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Portugal

Health system review

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Preface

The Health Systems in Transition (HiT) series consists of country-based reviews 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 review is produced by country experts in collaboration with the Observatory's staff. In order to facilitate comparisons between countries, reviews are based on a template, which is revised periodically. The template provides detailed guidelines and specific questions, definitions and examples needed to compile a report.

HiTs 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 reform programmes;
- to highlight challenges and areas that require more in-depth analysis;
- to provide a tool for the dissemination of information on health systems and the exchange of experiences of reform strategies between policy-makers and analysts in different countries; and
- to assist other researchers in more in-depth comparative health policy analysis.

Compiling the reviews poses a number of methodological problems. In many countries, there is relatively little information available on the health system and the impact of reforms. Due to the lack of a uniform data source, quantitative data on health services are based on a number of different sources, including

the World Health Organization (WHO) Regional Office for Europe's European Health for All database, data from national statistical offices, Eurostat, the Organisation for Economic Co-operation and Development (OECD) Health Data, data from the International Monetary Fund (IMF), the World Bank's World Development Indicators and any other relevant sources considered useful by the authors. Data collection methods and definitions sometimes vary, but typically are consistent within each separate review.

A standardized review has certain disadvantages because the financing and delivery of health care differ across countries. However, it also offers advantages, because it raises similar issues and questions. HiTs can be used to inform policy-makers about experiences in other countries that may be relevant to their own national situation. They can also be used to inform comparative analysis of health systems. This series is an ongoing initiative and material is updated at regular intervals.

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

HiTs and HiT summaries are available on the Observatory's web site <http://www.healthobservatory.eu>.

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The HSPM is an international network that works with the Observatory on Country Monitoring. It is made up of national counterparts that are highly regarded at national and international level and have particular strengths in the areas of health systems, health services, public health and health management research. They draw on their own extensive networks in the health field and their track record of successful collaboration with the Observatory to develop and update the HiT.

The Institute of Hygiene and Tropical Medicine (*Instituto de Higiene e Medicina Tropical*, IHMT) has been an academic unit of the NOVA University of Lisbon (*Universidade Nova de Lisboa*) since 1980. IHMT's activity is characterized by postgraduate training, research and cooperation towards development. IHMT has been recognized at national and international level, for its scientific quality in postgraduate teaching and excellency in specific areas of research, which are focused on tropical medicine and health-related areas considered problematic in developing countries. For further details see www.ihmt.unl.pt. Global Health and Tropical Medicine is an R&D Centre that brings together researchers from IHMT with a track record in Tropical Medicine and International/Global Health.

This edition was written by Jorge de Almeida Simões, Gonçalo Figueiredo Augusto and Inês Fronteira (Institute of Hygiene and Tropical Medicine, NOVA University of Lisbon). It was edited by Cristina Hernández-Quevedo, working with the support of Ellen Nolte, London Hub Coordinator of the European Observatory of Health Systems and Policies. The basis for this edition

was the previous HiT on Portugal, which was published in 2011, written by Pedro Pita Barros (NOVA University of Lisbon), Sara Ribeirinho Machado (Boston University) and Jorge de Almeida Simões (Institute of Hygiene and Tropical Medicine, NOVA University of Lisbon) and edited by Sara Allin.

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The Observatory is a partnership that includes the Governments of Austria, Belgium, Finland, Ireland, Norway, Slovenia, Sweden, Switzerland and the United Kingdom; the Veneto Region of Italy; the French National Union of Health Insurance Funds (UNCAM); the World Health Organization; the European Commission; the World Bank; the London School of Economics and Political Science (LSE); and the London School of Hygiene & Tropical Medicine (LSHTM). The partnership is hosted by the WHO Regional Office for Europe. The Observatory is composed of a Steering Committee, core management team, research policy group and staff. Its Secretariat is based in Brussels and has offices in London at LSE, LSHTM and the Technical University of Berlin. The Observatory team working on HiTs is led by Josep Figueras, Director; Elias Mossialos, Martin McKee, Reinhard Busse (Co-directors); Richard Saltman, Ellen Nolte, Ewout van Ginneken and Suszy Lessof. The Country Monitoring Programme of the Observatory and the HiT series are coordinated by Gabriele Pastorino. The production and copy-editing process of this HiT was coordinated by Jonathan North, with the support of Caroline White, Lesley Simon (copy-editing) and Pat Hinsley (design and layout).

List of abbreviations

ACES	Groups of primary care centres
ACSS	Central Administration of the Health System
ADSE	Health subsystem for civil servants
ASF	Authority for Supervision of Insurance and Pension Funds
CIS	Commonwealth of Independent States
CODU	Urgent Patients' Orientation Centre
CODU-Mar	Urgent Patients' Orientation Centre for Situations Occurred at Sea
CRSul	Southern Rehabilitation Centre
CT	Computed tomography
DALY	Disability-adjusted life-years
DGH	Directorate-General of Health
DL	Decree-Law
DRG	Diagnosis-related group
EPE	Public enterprises
EU	European Union
FFS	Fee-for-service
FHU	Family Health Unit
GDP	Gross domestic product
GP	General practitioner
HPV	Human papillomavirus
HRA	Health Regulatory Agency
HSPM	Health Systems and Policy Monitor
INE	National Institute of Statistics
INEM	National Institute for Medical Emergencies
INFARMED	National Authority on Drugs and Health Products
INSA	National Institute of Health, Dr Ricardo Jorge
IT	Information Technology
MoU	Memorandum of Understanding
MRI	Magnetic resonance imaging
NHS	National Health Service

OECD	Organization for Economic Cooperation and Development
OOP	Out-of-pocket
PDS	Health Data Platform
PHCU	Personalized Health Care Units
PPP	Purchasing power parity
P-PPs	Public–Private Partnerships
R&D	Research and development
RHA	Regional Health Administration
RNCCI	National Network for Long-term care
SDR	Standardized death rate
SHI	Social Health Insurance
SiNATS	National System for Health Technology Assessment
SPMS	Shared Services – Ministry of Health
TFYR of Macedonia	The former Yugoslav Republic of Macedonia
VHI	Voluntary Health Insurance
WHO	World Health Organization
YLD	Years lived with disability

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Abstract

This analysis of the Portuguese health system reviews recent developments in organization and governance, health financing, health care provision, health reforms and health system performance.

Overall health indicators such as life expectancy at birth and at age 65 years have shown a notable improvement over the last decades. However, these improvements have not been followed at the same pace by other important dimensions of health: child poverty and its consequences, mental health and quality of life after 65. Health inequalities remain a general problem in the country. All residents in Portugal have access to health care provided by the National Health Service (NHS), financed mainly through taxation. Out-of-pocket payments have been increasing over time, not only co-payments, but particularly direct payments for private outpatient consultations, examinations and pharmaceuticals. The level of cost-sharing is highest for pharmaceutical products. Between one-fifth and one-quarter of the population has a second (or more) layer of health insurance coverage through health subsystems (for specific sectors or occupations) and voluntary health insurance (VHI). VHI coverage varies between schemes, with basic schemes covering a basic package of services, whereas more expensive schemes cover a broader set of services, including higher ceilings of health care expenses. Health care delivery is by both public and private providers. Public provision is predominant in primary care and hospital care, with a gate-keeping system in place for access to hospital care. Pharmaceutical products, diagnostic technologies and private practice by physicians constitute the bulk of private health care provision.

In May 2011, the economic crisis led Portugal to sign a Memorandum of Understanding with the International Monetary Fund, the European Commission and the European Central Bank, in exchange for a loan of 78 billion euros. The agreed Economic and Financial Adjustment Programme included 34 measures aimed at increasing cost-containment, improving efficiency and increasing

regulation in the health sector. Reforms implemented since 2011 by the Ministry of Health include: improving regulation and governance, health promotion (launch of priority health programmes such as for diabetes and mental health), rebalancing the pharmaceutical market (new rules for price setting, reduction in the prices of pharmaceuticals, increasing use of generic drugs), expanding and coordinating long-term and palliative care, and strengthening primary and hospital care.

Executive summary

Introduction

Portugal lies on the Atlantic coast of the Iberian peninsula (with also two archipelagos in the Atlantic Ocean), and has a population of 10.3 million people. Since 1974, the country has had a democratic regimen and has seen remarkable human, social and economic development, embodied by the membership of the European Community (1986) and the Euro Zone (1999). As a result of the 2008 financial crisis, a loan was agreed from the International Monetary Fund, the European Commission and the European Central Bank in May 2011. The associated Memorandum of Understanding (MoU) set a number of measures to be implemented in the health sector in Portugal, aimed at increasing cost-containment, improving efficiency and increasing regulation.

In 2014, average life expectancy at birth in Portugal was 81.3 years, slightly higher than the European Union (EU) average that year (80.9 years). However, estimates of life expectancy are quite different between men and women in Portugal. According to 2014 figures, Portuguese women are expected to live 6.4 years longer than men, whereas the EU average is 5.5 years.

Health inequalities remain a challenge more generally in Portugal. The Portuguese population has become concentrated in Lisbon, Oporto and along the coast, leaving an increasingly sparse and elderly population inland. With the recent economic crisis, the rates of people leaving Portugal have risen, and traditional immigration (in particular from former Portuguese African colonies) has fallen. Portugal remains one of the most unequal countries in the EU, with the fourth highest Gini coefficient in the EU, and major health differences between women and men; on average, women live longer than men, but they are also disproportionately affected by musculoskeletal disorders, depression and obesity. Combined with similar demographic ageing as elsewhere in Europe, these inequalities represent a major challenge to both social security and the health system.

Organization and governance

The first social security law in Portugal was enacted in 1946: health care was provided for the employed population and their dependents through social security and sickness funds, financed by compulsory contributions from both employees and employers. After the revolution of 1974, a process of health services restructuring began, which culminated in the establishment, in 1979, of the National Health Service (NHS), a universal tax-financed system.

Currently, the Portuguese health system is characterized by three co-existing and overlapping systems: the universal NHS; special health insurance schemes for particular professions or sectors (e.g. civil servants, employees at banks and insurance companies), called the health subsystems; and private voluntary health insurance (VHI).

Planning and regulation take place largely at the central level by the Ministry of Health and its institutions, whereas the management of the NHS takes place at the regional level, by the regional health administrations (RHAs) introduced in 1993. In each of the five RHAs, there is a health administration board accountable to the Ministry of Health and responsible for strategic management of population health, supervision of hospitals, management of the NHS primary care centres, and implementation of national health policy objectives. RHAs are also responsible for contracting services with hospitals and private sector providers for NHS patients. Although in theory the RHAs have financial responsibilities, these are limited to primary care because hospital budgets are defined and allocated centrally. The Azores and Madeira, as autonomous regions, have broad powers for their own health care planning and management.

Financing

Total health expenditure represented 9.5% of the country's GDP in 2014. This is around 10% lower than its peak in 2010, reflecting the impact of the economic crisis and the subsequent MoU.

Public expenditure on the NHS accounts for 66% of total health expenditure. The health subsystems, which collectively provide comprehensive or partial health care coverage to between one-fifth and one-quarter of the population, are financed mainly through employee and employer contributions.

A relatively large proportion of financing is private, around 35% of total health expenditure (compared to a European average of around 24%). Over 80% of this goes on out-of-pocket payments, mainly user charges in private outpatient care, medicines, dental care and user charges in the NHS (although exemptions cover much of the population). The rest is mostly spent on premiums to private insurance schemes and mutual institutions. Private VHI covers about 26% of the population. Its main role is supplementary (speeding access to elective hospital treatment and ambulatory consultations, and choice of provider) and, only rarely, complementary (covering services excluded from the NHS).

Public hospitals are funded through global budgets, but with an increasing role of activity-based funding using diagnosis-related groups, and private insurers and health subsystems pay providers. The Ministry of Health allocates funds to the health regions, based on a combination of historical expenditure and capitation, which pay for primary care and specific health programmes.

Physical and human resources

In 2014, Portugal had 225 hospitals, 113 of which belonged to the NHS, with a total capacity of 34 522 beds. Trends in hospital numbers have been similar to those observed in other European countries; there has been a significant decrease in the number of public hospitals over the decades, due to the recent mergers between public sector hospitals and the closing of psychiatric hospitals. Portugal has a relatively low supply of beds compared with other European countries, though it is higher than in other countries with similar NHS models, such as the United Kingdom and Spain.

In 2014, the number of physicians per 100 000 population (442.6) was above the EU average (349.6). On the other hand, the number of nurses in Portugal (637.8 per 100 000 population) was below the EU average (864.3), which implies that Portugal has a low ratio of nurses to physicians. The overall distribution and density of pharmacies in the country seems to be evenly distributed across the country, and the number of pharmacists has been growing steadily over the last 15 years, although it remains low in comparison to similar systems such as the United Kingdom and Spain.

Portugal faces similar challenges regarding the distribution of health workers across the population: they are concentrated in the major urban centres and along the coast, leaving the inland underserved. Adaptations of roles as

has been adopted elsewhere (e.g. from doctors to nurses) remains a challenge in Portugal. There are also significant deficiencies in the distribution of health equipment, which risk affecting the NHS's ability to meet population needs.

Provision of services

The Directorate-General of Health is responsible for the organization of public health services at national level.

Portuguese primary care is delivered by a mix of public and private health service providers. The NHS predominantly provides primary care and acute general and specialized hospital care. Dental consultations, diagnostic services, renal dialysis and rehabilitation are more commonly provided in the private sector (but with public funding to a considerable extent) under contractual arrangements with the NHS. The creation of Family Health Units, in 2007, and Primary Healthcare Centre Groups, in 2008, restructured the organization of Portuguese primary care in order to provide integrated primary care for the local population.

Secondary and tertiary care is mainly provided in hospitals, which are grouped into Hospital Centres covering a given geographical area. At the start of the twenty-first century, one of the government's objectives was to increase capacity and value for money in the NHS by increasing private sector involvement in the building, maintaining and operating of health facilities under public–private partnerships, drawing on the British model. However, evidence of their value has been mixed and currently no more public–private partnerships are planned. Another attempt at vertical integration of health care has been the establishment of Local Health Units (*Unidades Locais de Saúde*), allowing the integration of hospitals and primary health care units in the same organization. However, these have not so far fulfilled the hopes of improved integration.

The National Network for Long-term Care (the RNCCI) created in 2006 combines teams providing long-term care, social support and palliative care, and brings together hospitals, Primary Healthcare Centre Groups, local and district social security services, municipalities, as well as private and not-for-profit institutions providing social services.

The National Institute for Medical Emergencies is the organization within the Ministry of Health responsible for the coordination and functioning of an integrated medical emergency system in mainland Portugal, ensuring the rapid and appropriate delivery of emergency care.

There is a maximum number of pharmacies allowed in each community and the location of those is highly regulated.

Principal health reforms

Recent reforms in the health sector in Portugal are inevitably linked to the MoU signed between the Portuguese Government and the three international institutions in exchange for a €78 billion loan. The reforms implemented since 2011 by the Ministry of Health are focused on five major dimensions: regulation and governance; health promotion; pharmaceutical market; long-term and palliative care; and primary and hospital care; this last area including a continuation of reforms launched before the Economic and Financial Adjustment Programme. The overall aim was to cut costs and increase the system's efficiency. Overall, most of the adjustment in spending in the health sector resulted from price effects, a few from quantity cuts, and only a small proportion resulted from the shift of financial responsibility from the government to citizens. That was achieved through a reduction in the level of salaries paid to health workers, cuts in public pharmaceutical expenditure, and price review regarding private institutions that have contracted with the NHS. Medical practice was also targeted with the introduction of clinical guidelines.

Future challenges include how to balance financial sustainability with NHS improvements in underserved fields such as dental care, mental health and palliative care; and more broadly, how to increase healthy life expectancy. Moreover, the wage cuts following the MoU have left wages low in comparison to the private sector and elsewhere in the EU, with a subsequent wave of emigration by healthcare professionals; ensuring that a sustainable workforce is a challenge. Improving hospital management is also a challenge, as is continued improvement of primary care. The goal of including every NHS user in a GP patient list can only be achieved with serious investments in human resources and infrastructure, and this is crucial to tackle the current inequalities in accessing health care.

Assessment of the health system

The period between 2011 and 2015 has been characterized both by the consolidation of previously launched reforms and the introduction of new reforms.

The health system in Portugal has an extensive information infrastructure that plays a central role in monitoring system performance. There are electronic platforms (e.g. an electronic Health Data Platform) storing different kinds of health information that are used for several purposes. However, not all data sources are effectively connected and some challenges concerning patient privacy and the legal basis for connecting patient data remain.

Although there is a strong legal and political commitment to social rights, the impact of social determinants is not equitable in Portugal and health inequalities remain one of the key problems for the NHS. These inequities are determined by geography (people from the interior regions have more difficulties in accessing health services); income (individuals with low income face a greater challenge when paying for pharmaceuticals and when accessing health services not covered by the NHS, such as oral health); and health literacy (access to the internet and, consequently to a lot of health-related information available online, is more difficult for the older populations and for those with a low educational level).

The main source of funding of the Portuguese NHS is general taxation. However, out-of-pocket payments are an important source of financing for the Portuguese health system. The process of resource allocation in Portugal is still moving from historically based allocation of funds towards needs-based allocation. There is room for further efficiency gains in health care delivery in Portugal, using health technology assessment to monitor, and so improve, the system's quality.

The system has progressively become more transparent, mainly due to the creation of the NHS Portal, where information of waiting times in emergency departments and for outpatient consultations at NHS hospitals are available in real time. At the same time, it is possible to know, in detail, the activity of each of the NHS units as well as their financial situation and delays in payments to service providers, though accountability still needs to be improved.

In addressing these challenges, the National Health Council, an independent body created in 2016 that brings together stakeholders in the health sector, will have an important role in reaching consensus, acting as a consultant body for the government and producing studies and recommendations on all issues related with health policies.

1. Introduction

Chapter summary

- Portugal is located in south-western Europe, with a population of 10.3 million people.
- The country has had a democratic regimen since 1974, being part of the European Community (1986) and the Euro Zone (1999).
- The international economic crisis had a major impact in Portugal from 2009, 2011 and 2012, leading the country to sign a Memorandum of Understanding with three international institutions.
- The Portuguese population is ageing rapidly, and this scenario was worsened by the economic crisis and the subsequent migration of fertile and active citizens.
- Maternal and child health have improved, while noncommunicable diseases are the main causes of death and morbidity.
- Health inequalities are particularly important in Portugal, related mainly to gender and geographic location.

1.1 Geography and sociodemography

Portugal is located on the western side of the Iberian Peninsula, in south-western Europe. It comprises the mainland and two archipelagos lying in the Atlantic Ocean: the Azores (nine islands) and Madeira (two main islands – Madeira and Porto Santo – plus two groups of small islands – Desertas and Selvagens).

Mainland Portugal has one land border with Spain to the north and east and has a long coastline with the Atlantic Ocean to the west and south (Fig. 1.1). The River Tagus divides the country into two distinct geographical areas. Rivers, mountains and forests are part of the northern and central landscape in Portugal,

Fig. 1.1

Map of Portugal



Source: Authors' compilation.

whereas soft rolling hills and large plains characterize the southern region. The highest range in mainland Portugal is Serra da Estrela (1993 m), but the highest mountain in the territory is located in Pico, in the Azores (2100 m).

The climate is temperate maritime with hot summers and wet winters, affected by Atlantic, Continental and Mediterranean influences.

According to recent estimates for 2015, Portugal has a total of 10.3 million inhabitants (Table 1.1). Since the last census in 2011, the resident population in Portugal has decreased by 1.6% (INE, 2011). Population density has also decreased from 115.4 inhabitants per square kilometre in 2010 to 113.0 per square kilometre in 2015 (World Bank, 2016). However, this figure hides one of the major discrepancies in Portugal: the distribution of the population is highly unbalanced and has been increased by migration to the metropolitan

Table 1.1

Trends in population/demographic indicators for Portugal, 1995–2015 (selected years)

	1995	2000	2005	2010	2015
Total population (millions)	10.0	10.3	10.5	10.6	10.3
Population aged 0–14 years (% of total)	17.8	16.0	15.4	14.9	14.1
Population aged 65 years and above (% of total)	15.0	16.3	17.2	18.8	20.8
Population density (people per km ²)	109.6	112.5	114.8	115.4	113.0
Population growth (annual growth rate)	0.3	0.7	0.2	0.0	–0.5
Fertility rate, total (births per woman) ^a	1.4	1.6	1.4	1.4	1.3
Urban population (% of total)	51.1	54.4	57.5	60.6	63.5

Source: World Bank, 2016.

Note: ^aINE, 2016a.

areas of Lisbon and Oporto and the coast between the 2001 and 2011 censuses (INE, 2011), with the population of the interior decreasing, a trend which has been accompanied by a gradual ageing of the population due to increasing life expectancy and the steady decrease of birth rate (see section 1.4). This situation will pose major challenges to the Portuguese health system in the coming years.

During the 1990s, Portugal was the destination of regular and irregular migrants from Brazil and Central and Eastern Europe, as well as the more traditional migration from the former Portuguese colonies in Africa. According to 2015 estimates, legal immigrants represent 3.8% of the resident population in Portugal. Immigrants are mainly concentrated in coastal cities: Lisbon (44.6%), Faro (15.0%) and Setúbal (9.5%) (SEF, 2016). In 2015, 40.4% of immigrants with legal status in Portugal came from Europe, 24.4% came from Africa, 23.4% from the Americas and 11.7% from Asia (SEF, 2016). Immigrants from Europe were mainly Ukrainian (23.0%) and Romanian (19.7%) nationals, whereas most of the African immigrants came from Portuguese-speaking countries (91.3%), especially Cape Verde (41.0%). Of immigrants from the Americas, 89.7% came from Brazil. Around half of the Asian immigrants living in Portugal were Chinese (46.3%). Immigrant population with legal status in Portugal has decreased since 2010, mainly due to the economic crisis (see section 1.2), motivating the emigration of many Portuguese citizens, mainly to Germany, the United Kingdom of Great Britain and Northern Ireland and Switzerland (OECD, 2014; Government of Portugal, 2015a). Since 2010, more than 400 000 Portuguese are estimated to have left the country, either permanently or temporarily (Government of Portugal, 2015a).

Portuguese immigration policy is currently guided by Law No. 29/2012 of 9 August 2012, which establishes that immigrants have the same access to the health system as Portuguese citizens (see section 3.3.1, *Breadth: who is covered?*).

The government does not gather data on ethnicity. The latest information on religion is provided by the 2011 Census, where 81.0% of residents aged 15 years or older identified themselves as Roman Catholics, and only 6.8% declared themselves atheist (8.3% of respondents did not answer that question). Muslim (0.2%) and Jewish (0.03%) communities are small (INE, 2011).

According to Eurostat (2016a), Portugal had the lowest fertility rate among the European Union (EU) Member States as of 2013 (1.2 total fertility rate compared with an estimated rate of 1.5 in the EU). Increasing life expectancy (from 75.3 years in 1995 to 81.3 years in 2014) (see section 1.4), the decline in fertility rates and the decrease of those aged 15–64 years (see Table 1.1), are causing a “double ageing” effect in Portugal. Further, the population in Portugal has been declining since 2010, mainly as a result of increased emigration and decreased immigration (INE, 2014).

1.2 Economic context

The international financial crisis that started in 2008 had a major impact in Europe, and Portugal was no exception. Following several years of weak economic growth (average gross domestic product (GDP) growth of 0.8% between 2001 and 2010), the Portuguese economy experienced recession in 2009, 2011 and 2012 (Perelman, Felix & Santana, 2015). The economic slowdown was coupled with a steady rise in unemployment and by a public debt crisis. The economic downturn and the turmoil that followed Greek and Irish bailouts led to increased difficulty in Portugal accessing the financial markets. In this context, Portugal was unable to re-finance its debt (both public and private), which led Portugal to request financial assistance from the EU, the European Central Bank and the International Monetary Fund (Maresso et al., 2014). An Economic and Financial Adjustment Programme was agreed between these three international institutions and the Portuguese government in May 2011 by signing a Memorandum of Understanding (MoU) (MoU, 2011; Augusto, 2012), in exchange for a loan of €78 billion. The MoU defined several policy measures to be adopted by the Portuguese government for the period 2011–2014, including: a range of austerity requirements, including

the reduction of public spending and the increase of tax revenues to decrease the budget deficit, as well as other measures to stabilize the financial sector together with structural reforms in several areas, including labour, goods, services and housing (Maresso et al., 2014). The MoU considered 34 measures and actions concerning the health sector (Campos & Simões, 2014). Those measures were a combination of cost-containment actions and strategies to improve efficiency in the National Health Service (NHS) on a permanent basis (Barros, 2012).

In 2015, 5.2 million people (58.6% of the population 15 years or older) were active in the labour market, with women accounting for 48.4% of the country's workforce (INE, 2016b). Compared to the last quarter of 2010, at the end of 2015 there were 387 300 (-7.8%) fewer people employed, due both to the rise in unemployment and emigration (INE, 2016b). Between 2010 and 2013, unemployment increased from 10.8% to 16.2% (World Bank, 2016), reflecting the effects of the deep economic crisis in Portugal. Since then the unemployment rate has declined, but in 2015 Portugal was still among the five EU countries with the highest unemployment rate (12.4%), after Greece, Spain, Croatia and Cyprus (Eurostat, 2016a). Also, youth unemployment (those less than 25 years old) in Portugal rose from 28.2% in 2010 to a peak of 38.0% in 2012 (Eurostat, 2016a). In 2015, that rate was 32.0% (EU average 20.3%), placing Portugal among the EU countries with the highest youth unemployment, after Spain, Greece, Croatia, Italy and Cyprus (Eurostat, 2016a).

In 2015, 19.0% of the population was living below the poverty line, defined as 60% of the median income (€5268 in 2015). This percentage has been growing since 2010, when it was 18.0% (Table 1.2). Income disparities in Portugal are high and have deepened during the Adjustment Programme. In 2015, the income ratio of the richest 20% and the poorest 20% was 5.9 (5.7 in 2010), while the income ratio of the richest 10% and the poorest 10% was 10.1 (9.4 in 2010) (INE, 2016a). Portugal is among the EU countries where income is most unequally distributed, after Bulgaria, Greece, Romania, Spain, Latvia and Lithuania (Eurostat, 2016b), with children and youths being particularly affected (OECD/EU, 2016).

Table 1.2

Macroeconomic indicators in Portugal, 1995–2015 (selected years)

	1995	2000	2005	2010	2015
GDP per capita (current local currency unit €)	8 880.5	12 484.7	15 105.0	17 017.7	17 333.3
GDP per capita, PPP (current international US\$)	13 687.0	17 852.1	22 072.7	26 924.4	29 214.3
GDP growth rate (annual %)	4.3	3.8	0.8	1.9	1.5
Public expenditure (% of GDP) ^a	42.6	42.6	46.7	51.8	48.3
Cash surplus/deficit (% of GDP) ^a	-5.2	-3.2	-6.2	-11.2	-4.4
Public debt (% of GDP) ^a	58.3	50.3	67.4	96.2	129.0
Unemployment, total (% of labour force)	7.1	3.8	7.6	10.8	12.4
Poverty rate ^{b,c}	n/a	n/a	18.5	18.0	19.0
Income inequality (Gini coefficient) ^b	n/a	n/a	37.7	34.2	33.9

Source: World Bank, 2016.

Notes: GDP: Gross Domestic Product; PPP: Purchasing Power Parity; n/a: not available. ^aEurostat, 2016a; ^bINE, 2016a; ^cPopulation at risk of poverty provided by the Portuguese National Institute of Statistics (INE) according to Eurostat's definition: number of people with an equivalized disposable income below the risk-of-poverty threshold, which is set at 60% of the national median equivalized disposable income (after social transfers).

1.3 Political context

Following the military coup of 25 April 1974, Portugal adopted a new Constitution in 1976, which established a democratic republic after 48 years of dictatorship. The main institutions are: the President of the Republic, the parliament, the government and the courts.

The president is elected through universal suffrage for a 5-year term. The parliament has 230 members also elected by direct universal suffrage for a 4-year term. The president appoints the prime minister based on election results and following consultations with all political parties with parliamentary seats. The Prime Minister recommends the other members of the government, who are also appointed by the president. The government develops and guides policy implementation, while the parliament holds the legislative power.

Portugal is a unitary state, respecting the autonomous regimen of the Azores and Madeira regions, which have their own regional governments and parliaments, also elected for a 4-year term. Portugal is divided into municipalities (*concelhos*), which have their own level of elected government, and parishes (*freguesias*). Despite some decentralization since the early 2000s, political power is still very concentrated in the central government. Mainland Portugal is conceptually divided in five regions (North, Centre, Lisbon and the Tagus Valley, Alentejo, and Algarve), but regional authorities have no real decisional power and the government nominates their leaders.

Following a political crisis in 2011 and the Economic and Financial Adjustment Programme (see section 1.2), Portugal held general elections; these replaced the central-left wing Socialist Party, in power since 2005, with a central-right-wing coalition between the Social Democratic Party and the Social Democratic Centre/Popular Party. That government had a majority in the parliament and ruled during the 3-year Economic and Financial Adjustment Programme (2011–2014) in close touch with the three financial institutions (see section 1.2), which assessed the programme every 3 months. Despite winning general elections in October 2015, the right-wing coalition did not succeed in renewing the majority in the parliament. Instead, an unprecedented left-wing coalition allowed the leader of the Socialist Party to be appointed prime minister by the president. The majority comprised by the Socialist Party, the Communist Party, the Greens and the Left Bloc currently support the Socialist Government in the parliament.

Portugal is a member of many international organizations, including the EU, the North Atlantic Treaty Organization, the United Nations, the Organization for Economic Co-operation and Development (OECD), the Council of Europe and the World Health Organization (WHO). EU directives, such as those regarding health policies, largely determine national policies and legislation.

1.4 Health status

Portugal has made significant progress in both reducing mortality rates and increasing life expectancy at birth during the last 40 years. The introduction of a universal immunization programme in 1965, the expansion of health care services, especially pushed by the creation of the NHS in 1979, and the overall improvements in general living conditions have brought remarkable reductions in infant mortality rate and a steady increase in life expectancy, especially among women (Table 1.3).

In 2014, average life expectancy at birth in Portugal was 81.3 years, slightly higher than the EU average that year (80.9 years) (Eurostat, 2016b). However, estimates of life expectancy are quite different between men and women in Portugal. According to 2014 figures, Portuguese women are expected to live 6.4 years longer than men (Table 1.3), whereas the EU average is 5.5 years (Eurostat, 2016b).

Table 1.3

Mortality and longevity indicators in Portugal, 1995–2014 (selected years)

	1995	2000	2005	2010	2014
Life expectancy at birth, total	75.4	76.8	78.2	80.1	81.3 ^b
Life expectancy at birth, male	71.7	73.3	74.9	76.8	78.0 ^b
Life expectancy at birth, female	79.0	80.4	81.5	83.2	84.4 ^b
Mortality, SDR per 100 000 population ^a					
Circulatory diseases (CID-10: I00–I99)	320.9	263.7	208.7	167.4	150.8
Malignant neoplasms (CID-10: C00–C97)	164.5	160.3	155.3	154.4	152.0
Communicable diseases (CID-10: A00–B99)	18.0	19.5	16.9	16.6	12.8
External causes of death (CID-10: V01–Y89)	53.4	39.9	35.9	32.3	32.3
All causes (CID-10: A00–Y89)	804.8	735.6	670.0	586.4	538.0
Infant mortality rate (per 1 000 live births)	7.4	5.5	3.5	2.5	2.9
Maternal mortality rate (per 100 000 live births) ^a	9.9	8.8	5.2	5.8	5.6 ^c

Source: Eurostat, 2016a.

Notes: ^aAuthors' calculations based on INE, 2016a; ^bestimated; ^c2013 data. disposable income (after social transfers).

1.4.1 Leading causes of death

According to the latest available data, the main causes of death in 2014 were malignant neoplasms (152.0 deaths per 100 000 population) and circulatory system diseases (150.8 deaths per 100 000 population) (Table 1.3). However, when analysing standardized death rates (SDRs) by gender, SDRs for men are greater than SDRs for women in all causes, except for Alzheimer disease (INE, 2016c). This is in line with the fact that, on average, women live longer than men. In 2014, circulatory system diseases killed 177.9 men per 100 000 population and 128.1 women per 100 000 population, while malignant neoplasms killed 212.9 men per 100 000 and 105.4 women per 100 000. Respiratory diseases were, for both sexes, the third most important cause of death but they accounted for a much lower proportion of deaths: 11.6% of all deaths; SDR: 72.4 men per 100 000 population and 40.9 women per 100 000 population (INE, 2016c). The SDR for circulatory diseases has decreased since 2000 for both men (–41.5%) and women (–44.4%); the SDR for malignant neoplasms has reduced by only 3.3% for men and 9.0% for women over the same period.

Between 2000 and 2014, the SDR for colon cancer increased substantially by 51.3% among men and 30.4% among women. Also, among women, the SDR for trachea, bronchus and lung cancers increased from 7.6 to 9.4 (+23.7%) in the same period. Finally, among men, the SDR for suicide more than doubled (+102.7%) between 2000 (7.4 per 100 000 population) and 2014 (15.0 per 100 000 population) (INE, 2016c).

Box 1.1

Health inequalities

In 2012, Portugal was among the most unequal countries in the EU, recording the fourth highest Gini coefficient for disposable household income (0.34) (European Commission, 2015). Likewise, Portugal also registers high health inequalities in the EU context (Mackenbach et al, 2008). Despite intense criticism in several international reports and scientific articles (WHO Regional Office for Europe 2010a; 2010b; Bago d'Uva, 2010), there is no new evidence since then that the objective of reducing health inequalities has been achieved.

