsibility for health powers and resources to 10 autonomous communities under central control. Both reforms became effective as of January 2002. The Law on Cohesion and Quality of the NHS approved on 28 May 2003 set up the

Table 7.1 Major health care reforms and policy measures

1978–1986	Responsibility for the pre-social security health care networks (public health, mental health, charity health care, etc.) was decentralized to all autonomous communities.
1981	Responsibility for health care was decentralized to the autonomous community of Catalonia.
1984	PHC reform started.
1986	The General Health Care Act was adopted.
1987	Responsibility for health care was decentralized to the autonomous communities of Basque Country and Valencia.
1989	The shift took place from social insurance to general taxation as the main source of funding of the health care system and extension of coverage to those without economic resources was implemented.
1990	Health care powers were transferred to the autonomous communities of Galicia and Navarra. The right of access to all public benefits for non-Spanish children was approved.
1991	A Review of the NHS carried out by the parliamentary commission was presented (*Informe Abril*) and several organizational and cost-containment measures were proposed.
1992	Explicit contracts with hospitals and prospective funding systems began to be piloted.
1993	A negative list of pharmaceuticals was adopted. Free choice of GPs and paediatricians was introduced (piloted since 1984).
1994	An agreement was reached between the central government and the seven "special" autonomous communities regarding the regional resource allocation system. Responsibility for health care was transferred to the autonomous community of the Canary Islands. The National Agency for the Assessment of Health Technologies was created.
1995	A single common benefits package to be provided by the NHS was established. The first and only National Health Plan was approved.
1996	Free choice of physician specialists (of 12 specialties) was introduced within the INSALUD territory (comprising 10 "ordinary" regions – see the subsection on decentralization). A law regarding the self-governing status of health care centres was approved. The Decree on the liberalization of pharmaceutical services was introduced.
1997	The above-mentioned law regarding the self-governing status of health care centres was adopted.
1998	An updated negative list of pharmaceuticals was approved. An agreement with the main employers' association in the field of pharmaceuticals (Farmaindustria) on a set of cost-containment measures was signed. An agreement on a new regional resource allocation system was reached.
1999	Legislation on transforming all public hospitals into independent agencies, under the legal status of public foundations, was stipulated. The Law on Immigration was approved in parliament.
2001	The Food Safety Agency was created.
2002	From 1 January responsibilities for health care were decentralized to the remaining 10 autonomous communities. A new general financing scheme was introduced. Further statutory regulation of the Spanish Food Safety Agency was developed.
2003	The Law on the regulation of health professionals was adopted. The Labour Regulation Framework for Health Services Employees was adopted. Royal Decree 1555/2004 on the new structure of the Ministry of Health and Consumer Affairs and Royal Decree 605/2003 on Information about Waiting Lists of the NHS were approved. The Law on Cohesion and Quality of the NHS was approved in parliament.

framework for ensuring cohesion and quality in the NHS in response to a new context of increasing need for coordination within the NHS.

7.1.1 Reform content, policy process and reform implementation

Universal coverage

The percentage of the Spanish population covered by public health care systems increased from 81.7% in 1978 to 99.1% in 2003. Currently low-income inhabitants, immigrant children and adult immigrants have a right to access to public health care services. The process of implementation of the extended coverage started in 1986 when the General Health Care Act recognized the right of access to the NHS for deprived groups of the population who did not contribute to the social security system. In 1988, the regional government of Basque Country extended such rights to registered immigrants, an initiative soon followed by the central government and some of the autonomous communities during 1989–1991. Although the 1990 Youth Act had recognized full rights to access to public health care services for immigrant children, the ordinances required to make this right effective had not been developed, which led to a formal complaint by the Patients' Ombudsman of the autonomous community of Madrid, opening up a political debate on the issue. As a result, children's rights were made effective. The rights were then extended to legal adult immigrants in 1999.

Benefits package

The benefits package covered by the NHS was broadly defined in 1995 by royal decree and is available to almost the entire population. Dental care for adults is still excluded from public funding and social and community care are not fully covered either. Since 1996, details on the specific extent of, and limits on, coverage for different treatments in this field have been approved through the corresponding ministerial ordinances. In addition, pharmaceutical benefits were extensively regulated during the 1990s. In 2003, the Law on Cohesion and Quality of the NHS defined the basic benefits package that should be common to the whole system, including primary and specialist health care, pharmaceuticals, orthopaedics, dietetic products, patient transport, public health and social services, leaving the explicit regulation of the general benefits package to the autonomous communities. In January 2006, the ACs and the Ministry of Health and Consumer Affairs agreed to redefine the common basic benefits package. The reviewed basic package will be put into force through a royal decree. Its content is more explicit than the previous 1995 version (Royal Decree 63/1995

on the benefits package of the National Health System), stating in a clearer way the common services to be provided by every region.

Financing

As explained in the chapter on financing, the state began to transfer some taxes to the ACs during the 1980s, although major taxes remained in the hands of the central administration. The transfer involved both decentralization of taxes collected at central level and limited tax-raising powers for some direct taxes. The health care system was viewed until 1989 as part of the social security system, and was financed mainly by social security funds. In 1989 the financing of health care shifted to general taxation supplemented by insurance contributions through the earmarked social security budget. In the 1990s, the state began to assign to the ACs portions of the personal income tax collected at central level plus a fraction of the indirect taxes on consumption generated within their territories. The general tax component reached 80% in 1995, almost 83% in 1996, and 100% in 1999. However, the measure, although initially intended to increase redistribution, only had limited effects, owing to the introduction of the EU regressive VAT system in the late 1980s. Several autonomous communitites (Madrid, Galicia, Asturias, Catalonia, Castilla-La Mancha and Valencia) are applying their powers regarding taxes on hydrocarbon-based products, increasing the tax to help finance health issues. The measure is popularly known as the "health cent", and it is currently under study in other regions (Balearic Islands, Andalucia and Castilla-León).

In December 2001, three key elements of the financing systems expired: (1) common entitlements with similar levels of devolved power for all the autonomous communities; (2) financing of health services and social services; (3) agreement for Basque Country based on historical considerations. As a result, a new system was approved by the National Council on Financial and Fiscal Policy (adopted as the 21/2001 Act). The model meant a step forward towards guaranteeing financial sustainability despite the fact that it maintained three submodels with different allocation variables, different dynamics, etc. Progress was made in financial independence, sufficiency of resources and solidarity amongst regions. A reform of the 21/2001 Act has since been proposed (see Section 7.2 for more details).

Decentralization

Different health care powers have been transferred to the regions at different stages of the decentralization process. First, the pre-social security health care networks (public health, mental health, charity health care, etc.) were devolved to all regions during 1978 and 1986. Second, the social security network of

health care centres was progressively transferred to the seven "special" regions (according to their constitutional powers), beginning in 1981 with Catalonia and ending in 1994 with the autonomous community of the Canary Islands. Third, some responsibilities in the field of pharmaceuticals, such as control of advertisement, quality control and capacity to sanction, were transferred to seven "special" and three "ordinary" regions during 1996–1999. Finally, from 1 January 2002, the decentralization of resources and powers to the other 10 regions (previously managed by INSALUD) took place. Among the numerous outcomes attributed to decentralization are innovative initiatives in the health sector in the ACs. The range of innovations is broad and includes public health interventions (Aragon), integrated care (Castilla-León), mental health initiatives (Madrid), management of waiting lists (Balearic Islands) and others. A detailed list of innovative initiatives is provided in the Annual Reform of the Spanish NHS 2004.

Budget allocations to different regional health services

Budget allocations were originally agreed upon in a series of bilateral agreements with the level of funding conditioned by historical precedents (which gave rise to inequity among regions). In 1994, a political agreement was reached to ensure cost-containment and equity in financing; a public expenditure ceiling was fixed (linked to the 1993 spending) and annual increases were to be adjusted to GDP growth. Agreement on a firmer commitment to capitation targets was also reached. These reforms in regional resource allocation were again subjected to revision in 1997, when special supplements for cross-border flows and research and teaching were introduced. The new system, in place for the period 1998–2001, also included an additional fund to compensate regions with decreasing population sizes (which tended to undermine the 1994 commitment to make effective the adjustment to capitation targets prescribed in the General Health Care Act). Finally, the responsibility for, and risk of, debts generated was passed on to the administration in charge of the health service in 1994, when parliamentary approval of deviations from planned budgets was first introduced.

A number of significant problems remain. Commitments to capitation and regional redistribution embodied in the General Health Care Act still present many outstanding issues, mainly as a result of the difficulties encountered in adjusting the effective cost of services to capitation targets in those regions with above-average levels of expenditure. In addition, the long-proposed adjustment of capitation fees according to age structure and health needs has never been put into practice. Finally, some dispute remains about the debts accumulated by "special" autonomous communities during the 1990s, which it is claimed have not been properly accounted for. As already mentioned, the 21/2001 Act

modified the resource allocation formula and now includes criteria beyond the basic per-capita criteria, such as the proportion of the elderly population and insularity.

Primary health care

Primary health care is now territorially based throughout the country, with virtually the entire population living less than 30 minutes away from their nearest health centre. PHC teams resulting from the extensive reform initiated in 1984 were available to 81% of the total population in 2000, with the remainder covered by the old system of individual doctors and nurses. Since 1993, most regional health services offer some user choice, allowing patients to select their primary care physicians (although in practice professionals often reject patients from distant locations owing to the increased cost of compulsory home visits). Some regions, however, have regulated patient choice in more detail, such as Andalucia, as explained earlier.