As noted before, there are significant differences between men and women regarding mortality and morbidity. On average, women live longer than men, but they are also disproportionately affected by musculoskeletal disorders, depression and obesity. Women are also more likely to take sick leave and report chronic back pain (Perelman, Fernandes & Mateus, 2012). According to the latest National Health Survey, in 2014 men recorded higher standardized mortality rates than women, and latest data also suggest higher rates of smoking and other risk factors (INE/INSA, 2016).

Besides, other studies have shown that African immigrants have higher AIDS and cardiovascular mortality than citizens born in Portugal, having higher mortality associated with socio-environmental factors (Harding et al., 2008; Williamson et al., 2009). Additionally, a number of studies reported that lower education is strongly associated with worse health condition (Bastos et al., 2013; Santos et al., 2014). Education was also found to be strongly associated with chronic back pain (with less educated individuals being more likely to suffer chronic back pain) (Azevedo et al., 2012) and functional limitations (Eikemo et al., 2008). Deprivation and financial constraints were also found to be associated with poorer health outcomes (Alves et al., 2012).

Despite the limited availability of demographic data, the existing evidence suggests that the most vulnerable groups in Portugal include the elderly and children in poverty, poor people living in rural areas, ethnic minorities, migrants, and the long-term unemployed (Crisp et al., 2014). These groups are more likely to suffer from poor health and experience long periods of poverty, unemployment and social exclusion (Crisp et al., 2014). There are also significant differences in wealth and health indicators between the great metropolitan areas of Lisbon and Oporto and the interior regions. Many of those living in rural areas still live in relative poverty and have barriers (particularly geographic distance) to access quality health services (Crisp et al., 2014).

Infant mortality in Portugal is below the EU average (3.7/100 000 live births in 2012) and was recorded as 2.9 deaths per 100 000 live births in 2014 (Table 1.3). Overall, maternal and child health indicators in Portugal are similar or better than the EU average. The adolescent fertility rate in Portugal has been decreasing over the past decades, as a result of better health promotion and education, from 21.0 in 1995 to 10.3 births per 1000 women aged 15–19 years in 2014, remaining slightly lower than the EU average of 11 births per 1000 women in 2014 (World Bank, 2016).

According to the Global Burden of Disease study (IHME, 2016), noncommunicable diseases accounted for 85.9% of the burden of disease in Portugal (measured by disability-adjusted life years (DALYs)) in 2015. This is in line with other European countries, where noncommunicable

diseases have become more important compared with infectious diseases (WHO, 2014). Among noncommunicable diseases, those with major impact in morbidity, disability and premature death in the Portuguese population are cancers (18.5% DALY), circulatory diseases (15.5% DALY), musculoskeletal disorders (12.2% DALY) and mental and behavioural disorders (8.9% DALY) (Table 1.4).

Table 1.4

Estimates of global burden of disease, by group of disease, as percentage of total DALY and YLD, 2015

	DALY (% of total)	YLD (% of total)
Noncommunicable diseases	85.9	88.5
Circulatory diseases	15.5	3.7
Malignant neoplasms	18.5	2.8
Mental and behavioural disorders	8.9	17.7
Diabetes and other endocrine, blood and urogenital diseases	7.2	7.7
Chronic respiratory diseases	4.1	3.9
Musculoskeletal disorders	12.2	25.1
Neurological disorders	7.1	8.9
Digestive diseases	1.7	1.3
Chronic liver diseases (including cirrhosis)	1.9	0.1
Other causes (including congenital, neonatal and other neglected causes)	8.8	17.3
Infectious diseases	6.2	4.7
External causes	7.9	6.8

Source: Authors based on IHME, 2016.

Notes: DALY: disability-adjusted life-years; YLD: years lived with disability. These estimates have been obtained from a different modelling framework and may not be consistent with National Institute of Statistics data.

Estimates from the 2015 Global Burden of Disease study on years lived with disability by the Portuguese population also place noncommunicable diseases at the top, accounting for almost 90% of the total years lived with disability (YLD). Considering only morbidity (measured in YLD), musculoskeletal disorders have the most impact in the Portuguese population, accounting for 25.1% of YLD. Mental and behavioural disorders are the second condition with the most impact in morbidity, accounting for 17.7% of the total YLD (Table 1.4).

Latest data from the Epidemiological National Study on Mental Health show that mental health problems affect 22.9% the Portuguese population. Anxiety (16.5%) and depression (7.9%) are the most prevalent problems. The estimated lifetime prevalence of overall mental health problems is 42.7% (Caldas de Almeida & Xavier, 2013).

1.4.2 Health behaviour and lifestyle

The Portuguese Health Survey presents recent data (2014) on the prevalence of major diseases among the Portuguese population. In 2014, 52.8% of the adult population (15 years or older) was overweight (36.4%) or obese (16.4%). Overweight was more prevalent among men (42.0% versus 31.6%), but more women were obese than men (17.5% versus 15.1%) (Table 1.5) (INE/INSA, 2016).

Table 1.5

Proportion (%) of Portuguese residents (aged 15 years or older), by disease and sex, 2014

	Total	Men	Women
Overweight ^{a,d}	36.4	42.0	31.6
Back pain	32.9	25.2	39.7
High blood pressure ^b	25.3	21.6	28.5
Neck pain	24.1	15.5	31.6
Arthrosis	24.1	15.4	31.7
Allergies	19.4	15.2	23.1
Obesity ^{c,d}	16.4	15.1	17.5
Depression	11.9	5.9	17.1
Diabetes	9.3	9.4	9.2
Asthma	5.0	4.1	5.9
Stroke	1.9	1.9	1.9
Myocardial infarction	1.7	1.9	1.6

Source: INE/INSA, 2016.

Notes: ^aOverweight defined as Body Mass Index (BMI) ≥ 25 kg/m² and < 30 kg/m²; ^bHigh blood pressure defined as systolic blood pressure ≥ 140 mmHg or diastolic blood pressure ≥ 90 mmHg; ^cObesity defined as BMI ≥ 30 kg/m²; ^dPopulation aged ≥ 18 years.

Overall, results show, as noted previously (Table 1.4), that musculoskeletal disorders, such as back pain, neck pain and arthrosis, are significant among the Portuguese, particularly among women (Table 1.5). Also, women are disproportionately affected by depression (17.1%) compared with men. The survey shows that 25.4% of the population aged 15 years or older have depression symptoms, being once again women more affected (33.7%) than men (16.0%). Those retired (36.5%), inactive (27.4%) and unemployed (26.9%) are more affected by symptoms of depression than the employed population (18.5%) (INE/INSA, 2016).

A total of 64.9% of the population did not take any physical exercise. That proportion was higher among women (69.8%) than among men (59.3%). Men take more physical exercise both in number of days per week and in average length of time (in hours) (INE/INSA, 2016).

Regarding diet, 70.8% of the population eats fruit every day. Eating fruit was less frequent among those aged 15–24 years and more frequent among those older than 45. The average number of portions eaten daily was 2.3 and was higher among those aged 55–64 years and among those with higher education. Women eat daily more vegetables and salads than men (60.7% versus 48.8%). That proportion was higher among those aged 55–74 years and lower among those aged 15–24 years. People with higher education consume on average more portions of vegetables and salads (2.0) than the average population (1.8) (INE/INSA, 2016).

In 2014, 20.0% of the Portuguese population aged 15 years or older were smokers, with a higher prevalence among men (27.8% versus 13.2%). Comparing with the previous Health Survey (2005/2006), the proportion of former smokers increased from 16.0% to 21.7%, while the proportion of regular smokers was reduced from 20.9% to 20.0% (INE/INSA, 2016).

Regarding alcohol consumption, the results from the National Health Survey show that 70.0% of the population aged 15 years or older consumed alcohol at least once in the previous year, and 34.5% drank daily. Analysing the data by sex and amount of consumption, the survey found that 44.7% of men consumed six or more drinks in a single episode in the previous 12 months. That proportion was higher among men less than 35 years old, particularly among those aged 25–34 years. For every woman, 2.9 men consume alcohol daily (INE/INSA, 2016).

More recently, the preliminary results of the National Health Survey with Physical Examination were issued. The National Health Survey with Physical Examination was conducted in 2015 and was the first health survey including a physical examination (blood tests, weight measures, etc.), having examined 4911 individuals aged 25–74 years. The prevalence of high blood pressure found in this survey was 36.0%, whereas the prevalence of obesity was 28.7%, and the prevalence of diabetes was 9.8% (INSA, 2016). Men were more affected than women by high blood pressure (39.6% versus 32.7%), diabetes (12.1% versus 7.7%) and overweight (45.4% versus 33.1%), whereas obesity was more prevalent among women (32.1% versus 24.9%) (INSA, 2016). Overall, these results show higher prevalences than those reported by the 2014 National Health Survey.

Additionally, the National Health Survey with Physical Examination also found that 79.3% and 73.3% of respondents consumed fruits and vegetables daily, respectively. Lack of physical activity in free time affected 44.8% of the population, while 39.7% of men engaged in physical activity at least once a

week. Finally, 28.3% of men and 16.4% of women consumed tobacco daily or occasionally, being that prevalence higher among those aged 25–34 (45.6% men and 25.1% women); and 33.8% of men and 5.3% of women reported binge drinking, which was especially prevalent among the youngest (51.9% of men and 13.7% of women aged 25–34 years) (INSA, 2016).

1.4.3 Immunization rates

Portugal has high immunization rates among those aged 5–14 years. In 2014, at age 7, 95.7% of Portuguese children were immunized against measles and 95.9% were immunized against polio. Also, high rates were recorded for immunization against tuberculosis (98.6%), Hepatitis B (98.5%), diphtheria, tetanus and pertussis (95.7%) and meningococcal infections type C (98.4%). Similarly, for those at age 14 years, measles and polio immunization rates were 97.9% (DGS, 2015a). Introduced into the National Immunization Programme in 2008, the vaccine against human papillomavirus (HPV) is administered only to girls in Portugal. In 2014, data showed that girls born between 1992 and 2000 had high immunization rates against HPV, ranging from 85% to 93% (DGS, 2015a).

1.4.4 Oral health

The index of decayed, missing or filled teeth at age 12 in Portugal was above the EU15 average in 2000, but has decreased ever since. In fact, Portugal has already achieved the 2020 WHO goal of having a decayed, missing or filled teeth index at age 12 years below 1.5 (1.18 in 2013, with a decreasing trend since 2000 from 2.95). In 2013, 51.8% of children aged 12 had healthy gums, which constitutes a remarkable improvement since 2006, when it was only 26.1% (DGS, 2015a).

2. Organization and governance

Chapter summary

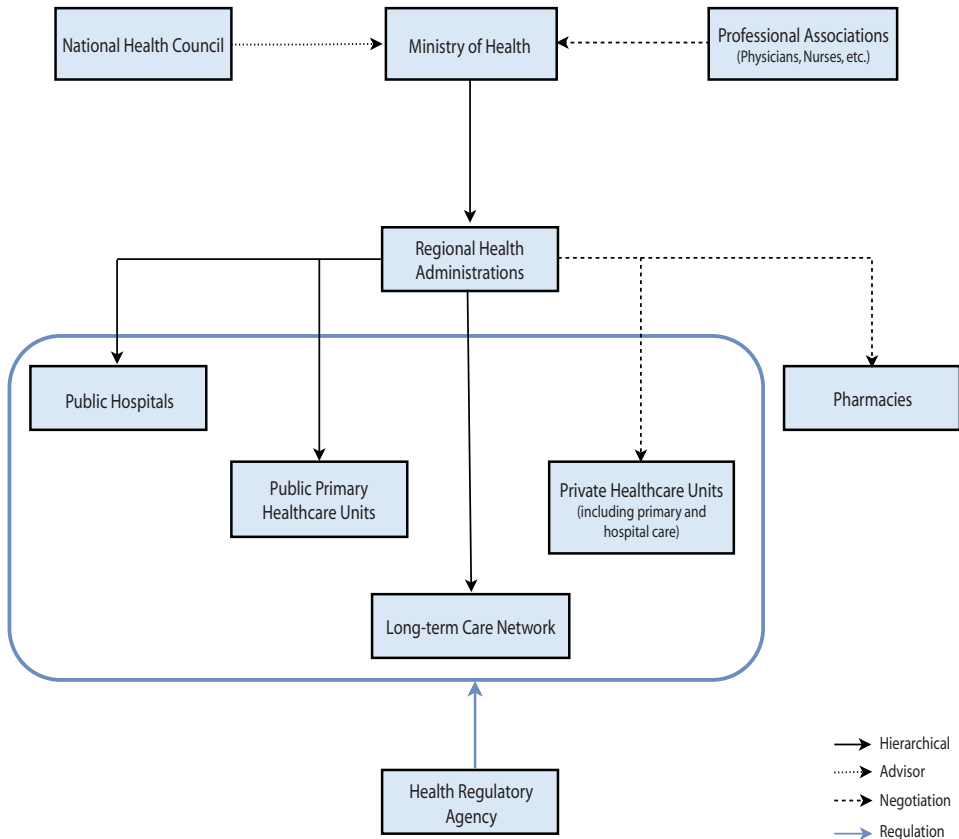
- The Portuguese health system is characterized by three co-existing and overlapping systems: the universal NHS; the health subsystems, health insurance schemes for which membership is based on professional/ occupational group or company; and private voluntary health insurance (VHI).
- The Portuguese NHS was established in 1979, and is a universal tax-financed system.
- The Ministry of Health and its institutions concentrate the planning and regulation activities of the health system.
- The NHS is managed at regional level by the five regional health administrations (RHAs), which were introduced in 1993.
- Each RHA has a health administration board accountable to the Minister of Health and responsible for strategic management of population health, supervision and control of hospitals, management of the NHS primary care centres, and implementation of national health policy objectives.
- All hospitals belonging to the NHS are under the jurisdiction of the Ministry of Health. Private sector hospitals, both not-for-profit and for-profit, have their own management arrangements.

2.1 Organization

The Portuguese health system is characterized by three co-existing and overlapping systems: the NHS; special public and private insurance schemes for certain professions or companies (health subsystems); and private VHI. Fig. 2.1 outlines the relationships between the various bodies, organizations and institutions that comprise the health system.

Fig. 2.1

Overview chart of the health system



Source: Authors' own compilation.

Note: The Health Regulatory Agency does not include pharmacies, which is reflected in the figure, placed outside the blue box.

The overall legal framework of the system is the 1990 Basic Law on Health (Law No. 48/90, of 24 August 1990), which introduces the principles for the organization and functioning of the health system (Barros, Machado & Simões, 2011). The 1990 Basic Law on Health is a pivotal legal act from the Portuguese health system that established: the regionalization of health service administration, by creating the RHAs; the possibility of privatizing sectors of health care provision, by allowing the state to promote the development of the private sector and the private management of public health care facilities; the possibility of privatizing sectors of health care financing, by promoting the option for VHI and the possibility of creating an alternative health insurance

(opting out); the integration of health care, with the possibility of creating health care units that would assemble hospitals and primary care units within a single region.

The health care delivery system in Portugal consists of a network of public and private health care providers; each of them is connected to the Ministry of Health and to the patients in its own way. The key relationships are shown in Fig. 2.1, with the Ministry of Health coordinating all health care provision and the financing of public health care delivery.

Box 2.1

Historical background

The current Portuguese National Health Service (NHS) was established in 1979 (for earlier developments, see Barros et al. (2011)). Its creation was in line with the principle of every citizen's right to health, embodied in the new democratic constitution (1976). Existing district and central hospitals as well as other health facilities, previously operated by the social welfare system and religious charities, were brought together under "*a universal, comprehensive and free-of-charge National Health Service*". The 1979 law establishing the NHS laid down the principles of centralized control but decentralized management (see Barros et al., 2011).

A number of changes were introduced to the NHS since its creation, namely the introduction of user charges. However, to assure all citizens would have access to health care regardless of their economic and social background, exemptions were also created at the same time (see Barros et al., 2011). Despite the development of a publicly financed and provided health system, some features of the previous system remain unchanged, namely the health subsystems, which continue to cover a variety of public (civil servants) and private (e.g. banking and insurance companies, postal service, etc.) employees (see section 2.1.6). Although the NHS incorporated most of the health facilities operating in Portugal, private provision has always been available, namely in clinics, laboratory tests, imaging, renal dialysis, rehabilitation and pharmaceutical products.

Following the creation of the NHS, Portuguese health policy went through several periods, from the development of an alternative to the public service (early 1980s), to the promotion of market mechanisms (mid-1990s), and the introduction of a number of policies that drifted away from the market-driven health care provision (late 1990s). By the beginning of the twenty-first century, the NHS became a mixed system, based on the interaction between the public and the private sectors, integrating primary, secondary and long-term care. Reforms were enacted aimed to combine the universal coverage provided by the NHS and the promotion of efficiency.

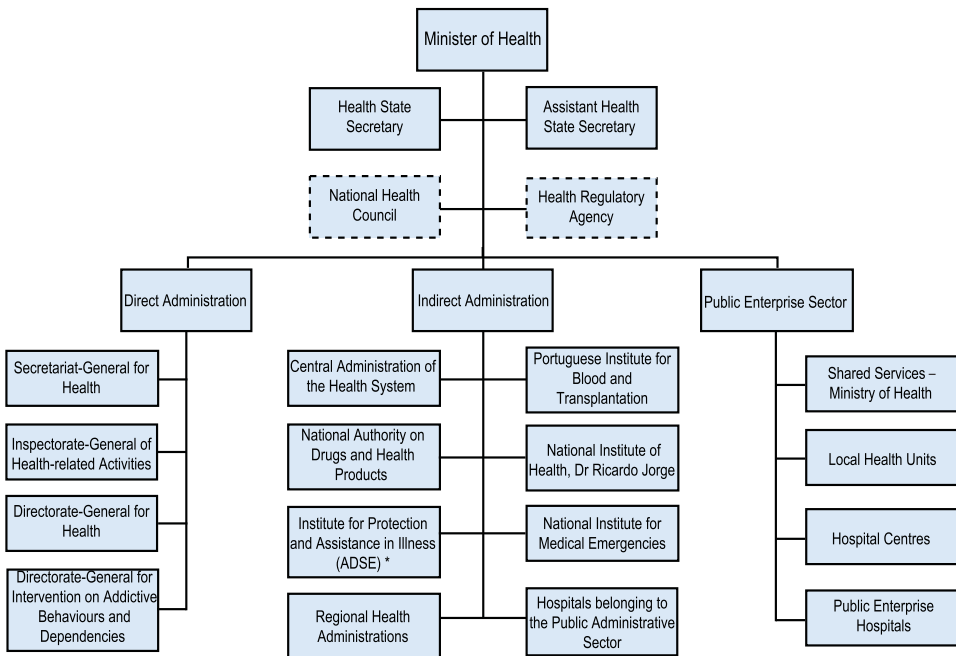
By 2011, the Economic and Financial Adjustment Programme brought a number of cost containment measures, including the health sector. The aim was to cut costs and increase the system's efficiency. Overall, most of the adjustment in spending in the health sector resulted from price effects, few from quantity cuts, and only a small part was due to shift of financial responsibility from the government to citizens. That was achieved through a reduction in the level of salaries paid to health workers, cuts in public pharmaceutical expenditure, and price review regarding private institutions that have contracted with the NHS. Medical practice was also targeted with the introduction of clinical guidelines.

2.1.1 Ministry of Health

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

Fig. 2.2

Organizational chart of the Portuguese Ministry of Health



Source: Authors, based on SNS, 2016.

Notes: Dotted lines represent some degree of independence from the Ministry of Health; *ADSE is under the indirect administration of both the Ministry of Health and the Ministry of Finance.

The policy-making process takes place within government. It is frequent that government rulings go to institutional partners for consultation. Usually, there is no detailed evaluation plan or ex-post assessment of policy measures. The implementation of the policies is a task of the RHAs. The Ministry of Health performs some assessment and audit, as well as the Court of Auditors and the Inspectorate-General of Health-related Activities, but the policy evaluation process is not systematic.

Many of the planning, regulation and management functions are in the hands of the Minister of Health. The two state secretaries have responsibility for the first level of coordination, under delegation by the Minister of Health.

The Ministry of Health comprises several institutions: some of them under direct government administration; some integrated under indirect government administration; some having public enterprise status; a Health Regulatory Agency (HRA) formally independent from the Ministry of Health in its actions and decisions; and a recently consultative body: the National Health Council (created by Decree-Law No. 9/2016, of 23 August 2016).

The following central services are under the government's direct administration, which implies that they are hierarchically run by the Ministry of Health.

- **The Secretariat-General for Health (*Secretaria-Geral da Saúde*)**, which provides technical and administrative support to the other sections of the Ministry, coordinates their work, and provides assistance to staff within various government offices. It also gives support to other institutions, services and bodies not integrated within the NHS, concerning internal resources, legal advice, information and public relations.
- **The Inspectorate-General of Health-related Activities (*Inspecção-Geral das Actividades em Saúde*)**, which performs the audit, supervision, and disciplinary function in the health sector, both in NHS institutions and services, and in private institutions.
- **The Directorate-General of Health (*Direcção-Geral da Saúde, DGH*)**, which plans, regulates, directs, coordinates and supervises all health promotion, disease prevention and health care activities, institutions and services, whether or not they are integrated into the NHS. It is also responsible for public health programmes, quality and epidemiological surveillance, health statistics and studies.
- **The Directorate-General for Intervention on Addictive Behaviours and Dependencies (*Serviço de Intervenção nos Comportamentos Adictivos e nas Dependências*)**, which promotes the reduction of both legal and illegal drugs consumption, the prevention and treatment of addictive behaviours, and the decrease of dependencies.

The following central services are under the government's indirect administration, including public institutes or other bodies:

- **Central Administration of the Health System (*Administração Central do Sistema de Saúde, ACSS*)**, which is in charge of managing financial and human resources, facilities and equipment, systems and information technology (IT) of the NHS. It is also responsible for the implementation of health policies, regulation and planning, along with the RHAs, namely in health service contracting.
- **The National Authority on Drugs and Health Products (*Autoridade Nacional do Medicamento e Produtos de Saúde, INFARMED*)**, which regulates and supervises the pharmaceuticals and health products sector, following the highest standards of public health protection (see section 5.6). It aims to ensure that all health care professionals and patients have access to safe, efficient and quality pharmaceuticals and other health products.
- **The National Institute for Medical Emergencies (*Instituto Nacional de Emergência Médica, INEM*)**, which delineates, participates in and assesses the activities and performance of the Integrated System of Medical Emergency, guaranteeing immediate assistance to injured or severely ill patients (see section 5.5).
- **The Portuguese Institute for Blood and Transplantation (*Instituto Português do Sangue e da Transplantação*)**, which guarantees quality and safety regarding donation, analysis, processing, storing and distribution of human blood and blood components, as well as human organs, tissues and cells. Additionally, the Institute for Blood and Transplantation regulates, at a national level, the pharmaceuticals related to transfusions and guarantees that there is a stock of secure blood and blood components available when needed.
- **Institute for Protection and Assistance in Illness (*Instituto de Protecção e Assistência na Doença, ADSE*)**, which guarantees the effective access to social protection regarding health care services to Public Administration workers and their families (see section 2.1.6). This is the health subsystem for civil servants and it is under the indirect administration of both the Ministry of Health and the Ministry of Finance.
- **National Institute of Health, Dr Ricardo Jorge (*Instituto Nacional de Saúde Doutor Ricardo Jorge, INSA*)**, which is the reference laboratory of the Portuguese health system, incorporating the functions of national observatory and national reference laboratory in the Portuguese health

sector. It is responsible for conducting, coordinating and promoting health research at the Ministry of Health. It also has the objective of producing evidence for policy and action in public health. Currently, the National Institute of Health is organized in six departments: Food and Nutrition; Infectious Diseases; Epidemiology; Genetics; Health Promotion and Chronic Diseases; and Environmental Health. All operative units composing the departments develop multidisciplinary programmes in problem-areas of public health, namely: performing research and development (R&D), health monitoring, training, laboratory external quality assessment and general health services.

- **Regional Health Administrations (*Administrações Regionais de Saúde, RHAs*)**, which are responsible for implementing national health policy regionally, and coordinating all levels of health care. The NHS, although centrally financed by the Ministry of Health, has had a regional structure since 1993 comprising five health administrations: North, Centre, Lisbon and the Tagus Valley, Alentejo, and Algarve. A health administration board, accountable to the Minister of Health, manages the NHS in each region. The management responsibilities of these boards are a mix of strategic management of population health, supervision and control of hospitals, and centralized direct management responsibilities for NHS primary care.

The RHAs work in accordance with the principles and directives issued in regional plans and by the Ministry of Health. Their main responsibilities are the development of strategic guidelines; coordination of all aspects related to health care provision; supervision of hospitals and primary care management; establishment of agreements and protocols with private bodies; and liaison with government bodies, religious charities (*Misericórdias*), other private non-profit-making bodies, and municipal councils. They are also in charge of developing a long-term care network.

- **Hospitals belonging to the Public Administrative Sector (*Hospitais do Sector Público Administrativo*)**, which currently are a minority of public hospitals that were not converted into Public Enterprises (*Entidades Públicas Empresariais*, EPE). In other words, these are public institutions without an enterprise status and continue to be managed by civil service rules.

The following services are part of the Public Enterprise Sector, including public hospitals and other entities:

- **Shared Services – Ministry of Health (*Serviços Partilhados do Ministério da Saúde, SPMS*)**, which provides specific shared health-related services in matters of purchasing and logistics, financial management, human resources, information and communications systems, and other supplementary and subsidiary activities to organizations that are part of the NHS, irrespective of their legal nature, as well as to bodies and services of the Ministry of Health and any other organizations, as long as they carry out activities specific to the health field.
- **Local Health Units (*Unidades Locais de Saúde*)**, which were created in 1999 to generate greater and better communication between primary care and hospitals, through a vertical integration of different levels of care. Currently, there are eight local health units in Portugal: Matosinhos, Northern Minho/Viana do Castelo and Northeast/Bragança (North); Guarda and Castelo Branco (Centre); and Northern/Portalegre, Southern/Beja and Coastal/Santiago do Cacém Alentejo (Alentejo).
- **Hospital Centres and other Public Enterprise Hospitals (*Centros Hospitalares e Hospitais*)**, which include hospitals that are ruled as EPEs. Among them, there are hospitals that were grouped into Hospital Centres and others that remained as individual institutions. The rationale behind the creation of Hospital Centres was to improve efficiency through better coordination between institutions providing hospital care in the same geographical area. Both Hospital Centres and Hospitals are public enterprises, meaning that hospital boards have some level of autonomy and management accountability, compared with hospitals from the public administrative sector.

There are other bodies related to health care that do not belong to the Ministry's administration, either directly or indirectly.

- **National Health Council (*Conselho Nacional de Saúde*)**, which is the consultative and independent body for the Ministry of Health. It is responsible for issuing recommendations and advice on measures to enforce the implementation of health policies.
- **Health Regulatory Agency (*Entidade Reguladora da Saúde*)**, which is an independent body responsible for the regulation of the health care sector. Its functions include the supervision of health care institutions regarding operating requirements, patients' access to health care and

patients' rights defence, quality of health care provision, economic regulation, and promotion of competition in the health care sector (see section 2.4).

2.1.2 Ministry of Finance

The creation of new staff positions within the NHS, whether hospital-based or not, requires the approval by the Ministry of Finance. The proposals presented by the Ministry of Health in this regard are included within the government's budget (which includes the NHS budget). The government's budget is discussed and approved afterwards in the parliament (see section 3.3.3), which potentially limits the scope of the Ministry of Health and its agencies to make changes towards more coherent patterns of service delivery and staffing.

2.1.3 Ministry of Labour, Solidarity and Social Security

This Ministry is responsible for social benefits such as pensions, unemployment benefits and disability benefits. In 2000 social security expenditure in Portugal corresponded to 9.6% of GDP, but in 2013 this percentage had risen to 26.9% (DGSS, 2015). The Ministry's collaboration with the Ministry of Health has improved in recent years. Joint projects include a review of certification for sick leave, a programme to improve coordination between health care and social services, and an initiative to improve continuity of long-term care for the elderly and people with disabilities. For more information on the relations between the two ministries in the long-term care network, see section 3.6.

2.1.4 Ministry of Science, Technology and Higher Education

This Ministry is responsible for undergraduate medical, nursing and allied health professionals' education and for academic degrees. However, specialized postgraduate medical training is the joint responsibility of the Portuguese Medical Association (*Ordem dos Médicos*) and the Ministry of Health. Specialized training in other health professions is, in general, within the scope of the Ministry of Health and, in some cases, of professional associations (e.g. nurses).

2.1.5 Local government

There are a number of initiatives being undertaken in cooperation with the municipalities, such as promoting greater traffic and pedestrian safety, and encouraging physical exercise. Nutrition is also being promoted in close

cooperation with the media, schools, sports organizations and local authorities. However, overall, the role of municipalities in the Portuguese health system is rather marginal. The involvement of the municipalities in health promotion programmes is limited to a few specific projects, namely child oral health, environmental health and healthy behaviours.

2.1.6 Health subsystems

Almost four decades after the inception of the NHS in Portugal, the historical remnants of the pre-existing social welfare system still persist in the form of health insurance schemes for which membership is based on professional or occupational category. These are often referred to as health subsystems (*subsistemas de saúde*). In addition to the health insurance coverage provided by the NHS, approximately 25% of the population is covered by a health subsystem or VHI. More precisely, approximately 16% of the population are covered by a health subsystem (ERS, 2016c), and in 2015 more than 2.7 million individuals (around 25.8% of the population) were covered by individual or group private health insurance (ASF, 2016). Health care is provided either directly or by contract with private or public providers (and in some cases by a combination of both). Access is generally limited to members of a specific profession and their families.

In 2005, a number of subsystems operating in the public sector were integrated into the main subsystem, the ADSE (*Assistência à Doença dos Servidores do Estado*), for civil servants. Therefore, the benefits are now standardized across the health subsystems. Before 2005 the separate subsystems included:

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

In the private sector, the major health subsystems are: the health subsystem for the employees of the historic telecommunications operator Portugal Telecom (*Portugal Telecom Associação de Cuidados de Saúde*, PT-ACS), for postal service employees at *Correios de Portugal*, and for banking and associated insurance employees (*Serviços de Assistência Médico-Social*), set up by their respective unions on a regional basis. There are also a few additional smaller funds. Some of the funds are associated with and run by trade unions and managed by boards of elected members.

Until 2013, the Ministry of Finance controlled the largest health subsystem, ADSE, which was mandatory for all civil servants until 2009. Since 2009, civil servants may easily opt out from ADSE. In 2015, ADSE was transferred to the Ministry of Health (Decree-Law No. 152/2015, of 7 August 2015). However, in 2017, ADSE was converted into a public institute with special regimen and participated management (Decree-Law No. 7/2017, of 9 January 2017), and it was renamed Institute for Protection and Assistance in Illness (*Instituto de Protecção e Assistência na Doença*). ADSE is now under the indirect administration of both the Ministry of Health and the Ministry of Finance. Created in 1963, this subsystem covers more than 10% of the population, with 1.25 million enrolled beneficiaries in 2015 (ERS 2016c) (see section 3.6.1 for more information on health subsystems).

Private health care providers mainly fulfil a supplementary role to the NHS rather than providing a global alternative to it. Currently, the private sector mainly provides diagnostic, therapeutic and dental services, as well as some ambulatory consultations, rehabilitation and hospitalization.

2.1.7 Religious charities – *Misericórdias*

Misericórdias are independent non-profit-making institutions with a charitable background. The Lisbon *Misericórdia* is an exception, because it is a public enterprise with a board that is appointed by the Ministry of Labour, Solidarity and Social Security rather than elected by members. Despite their historical role as one of the main providers of health care services, currently these institutions operate very few hospitals: a total of 15 hospitals distributed across the country, but mostly concentrated in the North region (10). Most of the institutions are now focused on long-term care provision, being the largest provider in the National Network for Long-term Care (*Rede Nacional de Cuidados Continuados Integrados*, RNCCI), both in number of units and capacity.

2.1.8 Private health insurance companies

On the financing side, the main private actors are the private health insurance companies. VHI was introduced in 1978 (see section 3.5). Initially, only group policies were offered, but individual policies have also been available since 1982. The number of people insured has grown from approximately 500 000 in 1990 to almost 2.7 million in 2015 (ASF, 2016). There is a mechanism of double coverage in place, hence increasing mostly the number of specialized medical appointments. People can even benefit from triple (or more) coverage, that is, from the NHS, a health subsystem from their job, VHI and having coverage from another health subsystem as an extension of their spouse's coverage. It is not uncommon for beneficiaries of health subsystems to also sign up to VHI.

2.1.9 Professional associations and unions

Founded in 1938, the Portuguese Medical Association (*Ordem dos Médicos*) is the professional organization for physicians. There are also two main unions: the National Medical Federation (*Federação Nacional dos Médicos*, FNAM) and the Independent Medical Union (*Sindicato Independente dos Médicos*, SIM). Membership of the Medical Association is mandatory for practicing physicians. Its functions include:

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

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

Equivalent bodies also exist for pharmacists (*Ordem dos Farmacêuticos*, founded in 1972), dentists (*Ordem dos Médicos Dentistas*, founded in 1991), nurses (*Ordem dos Enfermeiros*, founded in 1998), psychologists (*Ordem dos Psicólogos*, founded in 2008), and nutritionists (*Ordem dos Nutricionistas*, founded in 2010).

The National Association of Pharmacies (*Associação nacional de farmácias*), a union for pharmacies, covers almost 95% of pharmacies, though membership is optional. It has an important corporate role and operates as a fund, handling the majority of pharmaceutical payments between the NHS and the associated pharmacies. Its mission includes modernizing facilities and organizational models; continuous education and training of pharmacists; dissemination

of information on up-to-date practices in pharmaceuticals management and dispensing; implementation of a global computerized information system for the pharmacies; and collaboration with the government in projects and campaigns in the public health domain.

2.1.10 Patient groups

Organizations specifically advocating for patients are active disease-based advocacy groups, such as those devoted to diabetes, cancer, haemophilia, hepatitis and HIV/AIDS. These groups are specifically focused on patients and families affected by a particular condition, and promote the allocation of resources for patients' treatment and care in those particular disease groups, as well as donations and awareness campaigns.

More recently, the project “More participation, better health” (*Mais participação, melhor saúde*) was created with the aim of promoting the participation and capacity building of representatives of people with and without illness in policy and institutional decision-making in Portugal (GAT, 2016).

2.2 Decentralization and centralization

Formally, decentralization is a keyword of the NHS constitutional framework. The Law on the Fundamental Principles of Health (1990) states that the NHS is managed at the regional level, with responsibility for the health status of the corresponding population, the coordination of the health services provision at all levels, and the allocation of financial resources according to the population needs. This is in line with the reform trends in many European countries, which have regarded decentralization as an effective way to improve service delivery, to better allocate resources according to needs, to involve the community in health decision-making, and to reduce health inequities. In practice, however, responsibility for planning and resource allocation in the Portuguese health system, both to the level of the region and at the sub-regional level, has remained highly centralized despite the establishment of the current five RHAs in 1993. The Minister of Health appoints the directive body of each RHA. In theory, the creation of the RHAs conferred financial responsibility: each RHA was to be given a budget from which to provide health care services for a defined population. However, in practice, the RHAs autonomy over budget setting and spending is limited to primary care, because hospital budgets continue to be defined and allocated by the central authority, which also appoints hospital administration boards.

Within hospitals, the delegation of responsibility down the line of management, allowing lower-level managers greater power to deploy resources more efficiently, was the rationale for the creation of “responsibility centres”. These centres were meant to group hospital services and units of an adequate management dimension under criteria of homogeneity of production and complementarities of objectives, with the aim to better coordinate medical specialties, contain costs, and strengthen competition. To date, there are very few responsibility centres, as their creation never gained momentum. The reforms on hospital management led to neglect of these centres. No more responsibility centres have been created, nor have the existing ones been eliminated.

Despite this, the creation of Public Enterprise Hospitals (*Hospitais EPE*) (see section 2.4.2, *Organization*) from 2005 and the primary care reform (see section 5.3) point to a high level of responsibility at the institution level. The role of RHAs and other ministry authorities is more to supervise policy implementation and assess results.

In the last 5 years, measures taken in the context of the Economic and Financial Adjustment Programme agreed in May 2011 (see section 1.2), had the effect of increasing central control, because some of the agreed targets required financial, employment and other limits imposed from the centre.

2.3 Intersectorality

The current government recognizes that, “in order to obtain health gains, one must intervene on the several health determinants in a systemic, systematic and integrated way”, adding that “the integration of the health sector with education, where ‘health in all policies’ should be a core strategy that will allow to leverage and create the supporting frame for the sustainability of political action” (Government of Portugal, 2015b). In its programme, the government highlights policies to tackle poverty and exclusion, improve working conditions, employment, food, transport, urban planning and leisure areas as fundamental to improving the health of the population.

In 2012, the DGH launched nine priority health programmes, including diabetes, cerebro-cardiovascular diseases, oncological diseases, mental health, tobacco control, respiratory diseases, healthy nutrition, prevention and control of antimicrobial resistance and infections, and HIV/AIDS (see section 5.1). Those programmes set a number of intersectoral approaches, namely partnerships with municipalities, schools and civil society, in order to

achieve their goals. Also, the current National Health Plan defines strategies for improving citizens' empowerment and tackling health inequalities, through the involvement of several actors both in the social and the private sectors, and the development of intersectoral and multidisciplinary approaches (DGS, 2015b). In 2016, two more programmes were added on viral hepatitis and physical activity, respectively.

Health is also considered by several policies in different areas. The Authority for Working Conditions (*Autoridade para as Condições do Trabalho*) participates in health protection and disease prevention in the workplace. Responsibility for food safety is shared by several institutions, including the Authority for Economic and Food Safety (*Autoridade para a Segurança Alimentar e Económica*), the DGH and the Ministry of Agriculture. At the local level, the health sector is often involved in a number of activities, including social support networks (in partnership with the social sector and municipalities), the coordination of school health programmes (in partnership with public and private schools), and the commissions of children at risk, which are multidisciplinary teams that evaluate, plan and coordinate public institutions' actions towards identified situations of children and young people at risk of violence and social exclusion.

Despite these examples of intersectorality in health, there is room for improvement. Portugal does not have permanent intersectoral structures or bodies, and decisions in areas such as urban planning or transports are not carried out in partnership with the health sector. Health impact assessments have not been institutionalized in Portugal, nor have specific guidelines been produced.

2.4 Regulation and planning

The DGH has been responsible for the design, implementation and follow up of the National Health Plan (see sections 2.1 and 5.1). The Plan sets the main guidelines, strategies and goals for the whole country, for a given period of time and it involves a large number of players, including policy-makers, academics, health professionals and members from civil society. The current 2012–2016 National Health Plan was recently extended until 2020 (DGS, 2015b). The National Health Plan comprises strategic guidelines and goals regarding a minimum set of health system activities to be put into effect by the Ministry

of Health. The current Plan sets four main axes: health citizenship, equity and adequate access to health care, health quality and healthy policies. The indicators guiding the Plan's monitoring and evaluation are:

- annual reduction of premature (before age 70 years) mortality until 2020
- increase in healthy life-years by at least 30% for both men and women
- reduce the use and exposure to tobacco smoke in the population 15 years or older
- control the incidence and prevalence of overweight and obesity in school-age population.

A formal national health strategy and health care policy with quantified goals and targets was defined for the first time in 1998, for the period 1998–2002. A revised version of this policy document was produced in 1999 involving a broader range of social partners and stakeholders. It was made public by the Ministry of Health under the title “Health: a Commitment” (*Saúde: Um Compromisso*) (Ministry of Health, 1999). In fact, this structuring tool was a true commitment of the administration to the citizens.

Legislation from 1988 gave the Ministry of Health total control over the procurement and installation of high-technology equipment both within the NHS and in the private sector. The legal guidelines for installing expensive equipment (big-ticket technologies), which established ratios of equipment per inhabitant, were abolished in 1995. However, the principle of prior authorization by the Ministry of Health for equipment within the NHS was retained. In 1998 a national list of health equipment was published (Ministry of Health, 1998), describing the distribution of specific items of equipment and services throughout the country, regional variations in equipment, the amount of equipment in public and private facilities, and the age of equipment. It was not primarily intended as a tool for determining the distribution of equipment, but rather it aimed to enable planners and hospitals to identify areas where there were gaps in service provision.

In 2001, the Ministry of Health issued formal guidelines for the development of Regional Master Plans for NHS hospital and primary health facilities. The intent was to turn the Regional Master Plans into core instruments for the harmonious and integrated development of NHS infrastructures at national level. However, few developments have been made to accomplish the stated objectives.

The Portuguese Constitution specifies that the economic and social organization of the country must be guided, coordinated and disciplined by a national plan. The national plan must ensure, for example, the harmonious development of the different sectors and regions, the efficient use of productive resources, and the equitable allocation of resources among the population and between regions. As the NHS does not have its own central independent administration, the Ministry of Health carries out most of the planning, regulation and management functions of the NHS, which are centralized in the ACSS.

Box 2.2

Evaluating priority-setting and planning

The government is in charge of health policy formulation and decision-making, whereas the parliament has the role of supervision, as happens with other public policies. Traditionally, the parliament and the media hold the role of monitoring and screening policy decision-making and subsequent implementation of policies. Professional associations, particularly those of doctors as well as patient groups, also play a role in shaping health decision-making.

Despite the existence of a National Health Plan that sets health priorities in terms of policies, the government, taking into account the financial, political and social environment, can decide on other health priorities, so giving the National Health Plan a secondary role. Nevertheless, having a National Health Plan is considered important in terms of health strategy and guidance.

The Azores and Madeira, as autonomous regions, have, according to the Portuguese Constitution, wide responsibilities for health care planning and management.

Regarding regulatory management mechanisms, the Portuguese health system might be viewed as highly normative, with extensive legislative provisions. There are, for example, numerous and sometimes very restrictive controls over pharmaceutical goods, high-technology equipment, and education, training and registration of health personnel (see sections 2.4.4 and 4.2.4, *Doctors*).

Established in 1993, INFARMED was reorganized in 1999 to meet the new and reinforced EU regulations in the area of pharmaceuticals. It is responsible for the regulation of pharmaceuticals and medical equipment, and supported by the Pharmaceutical Inspection Service, the Pharmacosurveillance Service and the Official Laboratory for Pharmaceutical Quality Control (see section 5.6).

In June 2015, the Ministry of Health launched the National System for Health Technology Assessment (*Sistema Nacional de Avaliação de Tecnologias de Saúde*, SiNATS), in the context of INFARMED (Decree-Law No. 97/2015,

of 1 June 2015) (see section 2.4.3, *Health technology assessment*). The Court of Auditors, a body responsible for supervising all public revenues and expenditures, which can launch legal proceedings for bad management, conducts periodic external auditing to several public bodies, including the NHS, and in recent years has produced some critical reports. These reports have looked at the overall public health expenditure as well as giving a comparison across hospitals. Since the year 2000, a few major auditing reports have been drawn up. These analyses have highlighted major organizational and financial problems and have made recommendations.

Created in 2003, the HRA arose in the broader context of a regulation and supervision system based on the principles of segregation of the state's duties as regulator and supervisor, operator and funder, and of independence of the regulatory body. The HRA's competencies include regulation and supervision of health care institutions and services, regarding their legal and contractual obligations concerning patients' access to health care, quality of health care provision, patients' safety, and patients' rights. HRA aims to guarantee enough competition between health care providers and to protect the citizens' right to universal health care coverage.

Current HRA's status, approved in 2014, has broadened the institution's competencies, namely concerning patients' complaints, licensing of institutions operating in the health care sector, and conflict resolution (see section 2.4.1).

Recent examples of the HRA's work include:

- a study comparing the performance of two co-existing types of primary care units within the Portuguese NHS: Family Health Units (*Unidades de Saúde Familiar*, FHUs) and Personalized Health Care Units (*Unidades de Cuidados de Saúde Personalizados*, PHCUs) (ERS, 2016a);
- a study evaluating the access to health care by immigrants in Portugal (ERS, 2015a);
- a study aimed at analysing patients' access, quality of care and competition among providers in long-term and palliative care markets (ERS, 2015b);
- a new report on health insurance, describing the existing complementary types of health care financing in Portugal, more specifically VHI health subsystems (ERS, 2015c);
- a study on access and quality in mental health services (ERS, 2015d);

- a study assessing the performance of the NHS local health units (*Unidades Locais de Saúde*) in terms of access to health care, service quality, production, efficiency, and economic and financial performance (ERS, 2015e).

2.4.1 Regulation and governance of third-party payers

The RHAs play an essential role in the contracting of health care providers to work with the NHS. They are responsible, together with ACSS, for setting up (and paying for) contracts (i.e. the contracting of private sector providers to provide NHS patients with specific health care services) and contracts (*contratos-programa*) with the hospitals (based on cost history, utilization and complexity variables; see section 3.7.1, *Payment of hospitals*). RHAs are also in charge of negotiating and signing Public–Private Partnership (P-PPs) contracts. These follow the procedure used in the contract that established the first public hospital under private management, signed between the private operators and an RHA.

The delivery of diagnostic and therapeutic services by private providers to the NHS is an area that for several years has been of concern to Portuguese authorities. The public procurement framework of such contracting by the NHS that has been in place since the late 1980s was responsible for a lack of competition within this subsector and for the substantial cost to the NHS for such services (ERS, 2006). In fact no new private providers were allowed to contract with the NHS for some time, so the NHS was subjected to the prices of those already contracted. These conventions are responsible for almost 10% of the NHS total costs, which makes it a key issue with respect to cost-containment.

To tackle this problem, in 2013 the government approved a new legal framework for private services contracted by the NHS (Decree-Law No. 139/2013, of 9 October 2013). According to this new framework, NHS authorities can choose whether they contract by adhesion contracts or public tenders, and this choice must be based on the potential competition in each relevant market (i.e. public tenders for markets with substantial number of potential competitors for contracts with the NHS, while contracting by adhering to pre-determined conditions, particularly prices for services, for markets with few competitors). The rationale for this measure is to make public procurement more sensitive to market competition and as a result, to achieve lower prices.

Health subsystems manage the provision of NHS and private sector services through their own “contracted health care providers”.

Several insurance companies provide VHI. Private insurers are free to choose their providers. The way they work is different from both NHS and health subsystems health care provision. There are quite a few rules to conform to in order to be accepted as a client of the insurer. Insurance companies are under the jurisdiction of the Authority for Supervision of Insurance and Pension Funds (*Autoridade de Supervisão de Seguros e Fundos de Pensões*, ASF), which is responsible for the regulation and supervision of insurance, reinsurance, pension funds and their management companies, and insurance mediation, both from a prudential and a market conduct point of view (see section 3.5).

2.4.2 Regulation and governance of provision

Organization

All hospitals belonging to the NHS are under the jurisdiction of the Ministry of Health (see section 3.7.1, *Payment of hospitals*). Private sector hospitals, both not-for-profit and for-profit, have their own management arrangements.

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

All hospitals are financed through contracts (*contratos-programa*), but the *Hospitais EPE* concentrate many decision-making powers with relation to capital, staff and negotiation of input prices, which are not present in the traditional NHS-run hospitals. Among the new management rules, *Hospitais EPE* may hire staff under individual labour contracts (instead of the public administration regimen) and may set the performance-related payment schedules of professionals. The use of incentive schemes is seen as a way to counteract the existing tendency of “equal pay/least possible effort”. This change generated competitive pressures in the labour market, more precisely in the demand for physicians in the most sought after specialties, leading to wage escalation. Several hospitals are also getting together to block purchase pharmaceutical products and other clinical consumables, taking advantage of the bargaining power resulting from larger acquisition volumes.

As noted before, since 2014 the HRA is responsible for licensing health care providers. HRA’s competencies include deciding about issuing, maintaining or revoking operating licenses from health care providers working both in private

and social sectors. HRA also conducts enquiries and issues recommendations to the Ministry of Health. In 2013, following an inquiry conducted by the HRA, which found that several NHS hospitals were allowing the provision of private medical services in their facilities, the regulator called on the Ministry of Health to prevent provision of private medical services within public funded NHS hospitals (ERS, 2013b). It was determined that private services performed in NHS hospitals did not follow uniform procedures in aspects that included the use of facilities and equipment, billing of services and fees. Moreover, private provision in public hospitals was characterized by lack of transparency in the relationship between patients and providers and that could result in longer waiting times among NHS users, as well as difficulties in the determination of medical liability (ERS, 2013b).

Quality

The main responsibility for regulation of policy objectives and national quality standards lies at the central level with the DGH. Under this body, a functionally separate institute for quality was created in 1999. Its scope covered the development of policies, strategies and procedures that support professionals and provider organizations in the continuous improvement of quality for the delivery of health care.

In May 2015, the Ministry of Health published the new National Strategy for Quality in Health 2015–2020, in line with the EU Health Programme 2014–2020. The strategy defines the following priorities:

- focusing on local interventions, services, providers and institutions
- improving organizational and clinical practice quality
- increasing the adoption of practice guidelines in clinical practice
- strengthening patient safety
- strengthening clinical research
- continuous monitoring of quality and safety
- disseminating of comparable performance data
- improving quality and accreditation of health care providers
- providing transparent information to citizens and citizens' empowerment.

The DGH also created a voluntary National Accreditation Programme for Quality in Health (2009).

The HRA plays an important role in the assessment of quality of care. It is able to monitor and audit quality of providers, and adherence to legislation. The HRA also has the role of promoting a system of classification of quality of health care establishments. That role is embodied by the development of a National System of Healthcare Evaluation (*Sistema Nacional de Avaliação em Saúde*). This system is based on a model of global quality assessment of health care services, aimed to be applied to different health care providers and including several dimensions of evaluation. The main goals of the National System of Healthcare Evaluation are promoting patient access, providing useful and comprehensible information on quality of health care services and supporting quality health care provision. The Medical Association is responsible for overseeing medical negligence.

2.4.3 Regulation of services and goods

Basic benefit package

The Ministry of Health is responsible for defining the basic benefit package offered by the NHS. The NHS predominantly provides primary care and specialized hospital care. Dental consultations, diagnostic services, renal dialysis and rehabilitation are more commonly provided in the private sector (but with public funding to a considerable extent) under contractual arrangements with the NHS (see section 3.3.1, *Scope: what is covered?*)

There have been no significant changes regarding the basic benefit package offered by the NHS. The main change introduced was the dental pay cheque in 2008 (see section 3.3.1, *Scope: what is covered?*).

Table 2.1
Responsibilities in the Portuguese health system by sector

	Legislation	Planning	Licensing/accreditation	Pricing/Tariff setting	Quality assurance	Purchasing/Financing
Public health services	Ministry of Health	Ministry of Health	Ministry of Health and Health Regulatory Agency	Ministry of Health	Ministry of Health and Health Regulatory Agency	Ministry of Health
Ambulatory care (primary and secondary care)	Ministry of Health	Ministry of Health (for the public sector)	Ministry of Health (for the public sector); Health Regulatory Agency (for the private sector)	Ministry of Health (for the public sector)	Ministry of Health and Health Regulatory Agency	Ministry of Health (for the public sector), patients
Inpatient care	Ministry of Health	Ministry of Health (for the public sector)	Ministry of Health (for the public sector); Health Regulatory Agency (for the private sector)	Ministry of Health (for the public sector)	Ministry of Health and Health Regulatory Agency	Ministry of Health (for the public sector), patients
Dental care	Ministry of Health	None	Health Regulatory Agency	Depends on the provider	Health Regulatory Agency and Portuguese Dental Association	Patients, VHI, health subsystems
Pharmaceuticals (ambulatory)	Ministry of Health	Legislation defines pharmacies' location	INFARMED	INFARMED	INFARMED	Patients, VHI, health subsystems
Long-term care	Ministry of Health; Ministry of Labour, Solidarity and Social Security	Ministry of Health; Ministry of Labour, Solidarity and Social Security	Ministry of Health; Ministry of Labour, Solidarity and Social Security	Ministry of Health; Ministry of Labour, Solidarity and Social Security	Ministry of Health; Ministry of Labour, Solidarity and Social Security	Ministry of Health; Ministry of Labour, Solidarity and Social Security; patients
University education of personnel	Ministry of Science, Technology and Higher Education	Public and private universities	Ministry of Science, Technology and Higher Education	Ministry of Science, Technology and Higher Education; universities	Ministry of Science, Technology and Higher Education; universities	Ministry of Science, Technology and Higher Education; students (fees)

Source: Authors' compilation.

Notes: INFARMED: National Authority on Drugs and Health Products; VHI: voluntary health insurance.

Health technology assessment

Portugal does not have a tradition of health technology assessment, except for pharmaceutical products, as detailed below. Since 1988, the Ministry of Health has authorized the procurement and installation of expensive medical technologies in the public and private sectors. In 1995, new legislation lifted the restrictions on computed tomography (CT) scanners and magnetic resonance imaging (MRI) scanners. There are currently no effective methods for regulating the distribution of health equipment in the private sector.

INFARMED is responsible for regulating the assessment of any pharmaceutical and medical devices. Created in 2015 and managed by INFARMED, the new system SiNATS aims to assess health technology and its utilization. SiNATS covers all public and private institutions that produce, commercialize or use health technologies. Also, the assessment performed by SiNATS covers all health technologies. Economic evaluation of pharmaceuticals was initially only mandatory for ambulatory care, even though occasionally other drugs were also the subjects of a health technology assessment. Since 2006, economic evaluation has also become mandatory for drugs used or prescribed in hospitals. INFARMED is extending its responsibility from ambulatory to hospital care. In February 2013, the Ministry of Health created a National Commission of Pharmaceutical Products (*Comissão Nacional de Farmácia e Terapêutica*) to define a national list of pharmaceutical products and guidelines for their use. The national list of pharmaceutical products (*Formulário Nacional de Medicamentos*) is available at <http://app10.infarmed.pt/pt/fnm/prefacio.php> and is currently being validated (see section 5.6).

2.4.4 Regulation and governance of pharmaceuticals

In recent years, the government has taken a series of decisions that have changed the regulation of pharmaceuticals in Portugal (see section 5.6), but can be summarized as follows: since 2005, the price of over-the-counter medications is no longer fixed, and over-the-counter medications can be sold outside pharmacies, and since 2006 retail pharmacies can operate in hospitals; since 2007, the ownership of pharmacies is no longer restricted to pharmacists; and also since 2007 there has been no change to the strong regulation of pharmacy locations and the maximum number of pharmacies that are permitted in each community. Administrative prices of pharmaceutical products are now maximum prices, with pharmacies being able to provide discounts on prices to patients.

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

The guarantee system for the quality and safety of pharmaceuticals is a complex one and is not limited to the industrial process. Owing to the unique features of the pharmaceutical market, decisions are not made under normal market conditions. Pharmaceutical production is controlled by a strong system of regulation. INFARMED's responsibilities include:

- to contribute to the national health policy, namely in the definition and execution of pharmaceuticals, medical devices and cosmetics;
- to regulate, evaluate, authorize, discipline, audit and verify, as the National Reference Laboratory, and to ensure the surveillance and control of R&D, production, distribution and sale of pharmaceutical devices and cosmetic consumption;
- to ensure the fulfilment of the regulations on clinical trials on pharmaceuticals, as well as good clinical practice;
- to guarantee the quality, efficacy and cost-effectiveness of pharmaceuticals, devices and cosmetics;
- to screen consumption and use of pharmaceuticals;
- to ensure the adequate integration and participation in the network of pharmaceutical devices and cosmetics, in the official Quality Laboratories network, and with authorities in the European Union.

In recent years there have been a number of regulatory reforms directed towards improving the cost-effective consumption of pharmaceuticals (see section 5.6). To promote the use of generic drugs, the price of generic drugs

was lowered and pharmacists were permitted to substitute generic equivalents for brand-named drugs. Reference pricing for pharmaceutical reimbursement was also introduced in 2003. Moreover, the government enacted new rulings related to the way prices of new pharmaceutical products are determined, and established maximum (not fixed) prices.

2.5 Patient empowerment

The National Health Plan highlights the importance and need for patient empowerment through the adoption of the progressive development of personal skills towards empowerment.

2.5.1 Patient information

All Ministry of Health institutions have their own web site, with areas designed specifically to inform patients. These sites include information on available services and reports on quality of care. Internet coverage of the population is quite extensive, particularly in the coastal areas, which enables citizens to keep in touch with the latest news and information. The brand new NHS webpage (<https://www.sns.gov.pt/>) was launched in February 2016 and is one of the best examples of the link between the Ministry of Health and the citizens (see section 4.1.4). The new website consolidated features of several institutions under the Ministry of Health, e.g. the possibility of scheduling a visit at NHS primary care units, and added new ones, such as information on waiting times for emergency visits at all NHS hospitals or outpatient consultations both at NHS hospitals and primary care units.

Another feature of the IT system is the NHS Call Centre “Health 24” (*Saúde 24*), one of the few P-PPs established by the Ministry of Health. It started operating on 25 April 2007.

In general, information is available on statutory benefits, patient rights and prescriptions, to Portuguese citizens (Table 2.2). In some cases (e.g. medical records), there is a legal obligation to provide information, but, in general, the information is made available without any normative rule. Several information campaigns have been put into place to create awareness among citizens about the available information. The development of websites that provide information from several health sources (e.g. NHS website) has helped to increase access to information among patients. Overall, the population is aware of the main sources of information.

Table 2.2

Patient information

Type of information	Is it easily available? (Yes/No)	Comments
Information about statutory benefits	Yes	Available at www.sns.gov.pt
Information on hospital clinical outcomes	Yes	Available at www.ers.pt , although based on voluntary reporting by hospitals
Information on hospital waiting times	Yes	Available at www.sns.gov.pt
Comparative information about the quality of other providers (e.g. general practitioners)	Yes	Some information (e.g. readmissions, hospital infections) available at www.sns.gov.pt
Patient access to own medical record	Yes	Upon patient's request
Interactive web or 24/7 telephone information	Yes	Available at <i>Saúde 24</i> (Tlf. 808 24 24 24)
Information on patient satisfaction collected (systematically or occasionally)	Yes	Study on patients' complaints available at www.ers.pt
Information on medical errors	No	

2.5.2 Patient choice

Patients in the NHS must register with a general practitioner (GP) and can choose only among the available providers within a geographical area based on their residence. Since May 2016, NHS users can be referred to a hospital out of their residence area, as long as waiting times for a given procedure or outpatient consultation are shorter (Decision No. 6170-A/2016, of 9 May). Secondary care is subject to a gate-keeping process, with strict rules for referral both for outpatient appointments and emergency room episodes. Choice of provider is greater for those covered by a health subsystem or VHI.

The concept of health citizenship is not particularly widespread in Portugal. The state tends to be regarded as responsible for the population health and health care delivery, which reduces responsibility in relation to patient choice. Although legal documents do refer to the possibility of patients having choices in health care, the mechanisms needed for citizens to make choices are not well developed. A first attempt was made in 2008, with the “dental voucher”, specifically designed for dental care, where the public sector is small. Under this programme, pregnant women have access to three “dental pay cheques”, which give them the right to schedule a dentist appointment. The elderly are entitled to two of these pay cheques per year. The first groups to

Table 2.3
Patient choice

Type of choice	Is it available? (Yes/No)	Do people exercise choice? Are there any constraints (e.g. choice in the region but not country-wide)? Other comments?
<i>Choices around coverage</i>		
Choice of being covered or not	No	NHS is universal.
Choice of public or private coverage	No	Private coverage is optional.
Choice of purchasing organization	Yes	Only in private sector.
<i>Choice of provider</i>		
Choice of primary care practitioner	Yes	Only in private sector. In public sector, patient's choice is limited to availability of practitioner in the primary care unit related to the patient's residence area.
Direct access to specialists	Yes	Only in private sector. In public sector, access to specialists is done through referral in primary care.
Choice of hospital	Yes	Only in private sector. In public sector, hospital access is related to the patient's residence area. However, since 2016, NHS users can discuss with their GP and be referred to a different hospital within the NHS, based on waiting times, for particular procedures or outpatient consultations.
Choice to have treatment abroad	No	Treatment abroad is conditioned to prior evaluation by a medical board.
<i>Choice of treatment</i>		
Participation in treatment decisions	Yes	It is a patient right.
Right to informed consent	Yes	It is a patient right.
Right to request a second opinion	No	Only in private sector.
Right to information about alternative treatment options	Yes	It is a patient right.

benefit from this measure were pregnant women and pensioners who receive social benefits, and since then it has been widened to include children with decayed, missing or filled permanent teeth, when referred by their primary care physician.

The programme of the current government pledges to make “progressively available to citizens the possibility of choosing in what health care units they want to be treated, considering technical hierarchy and referral rules within the NHS” (Government of Portugal, 2015b).

2.5.3 Patient rights

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

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

There have not been any studies assessing the effectiveness of the Charter's implementation or its impact. The right to health protection is inscribed in the Constitution of the Portuguese Republic (1976) and is based on a set of fundamental values such as human dignity, equity, ethics and solidarity.

Law No. 15/2014, of 21 March 2014, assembles, in a single diploma, all scattered legislation on rights and duties of health care users, the right to be accompanied, and the Charter of Rights for Access to Healthcare of the NHS Users (see Chapter 5). This Charter defines the maximum waiting times for access to health care; it is updated annually and published in the Ministry's website and at all NHS facilities. However, these documents have not had a significant practical relevance until now. Also, Law No. 52/2014, of 25 August 2014, regulates the access to cross-border health care in any EU country (see section 2.5.4).

Table 2.4
Patient rights

	Yes/No	Comments?
<i>Protection of patient rights</i>		
Does a formal definition of patient rights exist at national level?	Yes	
Are patient rights included in specific legislation or in more than one law?	Yes	Patient rights are included in more than one law
Does the legislation conform with WHO's patient rights framework?	Yes	
<i>Patient complaints avenues</i>		
Are hospitals required to have a designated desk responsible for collecting and resolving patient complaints?	Yes	
Is a health-specific Ombudsman responsible for investigating and resolving patient complaints about health services?	No	Health Regulatory Agency monitors all patients' complaints.
Other complaint avenues?	Yes	Other bodies deal with complaints: Ombudsman (Justice) and professional associations.
<i>Liability/compensation</i>		
Is liability insurance required for physicians and/or other medical professionals?	No	It is optional.
Can legal redress be sought through the courts in the case of medical error?	Yes	
Is there a basis for no-fault compensation?	No	
If a tort system exists, can patients obtain damage awards for economic and noneconomic losses?	Yes	
Can class action suites be taken against health care providers, pharmaceutical companies, etc.?	Yes	

2.5.4 Patients and cross-border care

Mobility has never been a relevant issue in the Portuguese health system. Some populations living near the border with Spain used Spanish health facilities more because of proximity than lack of access in Portugal. Some situations of cross-border care were foreseen in European regulations, namely non-programmed medical emergencies abroad. For exceptional programmed situations, for which there was no adequate response in the NHS, the Ministry of Health authorized treatment abroad.

Law No. 52/2014, of 25 August 2014, establishes the rules for access to cross-border health care, transposing Directive No. 2011/24/EU of the European Parliament and of the Council. Beneficiaries of the NHS and the regional health services became entitled to reimbursement of expenses related to health care

received in other EU countries. The European Directive establishes the rules to facilitate access to safe, high quality, efficient and quantitatively adequate cross-border health care in the EU, ensuring patients' mobility, in accordance with the principles established by the European Court of Justice, and promoting cooperation between Member States regarding health care provision.

Later, a number of decisions were approved in order to define the roles of each body on the Ministry of Health, regarding cross-border health care:

- Decision (*Despacho*) No. 11712/2014, of 19 September, established INFARMED as the national institution responsible by health technology assessment;
- Decision No. 11713/2014, of 19 September, established ACSS as the national contact point;
- Decision No. 11778/2014, of 22 September, defined the requirements to the recognition of prescriptions of medical devices issued in another EU Member State;
- Decision No. 11779/2014, of 22 September, established SPMS as responsible for e-Health;
- Ordinance (*Portaria*) No. 191/2014, of 25 September, defined the range of health care subject to prior approval.

The HRA has calculated the financial impact of cross-border health care to Portugal and has estimated a positive balance of around €500 000 (ERS, 2012).

The previous approval mechanism gives each Member State the possibility of significantly limiting the circulation of patients in the EU, which might hamper the access of patients to cross-border health care. Hence, the volume of patients that seek health care abroad and that effectively manage to have authorization to be treated in other EU Member State should remain low.

3. Financing

Chapter summary

- The Portuguese health system draws on a mix of public and private financing.
- The NHS is predominantly financed through general taxation.
- The health subsystems, which provide comprehensive or partial health care coverage to between one fifth and one quarter of the population, are financed mainly through employee and employer contributions.
- Private VHI covers about 26% of the population, and it mainly has a supplementary role.
- Total health expenditure represented 9.5% of the country's GDP in 2014.
- Around 35% of total health expenditure, is private, mainly in the form of out-of-pocket payments (both co-payments and direct payments by patients), and to a lesser extent in the form of premiums to private insurance schemes and mutual institutions.
- While user charges exist for consultations, emergency visits, home visits, diagnostic tests and therapeutic procedures, around 60% of the population is exempted from paying them.
- The Ministry of Health receives a global budget for the NHS from the Ministry of Finance, which is then allocated to the several institutions within the NHS.
- The Ministry of Health allocates funds to the health regions, based on a combination of historical expenditure and capitation, which pay for primary care and specific health programmes.
- Public hospitals are funded through global budgets, but with an increasing role of diagnosis-related groups (DRGs), and private insurers and health subsystems pay providers.

3.1 Health expenditure

Total health expenditure in Portugal has risen steadily from 7.5% of GDP in 1995 to 10.4% of GDP in 2010, above the EU average of 9.8% in 2010 (Table 3.1). The economic recession (see section 1.2) and the austerity measures required by the Economic and Financial Adjustment Programme in 2011 reversed this trend, with total health expenditure decreasing to 9.5% of GDP in 2014 (Table 3.1).