The primary health care reform has been implemented more slowly than expected, probably reflecting a lack of political priority compared to other areas such as specialized care. During the second half of the 1990s little progress was made in upgrading the reformed PHC network. Moreover, over 20 years after the launching of reforms, the major policy goal of orienting the health system towards the primary level has not yet been accomplished; the issue has been absent from major political debates since the mid-1980s and important qualitative aspects still need improvement. Recent piloting of more flexible organizational and managerial arrangements might help to encourage further reforms in the future.

Access to and delivery of specialized care

In 2004, 14 new public hospitals were opened and five were closed. Almost the entire population now lives less than one hour from a public hospital offering surgical, internal disease, obstetric care and 24-hour emergency services.

Most medical staff working in the NHS have a status similar to that of civil servants. All negotiations of working conditions are carried out with the corresponding regional health authority and health centre managers have a very limited capacity to negotiate salary incentives. This makes a flexible human resources policy difficult and hampers managers' attempts to harness professionals to specific objectives. There have been attempts to encourage full-time commitment to the public sector using limited economic incentives that link a portion of the variable salary to the amount of time spent working in the public sector, but a sizeable proportion of health professionals still work in both the public and private sectors. In fact the only autonomous community

that has made a compulsory full-time commitment is Asturias, from January 2003. However, this measure only concerns new staff.

Considerable effort has been made to decrease waiting times. All Spanish regions have worked in recent years (most since 1994) to reduce the average length of hospital stay. A good number of surveys have estimated the percentage of inappropriate admissions and stays in hospitals, classifying the detected inadequacies by cause. A convergence in average length of stays between hospitals and autonomous regions in different specialty groups has taken place as hospitals have started applying remedies to those causes (further reductions in hospital stays became more difficult simply through the effect of the law of diminishing returns). However, significant accessibility problems remain, and waiting lists were still a major policy problem in the late 1990s (the effects of the Royal Decree 605/2003 on Information about NHS Waiting Lists have not been evaluated at the time of writing).

Also, the development of alternatives to inpatient care – in particular, major ambulatory surgery – has only recently been initiated in full. A certain level of consumer choice of specialists has been introduced in outpatient centres, but it has perhaps not been accompanied by proper economic incentives for the scheme to work correctly. In addition, identified managerial and clinical inefficiencies remain, so there is still considerable room for improvement.

Management and organizational issues

These issues have been high on the political agenda since the mid-1990s but initiatives in this field are still in the early development phase. The discussion points towards structuring public hospitals as entrepreneurial organizations and self-governing units, with less external bureaucratic control and with more emphasis on outcomes. A law adopted in 1994 (Law 30/1994) stipulated different public foundations, among which public hospital foundations have been the most prominent. These entities have their own legal status and they are accountable to public authorities, which in turn determine their funding via contracting. Labour law constitutes the background of the regulation of health personnel in public hospital foundations (Ministry of Health and Consumer Affairs 2004). In the field of health care service provision, various experimental forms of management and organization are being piloted in Catalonia since the early 1990s. In this context, the first strategic plan of INSALUD, approved in 1998, included a wide range of pro-competitive regulation proposals, such as shifting purchasing functions to health areas; contracting-out of auxiliary, management and provision services; improving prospective payment systems with the inclusion of quality indicators and monitoring; linking contracts to economic incentives; and allowing public providers to opt out of the public

service. In addition, in 1999 the Annual Budgetary Act implemented the content of the previous 15/1997 Act, thus opening the way for generalizing flexible, autonomous organizational reforms in all Spanish hospitals. New prospective systems to finance hospitals attempting to balance budgetary control, activity, and incentives that encourage efficiency are being tried in several regions. There has been a rapid introduction of management tools including patient classification systems, such as diagnosis-related groups, patient management categories and hospital funding based on yardstick competition. The literature available on this reports contradictory outcomes of these new forms of management (Martin-Garcia and Sanchez-Bayle 2004; Del Llano et al. 2002).

Separation between financing, purchasing and provision

Separation between purchasing and provision was formally introduced in both central and regional legislation during the 1990s. Several ACs proposed changes in the organizational status of their highest management institutions (the "regional health services"), partly to promote the effective implementation of the purchaser–provider split. Catalonia and Basque Country in particular instituted them as quasi-independent public agencies, to a large extent subjected to private law in order to better assign them an independent purchasing function while preparing the subsequent decentralization of purchasing responsibilities to health areas.

Until 1997, most hospital contract programmes were not linked to production levels and quality issues and they did not take into account coordination with primary care or existing health care plans, were not monitored, and economic incentives for accomplishing contractual objectives were weak. During the late 1990s there were important developments in this area, incorporating effectiveness and quality indicators more adequately and linking contracts to regional health plans. Contracts were also expanded to psychiatric and other long-term care hospitals and significant changes along the same lines were introduced in several regions. The first strategic plan of INSALUD, designed in cooperation with scientific professional associations and approved in 1998, included a plan for improving quality within contracts, introducing a plan coordinator at hospital level and developing economic incentives linked to quality targets. Around the same period hospitals were allowed to have another source of financing, albeit of lesser importance, by providing health care services or risk coverage to people or schemes not covered by the NHS.

In practice, however, the separation between the purchasing and providing functions has not been fully achieved owing to limited implementation. In fact, there is evidence, at least for Catalonia, of advances in the opposite direction, e.g. direct intervention of the regional health services in the operational

management of health facilities, involvement of public and private providers in health planning, and higher dependence of independent providers on the state as a third-party payer (Belenes 2004).

One of the issues that calls for urgent clarification is the margin of efficiency gained with hospital autonomy and labour employment (as opposed to civil service), compared to enforcing effective control on behalf of the health authorities when new hierarchical levels are introduced in the organizational structure.

Waiting lists/times

Act 41/2002 on Patients' Freedom, Rights and Duties on Information and Clinical Documentation stipulated the patients' right to receive information about waiting lists. Waiting lists have been the main cause of patient dissatisfaction with the NHS. Measures introduced in order to reduce waiting lists have included contracting out private hospitals, financial compensation for public hospital doctors' work in the afternoons to shorten waiting lists and patients' right to opt for another public or private contracted-out hospital after having waited a specified time (known as the "time guarantee"). Table 7.2 shows different strategies employed in the autonomous communities in terms of waiting lists. As the table shows, all regions use strategies to manage the health care supply side of the issue and no measures are implemented on the demand side.

The main conclusions of the report were that even if the main measures used to reduce waiting lists imply a "time increase" for the supply (increasing the volume or the productivity of service provision), this strategy actually has the opposite effect, since the measures contain incentives for maintaining them. The report recommended a shift from aiming to reduce the volume of services to management strategies, such as the development of clinical guidelines, prioritization of patients, and clinical audit.

The role of the private sector within the NHS

Although since 1993 some private sector services have been contracted out with the public system and competitive free choice of insurers has been included in the electoral programmes of both the Popular Party and the long-standing Catalan governing party (CiU), there is no competition among insurers or providers (public or private) anywhere in Spain. At regional level, Catalonia has experimented with contracting out the integrated management of services in several health areas to private companies since the early 1990s, while the autonomous community of Valencia contracted out hospital services in two health areas to private for-profit newly built hospitals in 1999 (which were

Table 7.2 Waiting lists reduction strategies in the autonomous communities

Autonomous communities	Contingency plans	Additional working hours	Agreement with private providers	Mobile surgical teams	Additional recruitment	Contract programmes[a]	Specific funding	Time guarantee
Andalucia	yes	yes	yes	yes	yes	yes	yes	yes
Aragon	yes	yes	yes		yes	yes		yes
Asturias	yes	yes	yes	yes	yes	yes		no
Balearic Islands			yes			no		studying
Canary Islands	yes	yes	yes	yes	yes	yes	yes	yes
Cantabria	yes	yes	yes					yes
Castilla-La Mancha	yes	yes	yes			yes		yes
Castilla-León	yes	yes	yes					yes
Catalonia	yes	yes	yes		yes	yes	yes	yes
Valencia	yes	yes	yes	yes		no		studying
Extremadura	yes	yes	yes			yes		no
Galicia		yes	yes					no
Madrid	yes	yes	yes		yes	yes	yes	no
Murcia	yes	yes	yes		yes	yes		studying
Navarra	yes	yes	yes					yes
Basque Country	yes	yes	yes		yes	yes	yes	no
La Rioja	yes	yes	yes			yes	yes	no

Source: Ministry of Health and Consumer Affairs 2004c.

Note: [a] The contract programme includes financial incentives for decreasing waiting list.

offered a long-term contract with the public sector). On 1 January 1999, Adeslas, a Spanish health insurance and health services company, took over the management of Alzira Hospital, Valencia. Adeslas (51%) together with two banks – Bancaixa and the Caja de Ahorros del Mediterraneo (45%) – and two construction companies – Dragados (construction and services) and Lubasa (2% each) – formed the Union Temporal de Empresas, which was given the concession to build and manage the public hospital for 10 years. This management arrangement was ceased in 2003, when it was renewed for another 15 years but this time also including PHC in the hospital's sphere of influence. Other hospitals followed the Alzira model.

Two measures adopted by the central government during the late 1990s have tended to expand and promote the role of private providers within specific restricted areas of the health care system: care provision in the case of accidents at work and work-related illnesses, together with some authority over the management of sick leave (transferred to employers' mutual funds in 1996). More importantly, employer-purchased health care insurance has enjoyed considerable tax deductions since 1999. The considerable public opposition to market-oriented policies in the health sector in Spain will probably prevent drastic policy reform in this area for some time to come.