Table 3.1

Trends in health expenditure in Portugal, 1995–2014 (selected years)

Expenditure	1995	2000	2005	2010	2014
Total health expenditure per capita in Int US\$ (Purchasing Power Parity)	1 015.4	1 652.4	2 224.1	2 810.1	2 689.9
Total health expenditure as % of GDP	7.5	9.3	10.4	10.4	9.5
General government health expenditure as % of total health expenditure	62.6	66.6	68.0	68.7	64.8
General government health expenditure per capita in Int US\$ (Purchasing Power Parity)	635.8	1 100.1	1 511.5	1 930.9	1 743.5
Private health expenditure as % of total health expenditure	37.4	33.4	32.0	31.3	35.2
General government health expenditure as % of general government expenditure	11.2	14.9	15.1	13.8	11.9
Government health spending as % of GDP	4.7	6.2	7.0	7.2	6.2
OOP payments as % of total health expenditure	23.9	24.3	23.9	23.3	26.8
OOP payments as % of private health expenditure	64.0	72.8	74.5	74.5	76.3
Private insurance as % of private health expenditure	3.5	10.1	14.2	14.2	n/a

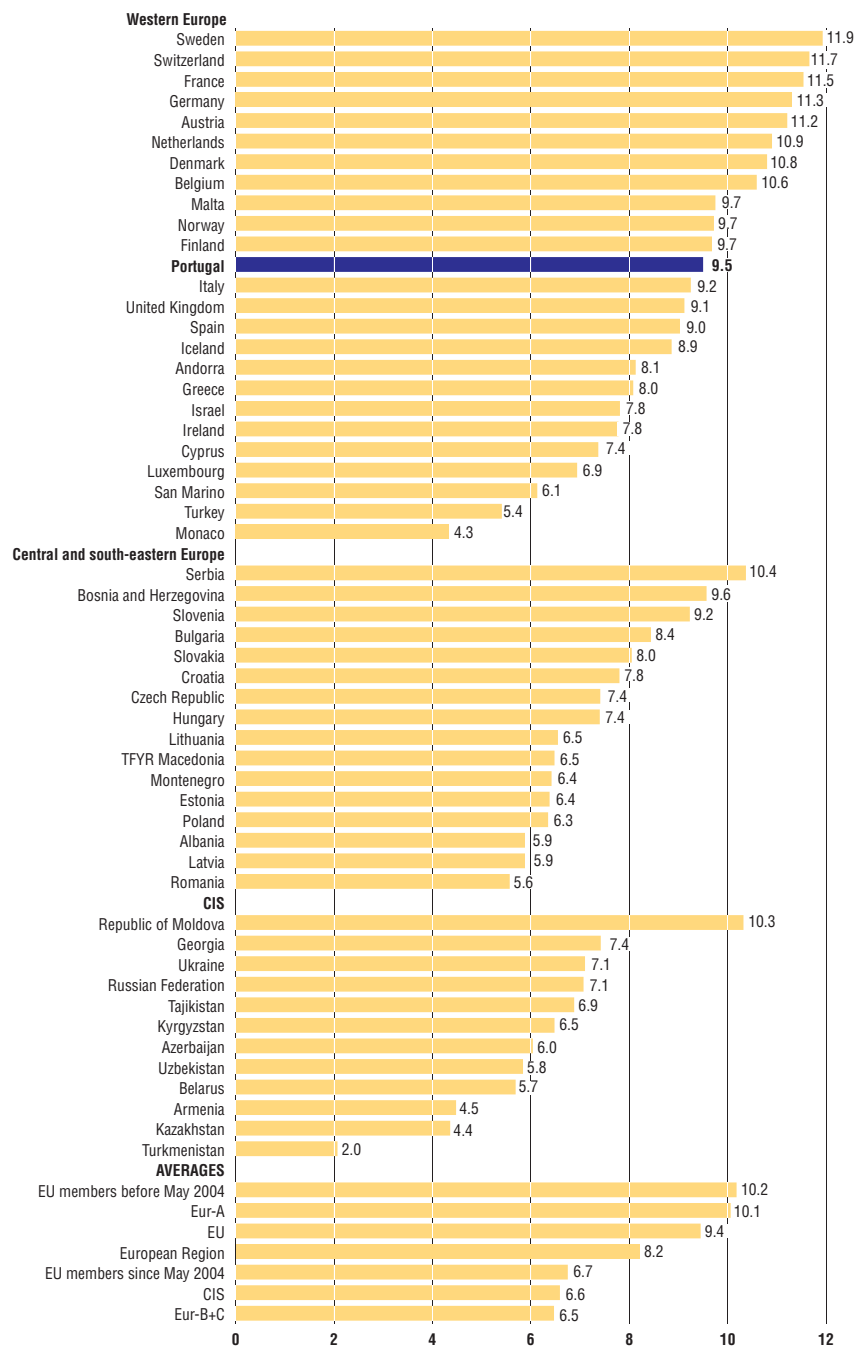
Source: WHO, 2016a.

Notes: n/a: not available; OOP: out-of-pocket.

The economic crisis in Portugal led to changes in total health expenditure. The reduction of the GDP by 5.4% between 2010 and 2013 was accompanied by a 12.4% decrease of the total health expenditure in the same period (INE, 2016a). Thus, analysing total health expenditure as a share of the GDP, Portugal was above the EU average in 2010, but in line with the EU average in 2014 (Fig. 3.1).

Fig. 3.1

Total health expenditure as a share (%) of GDP in the WHO European Region, 2014



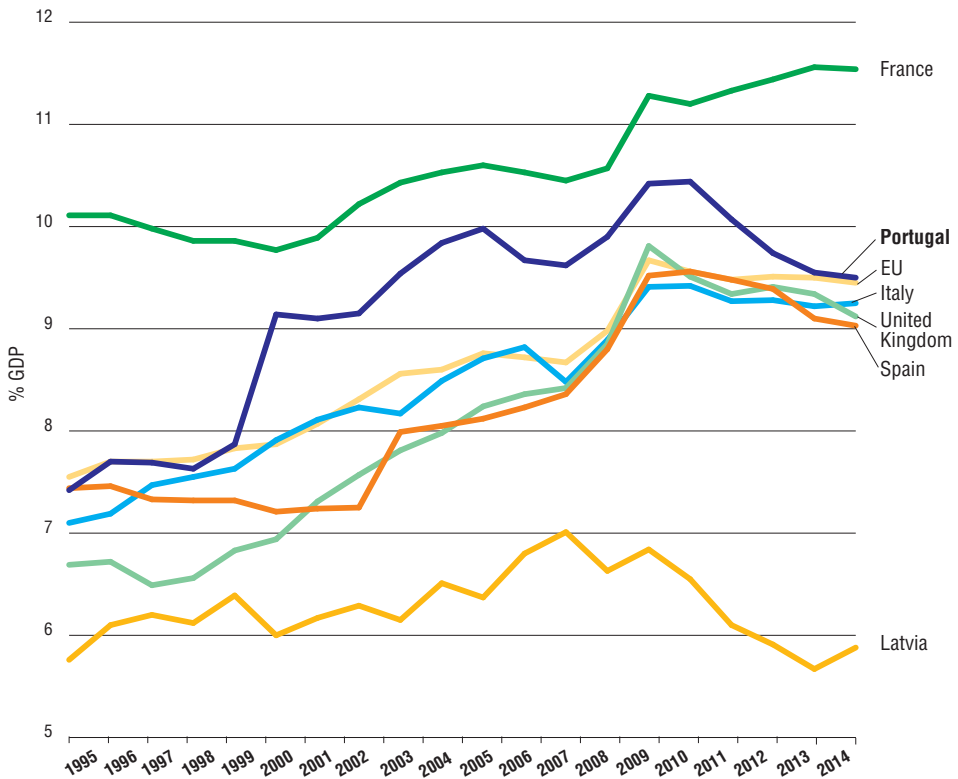
Source: WHO Regional Office for Europe, 2016.

Notes: European Region: the 53 countries in the WHO European Region; Eur-A: 27 countries in the WHO European Region with very low child and adult mortality (see WHO definition); Eur-B+C: 26 countries in the WHO European Region with higher levels of mortality (see WHO definition); CIS: Commonwealth of Independent States; TFYR Macedonia: The former Yugoslav Republic of Macedonia.

Austerity in Europe also led to the decrease of total health expenditure in countries like Spain, the United Kingdom or Italy, but that reduction was sharper in Portugal and Latvia (Fig. 3.2). Despite being among the top spenders on health care as a percentage of GDP, even after the Economic and Financial Adjustment Programme, Portugal spent US\$ 2689.9 per capita (purchasing power parity) in 2014, which is below the EU average of US\$ 3379 (purchasing power parity) (Fig. 3.3).

Fig. 3.2

Trends in total health expenditure as a share (%) of GDP in Portugal and selected countries, 1990–2014

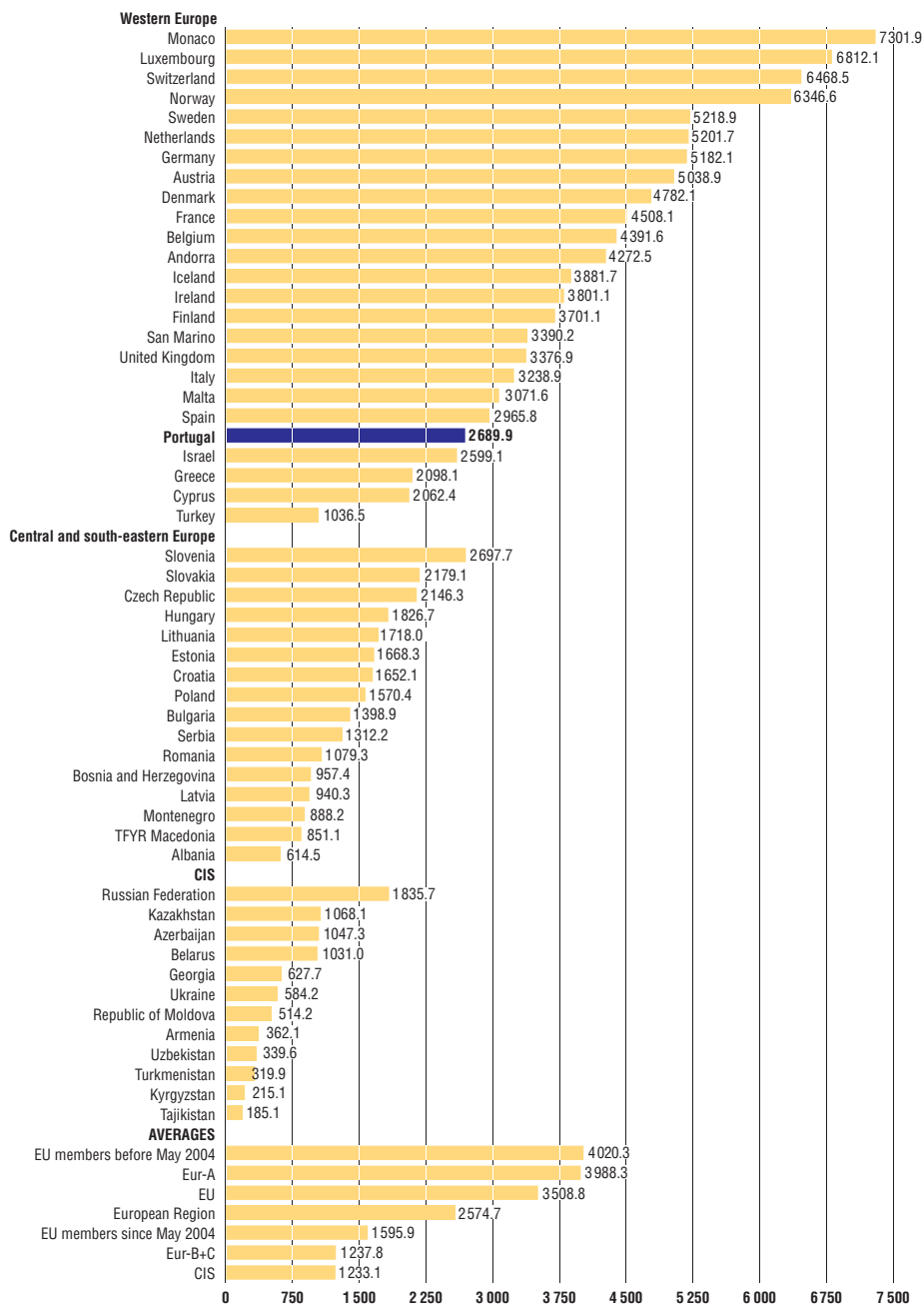


Source: WHO Regional Office for Europe, 2016.

Between 2010 and 2014, there was a significant decrease in general government health expenditure in Portugal (−9.7%). Measuring general government health expenditure as a share of general government expenditure, Portugal is below the EU average (Fig. 3.5).

Fig. 3.3

Total health expenditure in US\$ purchasing power parity per capita in the WHO European Region, 2014

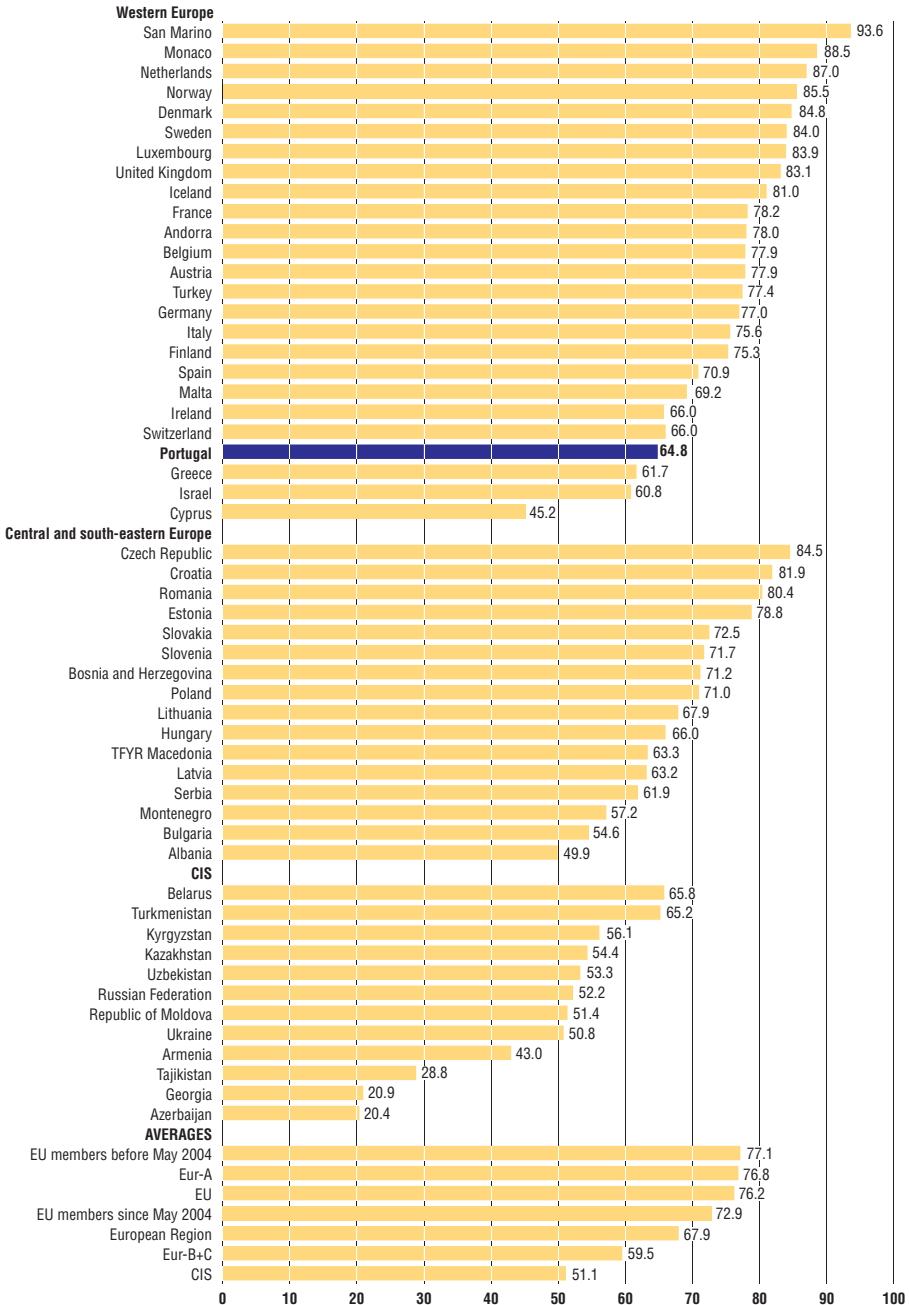


Source: WHO Regional Office for Europe, 2016.

Notes: European Region: the 53 countries in the WHO European Region; Eur-A: 27 countries in the WHO European Region with very low child and adult mortality (see WHO definition); Eur-B+C: 26 countries in the WHO European Region with higher levels of mortality (see WHO definition); CIS: Commonwealth of Independent States; TFYR Macedonia: The former Yugoslav Republic of Macedonia.

Fig. 3.4

Public sector health expenditure as a share (%) of total health expenditure in the WHO European Region, 2014

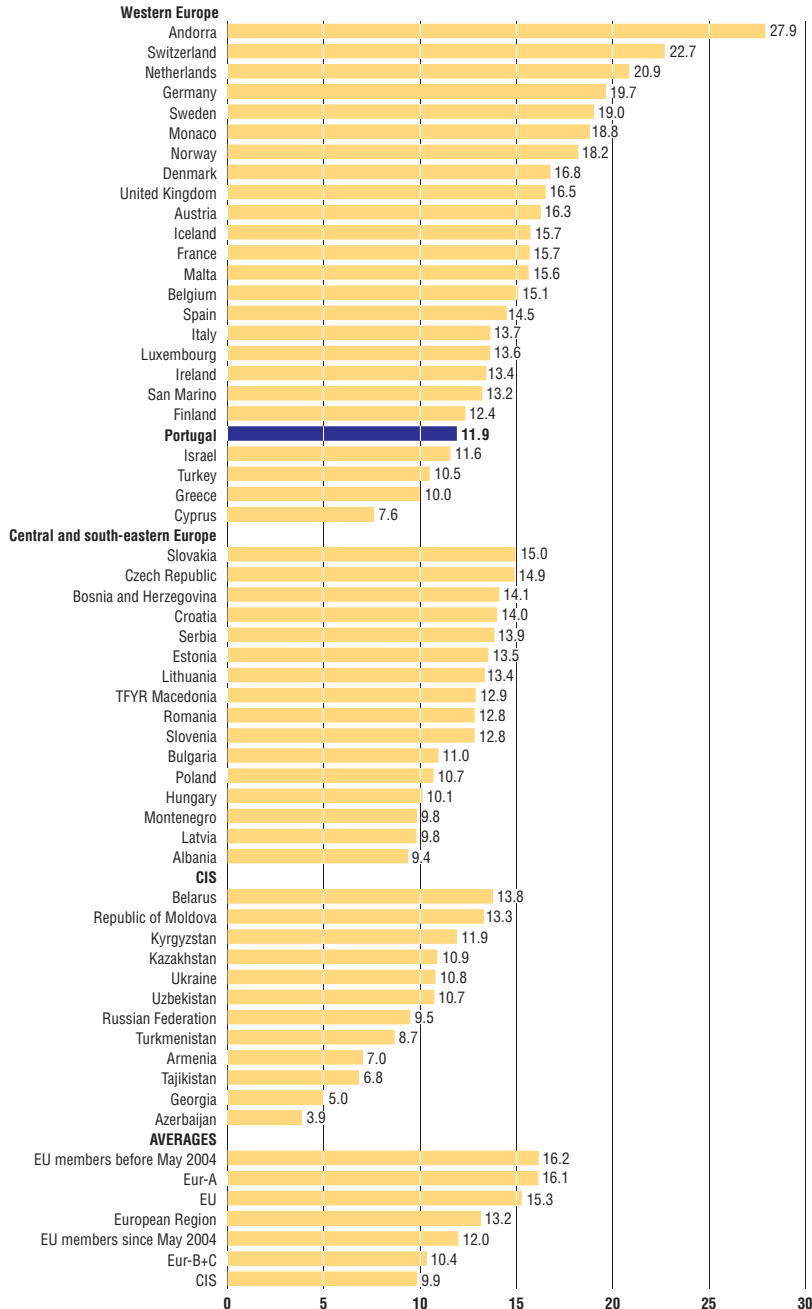


Source: WHO Regional Office for Europe (2016)

Notes: European Region: the 53 countries in the WHO European Region; Eur-A: 27 countries in the WHO European Region with very low child and adult mortality (see WHO definition); Eur-B+C: 26 countries in the WHO European Region with higher levels of mortality (see WHO definition); CIS: Commonwealth of Independent States; TFYR Macedonia: The former Yugoslav Republic of Macedonia.

Fig. 3.5

General government health expenditure as a share (%) of general government expenditure in the WHO European Region, 2014



Source: WHO Regional Office for Europe, 2016.

Notes: European Region: the 53 countries in the WHO European Region; Eur-A: 27 countries in the WHO European Region with very low child and adult mortality (see WHO definition); Eur-B+C: 26 countries in the WHO European Region with higher levels of mortality (see WHO definition); CIS: Commonwealth of Independent States; TFYR Macedonia: The former Yugoslav Republic of Macedonia.

Since 2010, the amount spent on health care has decreased in both absolute and relative terms, after a strong growth pattern observed in the previous years (Table 3.1). The Economic and Financial Adjustment Programme required public expenditure for health to be cut, while some part of those cuts targeted the private sector. In the European context, public sources of spending as a percentage of total health expenditure in Portugal (64.7%) are among the lowest in the EU, where the average is 76.0% (Fig. 3.4).

Most private health expenditure is accounted for by out-of-pocket (OOP) spending, in the form of co-payments and direct payments made by citizens for pharmaceuticals, examinations and outpatient consultations (Table 3.2). OOP payments in Portugal are estimated to be among the highest in the EU, accounting for 27.6% of total health expenditure in 2015 (INE, 2016f) (see section 3.4). Health care financing in Portugal is overall slightly regressive due to the high share of OOP payments along with a heavy reliance on indirect taxes. Indirect taxes on goods and services accounted for 42.3% of total government revenue in 2015, whereas the EU average is 34.7% (INE, 2016e).

Table 3.2

Expenditure on health (as % of total health expenditure) according to function and type of financing, 2014

	Curative and rehabilitation care	Long-term care	Ancillary services	Medical goods	Preventive care	Administration	Other services	Total
General government	48.3	1.8	4.7	9.5	0.8	0.9	0.1	66.2
Private sector	17.8	0.5	3.3	10.1	1.0	1.1	0.0	33.8
Private out-of-pocket	14.8	0.4	2.5	9.6	0.1	0.0	0.0	27.5
Private insurance	3.0	0.0	0.9	0.4	0.0	1.1	0.0	5.4
Corporations (other than health insurance)	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.8
Other (e.g. non-profit institutions serving households)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total expenditure	66.1	2.4	8.1	19.6	1.8	2.0	0.1	100.0

Source: OECD, 2016a.

3.2 Sources of revenue and financial flows

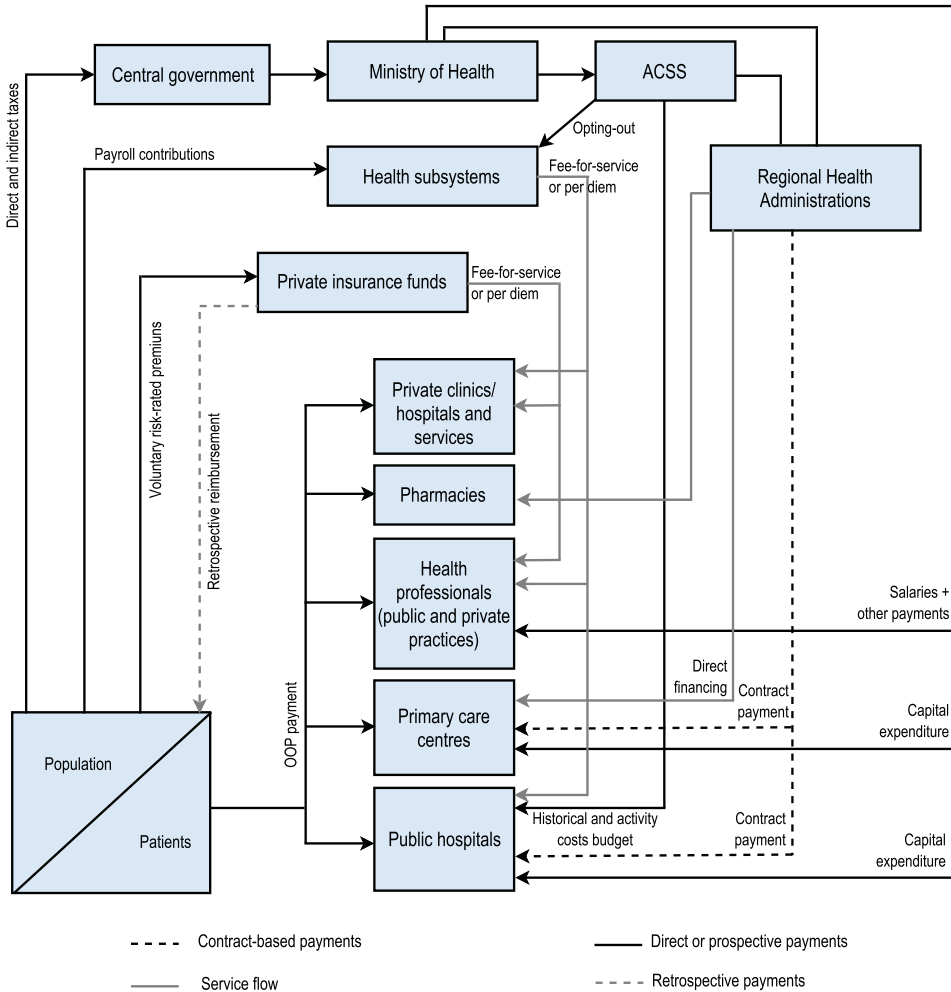
The NHS is predominantly financed through general taxation. In addition to the NHS, which provides universal coverage for a comprehensive set of services, citizens can benefit from extra layers of insurance coverage. These extra layers have three main sources: public health subsystems, private health subsystems and private voluntary health insurance, contracted through the employer or on an individual basis (see section 3.5).

Health subsystems, which provide either comprehensive or partial health care coverage between one-fifth and a quarter of the population (see section 2.1.6), are financed mainly through employee and employer contributions (including state contributions as an employer). It is estimated that private VHI covers about 2.7 million people, corresponding to 25.8% of the Portuguese population in 2015 (ASF, 2016). A summary of the financing flows in the Portuguese health system is depicted in Fig. 3.6.

Analysing the government budgets from 2005 to 2010, the NHS budget increased steadily, both in absolute value and in proportion of GDP, reaching its peak in 2010: almost €8.7 billion and 5.0% of GDP. In 2011 and 2012, the trend was reversed and the NHS budget in 2012 (€7.5 billion) was lower than the one recorded in 2005 (€7.6 billion). That means that, during the Economic and Financial Adjustment Programme, the NHS budget reverted to the level recorded 8 years earlier. In 2015 and 2016, the budgetary transfers to the NHS were around €7.9 billion in both years (DGO, 2017).

Private health expenditure has grown in recent years, though at a slower rate than public health expenditure, except between 2010 and 2015, when private health expenditure grew faster than public health expenditure. Table 3.3 shows the main private sources of financing in the period 2000–2014, distinguishing between OOP payments, not-for-profit institutions serving families, VHI and other private sources. A large proportion of financing (around one third of total expenditure) is private, mainly in the form of OOP payments (both co-payments and direct payments by the patient), and to a lesser extent, in the form of premiums to private insurance schemes and mutual institutions. The Economic and Financial Adjustment Programme brought a decrease in public funding from 2010 to 2015, with the exception of 2013. In contrast, private expenditure has shown an increasing trend from 2010 to 2015 (Table 3.3). OOP payments have increased from 24.6% of total health expenditure in 2010 to 27.6% in 2015 (INE, 2016f).

Fig. 3.6
Financial flows



Source: Adapted from Barros, Machado & Simões, 2011.

Table 3.3

Funding mix for the health system (%), 2000–2015 (selected years)

	2000	2005	2010	2011	2012	2013	2014	2015 ^a
Public funding	70.5	71.3	69.8	67.7	65.6	66.9	66.2	66.0
Private funding	29.5	28.7	30.2	32.2	34.4	33.1	33.8	34.0
Not-for-profit institutions serving families	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1
VHI	12.3	16.0	15.6	15.6	15.3	15.8	16.0	16.1
OOP payments	84.6	81.1	81.2	81.4	81.8	81.5	81.5	81.4
Other private funding	2.8	2.7	2.9	2.8	2.7	2.5	2.4	2.4

Source: Authors, based on the Satellite Account for Health (INE, 2016f).

Note: ^aProvisional data.

Box 3.1

Assessing allocative efficiency

Financial resources directed towards health care have reached a high level relative to the country's wealth. The share of GDP devoted to health expenditure in recent years (Table 3.1) puts Portugal in line with the level of health spending within the EU. Since the mid-1990s, Portugal has witnessed a steady and fast growth in public expenditure on health, with private expenditure remaining relatively constant (i.e. growing in line with GDP growth). That trend was reversed in 2010, with a decrease in public spending and an increase in private expenditure.

There has been a move away from historically based allocation of funds towards an approach close to needs-based allocation. This is the trend in primary care, particularly since 2012. On the other hand, hospital care is moving towards a contract-based approach, where an explicit target for “production” and the corresponding payment are spelt out. As health care activity increasingly follows the health care needs of the population the system moves closer to a needs-based approach. The fact that contract-based approaches were used in hospitals before primary care is explained by the use of DRGs and the introduction of private management in public hospitals in the 1990s. Hence, NHS hospital management moved away from historically based allocation of funds towards contracts (*contratos-programa*) signed between the NHS (as funder) and the hospitals. Contract-based approaches were introduced in primary care only later and gradually.

Human resources in Portugal have been characterized by a higher emphasis than most other countries on specialist hospital care, coupled with a relative scarcity of physicians and low productivity. More recent years have shown a movement towards correction of these imbalances (see Section 4.2.2). In particular, an increase in the ratio of GPs to specialists in hospitals, as well as an increase in the ratio of nurses to doctors, at national level, is observed. Some of these changes have been the result of government policy regarding vacancies for postgraduate medical training in NHS institutions. However, the shortage of physicians became more evident with the early retirement of many physicians, fostered by the civil servants' retirement plan reform.

3.3 Overview of the statutory financing system

3.3.1 Coverage

Breadth: who is covered?

All residents in Portugal are covered by the NHS, irrespective of their socioeconomic, employment or legal status. The NHS is universal, comprehensive and almost free at point of delivery (according to the Portuguese Constitution, Article 64). The universal and comprehensive nature of the NHS was defined at its inception (1979), and has been retained since then.

However, there are gaps in provision due to geographical imbalances, as hospitals located outside great metropolitan areas like Lisbon, Oporto and Coimbra do not provide for all medical specialties. However, the high levels of investment in regional facilities outside Lisbon and Oporto in recent years and the definition of regional systems contribute to attenuate these geographical imbalances.

Since 2001, Portugal's NHS services cannot refuse treatment based on nationality, or legal or financial status of the migrant. Further, Portuguese immigration policy is currently guided by Law No. 29/2012 of 9 August 2012, which establishes that immigrants have the same access to the health system as Portuguese citizens. It is expected that, given the universal and mostly free health insurance coverage given by the Portuguese NHS, access by immigrants to health care in Portugal is wider than in other European countries. However, not only language, cultural differences and financial problems, but also service constraints, remain major barriers that prevent immigrants from accessing NHS services in Portugal (ERS, 2015a). Particularly, regarding immigrants without legal status, information systems in the Portuguese NHS primary care services do not allow referral to other levels of care or examinations and drug prescriptions (ERS, 2015a). Some of these constraints have already been explored in previous investigations in Portugal (Dias et al., 2011).

Scope: what is covered?

The NHS predominantly provides primary care and specialized hospital care. Dental consultations, diagnostic services, renal dialysis and rehabilitation are more commonly provided in the private sector (but with public funding to a considerable extent). Typically, diagnostic services, renal dialysis and rehabilitation are carried out under contractual arrangements with the NHS. Most dental care is paid for OOP, as are many specialist consultations in private

ambulatory care. Theoretically, there are no services explicitly excluded from NHS coverage. However, throughout Portugal, the NHS does not cover dental care: it is neither provided nor funded by the NHS.

Since the creation of the NHS, dental care has been one of the areas where public coverage is still very limited. That was emphasized in previous analyses, which highlighted the exceptions to the formally comprehensive NHS coverage, namely dental care, where private providers have a predominant role (Simões, Barros & Pereira, 2007). According to the 4th National Health Survey (2005/2006), approximately 92% of dental consultations¹, and 60% of specialist consultations (e.g. cardiology) took place in the private sector (INSA, 2007).

In 2008, given the need to ensure equitable lifelong dental care provision, the National Programme for Oral Healthcare Promotion (*Programa Nacional para a Promoção da Saúde Oral*) was extended to pregnant women and the elderly who received social benefits. Those were identified as the most vulnerable groups regarding dental care, and hence a dental pay cheque programme was created to facilitate their access to dentists. Later, the National Programme for Oral Healthcare Promotion was further extended to people living with HIV/AIDS (in 2010), and those who needed early intervention due to oral cancer (in 2014) (see section 2.5.2).

The role of private specialists has increased during the last decade (Campos & Simões, 2014). This is due to both NHS shortages (with long waiting times) and a tradition, from before the creation of the NHS, of direct access to physicians' private offices. Overall, the scope of coverage in the NHS is comprehensive.

Depth: how much of benefit cost is covered?

User charges are in place for most NHS services, being most visible to the population in emergency visits, GPs and specialists visits. While extensive exemptions exist for user charges at service level, the depth of coverage is lowest for pharmaceuticals. The current government has revised both values and exemptions to user charges in 2016 (see section 3.4.1).

Concerning economic evaluation and consequent provision of coverage for pharmaceutical expenses, in Portugal, as in other countries, pharmaceutical products face a process of evaluation before they are included under the NHS coverage. Each recent pharmaceutical available for sale in pharmacies is subject to an economic evaluation (guidelines for this were enacted in 1998). In 2006, the government extended the same guiding principles of economic evaluation

¹ The remaining dental consultations that do not take place in the private sector (8%) correspond to stomatology consultations in hospitals, which are classified as dental consultations.

to new pharmaceuticals introduced in hospital consumption (see section 5.6). Policy measures on pharmaceuticals between 2011 and 2014 focused on pricing, NHS coverage, competition, and prescription and purchase rationalization. Decree-Law No. 112/2011, of 29 November 2011, established a new methodology for fixing the price of pharmaceuticals. New trade margins for retailers and pharmacies were created as well as new prices for generics. The highest sale price of generics became at least 50% lower than that of the reference drug; or 25%, if the retailer price is lower than €10. In 2013, Ordinance No. 335/2013, of 15 November 2013, established the rules for setting the price of pharmaceuticals, with annual review of the reference countries. This change in the reference countries allowed a sharp decrease in the price of labelled drugs.

In 2012, the government and the pharmaceutical companies established an agreement to reduce public expenditure on pharmaceuticals. New agreements have been signed since then. For example, in March 2016, the government and the pharmaceutical industry signed an agreement that regulates the terms and conditions in which both entities agree to collaborate to reach budgetary goals of public spending with ambulatory and hospital pharmaceuticals with the NHS in 2016. The agreement also provides a medium term understanding, covering the period until the end of 2018. For 2016, the agreement has established a benchmark of public expenditure on pharmaceuticals of €2000 million. The pharmaceutical industry agreed to collaborate in the control of public spending on pharmaceuticals in 2016, with a financial contribution of €200 million.

The Ministry of Health is responsible for setting the rules for access for patients to drugs that are innovative, in particular, by complying with the evaluation and decision deadlines set forth in the law, as set forth in SiNATS (Decree-Law no. 97/2015, of 1 June 2015).

Law No. 11/2012, of 8 March 2012, established that prescription of medicines should be done electronically only and using the International Non-proprietary Name (Barros, 2015).

The MoU signed in May 2011 by the Portuguese Government with the European Commission, the European Central Bank and the International Monetary Fund (see section 1.2), lead to changes in how the NHS was funded, i.e. the increase of user charges, jointly with an increase in exemptions. The focus of exemptions was redirected from disease to the financial status of individuals and their families, which resulted in more people entitled to exemption. Before being increased (2012), user charges represented 0.74% of the NHS total revenue in 2010, and 0.95% in 2011. In 2012, they accounted for 1.7% of the NHS total revenue (ERS, 2013a).

Box 3.2**Assessing coverage**

The NHS has been able to provide a universal and comprehensive approach to citizens' health problems, in both primary and hospital care. The exception is dental care, which is mainly based on private providers and funded by families.

Contracting with private providers has allowed the NHS, as funder, to meet the need of its users, mainly in laboratory tests, imaging, renal dialysis and rehabilitation. However, waiting lists remain a major problem regarding financial protection (seeking in the private sector the response that the NHS is not able to provide), access and equity. Waiting lists might be a major explanation for the magnitude of OOP payments in Portugal.

Despite the constant response of the NHS (meaning that utilization and the offer of services has not decreased) in recent years (2010–2014), both OOP payments and private sector activity have increased, in parallel with an increase in exemptions. This suggests that those with higher disposable income might have turned to private health care providers due to unsatisfactory responses from the NHS (e.g. waiting time).

3.3.2 Collection**General government budget**

A budget for total NHS expenditure is established within the annual government budget. Traditionally, this has been a soft budget. Actual health expenditure usually exceeded the budget limits, sometimes requiring supplementary budgets to be approved. Apart from direct transfers from the government budget, the NHS raises its own revenue, mostly generated by hospitals. This includes payments from private insurers (especially relevant for road traffic and workplace accident victims), income from investments, donations, fines and user charges.

Taxes, contributions or premiums pooled by a separate agency

The NHS is mainly financed by general taxes, which are not earmarked. Tax revenue also funds the employer contributions for government and public sector employees. The main tax fund sources are taxes on income (47% of total tax revenue in 2014), followed by indirect taxes (42.3% of total tax revenue in 2014) (INE, 2016a).

Box 3.3**Assessing progressivity and equity of health financing**

The Portuguese NHS is financed through general taxation, but the discussion on whether the fiscal system is regressive or progressive is complex.

Regarding user charges, the unemployed, pregnant women, blood donors, donors of live cells and tissues, firemen, people aged 18 years or under, and those belonging to certain patient groups are exempted from user charges throughout the NHS. Also in the pharmaceutical sector, new co-payment tables were created targeting the most vulnerable groups of the population.

More complex issues in regressivity are related to access to specific health care that the NHS does not provide, particularly dental care. In this case, patients are forced to use private providers, with or without reimbursement, total or partial, depending on social or voluntary health insurance schemes. The same happens with private outpatient consultations, imaging or laboratory tests, whose costs are incurred by patients on the conditions above mentioned.

The burden of regressivity in health funding is not likely to have been reduced in recent years, since the use of private providers has been growing while the public sector has maintained the level of service provision. That is, by using private providers regressivity increases because it allows more fiscal deductions that benefit the richest.

3.3.3 Pooling and allocation of funds

The Ministry of Finance sets the NHS budget annually, based on historical spending and plans put forward by the Ministry of Health, within an overall framework of political priority setting across the different sectors. Capital and current expenditure are separated, with the Ministry of Health retaining control for all capital expenditure. The ACSS, which is the department responsible for financial management within the Ministry of Health, prepares estimates detailing the resources required to support planned activities. The estimate of total expenditure for the current year is adjusted by the expected increase in the level of consumption and salary levels. The Ministry of Finance, based on macroeconomic considerations, ultimately determines the global budget for health.

The Ministry of Health receives a global budget for the NHS, which is then allocated to the many institutions within the NHS (hospitals; health regions, which then allocate funds to primary care centres; and special programmes). The Ministry of Health allocates a budget to each RHA for the provision of health care to a geographically defined population. In practice, however, RHA autonomy over the way in which the budget is spent has been limited to primary care, because hospital budgets are still defined and allocated at the central level.

The RHA budget for primary care is set on the basis of a combination of historical expense and capitation. This approach was introduced in 1998 and the budget computation has been progressively skewed towards a relative increase of the capitation component. In order to provide an adjustment for health care needs, the capitation component was adjusted by demography (age and gender) and also by a disease burden index computed according to the regional prevalence of selected health problems, namely four chronic conditions: hypertension, diabetes, stress and arthritis. Weights, based on pharmaceutical expenditure for each disease and region, were computed to create a disease burden index. The demographic index was based on the intensity of primary care visits per cell of age and gender.

3.3.4 Purchasing and purchaser–provider relations

Reform proposals initiated in 1996 intended to increase the purchasing role of the RHAs to move the system gradually from an integrated model towards a contract model of health care (see section 3.7.1, *Payment of hospitals, Payment of primary care centres*). The core instruments of this contracting culture would be the regional contracting agencies at each RHA. Their role is to identify the health needs of geographically defined populations and prospectively negotiate activity programmes and budgets with the provider institutions, with a view to integrating primary and hospital care to meet those needs.

Since 2002, the hospital payment system has evolved to a contract-based approach (see section 3.7.1, *Payment of hospitals*). In that year, roughly half of the hospital sector was given corporate-like status, which has now been extended to more hospitals. The contract approach is currently applied also to purely public hospitals. Contracts are set for 1 year and stipulate the overall payment and expected production level of the hospital (by broad lines of activity).

3.4 Out-of-pocket payments

OOP payments (including cost sharing and direct payments for private sector services) accounted for approximately 26.8% of total health expenditure in 2014 (see Table 3.1), and provisional data for 2015 indicate that OOP payments have increased to 27.6% of total health expenditure. Pharmacies (dispensing chemists), outpatient care centres and offices of physicians, hospitals, and nursing and residential care facilities represent

approximately 90% of a household's OOP payments on health care. Most dental care is paid OOP, as are many specialist consultations in private ambulatory care.

3.4.1 Cost sharing (user charges)

Cost sharing is part of both the NHS and private financing arrangements. All three forms of cost sharing are present in the NHS; the most common are co-payments (or user charges), defined as a fixed amount charged for a service; these exist in most public health care services (see Table 3.4).

Table 3.4

User charges for health services, 2016

Health service	Type of user charge in place	Exemptions and/or reduced rates
GP visit	Co-payment	Citizens with insufficient means, unemployed people, pregnant and parturient women, blood donors, live donors of cells and tissues, refugees and asylum seekers, firemen, people ≤ 18 years, and those belonging to certain patient groups are exempt from user charges in all NHS institutions
Primary care	Co-payment	
Outpatient specialist visit	Co-payment	
Emergency visits	Co-payment	
Outpatient prescription drugs	Coinsurance, varies depending on therapeutic value	
Inpatient stay	None ^a	
Dental care	OOP payment	Dental pay cheques target elderly receiving social benefits, pregnant women, school-aged children, and some patient groups (e.g. HIV/AIDS)
Medical devices	OOP payment	

Source: Authors' elaboration.

Notes: ^aCo-payment for inpatient stay was removed in 2009. There is no cap in OOP payments.

The values set for co-payments are typically small, when compared to the cost of the service. For example, the co-payment for an emergency visit currently ranges from €14 (in primary health care units) to €18 (in hospitals), while the average cost of an episode ranges from €36 (for a basic emergency at a primary health care unit) to €112 (in a general emergency service in a hospital), according to the values published by the government (Ordinance (*Portaria*) No. 234/2015, of 7 August 2015). There is no annual ceiling on co-payments.

Also in 2016, the values for user charges in the NHS were reduced for the first time (Table 3.5) and the overall cap per episode of care was redefined to €40 (previously €50) (Ordinance No. 64-C/2016, of 31 March 2016).

In March 2016, the existing exemptions for user charges were revised. Firemen, blood donors and donors of live cells and tissues became totally exempted from user charges in the NHS. Examinations performed in day hospitals and emergency services (if referred by primary units, the INEM or *Saúde 24* call centre) also became exempted. Finally, first outpatient consultations referred by primary care units; emergency service visits referred by primary care units, INEM or *Saúde 24*; and primary care visits referred by *Saúde 24* were also exempted for user charges (ACSS, 2016a).

Table 3.5

Values (in €) of user charges in the Portuguese NHS, 2011–2016

	2011	2012	2013	2014	2015	2016
<i>Emergency service</i>						
General emergency ^a	9.60	20.00	20.60	20.65	20.60	18.00
Medical surgical emergency	8.60	17.50	18.00	18.05	18.00	16.00
Basic emergency	8.60	15.00	15.45	15.50	15.45	14.00
<i>Outpatient service</i>						
Specialized consultation	4.60	7.50	7.75	7.75	7.75	7.00
Primary care consultation	2.25	5.00	5.00	5.00	5.00	4.50

Source: Barros, 2012; SNS, 2016.

Notes: ^aGeneral emergency services (*Serviços de Urgência polivalente*) comprise all types of emergency services, including intensive care and several specialties.

Currently, users in a situation of financial hardship (i.e. with an average household monthly income ≤ 1.5 times the Index of Social Support; for more details on household income definition, see corresponding legislation in Ordinance No. 311-D/2011, of 27 December 2011), unemployed people, pregnant and parturient women, blood donors, live donors of cells and tissues, refugees and asylum seekers, firemen, people aged 18 years or under, and those belonging to certain patient groups are exempted from user charges in all NHS institutions. In April 2016, 6.1 million NHS users (roughly 60% of the population) were exempted from any user charges, with 2.7 million (44%) being exempted due to financial hardship.

Coinsurance, in which the user pays a fraction of the cost of the service, is in place for pharmaceutical products covered by the NHS and for other health insurance arrangements (subsystems and VHI). The coinsurance on pharmaceuticals varies depending on the therapeutic value of the drug. Pensioners pay a reduced rate and chronically ill patients are exempt from the

cost of some courses of medication (see section 5.6). Indirect methods of cost sharing are also present, namely reference pricing for pharmaceutical products. Finally, deductibles are present in some commercial health insurance contracts.

Cost sharing is a highly debated issue in Portugal. The different cost-sharing instruments have different objectives. The (stated) objective for co-payments is to contain and regulate demand for public services (the standard argument of moral hazard control). This is visible, for example, in the smaller value paid by patients if they choose to go to primary care centres instead of going to hospital emergency departments for care. On the other hand, the role of coinsurance in pharmaceutical products is not only to influence demand but also to shift the financial burden to the users, given its relatively high value (see section 5.6).

The total value of co-payments in NHS hospitals accounted for 1.7% of the total NHS expenditure in 2012, which represents a significant increase from previous years: 0.74% in 2010 and 0.95% in 2011 (ERS, 2013a). The above cost-sharing arrangements are accompanied by mechanisms designed to protect vulnerable groups of the population. Exemptions from co-payments are generous and include pregnant women, those aged 18 years or younger, pensioners with low income, persons responsible for disabled young people, socially and economically disadvantaged people, and patients with some chronic conditions. In August 2016, there were 6 159 324 users exempted from paying user charges (roughly 60% of the population)².

3.4.2 Direct payments

Direct payments take place for those services not covered by statutory pre-payment, including dental care and specialist consultations in private ambulatory care. The patient pays transportation costs, except in special circumstances, such as long-distance travel, or specific health conditions (e.g. patients on dialysis), in which case costs are subsidized. Emergency care transportation, on the other hand, is provided free of charge by INEM (see section 5.5).

3.4.3 Informal payments

There is no detailed information on the role and magnitude of informal payments. The general perception is that they play at most a minor role.

² <http://www.acss.min-saude.pt/2016/09/15/taxas-moderadoras/>

3.5 Voluntary health insurance

3.5.1 Market role and size

The private insurance market, given by the number of individuals covered by individual or group private health insurance, has grown, reaching almost 2.6 million people covered in 2015 (around 25.8% of the population), which represents a 3.5% growth compared with 2012 (ASF, 2016; ERS, 2015c). The main role of private VHI is supplementary, speeding access to elective hospital treatment and ambulatory consultations and choice of provider) and, only rarely, complementary, covering services excluded from the NHS.

3.5.2 Market structure

Similarly to the number of people covered by VHI, the number of insurance policies has also increased, having VHI reached a market share of 25.8% in 2015 (ASF, 2016). Notwithstanding, due to the existence of a universal NHS, the private insurance market in Portugal is small. In the European context, countries such as Germany or the Netherlands have private insurance markets with a bigger dimension, given the nature of their health systems. Even so, Portugal is the country with the highest ratio of premium per GDP (0.33%) and the second highest ratio of gross premium per 100 000 population (€5.2 million), compared with countries such as the United Kingdom, Denmark, Italy, Finland and Greece, which shows the growing importance of VHI in Portugal (ERS, 2015c).

In 2013, there were 26 insurers selling VHI in Portugal, with *Fidelidade* and *Ocidental Seguros* having together more than 50% of market share, as defined by the proportion of total premium income (ERS, 2015c). Over time, the VHI market has become more concentrated, reflecting an increased concentration in the banking and insurance sectors more broadly. Based on all 26 insurers' market shares, it is possible to describe the Portuguese VHI market as moderately concentrated (ERS, 2015c).

3.5.3 Market conduct

Insurers have established measures to prevent moral hazard (the assumption that insured people overuse health care services because they have insurance) to avoid paying excessive amounts for claims. Some examples include:

- exclusions defined in insurance policies, which withdraw high treatment costs or recurrent treatment of chronic diseases from insurance coverage;
- delimitation of the scope of the guarantees, by defining limits in terms of quantity of health care covered or maximum limits (ceiling) of coverage;
- inclusion of a pre-authorization clause for certain medical expenses;
- co-payments and deductibles;
- definition of health care with larger grace periods;
- attempt by insurers to cover only lower risk claims, including clauses that define:
 - exclusion of health care that may become necessary due to acquired disease or the individual's behaviour;
 - premium update according to the individual's age;
 - age limits to insurance contract inaction or cessation;
 - potential exclusion of some individuals.

Prevention of moral hazard and discrimination against individuals by insurers suggest that if VHI (in current terms) was not complementary but alternative to the NHS (i.e. replacing the NHS in health expenditure coverage of Portuguese citizens), universal access to health care would be at stake (ERS, 2015c).

3.5.4 Public policy

The ASF, the Consumers' Institute (*Instituto do Consumidor*) and the Portuguese Competition Authority (*Autoridade da Concorrência*) regulate the private insurance market. There are no regulations in place to improve access to the market, as can be found in other European countries.

Insurance premiums are deductible for fiscal purposes, but the limits are low. For internal revenue service tax (personal income tax), 15% of health expenses are deductible by any person or member of the household up to the limit of €1000. Regarding corporations, insurance premiums can be accepted as an expense as long as the insurance includes all workers, with a similar coverage for all.

3.6 Other financing

3.6.1 Parallel health systems

The Portuguese health system is characterized by three co-existing and overlapping systems: the universal NHS; the health subsystems, which are special public and private insurance schemes for certain professions; and private VHI.

Health subsystems are insurance schemes for which membership is based on professional or occupational category. Hence, they can be divided into public or private health subsystems, according to the employer's nature (see section 2.1.6). Health subsystems are normally financed through employer and employee contributions, with the largest portion paid by the employer. Most beneficiaries of public sector health subsystems, such as those covering civil servants (e.g. ADSE), have contributed 3.5% of their gross salary since 2014 (ERS, 2016c). Private subsystems also receive mandatory contributions in a way that closely matches the practice of public health subsystems. However, in the private subsystems, contributions vary.

The main health subsystem is the ADSE for civil servants, covering 1.25 million beneficiaries as of 31 December 2015 (ERS, 2016c), whereas private subsystems include *Portugal Telecom Associação de Cuidados de Saúde*, for workers of Portugal Telecom, *Serviços de Assistência Médico-Social* for workers of the banking sector, and *Serviços Sociais da Caixa Geral de Depósitos* (Social Services of *Caixa Geral de Depósitos*) for workers of CGD (the state-owned bank). These schemes have a wider network of contracted providers than some private insurers.

The ADSE is administered by the Institute for Protection and Assistance in Illness (see section 2.1.1). Its mission is to guarantee protection to public administration workers regarding health promotion, disease prevention, treatment and rehabilitation. Beneficiaries, like individuals insured by VHI, have the option to use the network of contracted providers, or to simply pay for a service in any provider without contract and later request partial reimbursement of expenses. Access for health subsystems' beneficiaries to the NHS occurs under the same conditions as any NHS user. When referral from the NHS to the network of private contracted providers occurs, beneficiaries can choose to use a provider contracted with the NHS or one contracted with their health subsystem.

Between 2009 and 2014, both costs and revenues from ADSE were reduced, with costs declining more significantly than revenues. During that period, public funding of the ADSE was reduced, whereas contributions from beneficiaries increased to 3.5% to make the subsystem self-financed. This suppression of public funding to the ADSE was only possible because the Ministry of Health absorbed costs of health care provided to ADSE beneficiaries in the NHS. In 2015, ADSE achieved a surplus of €137 million (ERS, 2016c).

Comparing contributions of 3.5% to the ADSE with the salary of beneficiaries, and average contributions to VHI, regarding different profiles of insured individuals, the ADSE stands out as more advantageous, particularly to married couples with children. VHI might be more advantageous to young single individuals with no children. However, as the annual salary of an individual increases, contributions to the ADSE surpass those to VHI. For instance, from a monthly wage of €3154.7, VHI is more advantageous than the ADSE for a young 35-year-old couple with a 5-year-old child. In contrast, a 45-year-old couple with 12- and 17-year-old children, VHI will only be advantageous for a monthly wage higher than €6536.9 (ERS, 2015c).

3.6.2 External sources of funds

In the context of Europe 2020 – the EU’s growth strategy for the coming decade – Portugal and the European Commission have signed a Partnership Agreement, named Portugal 2020, which includes five structural and investment European Funds to support economic and social development policies for the period 2014–2020. Applications to funding on different areas are centrally managed at *Balcão 2020*³. Applications in the health sector include support to patients at home or in the community through the use of technology, health care workers training, and awareness and support to social and health services reform.

Additionally, the Third Health Programme 2014–2020 was approved in 2014 (Regulation No. 282/2014 of the European Parliament and Council, of 11 March 2014) and is executed through annual work plans, which establish priority actions and financial resources for each year. The Programme is managed by the European Commission with assistance from the Consumers, Health and Food Executive Agency (CHAFEA).

With a total of €449.4 million for the period 2014–2020, the Third Health Programme aims to support and complement Member States’ action in areas where cooperation at EU level is either indispensable or provides important

³ <https://balcao.portugal2020.pt/Balcao2020.idp/RequestLoginAndPassword.aspx>

added value, including: improving health and reducing health inequalities, encouraging innovation, increasing the sustainability of health systems, and protecting against serious cross-border health threats.

3.6.3 Other sources of financing

Mutual funds

Approximately 650 000 people⁴ (6.3% of the population) are covered by mutual funds, which are funded through voluntary contributions. They are non-profit-making organizations that provide limited cover for consultations, pharmaceuticals and, more rarely, some inpatient care. They do not exclusively provide health benefits to associates so it is difficult to calculate the health component of the contributions.

Long-term care

Long-term care has been neglected in terms of public sector involvement until recently. Traditionally, *Misericórdias* and other non-governmental organizations have provided long-term care. The NHS has paid some of the care they provided. In 2006, given the population's need for public sector involvement in long-term care, a network of long-term care providers (RNCCI) was set up mainly in private institutions (largely non-profit-making) (see section 5.8). The financial responsibility of the public sector is shared between the Ministry of Health and the Ministry of Labour, Solidarity and Social Security.

3.7 Payment mechanisms

The main provider groups and corresponding payment methods are shown in Table 3.6.

Salary is the dominant method of provider payment in Portugal, particularly for primary care and hospitals. In FHUs, besides salary, there are incentive mechanisms based on performance (see section 3.7.1, *Payment of primary care centres*). The Ministry of Health is the main funder of public hospitals, considering not only historical expenditure but also DRGs.

In the private sector, in both ambulatory and hospital care, patients make direct payments (OOP payments), with or without reimbursement or co-payments by social health insurance or voluntary health insurance (VHI). The same payment mechanisms apply to visits to dentists.

⁴ www.mutualismo.pt/portal/index.php/pt/publicacoes/itemlist/category/62-info-boletim

Table 3.6

Provider payment mechanisms

	Ministry of Health	Other ministries	SHI funds	Private/voluntary health insurers
GPs	S			
Ambulatory specialists			FFS	FFS
Other ambulatory provision			FFS	FFS
Public hospitals	Case payment			
Private hospitals			FFS	FFS
Dentists			FFS	FFS
Pharmacies			FFS	FFS
Public health services	S			
Social care	PD	PD		

Source: Authors' own compilation.

Notes: FFS: fee for service; PD: per diem; S: salary; SHI: social health insurance.

Patients make direct payments to pharmacies, and co-payments by the NHS may apply depending on the patient's medical condition and/or financial status (see sections 3.4.1 and 3.4.2).

Finally, social care included in the National Network of Long-term Care (RNCCI) is funded by the Ministry of Health and the Ministry of Labour, Solidarity and Social Security, through co-payment to patients.

3.7.1 Paying for health services

Payment of hospitals

Hospital budgets are drawn up and allocated by the Ministry of Health through the ACSS. At present, public hospitals are allocated global budgets based on contracts (*contratos-programa*) signed with the Ministry of Health. Traditionally, budgets had been based on the previous year's funding, updated for inflation, but since 1997 a growing proportion is based on DRG information as well as on non-adjusted hospital outpatient volume. This new activity-based resource allocation model brought to term research that had begun in the 1980s, involving systematic DRG grouping and the computation of hospital case-mix adjusted budgets.

The need to collect data on an individual patient basis for DRG grouping purposes has led to the generation of a significantly improved information system for hospitals based on a minimum basic data set – *Folha de Admissão e Alta*. This basic information system started to be developed in 1989 at the inception of DRG implementation in Portugal; today it covers all NHS hospitals. The centralized version of the system, which is run by the ACSS, assists in

the process of adjusting prospective budgets for case-mix and other hospital specificities, enabling a more equitable allocation of resources than would otherwise be possible if only patient volume or information on the length of stay were available.

Since 2003, DRGs have been used to set the totality of NHS hospitals and inpatient funding; however, between 1997 and 2002 they have been introduced smoothly. NHS inpatient care funding through DRGs represents around 75–85% of NHS hospitals' inpatient budget; the remaining percentage corresponds to billing to third-party payers (Mateus, 2011). The DRGs are used to set the budget given to the hospital, not to define a payment episode by episode. Some other refinements of the budget computation have been implemented between 1997 and 2002, such as case-mix adjustment for ambulatory surgery and the set-up of hospital peer grouping using a “grade of membership” model for price setting (for further details, see Vertrees & Manton, 1986). In spite of the formal sophistication of the payment model, the initial budget allocation was more indicative than normative. Because budget overruns are covered by supplementary allocations, the activity-based system had limited incentives to encourage cost-containment or efficient practices. This system was abandoned in 2001 in favour of a group classification derived from clusters based on principal components analysis.

Health subsystems and private insurance schemes reimburse NHS hospitals retrospectively on a case-by-case basis for inpatient care and ambulatory surgery (according to a DRG price list), and on a fee-for-service basis for ambulatory services provided to their beneficiaries. Private insurers may use different modes of reimbursement. In some cases, patients are expected to pay and then be reimbursed retroactively for the cost of services. The insurance companies also define networks of preferred providers, at which the patient only pays the co-payment (the remaining being settled directly between the provider and the insurance company). This method acts as an incentive for such patients to seek treatment from contracted providers.

Payment of primary care centres

Primary care centres are responsible for delivering primary care. They do not yet have financial or administrative autonomy. The Ministry of Health allocates funds to the RHAs, which in turn fund the global activity of each health centre through the recently created groups of primary care centres (*Agrupamentos de Centros de Saúde*, ACES). The contract (*contrato-programa*) of each ACES, which is responsible for primary care delivery in a given geographical area, is negotiated between the ACES and the RHA.

In 2006, a reform approved by the government was expected to introduce further changes to the previous organizational and funding models of primary care. This reform was based on the idea of FHUs (*Unidades de Saúde Familiar*), which are multidisciplinary teams, paid partially through incentive mechanisms. These include, among others: capitations, which are age-adjusted, related to the dimension of the list of patients, carrying out house-calls, number of working hours; performance compensations, related to the annual contracting of specific surveillance activities, with respect to vulnerable or high-risk patients; and an additional set of services, if contracted (Decree-Law No. 18/2007, of 22 January 2007). Multidisciplinary teamwork and organizational flexibility were promoted in a bid to provide incentives for the provision of better primary care service to the population.

The main differences between FHUs and PHCUs include the number of patients enrolled in an FHU, the voluntary creation of those multidisciplinary teams, and the incentive mechanisms. FHUs have a level of autonomy and participative management that PHCUs do not, and the professionals in FHUs are paid by incentive mechanisms related to their performance, which can be paid either by bonuses at institutional level and/or the multi-professional team (but only in FHUs belonging to the B model). There are two models of FHUs: at its inception, every FHU belongs to the A model, and later, based on its performance and after approval, becomes a B model, with incentive mechanisms to personnel. PHCUs are still the most common unit in the NHS primary care network. They correspond to the old model of primary health care provision and usually have many patients enrolled, some of them not being registered with a GP. A recent analysis showed that 99% of the population is located less than 30 minutes away from an NHS primary care unit, namely from a PHCU (97.5%). Approximately 74.9% of population is enrolled in an FHU (ERS, 2016a).

Payment for outpatient care

In NHS hospital outpatient care, patients pay only user charges (if they are not exempted), whereas in the private sector patients either make direct payments or use their health subsystems or VHI. The same applies for diagnostic tests: patients make direct payments, with or without reimbursement or co-payments by VHI.

3.7.2 Paying health workers

In 2012, the government extended public servants' weekly hours from 35 to 40 hours with no change in salaries in order to increase the full-time equivalents of civil servants. However, this decision was revoked in 2016 by the current government (Law No. 18/2016, of 20 June 2016) as one of the measures to reverse the main austerity measures taken by the previous centre-right-wing coalition. This applied to the majority of care professionals excluding those with a private-law contractual relationship with the state.

Doctors

All NHS doctors are salaried government employees. The fixed salary is established according to a matrix linking professional category and duration of service, independent of any productivity measure. In 2012, following a governmental decision to guarantee a rational and more efficient use of available resources and a better sustainability of the health system, the usual level of employment for medical doctors was raised from 35 to 40 hours/week (Decree-Law No. 266-D/2012, of 31 December 2012) without any change in salary. Currently, there are three employment levels for doctors: full-time (but not exclusive) (40 hours/week), full-time with exclusive NHS employment (40 hours/week with no private practice allowed), and part-time (being employed under the part-time contracts is not allowed for a head of service). There are no data available on the proportion of physicians in each of the three employment categories. There are currently no incentives, or mandatory times, for underserved areas. Since 2002, there has been a progressive increase in individual labour contracts, that is, the use of private management legal rules for the admission of workers in the NHS (both doctors and other health care professionals).

It is estimated that about half of the NHS salaried doctors also work in the private sector and many independent doctors work under contract for the NHS. The NHS, the health subsystems and private insurance negotiate fees independently with doctors (i.e. with independent doctors working under special contracts when there is a need for more personnel, such as emergency cover during influenza outbreaks or summer). Fees charged to the NHS are generally the lowest. Private fees are not regulated by the government but are subject to a range of reference prices set by the Medical Association (*Ordem dos Médicos*).

In general, doctors perceive their salaries as relatively low and therefore feel justified in augmenting their income through private sector activity, for which they are remunerated on the basis of fee-for-service payments. Since

2010, all civil servants have seen their salaries being reduced due to severe cost control measures taken by the government. This trend was reversed in 2016, when cuts to salaries in the public sector were reversed. Currently, the highest average monthly wage for a physician is €5063.40 for 40 hours/week of work, and the lowest is €1931.20 (for residents doing post-graduate medical training)⁵. Particularly in small hospitals, where there are a small number of doctors and on-call duties frequently arise, overtime can account for the majority of a doctor's overall income.

Professionals working in an FHU (model B) are paid by incentive mechanisms related to their performance (see section 3.7.1, *Payment of primary care centres*). Incentive mechanisms are linked to weighted units related to specific activities of health monitoring and surveillance of patients at risk, according to technical guidance provided by the DGH, on the following terms:

- surveillance of a woman of reproductive age, at family planning consultation – one unit;
- surveillance of a pregnancy – eight units;
- surveillance of a child, in the first year of life, per year – seven units;
- surveillance of a child, in the second year of life, per year – three units;
- surveillance of a person with diabetes, per year – four units;
- surveillance of a person with high blood pressure, per year – two units.

Specific activities are annually contracted, whereas criteria for the attribution of weighted units to the specific activities are defined by the DGH.

Nurses

The NHS employs nurses as civil servants. They are entitled to an annual fixed salary. This fixed salary is linked to a civil service pay scale that rewards people according to a matrix linking professional category and time of service and is not related to performance. Public-sector work modalities for nurses are: full-time (35–40 hours/week) and part-time (20 or 24 hours/week). As with physicians, there are no data on the distribution of nurses across these categories. Nurses also use the system as a way of upgrading their salary, due to the ability to work extra hours because of the shortage of nurses. It is not uncommon that nurses work in both public and private institutions, with a “second employment” position, due to the scarcity of resources. However, recent years have seen an increase in the supply of nurses, to the point where there is

⁵ http://www.acss.min-saude.pt/wp-content/uploads/2016/09/Tabela-remuneratoria_carreira-medica.pdf

now concern with nurses' unemployment and migration despite the fact that the nurse ratio per doctor or per 1000 population is well below the OECD average (see section 4.2.2).

Health ancillary technicians

The technological and scientific evolution of medical diagnostic and therapeutic procedures has given ancillary professionals a more relevant role in health care provision. As with doctors and nurses, these professions are salaried under a pay scale that is not related to performance. A major revision of their professional status was accomplished in 1999, along with a revised payment scale.

Members of management boards

Like all staff working in the NHS, members of the management boards of NHS institutions and department heads are salaried employees, appointed by the Minister of Health. Their remuneration is fixed, with no relation to attaining production goals or any other form of performance evaluation. However, as part of the health reform related to hospital management rules, a debate was opened about the virtues of incentive-based payments to health professionals.

Dentists

Dentists in Portugal work in private practice and are paid on a fee-for-service basis. Fees are privately determined, with the intervention of the Portuguese Dental Association (*Ordem dos Médicos Dentistas*). Nowadays each private practice sets the fees and has to post them at a visible location. Patients may be partially reimbursed by their subsystem, professional insurance scheme or private insurance scheme if dental care is included in the package of benefits. There are very few salaried positions within the NHS related to dental care. Only the more highly trained dentists (physicians who specialized in dental care) are permitted to work in hospitals and paid on a salary basis by the NHS.

Pharmacists

Pharmacists in Portugal work in retail private pharmacies or in hospitals. They can be either self-employed or receive a salary. The employer determines the amount of salary paid. In the case of pharmacists working within the NHS, the pharmacist is a civil servant, the salary is fixed and linked to a civil service pay scale that rewards people according to a matrix linking professional category and time of service and is not related to performance.

4. Physical and human resources

Chapter summary

- In 2014, Portugal had 225 hospitals, 113 of which belonged to the NHS, with a total capacity of 34 522 beds.
- There has been a decrease in the number of public hospitals over the decades, due to the recent mergers between public sector hospitals and the closing of psychiatric hospitals.
- One of the government's objectives in the last 16 years has been to raise capacity and value for money in the NHS by increasing private sector involvement in the building, maintaining and operating of health facilities under P-PPs.
- In 2014, the number of physicians per 100 000 population was above the EU average (442.6 versus 349.6 per 100 000 population). On the other hand, the relative number of nurses in Portugal (637.8 per 100 000 population) was below the EU average (864.3 per 100 000 population), which implies that Portugal has a low ratio of nurses to physicians.
- The overall distribution and density of pharmacies in the country is balanced, and the number of pharmacists has been growing steadily over the last 15 years.
- Portugal faces a number of challenges regarding the distribution of health workers and overall human resources planning (e.g. demand and supply, task shifting and expanded roles). In addition, important gaps in health equipment have been identified that might compromise satisfaction of population needs.

4.1 Physical resources

4.1.1 Capital stock and investments

Current capital stock

In 2014, Portugal had 225 hospitals, 113 of which belonged to the NHS, five military or prisoner hospitals, and 107 private hospitals, with a total capacity of 34 522 beds (INE, 2016d). Almost half of the private hospitals belong to for-profit organizations. *Misericórdias* currently operate hospitals and facilities in the areas of rehabilitation, long-term care and residential care for older people, people with disabilities and people with chronic illness (see section 2.1).

Trends in hospital numbers have been similar to those in other European countries. There has been a significant decrease in the number of public hospitals over the decades, from 634 in 1970 to 113 in 2014 (82% decrease). This effect is possibly due to mergers in recent years between public sector hospitals, and the closure of psychiatric hospitals. Over the last few years there have been progressive improvements of some older infrastructures and new hospitals have opened to replace old ones (see section 5.4).