Pharmaceuticals

Cost-containment measures for pharmacetucials have been implemented. Two negative lists of pharmaceuticals were introduced in 1993 and 1998 (but according to the available research they failed to have the desired impact on expenditure). Significant regulation also took place regarding pharmaceutical pricing, supply and distribution (profit and commercial margins, reference prices, operating hours, etc.) which is understood to have had positive overall effects. The National Medicines Agency, created in 1997, started to operate as a quasi-independent public body in 1999, absorbing some responsibilities previously held by the Ministry of Health, such as the authorization of new drugs and clinical trials. In January 2005 the Pharmacy Commission of the Interterritorial Council of the NHS approved the "1st semester 2005 action plan" of the Pharmaceutical Policy Plan (see Section 7.2 for more details).

Health technology assessment

Since the mid-1980s and early 1990s, significant advances have been made in the assessment of medical technologies. At state level, the Ministry of Health has sponsored the assessment of more than 40 emerging technologies since 1991, originally through a unit within the ministry and, since 1994, through the National Agency for the Assessment of Health Technologies. At regional level, five regulatory agencies have been created (Andalucia, Basque Country, Catalonia, Galicia and Valencia) with important cooperation among them.

Research

The Carlos III Health Institute coordinates scientific and technological investigation at all levels of the NHS. The common frame of reference for research is established in the I+D+I plans currently set for 2004–2007. Public research entities are allowed to collaborate with private health sector companies on strategic issues.

As an EU Member State Spain must adapt its biomedical scientific policy to align with the VI Framework Programme for Research and Technological Development (2002–2006). The two main goals are to bring basic and clinical research closer together and to promote the role of hospitals as research centres (for current and future plans and reforms see Section 7.2).

Mental health care

In the 1970s, when the mental health network constituted exclusively of psychiatric hospitals, in some provinces several mental health care teams began to use a different, more community-focused approach to care provision,

creating special units that went out into the community. These teams were not able to satisfy the increased demand for services. In response to the problems, a Ministerial Commission for Psychiatric Reform was set up in 1983, which drafted a document laying down the framework and broad criteria for reform of psychiatric services. The General Health Care Act (1986) stipulated that mental patients were to be treated as users of equal worth and provision was to be made for the integration of mental health into the general health care system.

In 1995, when the wider health system's benefits were fully regulated, the content of mental health care and psychiatric care was defined. Clear legislation is in place to protect those with mental health problems, and to ensure access to services. In Andalucia, for example, the public network for mental health care is completely integrated within the PHC, sociosanitary and specialized care public networks. In addition, a foundation for the social integration of mentally ill people was created. This body, linked to different regional governments (health, social affairs, finance and employment and development), is in charge of managing and developing a social services network for people with severe mental disorders. The psychiatric system has thus been integrating its resources, creating mental health centres, extending the number of psychiatric day care units and allowing for the hospitalization of acute cases in general hospitals, while reducing beds in psychiatric hospitals. In summary, there has been a shift away from institutional to community care and a change in the organizational structure of mental health care services, meaning that they now are better integrated with other health and social care services.

The main remaining challenges include the lack of alternatives to institutionalization, shortage of community care resources, uneven development of mental health reform in the ACs and the poor coordination between the health and social sectors.

Countrywide compatible information system

The initial lack of regulation of medical records in the General Health Care Act provoked a proliferation of regulations in the regions, thus leading to diverse information systems and clinical documentation. In 1986 Basque Country approved a decree that regulated medical records. Years later, a basic concept and a minimum content was introduced with the 41/2002 Act (thus providing the foundations for a national IT strategy for the health sector). The plan intended to set up a countrywide compatible information system for coordinating medical records that should be adhered to and developed by the autonomous regions. This should help patients to avoid having to go through the same tests and procedures more than once when receiving care in different centres.

Women's health

The Spanish Government is developing an explicit strategy for gender equity on the basis of Act 1/2004 on Measures for Integrated Protection against Gender Violence and the 2004 Bill of Equality Rights between Women and Men.

Improvement of the health of women is among the priority issues for the NHS. To this end, the Observatory of Women's Health was established in 2004 and makes up part of the NHS Quality Agency. The Observatory of Women's health is working closely with the Observatory of the NHS created in 2003. Objectives of the Observatory of Women's Health include generating knowledge about women's health, stimulating good practice in terms of gender equity issues, providing strategic advice to policy-makers at central and regional levels and revising the legislative basis. In addition, in 2004, a Commission against Gender Violence was created at the Interterritorial Council of the NHS.

Cohesion and quality of the NHS

Having achieved full decentralization of the health administration, the need to clarify and strengthen responsibilities in the collaboration and cooperation between public administration departments has become more urgent than ever. A criteria framework has to be established with the aim of guaranteeing the cohesion of the Spanish National Health System. It seems that the intensive work of previous negotiations, as well as the process of parliamentary approval of the 16/2003 Law on Cohesion and Quality of the NHS were characterized by a consensus-prone attitude (otherwise the approval of such an ambitious law – not only in terms of thematic breadth but also the depth of the reforms proposed – with the support of all the political parties with parliamentary representation, could not be explained). The main points the act deals with relate to:

- citizens' rights throughout the whole NHS (Article 4);
- maximum time taken in accessing services in the autonomous communities (Article 25);
- right to choose a physician and to obtain a second opinion in terms that are established according to the rules (Article 28.1);
- equality in conditions and guarantees for patients moved from one region to another (catalogue of NHS services).

Table 7.3, slightly modified from the 2003 Annual Report on the Spanish NHS, shows the main reforms introduced by the Law on Cohesion and Quality of the NHS to sustain the above-mentioned main points. The table also summarizes points outlined in the law.

Table 7.3 Key points of the Law on Cohesion and Quality of the NHS, adopted in 2003

Themes dealt with	Main points
Chapter I. National Health System Package of Benefits	The package of benefits is defined and extended. Recognition of the right to access, mobility, time to access, information, quality, security and services as a reference. Through the Royal Decree 605/2003 of 23 May 2003 measures are taken to establish the homogenous treatment of information on waiting lists, foreseeing the elaboration by the CISNS on the list of processes, specialties and diagnostic tests included in information systems and establishing the prioritization criteria for patients.
Chapter II. Pharmaceuticals	The reordering of state competencies exercise is tackled, corresponding to the Ministry of Health and Consumer Affairs. During 2003, some autonomous regions undertook pilot schemes aimed at dispensing medicine individually and setting up electronic prescription. The 62/2003 Act of 30 December defines the concept of personalized packaging of pharmaceutical goods and permits the issuing of prescriptions in electronic format. The Spanish Medicine Agency is renamed as the Spanish Medicine and Health Products Agency, also covering health products. Autonomous communities' representatives join its governing board.
Chapter III. Professionals	The statutory framework for working relationships is established. The basic criteria and conditions for the advertisement of vacancies are set out in such a way as to ensure the mobility of professionals in the entire state territory, following the agreement with the CISNS and based on the report from the Framework Forum for Social Dialogue (*Foro Marco para el Diálogo Social*). A Human Resources Commission is created, formed by representatives of the different administrations and focused on planning and design of training programmes for health professionals and homogenization of basic criteria for assessing competencies. The Negotiation Forum for Social Dialogue, the Professional Forum and the Consulting Professional Commission of the CRH are created.
Chapter IV. Research	Actions are taken in order to reorganize the research activity of the competent entities of the general state administration. Among the functions of the Carlos III Health Institute, it is intended that it will form a partnership with other NHS investigation centres and will give accreditations for institutes and cooperative investigation networks. The Assessing Commission on Health Research is created, to advise and guide on cooperation between public and private sectors.
Chapter V. Health Information System	The Individual Health Card is regulated and it should include in a standardized manner the basic identification data of the holder, and the right that he/she has in relation to pharmaceutical services and in relation to the health service or entity responsible for health care, without detriment to the management/administration by each region within its boundaries. This project is still under development. The Health Information Institute (IIS) is created (it is answerable to the NHS Quality Agency). The Ministry of Health and Consumer Affairs will establish a health information system that will guarantee the availability of information and reciprocal communication between health administrations.
Chapter VI. Quality	The elements of the so-called quality infrastructure are specified. External audits on quality and security in centres and health services will be encouraged (either by public institutions or independent private companies). The elaboration of an annual report on the situation of the NHS is envisaged. The NHS Quality Agency is created, being responsible for elaborating and maintaining the elements of quality infrastructure. Periodic elaboration of the Quality Plans for the NHS is expected. The NHS Observatory is created, being in charge of monitoring and analysing the NHS.

(cont.)

Table 7.3 (cont.)

Chapter VII. Health Integral Plans	Joint collaboration (by the Ministry of Health and Consumer Affairs and the autonomous regions) on integral health plans is expected, referring to pathologies of greater prevalence or those that produce a social and family burden. Integral plans for ischemic cardiopathy, cancer and mental health have been approved or are under development.
Chapter VIII. Public Health and Food Safety	The declaration of coordinated actuations in public health and in food safety material is regulated, the first under the responsibility of the Ministry of Health and Consumer Affairs and the second under that of the Spanish Agency for Food Safety, created in 2001.
Chapter IX. Social Participation	The participation of citizens and professionals within the NHS is regulated. The participation is articulated through the Social Participation Board of the National Health System, which can act as consultant committee, open health forum and virtual forum.
Chapter X. The Interterritorial Council of the NHS (CISNS)	A new regulation is established that modifies its composition and functions. It should be noted that, at present, it is made up of the head of the Ministry of Health and Consumer Affairs and regional ministers of health in the autonomous regions (with the support of a permanent secretary, who does not have the right to vote), while the central administration previously had a central representative for each autonomous region representative.
Chapter XI. High Inspection	The new regulation on the high inspection function of the NHS systematizes its role and adds new powers that pertain to the central administration and were not explicitly written in the 1986 General Health Care Act.
Additional regulation on health services under the prisons administration	The transfer of prison health services to the ACs is expected, in order to fully integrate them within the regional health services. Catalonia had already made this transition.
Additional regulation on the public financing of medicines	The reference pricing system is substantially modified, mainly regarding the method of calculating the reference price by the definition of therapeutic groups. Also, the substitution of pharmaceutical offices of prescribed medicine with a generic or trademark medicine with a lower price is detailed. Several articles of previous acts dealing with these issues are therefore cancelled.
Additional regulation on the Health Cohesion Fund	It regulates the financing of the mobility of Spanish residents to ACs different from those of their residence and the financing of non-resident patients within the Spanish territory. It regulates the financing of reference services, and limited and monitored practices.
Additional regulation on issues that affect budgetary and financial equilibrium of the National Health System	An interministerial body has been created that will compulsorily provide information on the issues that have significant economic implications for the National Health System.

Source: Ministry of Health and Consumer Affairs 2004.

7.2 Future developments

The fact that there was a change in the political direction of the government in March 2004 (from Conservative to socialist) obviously introduces some questions on the degree of continuity that the proposed measures could have in the future. With that caveat in mind, the 2003 Annual Report on the Spanish NHS will be used here to identify a technocratic perspective on the key strategic opportunities to improve the future of the National Health System. The priorities identified by the report are outlined here.

- Promotion of health prevention and health promotion policies, with health education for self-care as a fundamental component.
- National Health System sustainability, including moderation in the increase of pharmaceutical expenditure and other costs and rationalization of the use of resources.
- The promotion of cooperation between autonomous regions, guaranteeing quality and equity in the access to health services, strengthening information systems, ensuring patient mobility, improving the decision-making process and developing systems for health care delivery improvement.
- Professional development based on the principles of maintaining and improving training, offering stimulus and motivation and improving working conditions.
- The promotion of international cooperation with poorer countries, looking towards sustainable and just development.

The current government has emphasized in its press releases the following strategic and operational measures (Ministry of Health and Consumer Affairs 2005c).

Interterritorial Council

The work of the Interterritorial Council (the main body of cooperation between central administration and regional governments) will be improved in order for it to become more operational while facilitating maximum agreement on issues of general interest. Since the second half of 2004 each Interterritorial Council meeting takes place in a different region. The Ministry of Health and Consumer Affairs has also expressed a determination to bring this important body of cooperation closer to citizens, giving them a better insight into the work the Interterritorial Council undertakes to consolidate the Spanish health system. It is also intended that the people responsible for health at state level and within the regions should have first-hand knowledge about what is taking place in the different regions (Ministry of Health and Consumer Affairs 2004d).

Information system

The government wants to foster the cooperation between the Ministry of Health and Consumer Affairs and the autonomous regions in improving health information systems as a priority objective for the present administration. A National Health System Quality Agency will be in charge of such endeavours, with the objective of making available to all regions improved information retrieval, evaluation of the health system on a permanent basis and decision-making assessment in the different issues (Ministry of Health and Consumer Affairs 2004e). One of the important future issues is reform focusing on trying to harmonize information coming from the autonomous regions.

Sustainability of the health system

Attention will be paid to the issue of ensuring financial sustainability. In addition to securing sufficient resources, cost control and good cooperation between the central administration and the ACs will be promoted. An Interministerial Commission for the financial equilibrium of the NHS, by royal decree in March 2004, is supposed to be the basic instrument for analysing the financial repercussions of health expenditure on the sustainability of the financial system in the context of dialogue with the regions (Ministry of Health and Consumer Affairs 2004f).

Regional financing system

The likely proposal of a new model for regional financing which led to a confrontation between the regions (in particular Catalonia) and the central state has brought to the public's attention the related issue of health services financing. The proposed reform of the 21/2001 Act aims to establish common financial outcomes for every region, even if the historically special regions of Navarra and Basque Country will have a different tax-collecting system. The proposal is based on the principles of self-sufficiency, territorial balance, solidarity and financial autonomy. It intends to give regional governments more legislative freedom in the way they collect and allocate regional taxes, while reinforcing loyalty between the state and the regions (that is, that state measures cannot conflict with regional policies and vice versa). The issue that sparks the debate intensely is Catalonia's demand to have full control over its entire tax collection and a reduced payout to Madrid (which the government has already rejected). The explicit intention of the government is to have settled the debate during 2006, when the proposal will be discussed with the National Council on Financial and Fiscal Policy where the autonomous communities are represented.

EU-wide compensation system

The Health and Consumer Affairs Minister proposed, in the informal meeting of EU health ministers held in Cork, Ireland, on 12 April 2004, to create a specific compensation system to reimburse the costs generated by the free circulation of patients within the European Union. The different rulings of the European Court of Justice acknowledging the right of patients to receive reimbursement for health care delivered in other Member States, along with the ever-increasing number of people who move between countries within the EU or receive health care in other countries, demand the well-coordinated performance of the judicial and financial mechanisms of its national health systems (Ministry of Health and Consumer Affairs 2004g).

Accessibility of the health services plan

The Ministry of Health and Consumer Affairs will coordinate with the autonomous regions the launch of a plan on increasing accessibility, supporting access improvement programmes in hospitals and health centres as much as possible. In the same way, the ministry has promised to launch the Health, Consumer and Disability Commissions to study the development of projects for people with disabilities (Ministry of Health and Consumer Affairs 2004h).

Long-term care

In January 2005 a national report on long-term care was issued to parliament to be used as a basis for future legislative development. It is expected that the creation of a "national long-term care system" will provide universal sociosanitary and economic assistance to inhabitants that need continuous care. At the end of December 2005, the government approved a preliminary bill on long-term care which states that no citizen will remain uncovered by the system. It establishes some bases for progressive co-payment depending on income and wealth.

Research

The government has approved a new assisted conception bill in May 2005 that is under parliamentary discussion, and will adopt a law on biomedical research. The new act includes genetic selection of embryos for therapeutic purposes on the basis that they may help to save the life of an already born brother or sister, prohibition of cloning human beings for reproductive purposes and also of surrogate mothers. The bill on biomedical research will provide a legal framework for research on stem cells/mother cells and for the development and promotion of regenerative medicine. For this project, as in those in surrounding

countries, the creation of an Ethics Commission is anticipated that will consist of scientists, doctors, researchers, lawyers and experts with renowned prestige.

Promotion of research

An appropriate framework will be set up to support the work produced by relevant health researchers. The government will support renowned scientists and emerging groups, redefining the current Human Resources Policy to resolve motivational problems and ensure generational change, with an active policy of reincorporating new researchers (Ministry of Health and Consumer Affairs 2004i). An attempt will be made to achieve effective coordination with the Research, Development and Innovation National Plan and international research projects. Financial agreements have been reviewed so that investments in research by the industry are not tied to increased pharmaceutical expenditure. A complementary innovation programme will be established for the National Health System fostering cooperation between the public and private sectors. Cooperation with ACs in this field will also improve, strengthening the role of the Health Research Board of Advisors and defining priority areas. The Carlos III Health Institute will be strengthened, reinforcing its role as an information and coordination centre in biohealth issues.

Pharmaceutical policies

The Pharmacy Commission of the Interterritorial Council approved the "1st semester 2005 action plan" for the Strategic Pharmaceutical Policy Plan to guarantee that all inhabitants could obtain the medicine they need from the NHS at the right price while reducing the high pharmaceutical expenditure in Spain and promoting the rational use of medicines. In order to facilitate the quality of prescriptions, an Information System on Drugs/Medicine and Health Products will be promoted within the Spanish Medicines Agency, which will offer objective and independent information on the pharmaceutical industry. The timetable outlined below was introduced for the above-mentioned action plan.

- 3 February 2005. Establish criteria for the definition of the new system for price reference, for selective financing of medication in the NHS and for the urgent procedure of exceptional innovations.
- 24 February 2005. Define criteria for the Ministerial Order in relation to the new medical prescription and promote generic medication through acts directed at doctors, chemists and patients.
- 8 March 2005. Debate on the training plan for doctors regarding the rational use of medication, including contents of training on generic medicine, as well as definition of the criteria for the development of information campaigns

on the rational use of medication among the general public. A plan for launching training campaigns on pharmaceutical care for professionals in pharmacy offices will also be put forward, and two working groups will be set up: one on publicity and promotional activities for medicines and new parameters for doctor visits, and another on authorization for training campaigns, meetings and conventions of a scientific nature.

- 14 April 2005. Analyse the proposal criteria for establishing electronic prescription in the NHS, as well as for allowing the dispensing of drugs tailored to the treatment duration (as opposed to only in standard packages).
- 19 May 2005. Define criteria for the edition of the Vademecum for all NHS professionals, and initiate a debate on the criteria for access to information on medication for the Spanish Medicines and Health Products Agency, scientific agencies, doctors and pharmacists.

Preventive policies

Policies are being proposed in the areas discussed below.