Regulation of capital investment

Capital investments in health care are determined at central level by the Ministry of Health. Equity in the geographic distribution of health care facilities is often a point of contention (ERS, 2015b), although for the external observer, it is unclear how such considerations are actually included in the process, alongside the demands from local representatives of the population.

Investment funding

Since the beginning of this century, one of the government's objectives has been to improve the health care providing capacity of the NHS while guaranteeing more value for money, by associating private entities in the sphere of public responsibility to build, maintain and operate health facilities, under P-PPs. This is reflected in the Programme from the XV Constitutional Government (2002–2004) (Republic of Portugal, 2016). In the Programme from the current government (XXI Constitutional Government), the need to promote external and independent evaluation of P-PPs is highlighted, to technically support the political decisions in this regard. From a financial point of view, the transfer of financial risk investment from the government to the private operators through P-PPs alleviates the former from the initial investment burden, which would be otherwise excessive considering the financial constraints of the public sector. Objections have been raised in some political (and technical) sectors concerning the long-term consequences of this option. The model draws heavily on the

experience of the English NHS project finance initiative, and the P-PP model includes clinical services in the package in addition to ancillary services, for the first batch of hospital P-PPs. Legal provisions have been undertaken (Decree-Law No. 185/2002, of 20 August 2002) to create an adequate framework for the further implementation of actual partnerships. Although the initial intention was to extend the model to almost all types of health facilities, priority has been given to hospitals. Between 2003 and 2006, four hospital projects were launched under P-PPs: Cascais (opened in 2009), Braga (2011), Loures (2012) and Vila Franca de Xira (2013). The Task Force for Partnerships in Health, with specialized human resources and together with external consultants, was responsible for these P-PPs within the Ministry of Health.

Currently, the Portuguese experience in P-PP in the health sector includes the hospitals in Cascais, Braga, Loures and Vila Franca de Xira. These four hospitals included clinical management in the P-PP. Previously, the southern rehabilitation centre (CRSul) at São Brás de Alportel (Algarve), operating since 2007, was also under a P-PP model. In 2009, a specialized team analysed the performance of the CRSul, comparing it to other rehabilitation centres in the country and results indicated that it was too early to draw conclusions about the added value of the P-PP model in terms of clinical management (see Barros, 2010: 519–560). In 2013, CRSul was integrated in the RHA of Algarve.

The progress of the four most recent P-PPs was evaluated by the Court of Auditors, whose report concluded that the costs with P-PPs in the health sector were underestimated by the Ministry of Finance: instead of a €4.143 million expenditure, the Court estimated a €10.445 million expenditure until 2042 (Court of Auditors, 2013). More recently (August 2015), the Court of Auditors evaluated the Loures Hospital and concluded that there was no evidence supporting a greater efficiency of the private management model (Court of Auditors, 2015). Also, a report from the HRA evaluated the four P-PP hospitals from four dimensions – relative efficiency, efficacy, quality and regulation costs – and concluded that it was not possible to draw lessons regarding the advantage or disadvantage of the P-PP model (ERS, 2016b).

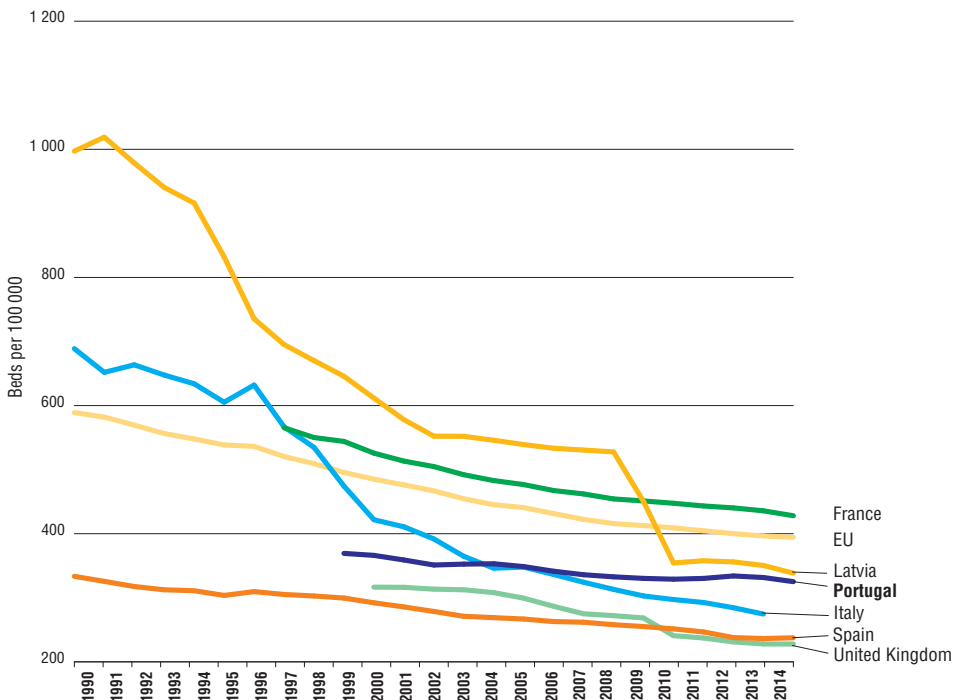
The process of each P-PP is complex and lengthy, involving preparation and previous evaluation, the approval and launch of the contest, the proposals and the evaluation of these proposals, which is followed by a competitive bargaining and finally the final bargain with the winner. Each step of the process takes months, and sometimes the process has to start from scratch all over again, due to bureaucratic problems. At the time of writing, no P-PPs have been agreed for the planned hospitals, but the decision on the model that will be adopted by the new *Hospital de Todos os Santos* (Lisbon) may reopen the debate on the P-PPs in the health sector in Portugal.

4.1.2 Infrastructure

In 2014, Portugal had a relatively low supply of beds compared with other European countries, though it is higher than in other countries with similar NHS models, such as the United Kingdom and Spain (Fig. 4.1). The evolution does, nonetheless, match the general international trend: a decrease over time, which is less strong in NHS countries. In 2013, there were 5.5 beds devoted to mental health care per 100 000 population, approximately one third of those in 2005 (17.0 per 100 000). This trend reflects a change in the paradigm of mental health care provision, promoting patients' integration in their communities instead of institutionalizing them. There has also been a consistent reduction in the number of beds in primary care centres over the past decade: in 2012 there were 2.9 beds per 100 000 population in primary care centres, compared with 13.8 in 2000 (Table 4.1). Regarding long-term care, the current 7759 beds fall short of the original aim to achieve 14 528 beds by 2015 (Ministry of Health, 2010), although an important effort since 2010 has almost doubled this number.

Fig. 4.1

Number of acute care hospital beds per 100 000 population in Portugal and selected countries, 1990–2014



Source: WHO Regional Office for Europe, 2016.

Table 4.1

Number of beds in hospitals, primary care and long-term care institutions in Portugal, per 100 000 population, 1995–2014 (selected years)

	1995	2000	2005	2010	2014
Hospitals	383.7	360.9	355.8	337.1	331.9
Primary care	20.7	13.8	9.5	3.6	2.9 ^a
Long-term care network ^b	–	–	–	46.3	71.6

Source: INE, 2016d.

Notes: ^a2012 data; ^bthe long-term care network was created in 2006.

Portuguese mental health facilities belong to either the public sector or the private not-for-profit care sector. The first of these includes three psychiatric hospitals (one in Oporto, one in Coimbra and one in Lisbon), three child and youth psychiatric and mental health departments (located in the same cities), and 30 local mental health departments (see section 5.4) spread all over the country, namely in the main district areas. These are responsible for most of the mental health care provision (see section 5.11).

Table 4.2 reports on the number of hospitals in Portugal, by type of hospital and care provision. In Greater Lisbon and in the Algarve, there are more private hospitals than public hospitals, the same trend occurring in both Madeira and the Azores (Table 4.2). Compared with 2005, the number of both NHS and private hospitals increased (from 100 to 113, and from 93 to 107, respectively). Among private hospitals, the biggest growth was observed in the North (from 29 to 35) and Greater Lisbon (from 27 to 32) (INE, 2006; INE/INSA, 2016).

Table 4.2

Number of hospitals, by region, type of hospital and care provision, 2014

	Total	Public (NHS)			Private			Other ^a
		Total	General	Specialized	Total	General	Specialized	
Portugal	225	113	88	25	107	76	31	5
North	72	36	29	7	35	29	6	1
Centre	55	35	26	9	19	16	3	1
Lisbon	60	25	18	7	32	20	12	3
Alentejo	11	7	7	0	4	2	2	0
Algarve	10	4	3	1	6	5	1	0
Azores	8	3	3	0	5	1	4	0
Madeira	9	3	2	1	6	3	3	0

Source: INE, 2016d.

Notes: ^aIncludes military and prisoner hospitals, which are used exclusively by active and retired military personnel and their families, and by prisoners, respectively.

Regarding primary care provision, Table 4.3 shows the distribution of public primary care facilities across the districts and respective regions in Portugal. Districts of Lisbon and Oporto concentrate the biggest number of primary care facilities (Table 4.3). The geographic distribution of those structures is adequate, as only 0.03% of the population is living more than 30 minutes away from a primary care facility (ERS, 2010). However, not all structures are allocated the same level of human resources. Hence, despite living close to a primary care unit, an NHS user might not be registered with a GP.

Table 4.3

Number of public primary care facilities, by region and district, 2015

	District	Number of facilities ^a
Portugal		1 772
North	Braga	98
	Bragança	54
	Oporto	191
	Viana do Castelo	31
	Vila Real	50
	Total	424
Centre	Aveiro	94
	Castelo Branco	83
	Coimbra	68
	Guarda	82
	Leiria	82
	Viseu	48
	Total	457
Lisbon and the Tagus Valley	Lisbon	207
	Santarém	158
	Setúbal	86
	Total	451
Alentejo	Beja	92
	Évora	66
	Portalegre	68
	Total	226
Algarve	Faro	91
	Total	91
Azores		70
Madeira		53

Source: Authors based on data available at www.sns.gov.pt

Note: ^aThe number of facilities includes extensions/posts that are part of the same unit, but located in a different building/infrastructure.

As for the number of pharmacies, the overall distribution and density of facilities, including extensions and drug stores, in the country seems to be balanced (Table 4.4). The distribution of pharmacies throughout the country is highly regulated (see section 5.6). A study commissioned by the Pharmacists' Association (*Ordem dos Farmacêuticos*) shows that existing regulations have been complied with, ensuring that a good coverage of the country exists (Rodrigues et al., 2006).

Table 4.4

Number of pharmacies and pharmacy extensions, by region and district, 2014

	District	Pharmacies	Pharmacy extensions	Drug stores	Number of facilities	Inhabitants per pharmacy
Portugal		2 772	175	1 010	3 957	3 561
North	Braga	182	1	69	252	4 613
	Bragança	41	0	11	52	3 166
	Oporto	433	3	160	596	4 131
	Viana Castelo	65	3	21	89	3 661
	Vila Real	70	3	13	86	2 838
	Total	791	10	274	1 075	4 039
Centre	Aveiro	191	1	60	252	3 680
	Castelo Branco	64	12	20	96	2 919
	Coimbra	152	8	47	207	2 728
	Guarda	58	11	22	91	2 625
	Leiria	135	12	44	191	3 423
	Viseu	114	15	49	178	3 208
	Total	714	59	242	1 015	3 200
Lisbon and the Tagus Valley	Lisbon	648	4	217	869	3 450
	Santarém	144	20	58	222	3 068
	Setúbal	203	1	71	275	4 199
	Total	995	25	346	1 366	3 547
Alentejo	Beja	56	16	18	90	2 630
	Évora	61	26	13	100	2 621
	Portalegre	45	32	9	86	2 491
	Total	162	74	40	276	2 588
Algarve	Faro	110	7	108	225	4 013
	Total	110	7	108	225	4 013

Source: INFARMED, 2015.

Box 4.1**Assessing the geographic distribution of health resources**

As noted before (Box 1.1), there are a number of health inequalities in Portugal, such as geographic barriers that limit equal access to health care. The distribution of health resources in Portugal is not even across different regions and, inside regions, across the municipalities (Santos, 2012). For instance, municipalities with a higher ageing index [the relation between older (64 years or older) and younger (less than 14 years old) populations] have a lower ratio of physicians per 1000 population (Santos, 2012). Actually, the distribution of health resources does not seem to take into consideration the characteristics of the population: there is no correlation between variables such as physicians, beds, nurses and primary care units, and ageing index. Hence, municipalities with a higher ageing index are not those concentrating more resources (Santos, 2012), resulting in limited access to health care from those populations. There is a dichotomy rural/urban and coast/interior, where municipalities with higher ageing index are concentrated in rural areas in the interior. Although those municipalities are not very densely populated, since the interior is deserted, those populations have higher health needs and seem to have difficult access to health care.

These findings are supported by an analysis from 2007, which concluded that access to primary care is less easy in the districts of Vila Real and Bragança (North Region – interior), and Viseu (Centre Region – interior), whereas the districts of Faro (Algarve – coast), Coimbra (Centre Region – coast) and Castelo Branco (Centre Region – interior) have the easiest access (ERS, 2010). Nevertheless, the same study found that only 0.03% of the population lives more than 30 minutes away from a primary care facility (ERS, 2010).

A more recent study from the HRA identified regions where the population experienced barriers in accessing hospital care – particularly in Alentejo and Algarve – while other regions have a potentially redundant hospital supply, for example where hospitals offering the same services co-exist (ERS, 2011).

4.1.3 Medical equipment**Regulation of medical devices and aids**

Decree-Law No. 95/1995, of 9 May 1995, established the procedures to be followed in order to install heavy medical equipment in both public and private health care facilities (i.e. medical equipment used for digital angiography, external radiotherapy, brachytherapy, positron emission tomography, gamma chambers, radiosurgery). The Ministry of Health, following programming and spatial distribution criteria established by Government decision (Resolution of the Council of Ministers No. 61/1995, of 28 June 1995), is responsible for authorizing the installation of heavy medical equipment.

Decree-Law No. 180/2002, of 8 August 2002, establishes the rules for health protection of people against ionizing radiation through medical exposure. The same legislation defines acceptability requirements that must be followed by

radiological facilities, both public and private, regarding planning, organization and operation. Those facilities must then request radiological protection and safety licensing from the DGH.

The legal framework regulating opening, modification and operation of private health care units is established by the Decree-Law No. 279/2009, of 6 October 2009 (altered by the Decree-Law No. 164/2013, of 6 December 2013). Since the 2013 legal update, and after publication of additional legislation, radiology health care units follow a simplified licensing regimen.

In 2014, according to the new Legal Framework of Licensing (Decree-Law No. 127/2014, of 22 August 2014), HRA became the only entity responsible for licensing health care provision facilities.

Since 2012, the purchase of equipment, within the NHS, with a total value greater than €100 000 must be previously authorized by the Ministry of Health. This control mechanism was implemented to prevent NHS debt and delayed payments to providers to grow out of control.

Equipment infrastructure

The latest equipment chart was published in 2014 with information referring to 2012 (Ministry of Health, 2014). It established national and regional ratios for the major medical technologies for diagnostic imaging (including CT scanners and MRI equipment). This new chart (the previous one was published in 1998) allowed the Ministry of Health to identify the main gaps in, for example, oncological responses (Ministry of Health, 2014). The chart concludes that Portugal has insufficient equipment to meet health needs, particularly in nuclear medicine and radio-oncology. For instance, instead of the 60 linear accelerators (used in external radiotherapy treatments) needed, Portugal has only 45, 29 of which are located in NHS units.

In 2013 there were five positron emission tomography scanners operating in NHS facilities (one in Braga, one in Oporto, one in Lisbon and two in Coimbra). Additionally there were seven positron emission tomography scanners operating in private units: five in Lisbon and two in Oporto.

In 2013 the OECD average was 6.5 MRI units and 20.3 CT scanners per million population (OECD, 2015b). Portugal is below the OECD average regarding both MRI units (14.1) and CT scanners (24.4). However, considering CT examinations per 1000 population, the country is above the OECD average (Table 4.5).

Table 4.5

MRI and CT examinations per 1000 population in latest available year, 2013

Item	Portugal ^a	OECD ^b
MRI examinations	30	52
CT examinations	141	120

Source: OECD, 2015b.

Notes: ^aExaminations outside hospitals not included; ^bData for MRI examinations include 28 OECD countries (Italy, Japan, Latvia, Mexico, New Zealand, Norway and Sweden are not included) and for CT examinations include 27 countries (Estonia, Italy, Japan, Latvia, Mexico, New Zealand, Norway and Sweden are not included).

4.1.4 Information technology and eHealth

In 2015, 71% of the families in Portugal had a computer. Moreover, 70.2% of the families had access to the Internet, of which 98% were broadband connections (INE, 2016a).

The ACSS (Central Administration of the Health System) is the service at the Ministry of Health responsible, in a centralized manner, for the study, guidance, assessment and implementation of IT, and for financial management of the NHS. Established in 2007, one of the main goals of ACSS was to develop an information system and the infrastructure needed to support it. Additionally, it also aims to effectively and rationally manage available economic and financial resources. The ACSS made available to all citizens a fair amount of information on hospitals, primary care centres and other NHS institutions and projects.

The brand new website of the NHS, launched in February 2016, provides important information on a regular basis, such as waiting list of patients registered for surgery, waiting times for emergency visits at NHS hospitals or outpatient consultations both at NHS hospitals and primary care units, and performance indicators for the Ministry of Health. Additionally, the new website offers the possibility of booking a visit at NHS primary care units and inserting personal medical information – for example immunization records, allergies, medications (see section 2.5.1).

Over time, the ACSS produced several IT software applications for registration and analysis of health unit activities. Additionally, the ACSS manages the database of hospital admissions (based on DRGs). There have been occasional attempts to implement electronic medical records, but this approach has not yet been widely disseminated.

A study placed Portugal close to the European average in terms of its eHealth profile (European Union, 2013). Overall, regarding eHealth deployment indicators between 2010 and 2012, Portugal shows a negative growth of -4%, whereas the European average grew 3% over the 2-year period. The report identified that the greatest gains since 2010 in Portugal have been achieved in “Broadband > 50 Mbp”, “Exchange of laboratory results with external providers” and “Single and unified wireless”, which delivered 31%, 28% and 25% growth, respectively. However, “Single Electronic Patient Record shared by all departments” and “Integrated system for eReferral” had negative growth, at -28% and -40%, respectively (European Union, 2013).

The think tank “eHealth in Portugal: Vision 2020” was an initiative of SPMS, which aimed to create a forum for reflection and debate about the Portuguese eHealth Strategy for the period 2016–2020, based on the methodology of the WHO “National eHealth Strategy Toolkit”. Regarding the benefits for the Portuguese health system that could be achieved through eHealth, participants put special emphasis on those related to improving access to health care; providing information to enhance the quality and safety of care; contributing to the efficiency of the system; and increasing knowledge on population health (SPMS, 2015).

4.2 Human resources

4.2.1 Planning and registration of human resources

The ACSS is responsible for planning and recruiting human resources for the NHS units, especially hospitals and primary care units (see section 2.1.1). Coordinated actions take place at central and regional levels to assess human resource needs and implement measures to streamline recruitment and placement of health care professionals (doctors and nurses). The RHA analyse human resource needs of the NHS health care institutions within the respective region. Then, RHAs give an opinion that is analysed and decided at the central level. The ACSS launches tender procedures at the central level, taking into account needs foreseen by RHAs. These tender procedures may follow exceptional rules foreseen in the annual state budget: for example, financial and non-financial incentives for recently appointed doctors in needed areas; special regimen to recruit retired doctors for primary and hospital care (Decree-Law No. 89/2010, of 21 July 2010 and Law No. 7-A/2016, of 30 March 2016); temporary mobility regimen – for doctors only – for distances of less than

60 km (Law No. 66-B/2012, of 31 December 2012). Most NHS staff are civil servants and all new posts have to be approved by the Ministry of Finance. However, there increasing numbers of workers are under individual contracts, which do not confer upon them the same rights as those of civil servant status. In addition, rules for civil servants are clearly becoming closer to those of private labour relations.

The *numerus clausus* for accessing medical schools varied in the last four decades between approximately 180 and 1800, but this significant increase in the number of new medical students was not guided by any planning of long-term need for physicians. Although there is a shortage of GPs (see section 4.2.2), there are strict limitations in terms of internship places, which depend on the reported capacity of NHS health care facilities (primary care centres and hospitals). Despite the existence of an active constraint on the number of postgraduate medical training places, the number of junior doctors increased from 6728 in 2011 to 8515 in 2014 (+27%), particularly in training programmes for GPs and family medicine (+70%), which shows the effort that is being made to address the limitations in primary care. It is widely recognized that there is a shortage of GPs and that this situation is likely to worsen in the future, as current GPs start to enter retirement. Recent decisions of the Ministry of Health regarding training vacancies indicate a willingness to deal with this issue.

In recent years, several frameworks of medical training (currently Ordinance No. 224-B/2015, of 29 July 2015), including new access rules, organization and governance, with a transitory period, were approved. Institutional cooperation with all entities involved in medical training led to an increase in the training capacity. The ACSS and the Portuguese Medical Association jointly decide on the number of specialized medical training places: the Medical Association is responsible for certifying each institution's competence to receive a resident for postgraduate medical training and the ACSS is responsible for recruiting and placing the new doctors. Besides the accreditation of postgraduate medical training, the Medical Association is responsible for the accreditation and granting of licenses to practise. There is no periodic re-licensing of doctors, although the Medical Association has already indicated openness to do so in the future.

According to the EU Directive 2005/36/EC, of the European Parliament and Council, of 7 September 2005, which provided for the mutual recognition of professional qualifications in the EU Member States, there are seven professions whose recognition is automatic: doctors, dentists, nurses, midwives,

pharmacists, veterinarians and architects. For all those where the Directive does not apply, they must request the recognition of their diploma from the Ministry of Science, Technology and Higher Education as well as the respective professional association.

The ACSS also plays a role in career development and training of health care professionals. For instance, in recent years collective labour negotiation with doctors' unions took place to achieve a new salary scale and the reduction of supplementary work and external medical services, and to increase the doctors' patient lists from 1550 up to 1900 patients.

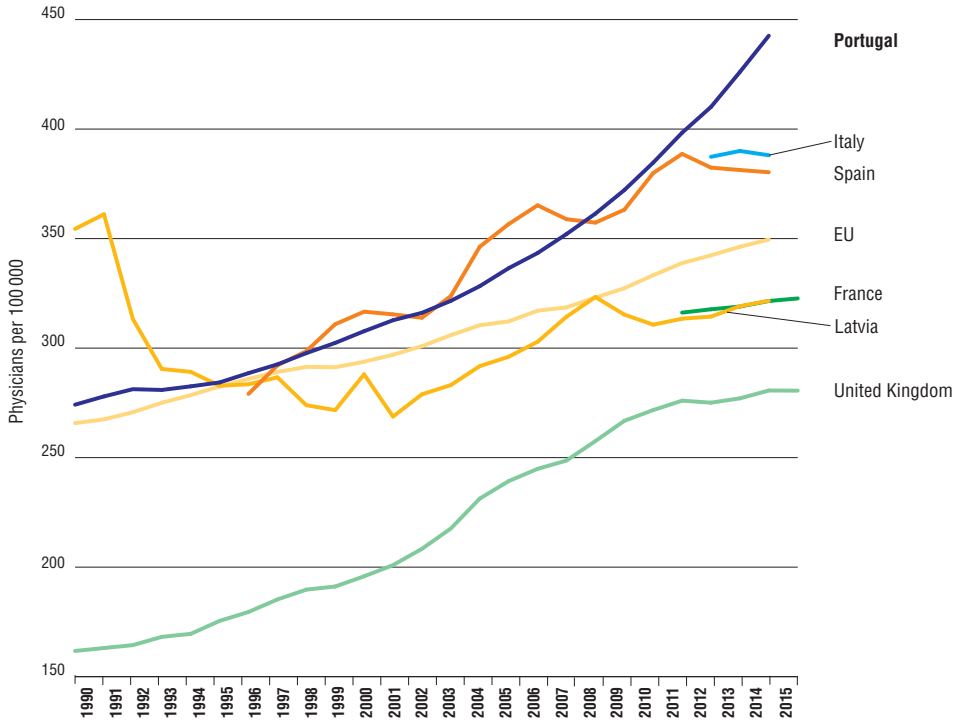
4.2.2 Trends in the health workforce

According to the figures from the Portuguese Medical Association, the number of physicians (physicians registered, including retired physicians) per 1000 population is currently above the EU average (Portuguese Medical Association, 2016). The situation regarding nursing staff is quite different. The relative number of nurses in Portugal is well below the EU average. The definition of tasks that can be performed by nurses and by physicians probably contributes to this lower ratio. Still, recent years have witnessed a movement towards a rebalancing of this trend, with a greater increase of nurses than of physicians, and this is likely to continue in the future. One of the major challenges for the next decade, not yet translated into policy actions, is the redefinition of roles for health care professionals.

In 2015, there were 54 467 active members of the Portuguese Medical Association (Portuguese Medical Association, 2016), whereas in 2014 there were 25 246 physicians employed by the NHS – 816 more doctors (+3.3%) than those working in the NHS in 2013 (ACSS, 2015). GPs, working in primary care, accounted for 29.5% of the total number of physicians in the NHS, 69.0% were hospital physicians, and 1.5% were public health specialists. After witnessing a very rapid increase in the number of doctors during the 1970s and 1980s (from 95 doctors per 100 000 population in 1970 to 283 per 100 000 in 1990), since 1990 Portugal has maintained the increasing trend in the number of physicians but at a lower rate (Fig. 4.2). In 2014, there were 443 physicians per 100 000 population, higher than the EU average (350/100 000) (WHO Regional Office for Europe, 2016).

Fig. 4.2

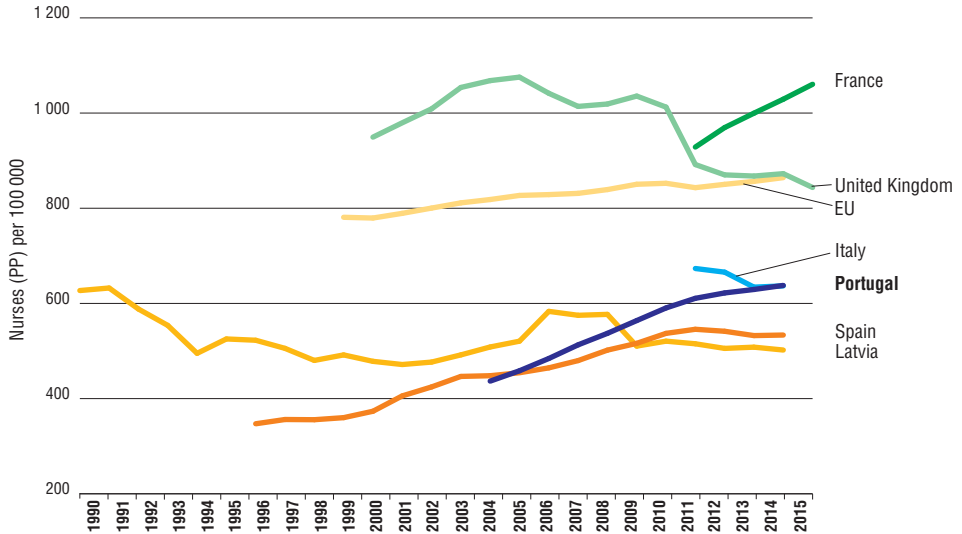
Number of physicians per 100 000 population in Portugal and selected countries, 1990–2014



Source: WHO Regional Office for Europe, 2016.

Fig. 4.3 shows that Portugal, like Spain, has steadily increased the ratio of nurses to inhabitants, but has one of the lowest ratios in Europe (638 per 100 000 population compared with the EU average of 864 per 100 000 population in 2014). The rise in the number of nurses reflects a policy adopted in 1998, with the creation of a 4-year university training programme for nurses (*licenciatura*) and the opening of at least one publicly funded nursing school per district. Despite the increase in the number of nurses, the growth rate (compared with any previous year) has progressively decreased. Between 2012 and 2013, there was a negative growth in the number of practicing nurses. In 2014, there were 66 340 nurses in Portugal, of which 39 316 (59%) were employed in the NHS (ACSS, 2015). Within the NHS, approximately 83% of nurses work in hospitals, while 17% work in primary care (ACSS, 2015).

Fig. 4.3
 Number of nurses per 100 000 population in Portugal and selected countries, 1996–2014

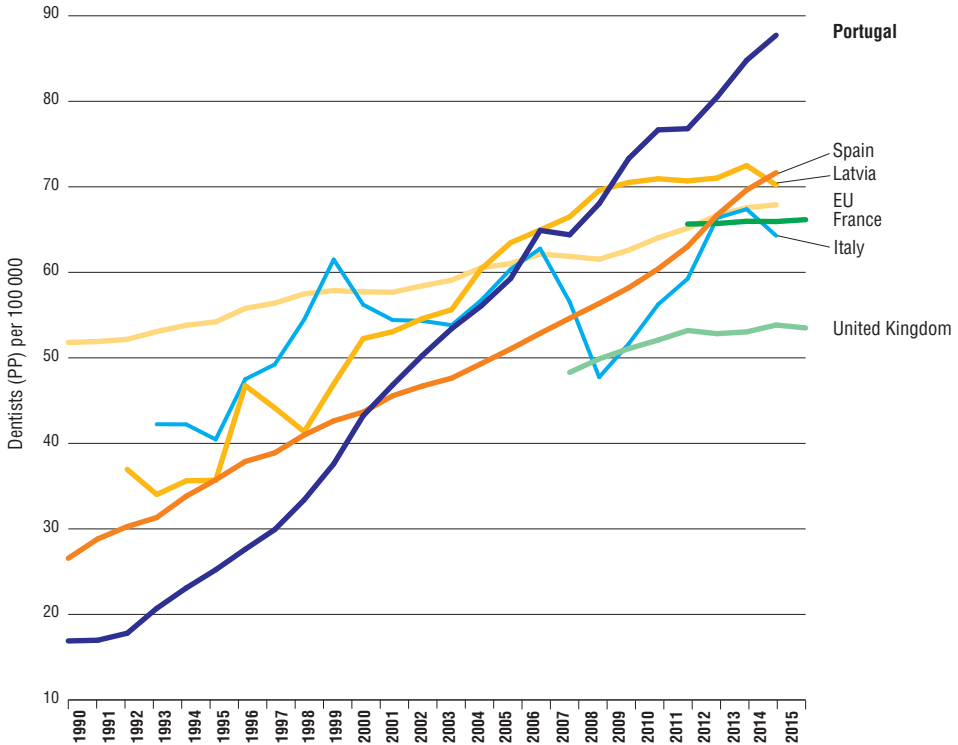


Source: WHO Regional Office for Europe, 2016.
 Note: No data available from 1990–1995 for the selected countries.

The number of dentists has increased steadily since the early 1990s, reaching 85 per 100 000 population in 2013, more than in Italy, Spain and the United Kingdom (Fig. 4.4). Since the mid-1990s, in addition to three existing schools in the public system, several private schools for dental care medicine have opened. Training of new dentists increased sharply in the last two decades. Since the NHS does not offer extensive dental care coverage, dentists work almost exclusively in the private sector. According to the Portuguese Dental Association, there were 8933 active dentists in Portugal in 2015 (one dentist per 1161 inhabitants) (Portuguese Dental Association, 2016).

Fig. 4.4

Number of dentists per 100 000 population in Portugal and selected countries, 1990–2014

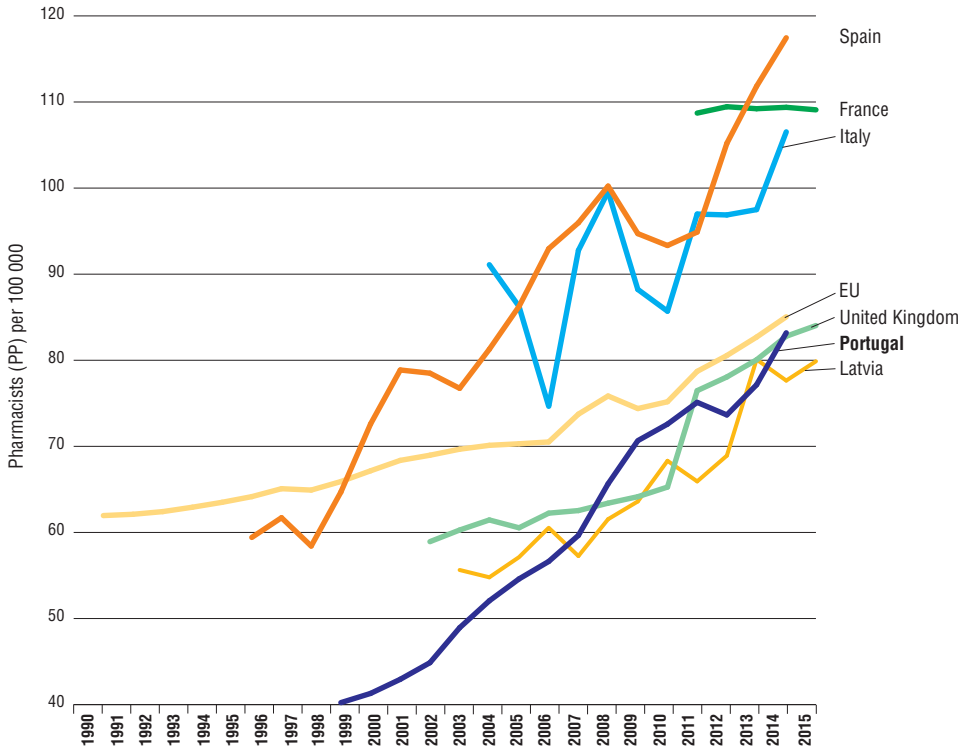


Source: WHO Regional Office for Europe, 2016.