- *Health education*. Preventive policies and health promotion from childhood will be improved in educational centres through joint collaboration with the Ministry of Education and the autonomous regions and through media campaigns and the use of new technologies. The definition of global strategies on prevention will also be established at national and international level.
- *Healthy lifestyles*. Efforts will be renewed to ensure that the population has healthy eating habits through a Healthy Nourishment and Nutritional Plan to combat obesity and other diseases and eating disorders (e.g. anorexia and bulimia) in all autonomous regions. Attention will also be paid to fighting sedentary lifestyles.
- *Tobacco*. Since tobacco is the first cause of premature deaths in Spain, the government will endorse all actions included in the National Plan for Smoking Prevention and Treatment, focusing mainly on prevention. Extreme rigour is employed in controlling advertising and measures intended to tackle tobacco habits among young people. Information and education, as well as smoking cessation programmes are promoted. A new Anti-tobacco Law, approved unanimously by the Spanish Parliament, has been in force since January 2006. The new law prohibits smoking in workplaces, does not allow the existence of smoking rooms, introduces strong economic sanctions for smokers and employers that allow smoking at work, and introduces strict regulations concerning restaurants and bars, ensuring real smoke-free areas in public places.

- *Traffic and work-related accidents*. Special attention will also be paid to reducing traffic accidents through prevention programmes, focusing, with the help of the autonomous communities, on improving guarantees in obtaining a driver's licence and related complementary actions. Medical research in the field of treatment and rehabilitation of victims of road traffic and work-related accidents will be promoted.
- *Patient safety*. The central government will continue to transfer €5 million to the autonomous communities for patient safety-related programmes. The design of an adverse reaction voluntary notification network is in the planning stages, along with the integration of the existing subsystems related to patient safety. The central government recognizes that there is considerable room for improvement.

With regard to care for patients with specific conditions, policies are being discussed in the areas listed below.

- *Mental health*. Possible reforms of the present system for health care and treatment will be addressed, promoting mental health care structures and intensifying rehabilitation and integration programmes.
- *Cardiovascular diseases and cancer*. Efforts will be made to apply in full the Integral Ischemic Cardiopathy Plan against cardiovascular illnesses. Cancer prevention and early detection policies, as well as total health care for these patients and the promotion of research in this field will be promoted through the Integral Plan against Cancer, with collaboration from the autonomous communities, scientific organizations and patient associations.
- *Diabetes, dementia and Alzheimer's*. The government will promote strategies at national level for integrated health care for patients with diabetes, dementia and Alzheimer's disease, facilitating new lines of research especially regarding stem cells (mother cells).
- *AIDS*. The emphasis in the case of AIDS will remain on preventing the spread of the disease and maintaining the actions taken which have proved to be efficient in controlling the epidemic. Spain will continue to provide global aid to countries less favoured, especially Latin America and Africa.

Additional policies being considered include those outlined here.

- *National Plan against Drug Addiction*. New efforts will be launched for prevention and treatment of drug addiction through a strategy for 2004–2008. Coordination and cooperation both at national and international level will be promoted, with due attention given to research and information systems as well as support to actions undertaken by nongovernmental organizations in collaboration with municipalities.

- *National Quality Plan for the NHS*. With a budget of €50 million, and managed by the Ministry of Health and Consumer Affairs through the National Health System Quality Agency, this plan will deal with some of the key challenges of the NHS. The most significant part of its role, with a budget of €33.8 million, will be devoted to finance measures and projects on the improvement of efficiency in the NHS, improvements in patient safety, promotion of clinical best practices, improvements in the NHS information system and reducing health inequalities.

8 Assessment of the health system

8.1 Stated objectives of the health system and its contribution to health improvement

According to policy and legal documents the objectives of the Spanish health system include improving the health status of the population through equity in access to health services, ensuring fairness in financial contribution to health expenditures through a tax-based system and increasing the level of responsiveness to users' demands. More specifically, and as stated in Chapter 2, the general principles of the Spanish NHS are:

- universal coverage with free access to health care;
- solidarity in public financing, mainly through general taxation;
- integration of different health service networks under the NHS structure;
- political devolution to the autonomous communities and region-based organization of health services into health areas and basic health zones;
- a new model of PHC, emphasizing integration of promotion, prevention and rehabilitation activities at this level.

Since it is difficult to assess the achievement of these goals owing to a lack of conclusive evidence at present, the performance of the system and its success in meeting these high-level outcomes has been assessed through function-based health system analysis.

In 1999, an evaluation study regarding the degree of achievement of the WHO Regional Office for Europe's 38 Health for All targets (HFA 2000) was carried out by the Spanish Society of Public Health and Health Management (SESPAS 2000). Experts and researchers in each field were involved in the process and produced an extensive report. Its results are summarized in Table 8.1, with "–"

denoting that the target has not been achieved at all and "+" to "+++" showing the range of positive degrees of achievement. The progress of the actions undertaken to accomplish the targets were also evaluated.

It was assessed that the majority (26) of targets, mostly related to the population's health status, were partially or totally achieved. Twenty of those targets were assessed as having positive trends. The other six, plus "Partners for health", were assessed as having "undefined" or "difficult to evaluate" trends. With the exception of hospital care, the rest of the targets (e.g. health services policies, health services resources and management, Health for All policy development, Health for All policy management, etc.) were elements of the policy-making.

Indicators on health status (with the exception of noncommunicable diseases such as cancer, accidents and mental disorders) were positively assessed in 1999 in terms of achievement and trends. The OECD Disease-based Comparison of Health Systems (2003) confirmed previous findings (OECD 2003).

- Life expectancy at birth ranks Spain, with its 75.7 years for men and 83.1 years for women according to Eurostat, at number five in the world (UNDP 2004).
- The Infant mortality level in Spain is the second best worldwide, along with Norway, Finland, France, Germany and Denmark, after only Sweden (UNDP 2004).
- Maternal mortality also places Spain as the fifth best in the world with a rate of 4 mothers per 100 000 live births (UNDP 2004).
- Spain also ranks number five in the world for vaccine coverage (WHO/UNICEF 2003) with DTP3 and Pol3 at 98%, HepB3 at 83% and Measles at 97%.

Evolution of health indicators since the beginning of the reforms shows similarly positive trends (Table 8.2).

Population coverage by the Spanish NHS is almost universal (99.1% in 2003) and assures a comprehensive benefits package, regardless of personal wealth. All regulations at regional level include the principle of universality of individual and collective health care. Moreover, five regions have regulated universal coverage to poor people or those that are not covered and some of them include Spanish and foreign residents, regardless of their legal or administrative situation.

On the negative side, however, six years after the negative assessment of 11 target achievements the areas of concern remain as such (namely "Equity in health", "Reducing mental disorders and suicide", "Healthy policies", "Community services to meet special needs", "Health research and

Table 8.1 Degree of achievement and progress of HFA 2000 targets, 1999

	HFA 2000 (1984) targets	Achieved	Going in the right direction
I	1 Equity in health	–	no
	2 Health and quality of life	+	yes
	3 More opportunities for people with disabilities	+	yes
	4 Reducing chronic diseases	++	yes
	5 Reducing communicable diseases	+++	yes
	6 Health of the elderly	+++	yes
	7 Health of children and young people	+++	yes
	8 Women's health	+	yes
	9 Reducing cardiovascular disease	++	yes
	10 Controlling cancer	–	no
	11 Accidents	–	no
	12 Reducing mental disorders and suicide	–	no
II	13 Healthy policies	–	no
	14 Settings for health promotion	+	yes
	15 Health education	++	yes
	16 Healthy living	++	yes
	17 Reducing health risks: tobacco, alcohol and psychoactive drugs	–	no
III	18 Policy on environment and health	–	no
	19 Environmental health management	–	no
	20 Control of water pollution	++	yes
	21 Control of air pollution	+	yes
	22 Food quality and safety	++	yes
	23 Control of hazardous waste	++	yes
	24 Human ecology and settlements	++	yes
	25 Working environment	+	yes
IV	26 Health services policies	+	?
	27 Health services resources and management	+	?
	28 Primary health care	++	yes
	29 Hospital care	+	?
	30 Community services to meet special needs	–	no
	31 Quality of care and appropriate technology	+	yes
V	32 Health research and development	–	no
	33 Health for All policy development	++	?
	34 Health for All policy management	+	?
	35 Health information support	–	no
	36 Human resources development	+	?
	37 Partners for health	?	?
	38 Health and ethics	++	yes

Source: SESPAS 2000.
Notes: Achievement measured from "–" (not achieved) to "+++" (very satisfactorily achieved); "?" indicates that it was not clear for the experts if the health system was going in the right direction or had achieved the target.

Table 8.2 Trends in health indicators in percentages, 1980–2003 (selected years)

Health indicator	1980	1985	1990	1995	2000	2001	2002	2003
Life expectancy at birth, in years	75.60	76.48	77.00	78.11	79.49	79.80	–	–
Infant deaths per 1000 live births	12.41	8.92	7.60	5.49	4.38	4.08	–	–
Maternal deaths per 100 000 live births	11.14	4.38	5.48	4.40	3.77	4.18	–	–
% of infants vaccinated against poliomyelitis	–	7.00	94.00	88.00	95.00	95.00	96.40	98.23
% of children vaccinated against measles	–	79.00	99.00	90.00	94.00	96.00	96.60	97.15
% of infants vaccinated against hepatitis B	–	–	–	–	77.00	83.00	82.61	83.00

Source: European Health for All database, January 2006.

development" and "Health information support"). This clearly indicates there is room for improvement.

A SESPAS (2006) report identified some of the challenges that the Spanish NHS will have to face:

- ageing of the population;
- management of chronic diseases, especially diabetes;
- suicide and mental health problems (as important issues in modern society).

Another important issue in Spain is health inequalities. Geographical divergence shows a pattern of increasing inequalities in life expectancy for women from the north-east to the south-west, while for men there is not such a clear pattern. Infant mortality data (2002) for the ACs ranged between 1.8 and 4.8 per 1000 live births (although geographical comparison is not easy, since reported infant mortality could be higher in those ACs where an active search is undertaken to find out whether premature deaths have not been reported). In addition, socioeconomic and gender health inequalities persist in Spain. According to a survery carried out in 2003, 75.68% of men and 71.31% of women perceived their health status as good or very good, while 32.92% of women compared with 24.32% of men perceived their health status as poor (INE 2003). Inequalities in perceived health status between social classes were reported (Ministry of Health and Consumer Affairs 2004).

Macinko et al. (2003) studied the impact of PHC systems for OECD countries, while Villalbi and collaborators' (Villalbi et al. 1999) research focused on the health outcomes of PHC reforms in Spain. Both studies concluded that

there was a clear association between the PHC reform and the decrease in mortality rates of lower socioeconomic population groups. However, detailed analysis of the relationship between health system reforms and the improvement in health outcomes is rather lacking, with the exception of McKee (Nolte and McKee 2003), who provides evidence that mortality is significantly affected by medical intervention in Spain.

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

The distribution of costs in Spain favours the poorer sections of society. The majority of total public health care (except civil servants' mutual funds) is funded through general taxation, with a residual amount generated by care provided for patients with other types of coverage. This taxation-based model foresees a progressive financial contributory scheme with wealthier inhabitants contributing a higher proportion of their incomes. Formally, taxes are collected based on a shared scheme operating both centrally and regionally and funding is redistributed to each region according to capitation, age and insularity-adjusted criteria plus extra funding from several central funds in order to ensure a basic level of service provision in all regions, to reduce inequities and to promote financial co-responsibilities between regional and central administrations (see also Subsection 3.1.1). The benefits of the system are distributed rather equitably in terms of need, at least as measured by geographical accessibility (virtually the entire population lives less than 30 minutes away from the nearest health centre and one hour from the nearest public general hospital).

However, the second above-mentioned objective of the health system "solidarity in financial contribution", pursued with this vertical equity scheme, is distorted by a number of elements.

- The strictly progressive taxation model for income taxation has been accompanied by an increase in consumption-based taxation owing to the use of VAT as part of the revenue mobilization scheme for funding the health system at national and regional levels. This has the effect of making it almost regressive.
- Co-payment for prescribed pharmaceuticals amounts to 40% independently of the patient's income, thus penalizing people with fewer resources. Higher reimbursement from the government is only applied to the elderly or to people under 65 years of age who suffer from permanent disability or certain chronic illnesses.

- Economic subsidies for dependent people are still linked to a social security scheme (Bismarckian), thus reproducing the previous economic position, and are not based on the need created by the dependency, thus lacking in the compensatory nature required for a pro-equity care system. However, regional social services provide non-contributive subsidies to those outside of the national system and the new dependency insurance will probably be linked to need and weighted according to income and patrimony.
- Devolution of taxes to regional governments is more homogeneous at the time of writing than before the 2001 financing reform, but still retains inherited historical criteria. This has allowed some asymmetric allocation of resources and benefits among the population to be carried over, based on "historical privileges" (for more information see Subsection 2.5.1).

Thus, behind the initial picture of full coverage of health care needs and a spirit of universal access, a number of regional and social class imbalances remain. Higher socioeconomic classes make better use of the system, with a greater knowledge of the boundaries of the benefits package. While general consultations with GPs are more frequent among the lowest social classes, the opposite applies to utilization of preventive and dental services (see Section 6.3 for further insight). These findings also point out room for improvement in effective coverage and utilization of the health system, perhaps through educational programmes.

Geographical imbalances may be linked to the existing financing scheme and perhaps to weaker global strategic policy-making and coordination than is desirable at the Interterritorial Council of the NHS (as noted in Chapter 3, the National Constitutional Court has accepted for discussion 87 "appeals of non-constitutionality" since the 1980s in order to assess whether actions or regulations dictated by either the central administration or the autonomous communities have eroded the boundaries of the powers of the different administration levels).

The current political agenda at national level has, in fact, as one of its main points, the struggle between supporters of asymmetry and supporters of symmetry in terms of decentralization. The current Catalonian Government is in negotiations for a new round of power transfers to be included in the reform of their regional constitution, explicitly expressing a wish to enjoy similar privileges to the two regions with autonomous tax regulations, Basque Country and Navarra, and is advocating limiting the amount of resources that could be transferred from the taxes collected in the Catalan territory to the central "pot", i.e. the state. Other regions are also considering financial schemes that are more decentralized than the current ones in their internal negotiations for their regional constitutions, although less extreme than the initial Catalan proposal. The central

government has in turn defended that the new financial model shall be the same for all, keeping the main taxation powers at central level (Aizpeolea 2005a), while also giving more room for regional governments to exert their financial responsibilities in terms of both taxation and accountability for allocation of resources. However, sometimes this power has been used by regional governments for political profit (decreasing taxes at regional level and asking for more funding for health issues from the central government), contravening its original rationale. According to the Minister of Public Administrations, the new model is inspired by the United States federal model (Aizpeolea 2005b). The political discussion (again not affecting either Basque Country or Navarra, which will retain their taxation power privileges) is expected to come to an end by the end of 2006, with enough political consensus.

In general, comparison with other countries belonging to the EU prior to May 2004 shows a discrepancy between Spain's health expenses and the mean health expenses of the other relatively wealthier countries in the European Region. It is worth mentioning that a previously existing gap widened during the period 1992–2002, since most of the other EU Member States committed more resources to health than Spain during those years. At the same time it is also true, however, that since the 1990s Spanish health expenditure has grown more than Spain's economy, especially in the area of pharmaceutical expenditure (the increases in both the number of prescriptions and the mean expenditure per prescription in recent years have been remarkable, in some ACs more than in others). Some researchers maintain that the actual problem lies more in the social desirability of the increase in health expenditure than in its financial sustainability. Even if the Spanish economy could allow a certain amount of growth in the expenditure, the question is whether the services to be invested in are worth their cost. There is a need for serious research into reforms focused on improving the efficiency of public expenditure versus reforms focused on increasing public and private financing or focused on prioritizing and rationalizing public services provision (Puig-Junoy et al. 2004).

Overall, many believe that the current model in Spain has intrinsic financial limitations that sooner or later will have to be addressed in depth.

8.3 Efficiency of resource allocation in health care

Section 8.3 discusses the main characteristics of resource allocation within the Spanish health care system. As described throughout the document, most health management powers regarding planning, financial allocation and resources

management belong to the ACs. Each of them has an autonomous body in charge of resource allocation and organization of specified types of health care for the population in the region (the respective regional health service). The points discussed below are particularly relevant.

- In many ways, revenue collection and purchasing are integrated in Spain and there is no proper resource allocation mechanism for purchasers, but simply a transfer of funds. In this sense, budgets are historically biased and the current policy is simply "paying the bill".
- As explained in Section 3.2, the regional annual budgets are calculated/politically negotiated according to historical precedent and based on some independent measure of health care need, i.e. risk-adjusted capitation. In theory, the centrally transferred funds are earmarked and regional health services are not expected to overspend, but Section 3.5 on health care expenditure shows the enormous economic impact of health policy-making at all public administration levels.
- In specialized care, management has suffered a functional decentralization towards hospitals trying to promote a purchasing–providing split through contractual agreements. However, regions fund their service provision institutions, making some adjustment (e.g. to account for supply-side factors and based on actual and historical expenditure). Further insight into managerial policies and their effect on resource allocation efficiency can be found in Section 4.1 on regulation.
- Regarding specialized care, the devolution of health services to the regions has led to decentralized planning and a strategizing of services with regional scope, perhaps at the expense of a balanced picture at countrywide level. In the global context of the relative scarcity of beds in Spain, the "completion" of the regional health services plan through the creation of rather small "district" hospital facilities (around 200 beds and sometimes with low occupancy rates) distorts efficiency of resource allocation. There may be losses of economies of scale, and the disaggregate planning and purchase of technology may diminish the advantages that a certain technology to population ratio would offer in terms of cost-containment and research (for further insight see Chapter 4 and Chapter 5).
- As mentioned in Chapter 6, and already discussed in the Spanish HiT profile produced in 2000, long-term and mental care, with some regional exceptions, are still outstanding issues that need systemic changes and a deeper policy-making commitment, both at central (social security/social care-related) and regional (health care-related) levels.

8.4 Technical efficiency in the production of health care

Users' perception of the improvement of the different levels of service provision shows positive trends. Recent data show that 51.7 % of the population thought that PHC has improved and only 4.5% thought it has worsened. For outpatient specialized care the figures were 44.4% and 5.7% respectively, and for hospital care they were 47.0% and 4.8% respectively (Ministry of Health and Consumer Affairs 2005a).

However, a number of challenges were identified at different levels of care.

- At PHC level, apart from the obvious efforts to improve the network, the move towards capitation-based wages in order to promote efficiency has had a positive effect but the percentage of GP salaries that are linked to productivity is still low and does not introduce any actual incentive element. This has had negative consequences in the area of GP choice by the health system users, as doctors usually reject patients that could entail home visits.
- While emergency care is universal, and some regions have also included illegal immigrants within the covered population, the PHC utilization rates differ markedly across programmes and services, as already mentioned. Also, the PHC gatekeeper role is avoided by a huge proportion of the population who enter the system through A&E services. Part of the misuse of the system, or the shortcuts taken in accessing secondary and tertiary care, stems from the patients' perception that specialized care is better equipped and solves their problems in a more efficient way than PHC. This could be in part due to a lack of transparent comparison between the quality and effectiveness of the different levels of care and to the greater asymmetry of information in specialized care.
- Public long-term and social care for dependent people also suffers from restrictive income-based filters controlling access to services. Private provision can only be afforded by a minority, thus obliging the majority of the population to use informal care networks (as described in Section 6.6).
- At specialized care level the "jobs-for-life" relationship between hospital staff and the state and the fact that most remuneration increases have occurred in the fixed components of payment have strengthened the importance of the fixed payment compared to income obtained by better performance. Throughout chapters 3, 4 and 5 the conflicting findings are analysed, showing that while hospital management is formally decentralized in order

to increase economic and service provision efficiency, the staff enjoy "quasi-civil servant" status.