The number of pharmacists in Portugal has increased steadily in the last 15 years (Fig. 4.5). However, in 2013 Portugal still had a low ratio of pharmacists (77 per 100 000 population) compared with Spain (112/100 000) or the United Kingdom (80/100 000). According to the Pharmacists' Association, in 2014 there were 14 668 active pharmacists in Portugal, of which 59% worked in community pharmacies, 9% worked at hospital pharmacies, 6% in clinical analyses and 5% in pharmaceutical industry (Portuguese Pharmacists' Association, 2016).

Fig. 4.5

Number of pharmacists per 100 000 population in Portugal and selected countries, 1990–2014



Source: WHO Regional Office for Europe, 2016.

Box 4.2**Evaluating the geographic distribution of health workers**

Like most populations, health workers in Portugal are concentrated in the coastal areas and greater Lisbon and Oporto.

Evidence suggests that there are major geographic disparities in the distribution of NHS health workers by profession and by region, according to the latest available year. Excluding junior doctors, the Lisbon area concentrates most NHS doctors (250 per 100 000 population), NHS nurses (496 per 100 000) and pharmacists (145 per 100 000), whereas the North region concentrates most dentists (94 per 100 000). Alentejo is the region that systematically ranks with the lowest ratio of NHS doctors (100 per 100 000), NHS nurses (273 per 100 000) and dentists (36 per 100 000). Algarve has the lowest ratio of pharmacists (72 per 100 000). These findings are not surprising, since international reports have already identified Portugal as one of the countries – together with Austria, Belgium, Czech Republic, Greece and Slovakia – where physicians are concentrated in the capital city (OECD, 2011).

Among NHS doctors, Alentejo also has the lowest ratio of GPs (41 per 100 000), well below the Lisbon area (69 per 100 000). Additionally, Alentejo and the Algarve have the lowest ratio of psychiatrists (2 per 100 000), whereas the Lisbon area has 7 psychiatrists per 100 000 population.

The geographic distribution of health workers follows the same trend across the different professional categories: mostly concentrated on the coast between Lisbon and Oporto, with high density in the two major cities. Only the most important cities in the interior (e.g. Braga, Coimbra, Viseu, Leiria and Santarém) are able to attract some doctors, leaving major parts of the territory – mostly rural areas with ageing populations – underserved (e.g. Alentejo). Due to low population density, access of populations living in rural areas of Alentejo is even more constrained, because transportation options to Alentejo main cities are limited, as well as the socioeconomic status of those populations. Specialists are often concentrated in the region's main cities (Évora, Beja and Portalegre).

This means that those living in the interior and in Alentejo and the Algarve regions have more difficult access to dental care, and most likely to primary and hospital care. It is also important to note that mental health is an increasing problem in isolated areas in Portugal, such as Alentejo, meaning that health workers distribution does not meet the population's needs.

4.2.3 Professional mobility of health workers

Between 2001 and 2015, the number of foreign health workers in the NHS has peaked in 2004 (4490) and has steadily decreased since then (ACSS, 2016b). The number of foreign doctors (mostly from Spain, Brazil, Ukraine and Angola) working in the Portuguese NHS increased until 2005 and has been decreasing ever since (ACSS, 2016b). However, in 2015 the number of foreign doctors in the NHS was still higher than in 2001 (Table 4.6). Among foreign nurses, there was an increasing trend until 2003, and a strong decrease until 2015 (Table 4.6). This was mainly due to changes in the Spanish nursing labour market, which was the main source of immigrant nurses in Portugal (ACSS, 2016b).

Table 4.6

Foreign health workers in the NHS, 2001–2015 (selected years)

	2001	2005	2010	2015
Doctors	1 484	2 123	1 696	1 836
Inpatient care	696	1 050	778	873
GPs	590	795	543	538
Public health	19	22	19	41
Other physicians	179	256	256	384
Nurses	1 619	1 526	690	543
Other personnel	271	656	675	599
Total	3 374	4 305	3 061	2 978

Source: ACSS, 2016b.

The economic crisis and deterioration of working conditions in the NHS are leading an increasing number of Portuguese doctors to leave the country (Table 4.7). The Portuguese Medical Association holds records of doctors requesting the necessary documents to be able to practice medicine abroad. A survey was conducted in 2014 to follow up on those requesting the documents and reported that Brazil, Spain, the United Kingdom, Germany, Switzerland, France and Ireland are the main destinations (Público, 2014a). Reasons for leaving the country are mostly related to better working conditions and more attractive salaries paid abroad. Doctors emigrating are both specialists and junior doctors pursuing their postgraduate medical training abroad.

Table 4.7

Emigration of Portuguese doctors and nurses, 2011–2015

	2011	2012	2013	2014	2015
No. of doctors	184	263	315	394	475
No. of nurses*	1 775	2 814	2 514	2 850	2 727

Source: Authors based on data provided by the Portuguese Medical Association and the Portuguese Nursing Association.

Note: *Figures correspond to the number of nurses who requested to the Nursing Association the necessary documents to be able to practice abroad. Therefore, these figures illustrate a trend as some of the nurses may not have emigrated after requesting the documents.

Portugal has become a source country for nursing migration. Many Portuguese nurses are seeking work opportunities abroad, in countries such as Spain and the United Kingdom. Several recruitment agencies are operating in Portugal (Público, 2014b), some of which try to recruit young nurses in nursing schools. Better salaries and benefits, having a new experience, and lack of job and career opportunities in Portugal are often pointed out as the main drivers for young nurses' migration.

4.2.4 Training of health personnel

Doctors

There are currently eight medical schools in Portugal (two in Lisbon, two in Oporto, one in Coimbra, one in Braga, one in Covilhã and one in Algarve). Medical training programmes at the medical schools of Lisbon, Oporto and Coimbra follow the same curriculum and, since the Bologna Process, are divided into two cycles of 3 years each, leading to a Master's degree: a core programme covering the basic sciences and a clinical programme based on practice and specialized procedures. The two medical schools (opened in 1998) in Braga and Covilhã are developing innovative educational programmes characterized by problem-oriented lectures favouring a tutorial system, promotion of training that is closer to the communities and less hospital-focused, and with more multidisciplinary integration. In 2008, the first Master's in Medicine was created in the University of Algarve, exclusively for people who have graduated in other areas and want to pursue a medical education. This Master's degree differs from the previous programmes as it targets those who have already graduated, being more practical and based on problem-solving lectures. The length of the degree is 4 years, whereas the other faculties have a 6-year programme.

In 2007, the Ministry of Health approved a law that regulated the creation of vacancies in Portuguese medical schools for applicants with a previous university degree (Decree-Law No. 40/2007, of 20 February 2007). This Decree-Law recognized that the scientific background of clinical practice and biomedical research was becoming more and more based on sciences not only physics, mathematics and biology, but also social sciences. For that reason, it was considered justifiable to widen the vacancies in medicine to candidates who had skills in these areas of knowledge. The existing medical schools were given the freedom to define the areas of knowledge of the prospective candidates, as well as the admission criteria by the Decree-Law No. 40/2007, of 20 February 2007. Between 2007 and 2011, each medical school was required to open at least 5% of the total vacancies for graduate applicants and, after 2011, 15%.

After concluding the medical degree, all graduates enrol in a national tender to pursue postgraduate medical training in the NHS. The government, through ACSS, is jointly responsible with the Portuguese Medical Association for the accreditation and certification of specialist training for medical graduates. That includes a national examination, which comprises 100 multiple-choice questions covering the digestive system, blood diseases, cardiology, nephrology and the respiratory system. After that examination (that usually takes place

in November), graduates undertake a general internship for 12 months (*Ano Comum*), including 3 months of training in the primary care setting (general practice and public health), and 9 months of training in the hospital setting (Internal Medicine, Paediatrics, General Surgery and an optional internship). On completion of the general internship, graduates are placed in their postgraduate training positions, according to the results that they achieved on the national examination: the results determine the order by which the positions – medical specialties and formative institutions – are taken. At the completion of the first year of training, junior doctors are free to practice without supervision. The duration of specialized training is determined by the specialist colleges of the Medical Association and varies according to different medical specialties: medical (i.e. hospital non-surgical) specialties: 5 years; surgical specialties: 6 years; general practice/family medicine and public health: 4 years. Specialists must be skilled in the diagnostic and treatment procedures of their own specialty and must be proficient in related techniques. They also have to carry out research and publish scientific articles, which are evaluated in curriculum analysis. After recognition of their aptitude, they can apply for a hospital position or go on to private practice.

Nurses

In Portugal, there have been no nursing auxiliaries or equivalents, since the 1980s. Currently, there are 31 public and 19 private nursing schools offering general nursing training, some of which offer two courses per year.

Nurses graduate after 4 years of university-level training as general nurses and are able to provide general nursing care in every health care context (hospital or primary care). In order to do that, they must register with the Portuguese Nursing Association. To become a specialist nurse, nurses have to enrol in at least 2 years of general nursing practice and must attend a specialization course (*Cursos de Pós-Licenciatura de Especialização em Enfermagem*) offered by nursing schools (Ordinance No. 268/2002, of 13 March 2002). This specialized training comprises theoretical and in-service training in the area of specialization and is of 900 hours duration (approximately three semesters). The only exception is midwifery training, which lasts at least 18 months full-time with the obligation of conducting at least 40 normal deliveries. The vacancies are determined by each nursing school offering the specialized training. Currently, there are seven areas of specialization:

- mental health and psychiatry
- community health
- midwifery

- children's health
- medico-surgical nursing
- rehabilitation
- family nursing.

After specialized training, nurses are able to provide specialized care (defined generally by law) in their area of specialization. The practice of nursing is regulated by law and the Portuguese Nursing Association is responsible for its reinforcement and sanctioning (the Nurses Code of Practice came into law in 1998). Registration is mandatory for all nurses practising in Portugal.

Other health care professionals

Since 1986, several public and private dentistry schools have opened. The courses have had a 10-semester (approximately 5 years) duration since the Bologna Process changes (previously, it was 6 years of training), and consist typically of four areas of knowledge: basics, biomedics, clinical and multidisciplinary. Previously, physicians who undertook 3 years of dentist specialist training after their medical degree provided oral health care. Another nonmedical grade exists, that of orthodontist. The government introduced this grade at a time when there was a severe shortage of dentists, but it has been replaced by the degree in dental medicine awarded by higher education institutions.

There are also several allied medical professional degrees being offered, covering 18 specializations (such as physiotherapy and radiology).

Pharmacists

In Portugal, there are several public and private pharmacy schools that offer degrees in Pharmaceutical Sciences. After the Bologna Process, the programme, previously a 6-year degree, was renamed Integrated Masters Degree in Pharmaceutical Sciences, with a 5-year length. Upon graduation and enrolment in the Pharmacists' Association (*Ordem dos Farmacêuticos*), pharmacists may pursue a specialization. The specialization is a complementary training, with variable duration, and is supervised by a Specialist Pharmacist. At the conclusion of the specialization, the pharmacist obtains the title of Specialist Pharmacist in a certain area of intervention: Clinical Analysis, Hospital Pharmacy, Pharmaceutical Industry, Community Pharmacy or Regulatory Affairs. The Pharmacists' Association is responsible for the representation, supervision and regulation of pharmacists in Portugal.

There are also pharmacy technicians (graduates in Pharmacy after a polytechnic programme of 4 years). The ACSS regulates the profession of pharmacy technician.

4.2.5 Physicians' career paths

When medical doctors finish their graduate medical education, after 6 years of undergraduate studies, the residency year and 4–6 years of specialty residency, they become an assistant physician, the lowest step in the NHS graduate physicians' hierarchy (the others are graduate assistant physician and senior graduate assistant physician). Promotion within the NHS hospital hierarchy is based on both the number of years and the positions available in the structure. The hospital boards are responsible for these decisions.

4.2.6 Other health workers' career paths

The majority of the health staff working for the NHS are civil servants, and have a standard civil servants' career path, with some particular features. Those who are not civil servants have individual contracts, which are regulated by private labour market rules.

As for the physicians' careers, a nursing career is considered to be a special career within the public service. In 2009, the nursing career was reviewed and two categories were created: nurse and principal nurse (*enfermeiro principal*). To be a principal nurse, it is mandatory to have a specialization and to have practiced within the field of specialization for at least 5 years (Decree-Laws No. 247/2009 and 248/2009, of 22 September 2009). Access to both nurse and principal nurse positions is achieved by applying to competitive calls. In 2014, the Family Nurse was recognized as a preferred profession for the provision of nursing care in the community and primary care settings (Decree-Law No. 118/2014, of 5 August 2014), and 35 primary care units (both FHUs and PHCUs) were selected to pilot the inclusion of a Family Nurse in the practice (see section 5.3). However, this experience is yet to be piloted, so there is no evidence of the possible impact of Family Nurses on the NHS.

Unlike other health staff, dentists and most pharmacists do not work for the NHS, and they do not have a clearly defined career path.

Since 2010, there has been a tendency for health workers, mainly physicians, to both retire early and work for the private sector or to practice in both public and private sectors. Additionally, some professionals choose to practice abroad, where they can find higher salaries and better working conditions. The Ministry of Health is trying to overcome this trend by providing more attractive working conditions.

5. Provision of services

Chapter summary

- Public health services in Portugal include the surveillance of health status and identification of its determinants, health promotion and disease prevention at community level and health impact assessment.
- Portuguese primary care is delivered by a mix of public and private health service providers, including: primary care centres integrated into the NHS, private sector (both non-profit-making and profit-making), and self-employed professionals/groups.
- FHUs (2007) and ACES (2008) have restructured the organization of Portuguese primary care.
- Secondary and tertiary care is mainly provided in hospitals, whose network was reorganized in recent years (e.g. for hospitals in 2002 and long-term care network in 2006).
- P-PPs have been introduced for renewed infrastructures in recent years but, at the time of writing, no additional P-PPs are being planned for the health sector.
- Vertical integration of health care has been enhanced since 1999 by the local health units (*Unidades Locais de Saúde*), which allow the integration of hospitals and primary health care units in the same organization.
- The RNCCI (2006) combines teams providing long-term care, social support and palliative care with its origins in community services, and covers hospitals, ACES, local and district social security services and municipalities.
- INEM is the organization within the Ministry of Health responsible for the coordination and functioning of an integrated medical emergency system in mainland Portugal, ensuring the rapid and appropriate delivery of emergency care.
- A maximum number of pharmacies is allowed in each community and the location of those is highly regulated.

5.1 Public health

Public health services in Portugal include the surveillance of health status and identification of its determinants, health promotion and disease prevention at community level and health impact assessment. The organization of public health services at national level is the responsibility of the DGH. The DGH is in charge of designing the programmes, defining strategies and approving national plans. These plans are approved as needed, according to the National Health Plan. For example, the DGH is responsible for coordinating all priority health programmes established since 2012: diabetes, cerebro-cardiovascular diseases, oncological diseases, mental health, tobacco control, respiratory diseases, healthy nutrition, physical activity, prevention and control of antimicrobial resistance and infections, viral hepatitis, and HIV/AIDS.

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

Some of the health education initiatives are run as vertical programmes by separate bodies within the Ministry of Health. The Directorate-General for Intervention on Addictive Behaviours and Dependencies (*Serviço de Intervenção nos Comportamentos Aditivos e nas Dependências*) coordinates the prevention and treatment of drug and alcohol addiction.

The NHS is responsible for implementing the National Immunization Programme (*Programa Nacional de Vacinação*), which includes the most important vaccines as set by the DGH (e.g. according to the epidemiology of disease in Portugal) for protecting population health. Vaccination is strongly advised but not mandatory. These vaccines can be altered from one year to the next in order to adapt the programme to the population's epidemiological profile, usually by combining existing vaccines, or introducing new ones. People can be vaccinated in local primary care units and vaccines that are included in the national programme are free for all NHS users. High levels of immunization are achieved in Portugal (see section 1.4).

At regional and local levels, the main entities involved in the delivery of public health services are:

- RHAs, supporting public health units within the ACES;
- local health authorities consisting of a public health unit based in ACES;
- public health doctors and sanitary technical staff;
- GPs, responsible for health promotion as part of their work, including family planning, antenatal services and screening programmes.

In 2008, the creation of the ACES restructured the organization of primary care and public health. The Decree-Law No. 28/2008, of 22 February 2008 established the regimen for the creation, organizational structure and financing of the ACES (see sections 2.3 and 5.3). These groups are formed by a set of teams, including PHCUs, FHUs, community care units (*Unidades de Cuidados na Comunidade*) and public health units (*Unidades de Saúde Pública*). Each unit contains a team of physicians, nurses, health ancillary technicians, among others, and works together with the primary care centres and the other units belonging to the same ACES. In 2009, the public health units were restructured to improve coordination with both the RHAs and the ACES. In the same year, a new public health surveillance system was created.

Public health doctors (medical doctors who have completed a 4-year postgraduate medical training in public health) are responsible for the epidemiological surveillance of the health status of the population and also for activities such as health promotion and disease surveillance. However, in many primary care centres, these responsibilities are transferred to GPs due to a shortage of public health doctors. Public health doctors' responsibilities include:

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

Public health doctors currently have a low status within the NHS and there are problems with recruitment. Until now, their tasks have included acting as health inspectors and occupational health officers, which are both heavily bureaucratic and meant working under old directives. The aim of the latest policies set out in the National Health Plan is to link the development of local

health systems with the new public health structures, giving public health doctors a broader remit in terms of the health of the population. In 2016, the government engaged in a broad reform entitled “a New Ambition for Public Health” (*Uma Nova Ambição para a Saúde Pública*), considering upcoming challenges such as population ageing and inequalities, and the increasing importance of the Internet and social networks, which offer innovative ways of communicating with the population. The reform is currently being discussed with public health professionals and civil society.

A National Health Observatory (*Observatório Nacional de Saúde*) was established in 1998 as part of the National Institute of Health (*Instituto Nacional de Saúde, Dr. Ricardo Jorge*). This Observatory aims to centralize major national health information systems and to produce timely reports on the health of the population and its determinants, which directly impacts policy-making (see section 2.5.2).

Public access to health information has also been developed further with the mass dissemination of telecommunications, especially the Internet. The *Saúde 24* Call Centre provides sorting, counselling and guidance according to the disease, including urgent situations. This service responds to personal primary care needs through health promotion and disease prevention, as well as public health needs, while participating in partnerships with other services to improve the health status of certain groups and communities: advising people on how to protect themselves from environmental risks, such as heat waves or cold snaps, or the existence of polluted air due to particles in suspension (e.g. a consequence of forest fires); helping to prevent disease from spreading in epidemic situations, such as influenza or acute respiratory syndrome; and promoting and encouraging healthy behaviours (nutrition and family planning).

Another useful means of getting public health information to a vast proportion of the population in a straightforward manner is the development of Internet websites dedicated to public health issues, such as those provided by the Ministry of Health (the new NHS website www.sns.gov.pt) and the DGH (www.dgs.pt) (see section 2.5.1).

In 2016, the Portuguese Government launched the National Programme for Health Education, Literacy and Self-care, which aims to make information, knowledge and informed decisions the major drivers of citizens’ involvement in the health system. The new Programme was launched in the framework of a “New Ambition to Public Health” (see above), stated in the Government’s

Programme, and uses the existing body of evidence that education, literacy and self-care are critical not only to the population's health promotion and protection, but also to health care provision effectiveness and efficiency. The DGH is responsible for leading the Programme implementation at the national level, while the public health departments in RHAs and public health units in ACES will coordinate the Programme at regional and local levels, respectively.

Box 5.1

Assessing the effectiveness of public health interventions

Evidence on the effectiveness of interventions addressing risk factors (e.g. tobacco and alcohol consumption) is limited. Tobacco control is a major priority for the DGH (included within the priority health programmes), but actions taken are mostly legal (e.g. tobacco ban in public places, prohibition of selling tobacco to people under age 18 years). There is no system for monitoring tobacco uptake among the population. In primary healthcare settings, that information depends on the registries recorded by GPs. This means that if a smoker does not go regularly to a GP, that information is not recorded in the patient's files. Also, GP's registries are not reliable because of different GP coverage. Latest figures on smoking prevalence in Portugal were recorded in the National Health Survey in 2014 (see section 1.4). The same happens with alcohol consumption (with some legal actions targeting adolescents: Decree-Law No. 106/2015, of 16 June 2015, forbids public establishments to sell alcohol to people under age 18 years) and obesity. However, the lack of reliable information systems makes it difficult to monitor the effectiveness of those interventions. Currently, NHS users can voluntarily introduce information on tobacco use, weight, height and other health issues at a specific area (*Patient Area*) on the NHS website. The use of these data is still unclear.

Regarding immunization rates, information systems at primary healthcare settings record the number of children and adults who receive vaccines from the National Immunization Programme. Immunization rates among children are high in Portugal (see section 1.4). Data from 2014 show that 96.5% and 98.2% of children aged 2 years were immunized against diphtheria, tetanus and pertussis, and measles, respectively (DGS, 2015a). Additionally, in 2014 children aged 7 years recorded a 95.7% immunization rate against diphtheria, tetanus and pertussis and a 95.7% immunization rate against measles; while 97.9% of adolescents aged 14 years were immunized against measles (DGS, 2015a). Influenza vaccination for older people became free for people aged 65 years or older and patients with specific conditions defined by the DGH. Latest data show that influenza vaccination rates among people aged 65 years or older in the 2014/2015 influenza season was 50.9% (Sousa Uva et al., 2015). Rates of vaccines included in the National Immunization Programme are monitored twice per year (June and December) and reported at Regional and National level.

5.2 Patient pathways

The first point of contact within the NHS is the GP in a primary care unit; a patient must register with a GP in his or her residential area or work place. Theoretically, people do not have direct access to specialist care and GPs are expected to act as gatekeepers. However, like in other European countries, patients often bypass their GP by visiting emergency departments. Frequently, there is a delay in obtaining a consultation depending on the specialty. The NHS recently made available on the Internet data concerning the waiting times for emergency care, specialist care and diagnostic services in all NHS hospitals. Many people go directly to the emergency department in hospitals if they have acute symptoms. However, an important proportion – approximately 40% in 2015, according to data on www.sns.gov.pt – of the attendees at hospital emergency units do not need immediate care (Table 5.1). The misuse of emergency services has been widely noted in international reports and even in the MoU (MoU, 2011; OECD, 2015b). People who go to emergency departments and genuinely need specialized care are treated immediately. There are user charges for emergency visits; however, considering that more than half of NHS users are exempt from paying user charges, these do not appear to affect the inappropriate use of emergency services. In 2016, the government revised both values and exemptions for user charges (see section 3.4.1), exempting from user charges all emergency service visits referred by primary care units, INEM and the *Saúde 24* Call Centre.

Table 5.1

Number of emergency visits, NHS hospitals, Portugal, 2015

Manchester Scale	Number of emergency visits	Percentage
Red (Immediate)	139 533	0.4%
Orange (Very urgent)	3 730 004	11.6%
Yellow (Urgent)	15 253 107	47.6%
Green (Standard)	11 542 659	36.0%
Blue (Non-urgent)	336 321	1.1%
White (Non-urgent)	1 069 666	3.3%
Total	32 071 290	100.0%

Source: SNS, 2016.

Patients who are covered by the health subsystems can go directly to the private hospitals and specialists approved by their schemes. Private physicians can also refer them to NHS hospitals. Those patients covered by VHI may be eligible for private specialist consultations but this will depend on the benefits package offered.

Box 5.2

A typical pathway after a stroke in Portugal

In Portugal, someone experiencing severe stroke symptoms would take the following steps:

- Call 112 (Medical Emergency hot line) for assistance.
- A specialized first-aid team from INEM is sent to help the patient.
- The patient is taken to the Emergency Service of the referral hospital (according to the place where the event happened) by an equipped medical ambulance.
- The “Stroke priority lane” (“*Via Verde AVC*”) (a protocol within the ambulance for this type of patients) is activated while in the ambulance (the hospital is contacted and the information is provided before the patient’s arrival) and the Emergency Service gets ready to receive the patient.
- The patient is assisted at the Emergency Service: referral to a more specialized hospital, where ICU or Vascular Surgery are available, takes place if needed.
- During hospitalization, an assessment of the patient’s social and forthcoming needs is made and the patient’s future after discharge starts to be defined.
- At discharge, a follow-up hospital consultation is scheduled, and the patient is also referred to:
 - Community: the patient’s GP receives a discharge summary from the hospital and a consultation at primary care setting (FHU or PHCU) is scheduled for further assessment, where provision of long-term care can be considered and arranged (e.g. home visits, rehabilitation, social support).
 - Other institution: depending on the severity of the patient’s condition, referral to the National Network of Long-term Care can be set in order to improve the patient’s condition until referral to the GP.

Box 5.3**A typical pathway for hip replacement in Portugal**

In Portugal, someone in need of a hip replacement because of arthritis would take the following steps:

- During a visit to the GP with whom the patient is registered, the GP refers the patient to an orthopaedic department at an NHS hospital.
- The choice of the NHS hospital is based on the information about waiting times (available to both GP and patient); if the patient is covered by a health subsystem or VHI, and does not want to wait at all, private hospitals are also a choice, with variable co-payments (depending on the health subsystem or VHI) for the patient.
- After referral, the patient may have to wait some months for the outpatient hospital appointment with a specialist, depending on the severity of the problem.
- After the appointment, the surgery is scheduled and the patient is enrolled in the list of patients awaiting surgery.
- If the maximum waiting time of response is achieved, the patient can be referred to either another public hospital or a private hospital to have a timely surgery.
- Following surgery, a follow-up hospital consultation is scheduled, and the patient is also referred to the GP, who receives a discharge summary from the hospital.
- At the primary care setting (FHU or PHCU), the patient is assessed by the GP and provision of rehabilitation care (e.g. physiotherapy) is arranged; again, if the patient is covered by a health subsystem or VHI, patients can choose private providers for rehabilitation.

Box 5.4

Integration of care

The fact that NHS health care units and social support units have carried out their activities without any communication since the 1980s has led to several attempts to improve the integration of hospital and primary care, on the one hand, and health care and social support units, on the other hand. Several methods of integration of care can be considered.

In Portugal, horizontal integration happened with the creation of Hospital Centres that reunited, in a single legal unit, previously autonomous hospitals. Currently, according to their geographic influence, most hospitals in Portugal are integrated in Hospital Centres. Hospital Centres gather hospitals that provide care within the same geographic area but were previously not linked. The creation of Hospital Centres was the result of a political decision aimed at cost containing, without any previous studies that supported that decision.

The creation of Local Health Units is an example of vertical integration of health care, assembling in one unit the health care provision for a given population. The goal of Local Health Units is, through an integrated provision and management of all services and levels of health care, to improve interlinking between primary and hospital care provision and, eventually, other levels of health care, namely long-term care.

A recent example of integration of care within the NHS includes the management of diabetes patients (Dispatch No. 3052/2013, of 26 February 2013). The aim was to better integrate the treatment of diabetes patients across all levels of health care delivery. The ACES were to provide specialized diabetes appointments. Previously, all diabetes patients had to schedule a regular appointment, with the corresponding increase in waiting time. At the hospitals, patients can be treated by specialists that are more acquainted with the complexity of this condition in Integrated Diabetes Units. The Diabetes Coordinating Units have been responsible, since 2013, for integrating diabetes health care delivery, and connecting patients to primary and tertiary care.

Finally, one of the first effective interventions to favour integration of care between the health and social sectors, was embodied in the creation of the National Network of Long-Term Care (RNCCI) in 2006 as the result of intersectoral collaboration between the Ministry of Health and the Ministry of Labour, Solidarity and Social Security. This collaboration led to the creation of short-, medium- and long-term care aimed at patients in a situation of great dependency, but with no need for hospitalization. The RNCCI is funded by both Ministries.

5.3 Primary/ambulatory care

A mix of public and private health service providers deliver Portuguese primary care. These include primary care units integrated in the NHS, the private sector (both profit and non-profit) and groups of professionals in private offices.

The primary care network ensures, simultaneously, health promotion and disease prevention, including the management of health problems, through a person-centred approach oriented towards the individual, the family and the community.

The number of publicly funded primary care centres and health posts continued to grow throughout the 1980s and mid-1990s, showing a slight decrease since then with a total of 387 primary care centres in 2012, covering the whole country. However, the number of primary care facilities, including all health posts that are part of PHCUs and FHUs, reached 1772 in 2015, including Madeira and the Azores (see section 4.1.2). In October 2016, there were 459 active FHUs in Portugal (SNS, 2016).

The facilities provided by each primary care centre vary widely in structure and layout: some were purpose-built to a reasonable size, with a rational distribution of space, and discrete areas for different purposes; some, mainly in large cities, were incorporated into the residential buildings and are poorly designed and not patient-friendly; and some, mainly in rural areas, were established in old hospitals. Relatively few outpatient contacts were made in Portugal in 2012 (4.1 per capita) compared with other European countries, being much lower than the EU average (6.9) (WHO Regional Office for Europe, 2016). This is consistent with the disproportionately and, arguably, inefficiently high use of hospital care, in particular for emergency services.

Primary care in the public sector is mostly delivered through publicly funded and managed groups (ACES). Each ACES has organizational (but not financial) independence, and is composed of several units, which are integrated in at least one primary care centre (see section 2.3). In practice, the ACES coordinate primary care provision but do not have financial autonomy, which belongs to the corresponding RHA.

The ACES mission is to guarantee the primary care provision to the population of a given geographic area. To do so, the ACES develop prevention, diagnosis and disease treatment through planning and provision of care to the individuals, family and community, as well as specific activities to address situations of greater risk or health vulnerability. The ACES also provide

mechanisms to connect the population with the long-term care network. There is a legal maximum of 74 ACES across the continental territory. The geographical area under the jurisdiction of ACES is set by the Decree-Law No. 28/2008, of 22 February 2008, corresponding either to NUTS III (Nomenclature of Territorial Units for Statistics), a municipality or set of municipalities (e.g. Lisbon has three ACES, each one covering around 250 000 people; a similar size of population may be covered by an ACES for the area of eight municipalities), taking into account the available resources and several sociodemographic conditions, including:

- the number of residents in the area, which should be between 50 000 and 200 000 inhabitants;
- the organization of the population in the area;
- the age structure of the population;
- the population's access to the hospital in the referral network (hospitals in which patients receive care, considering their residence area).

In Lisbon and Oporto, ACES are defined at a parish level (within municipalities) given the large population living in those cities. The aim is that ACES have a balanced composition in terms of population, ageing structure and location towards the referral hospital. This means that the rule for their composition is not strict and can change over time. For example, ACES located in the city of Lisbon were recently rearranged in terms of the parishes included in their respective areas.

The Ministry of Health allocates funds to the RHA, which in turn negotiates contracts (*contrato-programa*) with each ACES (see section 3.3.3).

Most primary care is delivered in the NHS by GPs as well as nurses in the primary health settings, together with local units and long-term care units, among others. The rest of primary care is delivered by private providers. Some primary care centres also provide a limited range of specialized care.

The health centre, which was created in 1971, is the result of the integration of social welfare medical services into the NHS started at the beginning of the 1980s. Specialists who had worked for the Department of Social Welfare were transferred and given contracts in the newly established NHS primary care centres.

The specialists who work in primary care centres belong to the so-called ambulatory specialties, such as mental health, psychiatry, dermatology, paediatrics, gynaecology and obstetrics, and surgery. The current trend to

provide some of these hospital specialties in primary care settings aims not only to improve access to the population but also to avoid hospital overuse. The range of services provided by GPs in primary care centres is as follows:

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

Patients must register with a GP, and can choose among the available clinicians within the primary health care unit of their residence area. Some people seek health care services in the area where they work, but most choose a GP in their residential area. GPs work with a system of patient lists, with an average of approximately 1900 patients. People may change GPs if they write an application, explaining their reasons for the change to the Executive Director of the ACES. There is no statutory limit to how often people can change their GP.

Data from 2015 show that 7.2 million NHS users had at least one medical appointment at primary care centres (ACSS, 2016c). Between 2011 and 2015 there was a 6.3% increase in the number of NHS users who had at least one medical appointment at primary care centres, but a 6.0% and 9.6% reduction in the number of overall medical appointments and face-to-face medical appointments, respectively. Home visits showed a 3.0% increase during the same period, but are still very limited: 198 993 in 2015 (ACSS, 2016c).

Despite a reduction of 27% in one year, by the end of 2016 the number of NHS users not registered with a GP was 769 537 (ACSS, 2017) (see Section 6.2). Thus, because they may not get a timely response, many patients go directly to emergency care services in hospitals or the private sector where the full range of diagnostic tests can be obtained in a few hours (see section 5.5). In fact, a patient that is not registered with a GP faces long waiting times at the primary care centre and hence, the patient usually prefers waiting for a long time in the

emergency services. This leads to excessive demand on emergency departments and considerable misuse of resources as expensive emergency services are often used for relatively minor complaints.

The major problems currently faced by primary care include:

- an inequitable distribution of health care resources (staff shortages in remote areas), resulting in limited access to health care services for poorer and geographically isolated people;
- difficult access, resulting in emergency department overuse;
- very limited public provision of services in continuing and home care, despite recent developments (see section 5.8);
- mixed opinions by sectors of the population about the public primary care system;
- scarcity of quality control programmes, despite efforts by the DGH (e.g. launching programmes to improve quality) (see section 7.6);
- a lack of motivation of GPs working in remote areas for fixed salaries;
- a shortage of qualified ancillary staff in primary care centres (see section 4.2.2).

A series of health care reforms, initiated in 1995/1996, aimed to tackle these problems by increasing accessibility, improving continuity of care, increasing GP motivation with a new payment system (see section 3.7.2, *Doctors*), stimulating home care services (see section 5.8) and improving quality.

The NHS has restructured the primary care services (see section 6.1) and this intervention included:

- implementation of local health units (*Unidades Locais de Saúde*) (since 1999);
- development of information systems (mainly since 2007);
- implementation of the Family Health Units (2007);
- reconfiguration and autonomy of primary care centres, by creating the ACES (Decree-Law No. 28/2008, of 22 February 2008);
- restructuring of public health services (2009).