The ability to properly respond to emergency situations deserves some comment and more research. On the one hand, the heat wave in Spain in 2003 is reported to have caused around 6500 deaths between 1 June and 31 August. Although of course no simplistic inferences should be made, many would see in these deaths a wake-up call for a better system of prevention and rapid response at community level. On the other hand, the response to the 11 March 2004 bomb attacks in Madrid that killed 190 people (177 right at the bombing site) and wounded more than 2000 people has been very positively assessed (Gutiérrez de Cevallos et al. 2004).

Health technology assessment agencies and pharmaceutical policy advice by the central and regional medicines agencies seem to have had some positive impact on cost-containment and technical efficiency. Generic substitution policies and other measures are analysed in Subsection 5.1.4 on pharmaceuticals. Some researchers claim that measures to involve retailers in the cost-containment and technical efficiency policy should be developed, with the design of regulation and payment schemes that link profits to the health effectiveness of the retailer's service provision (Meneu 2005).

However, as mentioned in Subsection 5.1.3, the purchasing of technical equipment is rarely subject to the individual decisions of policy-makers and does not always follow HTA agencies' recommendations (SESPAS 2002), often linking purchasing to surplus money from the budget within the political framework of institutional incentives, or even to informal agreements with the pharmaceutical industry.

8.5 Accountability of payers and providers

In recent years Spain has made significant efforts in the field of information technologies within the health system in order to improve service provision, monitoring and accountability of professionals (doctors, pharmacists, etc.) and institutions (hospitals, PHC centres, etc.), as well as improving planning and policy-making. Smart cards for health accreditation are well established throughout Spain and there is plenty of legislation in place governing freedom of information, protecting the rights of patients and ensuring professionals' access to and sharing of information. A technical platform has also been developed to be shared by all the regions, intended to better manage financing issues and interterritorial budget transfers in case of health care services provided to residents of other autonomous communities.

However, as analysed in subsections 3.2.2 and 5.1.2, the intense decentralization has also influenced the process, leading to a proliferation of regional rules that in turn gave way to a heterogeneous mix of clinical information and documentation systems. The convergence of all those systems towards a system that allows for common intelligence building will be a huge task for the coming years. This should lead to improved risk-adjustment mechanisms in prospective financing and, therefore, to a more equitable and transparent allocation of resources.

Regulation and governance of third-party payers/service providers scarcely promote full accountability in final purchasing decisions. As explained, the third-party payers/purchasers are expected to plan their actions to respond to the health needs of the population, but "purchasing" decisions are in reality more related to the running of the existing facilities and staff. Priorities identified are rarely translated into purchasing strategies and the health services usually find the inherited obligations towards the existing network to be almost insurmountable difficulties. In other words, purchasing seems to be perhaps more determined by history than driven by health objectives. A number of experts (Repullo et al. 2004; Elola 2004) have expressed that a new regulatory framework with an effective division of the public third-party payers and the service providers is needed.

Another serious problem in terms of accountability is linked to the way in which the central government and the regional governments relate to each other in health financing matters. The Interterritorial Council of the National Health System follows consensual procedures that can only take the form of recommendations, perhaps eroding the efficiency of the health care system and favouring increases in health expenditure. In fact, a governance crisis of the national system is perceived by some researchers (Repullo et al. 2004; Elola 2004).

As mentioned in Chapter 2, the mechanisms for inhabitants' participation in the planning and/or management of the statutory system are formally participatory but they lack actual power.

8.6 Other outstanding issues

Some other issues addressed in various parts of the text deserve explicit mention.

Health care provision is a human resources-intensive sector. The quality level of Spanish health professionals is high, but ensuring the sustainable production (i.e. number and profiles) of an adequate workforce requires a solid institutional map and careful planning. The "quasi-civil servant" working status

that most health staff currently enjoy raises a number of challenges. Better arrangements have been suggested in a number of studies to guarantee fair working relationships that respect the rights of professionals while fostering the search for excellence and keeping the best personnel in their jobs, avoiding demotivation and providing a clear professional career within the public sector at all levels (Repullo et al. 2004; Vilardell et al. 2005). There is also a gap between the generation of new professionals and the actual demand signalled by some studies (González López-Valcárcel 2000; Carles 2003: Martín 2003). One of the working papers (December 2005) of the Spanish Health Economics Association (González López-Valcárcel and Barber Pérez 2005) points out that the lack of a common human resources for health information system and the existence of several (not always coherent) information sources makes it hard to manage the problems, and solving this handicap is a must. In order to face the main manageable challenges found (deficit of resources in certain specialties and places, with serious risks of this worsening; opening of international markets while interregional markets are not functioning properly; career structure, accreditation and working conditions of newcomers; and specialization versus the number of residents), the report proposes a gradual increase in the medical schools' numerus clausus and in the number of residents' positions, the use of a variety of incentives to attract professionals to specific positions and, particularly, to increase the standing and quality of primary care.

It is also important to highlight the existing geographical imbalances. The decentralization process that should enhance accountability (policy-making tailored to each region's needs and expectations) should not entail imbalances that threaten equity and sustainability at national level, particularly when the European health policy agenda seems to show convergence towards a common basic benefits package. Some researchers think that a more explicit definition of the benefits package is needed, as the present one leaves the final decisions to practitioners, making expenditure very volatile, and having waiting times as the sole restriction (Planas-Miret et al. 2005). Several studies have addressed this issue (Ferrándiz 2004; Repullo et al. 2004) and highlight the need for revision of the financing model and strengthening of the role of the Interterritorial Council of the NHS.

In summary, the Spanish health system performs rather well in many areas. It also shows specific gaps that should be addressed at systemic, programmatic, organizational and operational levels. The publications of the Health Information Institute and the 2003 Annual Report of the Spanish NHS have also identified those gaps and suggest the need for policy discussion at national level. Producing a solid body of evidence should help an orderly debate of the issues concerned.

9 Conclusions

Since the 1980s, significant reforms have been implemented in the Spanish health care system. This development resulted in constantly improving health indicators for Spanish citizens since the 1970s and high satisfaction levels with the health care system among users. In addition, achievements of these reforms include universal coverage, an extensive network of primary health care, high-quality hospital services, and reformed financing and management structures.

The General Health Care Act of 1986 stressed the importance of primary health care and has strengthened the role of the general practitioner as a gatekeeper to health care services. Primary health care is territory based and there is very good access to health centres where mainly primary health care teams work. Extension of coverage to non-Spanish residents took place during the reforms of 1999–2000 and now 99.1% of the population are covered by public insurance, including low-income inhabitants, immigrant adults and immigrant children. A number of newly opened hospitals ensure good access to specialized care services. The legal basis for innovative forms of hospital and health centre management provided the stimulus for this change.

The Spanish health care system is a predominantly tax-based system. The percentage of GDP for health care has been constantly increasing in Spain as in other industrialized countries, while public health expenditure plateaued for a number of years. Cost-containment initiatives were adopted, such as regional resource allocation, an explicit benefits package, and regulation of the pharmaceutical market (profit and commercial margins, reference prices, operating hours, etc.).

One of the most important characteristics of the Spanish health system is its decentralization reform, which was completed in 2002 after more than 20 years of development. Currently, the 17 autonomous communities have the authority

to decide how to organize or provide health services. The Spanish Ministry of Health and Consumer Affairs establishes norms that define the minimum standards and requirements for health care provision. An important role in the stewardship of the Spanish health system is played by the Interterritorial Council of the NHS, which coordinates, sets up information systems and assures cooperation between national and regional health authorities.

In the context of the decentralized health care system an important event was the adoption of the Law on Cohesion and Quality of the NHS in 2003. This law outlines the framework of cooperation between public administration departments and proposes significant future reforms. A number of strategies, such as establishing the NHS Agency on Quality, the Health Information Institute and the National Observatory of the NHS, among others, have already been implemented.

Spain demonstrates success in effective public health interventions on lifestyle patterns, occupational health and accident prevention, among others. The Anti-tobacco Law came into force in 2006 and aims to tackle the high prevalence of smoking through strict regulation of advertising and places to smoke; occupational health indicators show significant improvement after several adopted strategies in the field.

Despite the important achievements of the Spanish NHS since the 1970s, a number of challenges should be addressed in the near future. Similarly to other industrialized countries, cost-containment remains an important challenge for the Spanish NHS. Decentralization of the health care system resulted in a significant increase in health expenditure in most regions. Pharmaceuticals, inefficient purchasing and human resources expenditure increase, as indicated by interregional comparisons, are the main factors attributed to health expenditure increase. Concerted efforts at cost-containment at regional and central levels are needed if the financial sustainability of the NHS is to be achieved.

Emphasis should be put on the development of primary health care to achieve cost-containment and efficiency. Strategies for improving the professional status of general practitioners, modifying their workload, improving the access to GPs' services, ensuring the right to choose a GP and reducing the differences in terms of provision of PHC among the regions could be beneficial to this end.

There is an urgent need to improve users' access to long-term and social care services and to address the increasing need for these services. The legal background to and provision of long-term care services varies across regions, but is limited in general terms. It is also important to strengthen research in health sciences. More efficient health policies should be implemented and the health system's performance thereby improved.

A number of challenges also arise from the context of the decentralized health care system. The regional financing system is one of the most urgent health policy issues. The challenge is to achieve a consensus on important policy issues in the multilevel system composed of autonomous communities. The government should therefore take into account a number of factors in order to decide upon the most appropriate method of health care funding for the regions.

The Spanish NHS lacks a well-developed information system, which is necessary for decentralized health care systems, for coordination and policy development purposes. Design and implementation of an information system for better cooperation between the central and local levels is among the future challenges.

Human resources issues in the Spanish NHS require special attention. So far, human resources have been oriented towards short-term values and have resulted in inadequate supply of health personnel. In the decentralized system, responsibility for human resources should probably stay at central level and through regulation ensure sustainable provision of the human workforce, achieve the adequate ratio of nurses and doctors and implement rational contracting policies.

Regional inequalities in health are additional challenges often faced by decentralized health systems. Regional health inequalities in Spain already existed before decentralization was complete, but they have been increasing since. It is therefore important to ensure that the achievements of decentralization are not be outweighed by lack of equity.

Coordination mechanisms are crucial in a decentralized context if objectives are to be achieved. It is therefore important to modify the roles, functions and responsibilities of the health care system and its actors.

The Spanish health care system performs rather well in many areas. The specific challenges identified in this report require concerted efforts at national and regional levels.

10 Appendices

10.1 References

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10.2 Web links

Spanish Ministry of Health and Consumer Affairs:

www.msc.es

Human Rights Watch:

http://hrw.org/doc?t=europe&c=spain

Organisation for Economic Co-operation and Development (OECD) Health Division: http://www.ecosante.fr/OCDEENG/11.html

Society for Palliative Care (SECPAL) directory of palliative care services:

http://www.secpal.com/directorio/index.php

European Monitoring Centre for Drugs and Drug Addiction:

http://www.emcdda.eu.int

Information System on Health Promotion and Education:

http://sipes.msc.es

Spanish society of public health and health administration (SESPAS):

http://www.sespas.es/

Institute of Health of Carlos III:

http://www.isciii.es

Investigation of health and health services (Investigacion en resultados en salud y servisios sanitarios):

http://www.rediryss.net

10.3 List of laws

Basic Social Security Act, 1967
(Ley General de la Seguridad Social, 1967)

Law 2/1974 Professional Associations Act
(Ley 2/1974, de 13 de febrero, sobre Colegios Profesionales, amended on several occasions: Ley 74/1978, Ley 7/1997, Real Decreto-ley 6/1999, Real Decreto-ley 6/2000)

Law 13/1983 on the Civil Code
(Ley 13/1983, que modifica el Código Civil en materia de tutelan)

General Health Care Act, 1986
(Ley General de Sanidad 14/1986)

Royal Decree 556/1989 on the accessibility to buildings
(Decreto Real 556/1989 sobre las medidas mínimas sobre accesibilidad en los edificios)

Royal Decree 1088/1989 on universal health care
(Decreto Real 1088/89 sobre la Universalización de la asistencia sanitaria)

Act 25/1990 on Pharmaceuticals
(Ley 25/1990 del Medicamento)

Royal Decree 83/1993 on selective pharmaceutical financing
(Real Decreto 83/1993, por el que se regula la selección de los medicamentos a efectos de su financiación por el Sistema Nacional de Salud)

Law 30/1994 on Foundations and Fiscal Incentives for private participation in activities of general interest
(Ley 30/1994 de 24 de noviembre, de Fundaciones y de Incentivos Fiscales a la Participación Privada en Actividades de Interés General)

Royal Decree 63/1995 on the benefits package of the National Health System
(Real Decreto 63/1995, de 20 de enero, sobre Ordenación de prestaciones sanitarias del Sistema Nacional de Salud)

Law 31/1995 on occupational risk prevention
(Ley 31/1995 de prevención de riesgos laborales)

Royal Decree 7/1996 on the liberalization of pharmaceutical services
(Real Decreto-ley 7/1996)

Act 13/1996 on Fiscal, Administrative and Social Order Measures
(Ley 66/1997de Medidas Fiscales, Administrativas y del Orden Social)

Law 15/1997 on new management forms of the NHS
(Ley 15/1997 sobre habilitación de nuevas formas de gestión del Sistema Nacional de Salud)

Royal Decree 39/1997 on Preventive Services Regulations
(Real decreto 39/1997 sobre reglamento de los servicios de prevencion)

Law 66/1997 on Fiscal, Administrative and Social Measures
(Ley 66/1997 de Medidas Fiscales, Administrativas y del Orden Social)

Royal Decree 165/1997 on the establishment of dispensation to the public of types of pharmaceuticals for human use
(Real Decreto 165/1997 por el que se establecen los márgenes correspondientes a la Dispensación al publico de Especialidades farmacéuticas de Uso humano)

Royal Decree 1663/1998
(expanding and updating Royal Decree 83/1993)
(Real Decreto 1663/1998 por el que se amplía la relación de medicamentos a efectos de su financiación con cargo a fondos de la Seguridad Social o a fondos estatales afectos a la sanidad)

Law on Immigration, 1999
(Ley de Inmigracion, 1999)

Royal Decree 1035/1999
(regulating the mechanism by which the government calculates the reference price for pharmaceuticals funded by social security)
(Real Decreto 1035/1999, por el que se regula el sistema de precios de referencia en la financiación de medicamentos con cargo a fondos de la seguridad social o a fondos estatales afectos a la sanidad)

Annual Budgetary Act, 1999
(Ley de Presupuesto Annual, 1999)

Act 21/2001 on regulation of the fiscal and administrative measures of the new financing system of the autonomous communities
(Ley 21/2001 por la que se regulan las medidas fiscales y administrativas del nuevo sistema de financiación de las Comunidades Autónomas de régimen común y Ciudades con Estatuto de Autonomía)

Act 41/2002 on Patients' Freedom, Rights and Duties on Information and Clinical Documentation
(Ley 41/2002 básica reguladora de la autonomía del paciente y de derechos y obligaciones en materia de información y documentación clínica)

Royal Decrees 1471–1480/2001

Professional Association Act 21/2001

Act 53/2002 on Fiscal, Administrative and Social Order Measures
(Ley 53/2002 de 30 de diciembre, de Medidas Fiscales, Administrativas y del Orden Social)

Law 16/2003 on Cohesion and Quality of the NHS
(Ley 16/2003 de Cohesión y Calidad del Sistema Nacional de Salud)

Law 44/2003 on the regulation of health professionals
(Ley 44/2003 de la ordenación de las profesiones sanitarias)

Law 55/2003 on the status of statutory health personnel
(Ley 55/2003 del Estatuto Marco del personal estatutario de los servicios de salud)

Royal Decree 605/2003 on Information about NHS Waiting Lists
(Real Decreto 605/2003 medidas para el tratamiento homogéneo de la información sobre las listas de espera en el Sistema Nacional de Salud)

Bill of Equality Rights between Women and Men, 2004
(Anteproyecto de Ley Orgánica de Garantía de la Igualdad entre mujeres y hombres, 2004)

Act 1/2004 on Measures for Integrated Protection against Gender Violence
(Ley Orgánica 1/2004, de 28 de diciembre, de Medidas de Protección Integral contra la Violencia de Género)

Royal Decree 1555/2004 on the new structure of the Ministry of Health and Consumer Affairs
(Real Decreto 1555/2004 sobre la estructura orgánica básica del Ministerio de Sanidad y Consumo)

Anti-tobacco Law, 2005
(Ley 28/2005)

Youth Act, 1990 (on civil regulation, rights and other measures concerning youth)
(Ley del Menor, 1990)

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 summer 2004 edition, the HFA database started to take account of the enlarged European Union (EU) of 25 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 ten 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. **Planning and regulation**: 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 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 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.

The Health Systems in Transition profiles

A series of the European Observatory on Health Systems and Policies

The Health systems in transition (HiT) country profiles provide an analytical description of each health care system and of reform initiatives in progress or under development. They aim to provide relevant comparative information to support policy-makers and analysts in the development of health systems and reforms in the countries of the WHO European Region and beyond. The HiT profiles are building blocks that can be used:

- to learn in detail about different approaches to the financing, organization and delivery of health services;
- to describe accurately the process, content and implementation of health reform programmes;
- to highlight common challenges and areas that require more in-depth analysis; and
- 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 countries of the WHO European Region.

How to obtain a HiT

All HiT country profiles are available in PDF format at *www.euro.who.int/observatory*, where you can also join our listserve for monthly updates of the activities of the European Observatory on Health Systems and Policies, including new HiTs, books in our co-published series with Open University Press, Policy briefs, the *EuroObserver* newsletter and the *Eurohealth* journal. If you would like to order a paper copy of a HiT, please write to:

info@obs.euro.who.int

HiT country profiles published to date:

Albania (1999, 2002[a,g])
Andorra (2004)
Armenia (2001[g], 2006)
Australia (2002, 2006)
Austria (2001[e],2006[e])
Azerbaijan (2004[g])
Belgium (2000)
Bosnia and Herzegovina (2002[g])
Bulgaria (1999, 2003[b])
Canada (2005)
Croatia (1999, 2006)
Cyprus (2004)
Czech Republic (2000, 2005[g])
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The former Yugoslav Republic of Macedonia (2000, 2006)
Turkey (2002[g,i])
Turkmenistan (2000)
Ukraine (2004[g])
United Kingdom of Great Britain and Northern Ireland (1999[g])
Uzbekistan (2001[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
[k] Polish

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

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