The initial phase – the one that has had most public visibility – was the creation of FHUs, which consist of small teams of three to eight GPs, the same number of family nurses and a variable number of administrative professionals

covering a population between 4000 and 14 000 individuals. These teams have functional and technical autonomy and a payment system sensitive to performance that rewards productivity, accessibility and quality. Their main goal is to maintain and improve the health status of people covered by them through general health care delivery in a personalized, accessible and continued way. In 2014, the Ministry of Health created the role of the family nurse. The Ordinance No. 281/2016, of 26 October 2016, acknowledges the need to create the specialty of Family Nurse, to be recognized by the Portuguese Nursing Association.

Box 5.5

Assessing the strength of primary care

A recent study conducted by the OECD on the Portuguese health system shows that, overall, the Portuguese health system is delivering high quality care at a low cost (OECD, 2015a). One of the strengths highlighted in the OECD report is that the Portuguese primary health system is oriented towards measuring, assuring and improving quality. For instance, unlike most OECD primary care systems, Portugal has a large amount of available information in primary care, with a widespread collection of a large number of indicators.

OECD also praised the recent reforms in Portugal, embodied by the creation of FHUs. This reform aimed to improve primary care accessibility, and the efficiency, quality and continuity of care, as well as to increase the satisfaction of professionals and citizens.

However, some challenges remain. The disparity between the performance of the old model PHCUs and the new FHUs on key quality indicators could be a cause for concern. Also, the OECD report highlighted three areas to which further attention could be given in the future, namely: the use of the primary care workforce, fully exploiting available data, and making sure that primary care contributes to the prevention and management of chronic diseases (OECD, 2015a).

In February 2016, the Ministry of Health launched the “Strategic Plan for Primary Healthcare Reform” to reprioritize the 2005 Primary Healthcare Reform and expand the number of NHS users enrolled in a GP patient list. For this purpose, the Ministry of Health has allowed retired physicians to return to the NHS, allowing them to accumulate their pensions with 75% of the salary they received when they retired. Currently, there are approximately one million NHS users with no GP.

The primary care sector in Portugal is expected to play a significant and growing role in providing health care for an ageing population characterized by a growing burden of chronic illnesses. In the future, Portugal’s main priorities for the primary care sector ought to be, first, supporting and expanding areas of excellence and innovation, and, second, filling in some key gaps, notably around primary care-led prevention and co-ordination with other levels of care.

In October 2012, the Ministry of Health and medical unions signed a new labour agreement, that was intended to lead to an important (work) reorganization within health care facilities of the NHS, increasing access for patients to GPs and reducing overtime pay (i.e. the money received if GPs work more hours than those established). Overtime pay had not been in the agenda until the introduction of the MoU. The new agreement increased the number

of patients on the list of a GP (i.e. the list of patients registered with a GP) from 1550 to up to 1900, and introduced a weekly reference number of hours (up to 18 hours) devoted to emergency service, which are included in the 40 weekly hours. Additionally, a special pay scale was put in place, with monthly (gross) salaries ranging from €2746.24 to €5063.38. This introduced flexibility in the allocation of physicians' working hours. The previous agreement (2009) set the schedule at 40 hours/week, but there were additional dispositions for specialized work in emergency care, intensive care units, which implied extra and overtime payments. The new agreement allows the inclusion of some of these extra hours (which are paid at a higher price), into the normal (average price) payment system. Finally, the agreement added a new ruling, allowing for supplementary pay by the NHS associated with seeing patients who are not in a GP patient list.

5.4 Specialized ambulatory care/inpatient care

Secondary and tertiary care is mainly provided in hospitals, although, as mentioned earlier, some primary care centres employ specialists who provide specialist ambulatory services. These positions are gradually diminishing in number and do not form a significant part of secondary and tertiary care provision.

The Ordinance No. 82/2014, of 10 April 2014, classifies hospitals according to the services they offer:

- Group I: includes hospitals providing some internal medicine and surgery services; further services may be provided (e.g. oncology, haematology, nuclear medicine) depending on the population served and the established national referral network. The national referral network is established by the ACSS through a complex process, which makes its review difficult. It defines where a patient goes by every specialty and region of the country.
- Group II: includes hospitals providing internal medicine and surgery services, including services that are not provided by Group I hospitals; this group does not provide clinical pharmacology, genetics, paediatric cardiology, cardiothoracic surgery and paediatric surgery services.
- Group III: includes hospitals providing all internal medicine and surgery services, including those highly specialized series not provided by Group II hospitals.
- Group IV: includes specialized hospitals in oncology, physical medicine and rehabilitation, and psychiatry and mental health.

Recently, Ordinance No. 147/2016, of 19 May 2016, revoked the Ordinance no. 82/2014, of 10 April 2014. According to this new Ordinance, a new hospital classification will only be published after the approval of hospital referral networks for all hospital specialties.

Most hospital services are provided according to the integrated model directly run by the NHS. However, nonclinical services, such as maintenance, security, catering, laundry and incineration have for some time been contracted out to the private sector.

Also, diagnostic and therapeutic services in the ambulatory sector are partially provided by the private sector through “any willing provider” contracts (see section 5.3). A very limited number of clinical services are contracted out, usually in specific areas where waiting list reductions are needed. The Integrated System to Manage the List of Patients Enrolled for Surgery (*Sistema Integrado de Gestão de Inscritos para Cirurgia*) is the tool that allows response to urgent situations to be improved. For instance, when the maximum time of response is reached, the patient can be referred to either another public hospital or a private hospital to have timely surgery.

Decisions on the outsourcing of services are usually made at the hospital administration level, while the decision to contract providers for specific clinical services, usually within waiting list recovery programmes (i.e. programmes aimed at reducing waiting lists for surgery), remain at the RHA level.

Health resources follow the distribution of the Portuguese population, which is mainly concentrated along the coast. At present, existing hospitals in Alentejo and Algarve offer only some medical and surgical services. In Alentejo, there are three hospitals with less specialized services, which are local health units, and one hospital providing medical and surgical services that are not provided by local health units (Hospital of Évora). Algarve has three hospitals offering medical and surgical services similar to the Évora hospital (all belonging to the Algarve Hospital Centre) and a rehabilitation hospital (Physical Medicine and Rehabilitation Centre in São Brás de Alportel). Many of the hospitals in the interior have suffered from a lack of resources compared with those in Lisbon, Oporto and Coimbra. The investment programme in recent years has concentrated heavily on these underserved regions and the hospitals have benefited greatly from this fact, with many of the interior hospitals having now better facilities than those in the coastal areas.

Since the mid-1990s, there have been major improvements and inaugurations of medical facilities. In 1998, two hospitals were created in Santa Maria da Feira and Cova da Beira (Centre region); in 1999 a hospital was opened in

Portimão (Algarve); in 2000 and 2003 another three were opened in Vale de Sousa (North region), Torres Novas and later Tomar (Centre region); and finally, in 2004, another hospital in Santiago do Cacém (Alentejo) was opened. The use of P-PPs for renewed infrastructures also took place, with the first one starting to operate in April 2007 (São Brás de Alportel), and, more recently, hospitals of Cascais (2009), Braga (2011), Vila Franca de Xira (2011) and Loures (2012).

Box 5.6

Assessing the appropriateness of care

The analysis of NHS users' access to publicly funded hospital care identified unadjusted supply considering the potential demand (ERS, 2011).

Regarding proximity, areas covered by hospitals are not adequate for the populations living in municipalities of mainland Portugal, according to the reference of a 60-minute distance to the hospitals. Results show inequalities in NHS users' access and eventually a hospital distribution out of step with the population distribution. In some regions, such as Alentejo and Algarve, the populations may experience difficult access to hospital care, whereas in other regions, like Lisbon and Oporto, there is an overlap of areas covered by hospitals. On the one hand, there are approximately 200 000 people living more than 60 minutes away from a publicly funded hospital; on the other hand, there is overlap in areas covered by hospitals providing the same level of health care.

Regarding capacity, there are regions with more than 500 physicians per 100 000 population, which indicates a potential oversupply. Additionally, in some municipalities, an oversupply of hospital specialties by hospitals providing the same level of health care was identified (ERS, 2011).

Primary care provision within the NHS comprises FHUs and PHCUs. More than 99% of people on mainland Portugal live less than 30 minutes away from a primary care facility. In 2014, 87% of NHS users were enrolled in a GP patient list; this proportion being highest in the North and the lowest in Algarve. All NHS users enrolled in an FHU have a GP, but that does not happen with NHS users enrolled in a PHCU (ERS, 2016a).

Analysing publicly funded health care provision in the private sector (private providers that have contracts with the NHS), there is a fair access of the population to laboratory tests, with almost 100% of the population living less than 30 minutes away from a contracted provider (ERS, 2013c). However, access to dialysis is poor, especially in Alentejo, Algarve and the Centre regions. Access to physical medicine and rehabilitation is higher than to dialysis but lower than to laboratory tests (ERS, 2013c). Alentejo is the region with the lowest access to physical medicine and rehabilitation, with more than half of the population living more than 30 minutes away from a contracted provider (ERS, 2013c). Alentejo and Algarve also have a lower access to radiology compared with the other regions (ERS, 2013c).

The first point of contact within the public system is the GP in a primary care unit (see section 5.3). The problem of lack of coordination between hospitals and primary care centres and the large numbers of patients bypassing the referral system has led to the development of local health units. These are organizations of vertical integration comprising one or more hospitals and a

number of primary care centres, based partly on geographical proximity and partly on the balance of specialties and availability of an emergency department. However, local health units did not achieve all the expected improvements in coordination and did not fulfil the aim of integrating, coordinating and facilitating continuity of care.

Currently, there are eight local health units. This process of vertical integration of health care began in Matosinhos (1999) but only 8 years later a new local health unit was created – North Alentejo/Portalegre (2007). Local health units in Northern Minho/Viana do Castelo, Southern Alentejo/Beja and Guarda were created in 2008, followed by Castelo Branco (2009), Northeast/Bragança (2011) and Coastal Alentejo/Santiago do Cacém (2012). According to an analysis carried out by HRA, there is no evidence of significant performance improvements after the integration of health care units in local health units (ERS, 2015e).

Box 5.7

Patient evaluations of the care they receive

Following the National Strategy for Health Quality (Ministerial Dispatch No. 14223/2009, of 24 June 2009), where regular monitoring of NHS users' satisfaction is a key component, the DGH conducted the first public opinion survey, among 2300 interviews, to know the level of satisfaction of NHS users with the services and the care provided.

Overall, 91% of the population felt “well served” by health care providers and 74% consider the health problem that led them to seek care was resolved (DGS, 2015c). In the year before the interview, most of the population (75%) went to a public facility, with 56% seeking an NHS primary care centre and 19% an NHS hospital. The majority (87.4%) of respondents were satisfied with the length of time of the medical consultation. Around 89% considered the doctor to have given them the opportunity to pose questions and 94% stated that indications given by doctors were clear. Finally, 87% of respondents thought that the doctor involved them in the decisions about their health care and treatments (DGS, 2015c).

Monitoring NHS users' satisfaction is also performed regularly in several FHUs. All ACES have special cabinets to receive patients' complaints and praises but no regular monitoring of patient satisfaction take place in a comprehensive way in all units, meaning that, within the same ACES, some FHUs regularly conduct surveys and other units do not.

Regarding hospital care, the latest survey conducted by the Ministry of Health was in 2009 (ACSS, 2009). Results of that study found the highest levels of satisfaction with doctors and nurses in outpatient consultations, inpatient care and emergency services, while the lowest levels of satisfaction were recorded regarding complaints process, waiting times (outpatient consultations and emergency services) and food (inpatient care).

In the MoU signed by Portugal in the context of the Economic and Financial Adjustment Programme, the Portuguese Government agreed to “set up a system for comparing hospital performance (benchmarking) on the basis of a comprehensive set of indicators and produce regular annual reports” (MoU, 2011). To fulfil this commitment, in 2013 the ACSS published the first quarterly report highlighting their benchmarking analysis, which covered both public and P-PPs hospitals (ACSS, 2013). The report aimed to assess the potential for improvement within each hospital in each major area of activity and to identify best practices and cross-cutting programmes to launch in the near future that may lead to improvements across the system. In 2014 and 2015, new reports for hospitals were launched, and in 2014 primary care centre groups (ACES) were also included in the benchmarking analysis, to improve monitoring within the NHS (results are available at: <http://benchmarking.acss.min-saude.pt/>).

5.4.1 Day care

Day care services are provided by the RNCCI (see section 5.8). Day care includes those services provided to patients that need specific health care services but do not need to stay overnight (e.g. haemodialysis, physiotherapy). Day care services provide integrated support care to promote autonomy and give social support in an ambulatory regimen, i.e. without resorting to an inpatient acute care setting, to people with different levels of dependence that are not cared for at home. It guarantees maintenance and stimulation activities, medical care, and periodical nursing care, periodical psychiatric control, psychosocial support, socio-cultural animation, nutrition and personal hygiene, when necessary. Day care has been strongly developed in the last decade, namely at hospital level. Besides ambulatory surgery, which currently accounts for an important share of the overall number of surgeries performed at NHS hospitals, an increasing number of specialties are providing day care services, including dialysis, dermatology, psychiatry and clinical haematology.

5.5 Emergency care

The INEM is the Ministry of Health’s organization responsible for the coordination and functioning of an integrated medical emergency system in mainland Portugal (Azores and Madeira have their own system). This system ensures the rapid and appropriate delivery of emergency care. The main tasks of the INEM include: providing medical aid at the scene; assisting transportation

of patients to the appropriate hospital; and ensuring the coordination between the various participants in the system. Through the European Emergency Number (112) the INEM has at its disposal several means to respond rapidly and efficiently, at any time, to emergency care situations. To deliver effective medical care in the case of an accident or sudden disease, the INEM uses the following services: Urgent Patients' Orientation Centre (*Centro de Orientação de Doentes Urgentes*, CODU); Urgent Patients' Orientation Centre for Situations Occurring at Sea (CODU-Mar, *Centro de Orientação de Doentes Urgentes-Mar*); Anti-poison Information Centre (*Centro de Informação Antivenenos*); and a high-risk newborn transportation subsystem.

In practice, if a health emergency occurs, people should call 112, inform the operator about the situation and location and hang up when the operator tells them to do so. If it is a health-related emergency, the call will be passed on to the CODU, which has permanent medical assistance and central operators with specific training to receive the help request, manage the triage and advise before aid arrives and correctly select the adequate rescue means. At the same time, CODU prepares the hospital reception for the arrival of the patients. The CODU also has at its disposal various rescue means, including field communication and resources such as ambulances, catastrophe intervention cars and medical emergency helicopters. There is no fee paid by patients for these services. The National Authority for Civil Protection (*Autoridade Nacional de Protecção Civil*) and the Ministry of Interior have predicted an increase in rescue means and professionals in the INEM, along with better coordination with fire safety services that usually support the CODU's actions in patient transportation and emergency rescue. This prompted a reorganization of the INEM's activities, which allowed the creation of an integrated system of medical emergencies to ensure that the injured and victims of sudden disease receive ready and effective health care provision, namely through aid at the locale of occurrence, assisted transportation of victims to the hospital and the coordination between hospitals, as stated in the Organic Law of INEM (Decree-Law No. 34/2012, of 14 February 2012). Results show the increase of activity with 85 new emergency officers and 70 technical assistants with function at CODU; in addition, emergency resources were in action 1 196 563 times in 2015, accounting for a 5% increase compared with 2014. The years 2009–2014 were characterized by full coverage of continental Portugal by the CODU. The number of emergency calls decreased by 11.9% but the number of times INEM ambulances were called for duty increased by 44.7%

during this 6-year period (INEM, 2015). Transportation of patients, along with emergency unit activity (vehicles and helicopters) have also increased in a similar percentage range.

5.6 Pharmaceutical care

Pharmaceuticals that require prescription can only be sold in a pharmacy. Until 2007, pharmacies had to be owned by a qualified pharmacist. However, the Ministry of Health passed a law (Decree-Law No. 307/2007, of 31 August 2007) allowing ownership of a pharmacy to have no constraints other than a maximum number of four pharmacies per owner. It is still mandatory to have a technical director with a degree in pharmaceutical sciences in each pharmacy.

The location of pharmacies is highly regulated. There are a maximum number of pharmacies permitted in each community. The Ministry of Health decides whether there is a need for a new pharmacy in an expanding residential area. In the first instance, there must be proof of at least 3500 new clients, and there must be no other pharmacy within 350 metres of the proposed site. Hence, established pharmacists have a considerable degree of monopoly over the prescription drug market. Despite the changes that have occurred, there is as yet no change in the enforcing of demographic and geographic constraints for the opening of new pharmacies.

In primary care centres, only those vaccines that are part of the National Immunization Programme, and therefore provided free of coinsurance, are dispensed directly by the institution. Otherwise, patients have to take their prescriptions to a private pharmacist, whether they receive the prescription from an NHS doctor in a primary care unit or from an outpatient department of a hospital.

In 2005, a major change occurred in the over-the-counter market, as it underwent a double liberalization: over-the-counter products have to be registered with the regulatory institute for the pharmaceutical sector, INFARMED, and can now be sold in specialized stores, which no longer need to be pharmacies, and prices are no longer fixed.

Box 5.8**Evaluating efficiency in pharmaceutical care**

Policy regarding pharmaceutical products had significant changes, namely a price cut in medicines and promotion of generic drugs. Between 2011 and 2014, total pharmaceutical spending on ambulatory care decreased by 12%. This decrease was the result of a notable price cut in pharmaceuticals that counterbalanced the effect of increased consumption on total expenditure and public expenditure with pharmaceuticals. Increased consumption occurred because the uptake of pharmaceuticals already on the market increased, and also due to entry of new pharmaceuticals to the market (Barros et al, 2015).

In 2014, NHS spending represented 62.5% of total spending with pharmaceutical sales in ambulatory care, whereas NHS users co-payment accounted for 37.5%.

Between 2011 and 2014, the entry of new pharmaceuticals on the market was mostly comprised by generics. Generics accounted for more than 70% of entries of new pharmaceuticals on the market annually, in that period.

In 2015, the share of generic drugs was approximately 47%, generics being the main provider of pharmaceuticals to the NHS, considering the number of units (around 47% in ambulatory care and more than 67% in the hospital sector). By contrast, generics represent approximately 24.3% of NHS spending with pharmaceuticals in ambulatory care and 22.5% in the hospital sector.

5.6.1 Pharmaceutical coinsurance

Prescribed drugs are subject to variable patient coinsurance based on effectiveness criteria, with full payment required for those pharmaceuticals deemed to have little or no clinical value or that are not cost-effective. Since 1992, there have been four categories of NHS coinsurance, whose rates have been regularly revised. Currently, pharmaceuticals in category A have a coinsurance rate of 10% (the NHS reimburses 90% of the costs); category B, 31%; category C, 63%; and category D, 85% (Ordinance No.195-D/2015, of 30 June 2015). Decree-Law No. 106-A/2010, of 1 October 2010 establishes two kinds of reimbursement regimens. The special regimen (drugs dispensed both at hospital and in the community pharmacy) applies to patients with particular conditions or groups of patients. The general regimen establishes a co-insurance rate, according to the categories mentioned above, if those medicines are not included in the list of indispensable medicines in terms of life support. Also, Ordinance No. 1319/2010, of 28 December 2010 establishes the reimbursement according to NHS users' special conditions. This depends on the users' income, being pensioners with a maximum annual income of up to 14 times the national minimum monthly wage eligible for a lower level of co-insurance on pharmaceuticals. These pensioners have an additional reduction in co-insurance for the pharmaceuticals. The Ministry of Health defines which pharmaceuticals fall into each category.

Pharmaceuticals used by some highly vulnerable groups of patients are fully paid for by the NHS. The following therapeutic categories or treatments are fully covered:

- immunomodulators
- cystic fibrosis treatment
- chronic kidney failure treatment
- treatment for rejected transplants
- amyotrophic lateral sclerosis
- growth and anti-diuretic hormones
- specific drugs for haemodialysis
- haemophilia treatments
- antivirals for hepatitis C
- antiretrovirals for HIV.

In 1995, a new policy was introduced whereby the NHS imposed cost sharing on private sector prescriptions at the same level as the public sector prescriptions (Decree-Law No. 272/95, of 23 October 1995). The rationale of this reform was to reduce the number of private prescriptions being taken to primary care centres to be repeated on an NHS prescription.

5.6.2 Pharmaceutical expenditure and policy

The Portuguese pharmaceutical market has been subject to a large number of policy measures over the last decade. These included the introduction of a reference price system whenever competition from generics was possible (since 2003) and changes in the way the reference price is defined; administrative price reductions (2005, 2007 and 2010); several changes in co-payment rules and values; and the increased use of economic evaluation as a hurdle to the introduction of new products, both in ambulatory care and hospitals. Since 2010 the package of measures seems to have had a noticeable impact on public expenditure, with a reduction in public expenditures on pharmaceutical products in ambulatory care and a slight slowdown in the increase of hospital expenditure. The administrative price reductions, introduced in 2010, included changes in the setting of maximum prices for pharmaceutical products, and changes to co-payment rules for products included under NHS coverage.

The MoU, signed in May 2011 under the Economic and Financial Adjustment Programme for Portugal, brought important changes to pharmaceutical policy. First, it set targets for public pharmaceutical expenditure. Second, it required changes to the structure of distribution margins. These two demands constitute new approaches to containing high public pharmaceutical expenditure growth. Additional requirements of the MoU included: the promotion of generic drugs, the use of clinical guidelines and the redefinition of the international referencing rules that establish prices of new pharmaceutical products. The latter is now focused on the prices in the three countries with the lowest prices in Europe, but which have some broad similarities with the Portuguese economy.

The MoU set clear targets for public pharmaceutical expenditure: the Portuguese government should decrease such expenditure in both the hospital sector as well as in ambulatory care. The target was 1.25% of GDP by the end of 2012 and 1% by the end of 2013. However, Portugal's total public pharmaceutical expenditure at the end of 2011 was 1.35% of GDP, and only in 2014 was it possible to achieve 1.23% of GDP.

5.6.3 Pharmaceutical prices

In Portugal, following market authorization, an international reference pricing system is applied to define the maximum market price. After this price is set, the pharmaceutical company can apply for the new product to be included in the positive list for reimbursement by the NHS. This price cannot be higher than the initially approved price.

The way prices are set was also subject to change. The international reference pricing system prevailing before the MoU used the average price of the same product in four reference countries (Spain, France, Italy and Greece). The MoU required a redefinition of the system to use the lowest price of a set of three countries to be chosen based on the level of prices prevailing in their markets and which have a comparable GDP to Portugal.

Increasing the use of generics has been one of the most relevant cost-control goals of pharmaceutical policy in Portugal. Several measures included in the MoU aimed to increase competition from generics, focusing on price regulation of the market and administratively forcing lower prices. The measures included: setting the maximum price of the first generic to enter the market in its class at 60% lower than the price of the originator product (initially, it was set at 50% but changed later); automatic reduction of the price of the originator pharmaceutical product when the patent expires; resolving the legal dispute over intellectual property to ensure faster entry of generics on the market; and

allowing the substitution of prescribed drugs by generics at the pharmacy under certain conditions; this substitution may be refused by the physician, who has to provide a justification in the prescription, and refusal is also an option for the patient (Law No. 11/2012, of 8 March 2012). Moreover, pharmacies are forced by law to have available at least three of the five lowest-price generics in each class defined by a branded product.

The continuing trend of declining prices among pharmaceutical products has reduced revenues to pharmacies and wholesalers, as their revenues result from a regressive margin on the price of the product. The measures highlighted above contributed to reduce pharmaceutical prices and pharmacy revenues, and, as a result, pharmacies have claimed to face difficult economic and financial conditions, including refusals by wholesalers to sell to them due to delays of payment by pharmacies.

5.6.4 Distribution of pharmaceutical products

The wholesale and retail distribution of pharmaceutical products was also addressed in the MoU. Historically, retail pharmacies and wholesale distributors earned a margin over the price paid by consumers. The MoU stipulated that a new structure of margins, using a combination of fixed fees and regressive margins over the wholesale price must be defined (MoU, 2011). Before the new legislation package enacted for this purpose, the pharmaceutical wholesale margin was 8% and the retail pharmacy margin was 20%, both over the final price (at the consumer level). These margins had been the subject of much discussion over the years and by the end of 2010 and early 2011, the possibility of moving to a different system of margins was mooted. Therefore, the MoU proposal to combine regressive margins and fixed fees was expected.

One of the aims of this change was to save €50 million in distribution costs, as reported in some versions of the MoU. The savings target is reinforced by the requirement for wholesalers and retail pharmacies to pay a special contribution (claw-back) if not enough savings are generated (although pharmacies in remote areas with low turnover may be exempt from this pay-back mechanism). A second objective of the margin change is to increase the incentives to pharmacies to offer patients the option of purchasing generics. Under the previous system, where margins were defined by constant percentage over the final price, pharmacies had the incentive to favour the dispensing of products with higher prices. Hence, the new rules mitigate this relative incentive to dispense more expensive products (by not carrying generic products), resulting in a decrease of prices.

While many of the other measures implemented in Portugal during the Economic and Financial Adjustment Programme in the pharmaceutical sector aimed to lower prices, some also acted on volume; that is, the prescribing patterns of doctors. This is usually a delicate matter and previously has not been explicitly and directly addressed by the Portuguese authorities. The MoU required a monitoring system that regularly provides information on both the volume and value of prescribing by individual doctors (MoU, 2011). The system has been in place since October 2011 as implemented by ACSS and it is used to provide feedback to doctors. This has been made possible by another MoU condition: the establishment of a mandatory electronic prescription system for pharmaceuticals covered by the NHS (MoU, 2011). The system has been operating since August 2011 (with a few temporary exceptions for operational reasons). In addition, the MoU calls for the adoption of international prescription guidelines in Portugal, to provide clear rules for more rational prescribing patterns, which has been implemented since 2011–2012. These guidelines aim to complement the feedback mechanism provided to doctors on their own prescribing.

5.7 Rehabilitation/intermediate care

Medium-term care and rehabilitation services are provided by the RNCCI (see section 5.8). These are inpatient services with their own physical space; they are associated with an acute hospital for the provision of clinical care, rehabilitation and psychosocial support due to a clinical situation resulting from recovery from an acute condition or imbalance in a chronic pathological condition to people with a temporary loss of autonomy, which is potentially recoverable. These services aim to stabilize the clinical condition, assess and integrally rehabilitate the patient. They consist of daily medical care, permanent nursing care, physiotherapy and occupational therapy, prescription and administration of pharmaceutical products, psychosocial support, hygiene, comfort, nutrition, socialization and leisure. According to Decree-Law No. 101/2006, of 6 June 2006, which created the National Network of Long-term Care, the length of stay in medium-term and rehabilitation units should be more than 30 and less than 90 consecutive days for each admission; whereas long-term units should provide care aimed at preventing or delaying the deterioration of clinical status, promoting patients' comfort and quality of life for a length of stay longer than 90 consecutive days.

5.8 Long-term care

State provision of community care services in Portugal has been characterized as scarce, including long-term care, day centres and social services for the chronically ill, older people and other groups with special needs, such as people with mental and physical disabilities. There is a traditional reliance on the family as the first line of care in Portugal, particularly in rural areas (see section 5.9). However, demographic changes, such as an increase in female employment and a breakdown in the extended family due to migration to urban centres (see sections 1.1 and 1.3), mean that many people are no longer able to rely on such informal care. As in many other European countries, Portugal faces a growing older population and the pressure to provide social as well as medical care is increasing.

The *Misericórdias*, and other independent charitable organizations are the key providers of long-term care services. Day centres, nursing homes and residences for the elderly provide a range of services including activities, meals, food to take home, laundry services, bathing and even assistance obtaining medication and attendance at primary care centres (Ministry of Labour, Solidarity and Social Security, 2015). A small means-tested contribution is usually charged.

Home care is expanding as a result of a joint project between the Ministry of Health and the Ministry of Labour, Solidarity and Social Security, as part of the Integrated Support Plan for the Elderly. In some regions, an infrastructure to deliver support to the elderly has been developed in partnership with RHAs, municipalities and private providers, such as *Misericórdias*.

As part of this inter-ministerial project, the state is facilitating vocational training opportunities in areas such as domiciliary care and informal health care as part of a job-creation scheme. The division of payment between the NHS and the social security department depends on the type of care provided by the project, e.g. nursing care or home help. Although there are regulations for nursing homes, these are not evaluated or managed on a regular basis. Nursing homes in the private sector are very expensive and the majority of the population does not have the resources to pay for them.

The RNCCI (*Rede Nacional de Cuidados Continuados*) was created by Decree-Law No. 101/2006, of 6 June 2006, within the scope of the Ministry of Health and the Ministry of Labour, Solidarity and Social Security due to evidence of a clear lack of resources in long-term and palliative care as a result of an increase in the number of people with incapacitating chronic diseases (see

also sections 5.10 and 6.1). This Network combines teams providing long-term care, social support and palliative care with its origins in communitarian services, covering hospitals, ACES, local and district social security services, the Solidarity Network and municipalities. This Network provides services in the following areas:

- Convalescence (short-term recovery): This is an independent inpatient section, integrated within an acute hospital or other institution, if it is associated with a hospital, to provide treatment and clinical supervision in a continued and intensive manner and to deal with clinical care as a result of an inpatient episode due to an acute clinical situation, reoccurrence of or imbalance in a chronic condition. Its main function is to stabilize patients in a functional and clinical manner, and to ensure the assessment and integral rehabilitation of patients with a transitory loss of autonomy that is potentially recoverable and that does not need acute hospital care. It assures permanent medical care, permanent nursing care, radiological, laboratory and complementary diagnosis examinations, prescription and administration of pharmaceutical products, physiotherapy, psychosocial support, hygiene, comfort, nutrition, socialization and leisure. The estimated maximum duration of stay is 30 days.
- Medium-term care and rehabilitation (see section 5.7).
- Long-term care: This is a temporary or permanent inpatient service with its own physical space, to provide care to people with chronic conditions, with different levels of dependence that are not cared for at home. It aims to provide care that will prevent and retard increasing dependency, favouring comfort and quality of life for a period longer than 90 consecutive days. It guarantees maintenance and stimulation activities, daily nursing care, medical care, prescription and administration of pharmaceutical products, psychosocial support, periodic psychiatric control, physiotherapy and occupational therapy, sociocultural animation, hygiene, comfort, nutrition and support in activities of daily life.
- Palliative care (see section 5.10).
- Day care and autonomy promotion (see section 5.4.1).

In June 2006, the government defined the prices to be paid for health care and social care provided within the pilot episodes of the newly created network (Article No. 12 of Decree-Law No. 101/2006, of 6 June 2006). The prices were updated by Ordinance No. 189/2008, of 19 February 2008. The costs of health care provision are to be paid by the Ministry of Health, although the patients

have to pay the co-payments for the social care they receive. For hospital admission episodes, the convalescence and palliative care units are financed by the NHS. The medium-term and rehabilitation care units are co-financed by the Ministry of Health (70%) and the Ministry of Labour, Solidarity and Social Security (30%), while long-term care is co-financed by the Ministry of Health (20%), the remainder being paid by the Ministry of Labour, Solidarity and Social Security (Ordinance No. 994/2006, of 19 September 2006).

The Ministry of Health introduced changes to the RNCCI in December 2012 and the latest decision was the merger of the task force created in 2005 to start and manage the public network of long-term care beds into the ACSS from December 2012. The expansion of the network occurred through contracts with private facilities, which increased the supply of long-term care beds.

In 2010, the number of facilities and the number of beds participating in the RNCCI was, respectively, 218 facilities and 4625 beds. In November 2015, the development of the network reached 7759 beds, representing an increase of 68% in 5 years (Table 5.2).

Table 5.2

Beds in the long-term care network, 2007–2015

	2007	2008	2009	2010	2011	2012	2013	2014	2015 ^a
No. of long-term care beds	1 902	2 870	3 938	4 625	5 595	5 911	6 642	7 160	7 759
Recovery	452	530	625	682	906	867	860	860	764
Rehabilitation and medium term	663	922	1 253	1 497	1 747	1 820	1 895	2 021	2 306
Long-term care	732	1 325	1 942	2 286	2 752	3 031	3 692	4 094	4 411
Palliative care	55	93	118	160	190	193	195	185	278

Source: RNCCI, 2016.

Note: ^aData until November 2015.

5.9 Services for informal carers

Demographic and social changes, among other factors, are determining the ageing of the Portuguese population. As in the rest of Europe, long-term care and home support for elderly and dependent people became a concern for health services, especially in southern Europe, where elderly support was traditionally provided by informal carers – family members, neighbours or friends (Pego, 2013). Currently, two kinds of networks providing support to

elderly and dependent people coexist: the so-called informal networks and the formal network embodied by the RNCCI. It is estimated that 110 000 people in Portugal are dependent at home, and 80% of them receive some kind of informal care. The latest National Health Survey found that 1.1 million people aged 15 years or more (12.5%) provided informal care or assistance to relatives or other non-family members, 85% of which provided informal care to family members (INE/INSA, 2016). Additionally, these informal carers were mainly women and 42.6% provided informal care for more than 10 hours per week (INE/INSA, 2016). A recent study conducted by the Portuguese Association for Consumer Protection (*Associação Portuguesa para a Defesa do Consumidor*) found that the majority of informal carers in Portugal are women, mainly daughters, mothers or wives. The study identified several vulnerabilities among carers such as anxiety and depression. Also, the study found that, without informal carers, around 80% of elderly and dependent people would be institutionalized.

Informal carers have gained increased importance in Portugal, and the Ministry of Health has publicly expressed the purpose of creating a structured network of informal carers in Portugal, comprising people taking care of elderly and/or dependent people at their homes. Training and empowerment of informal carers is included in the National Programme for Health, Literacy and Self-care launched by the Ministry of Health in March 2016 (Dispatch No. 3618-A/2016, of 10 March 2016). Similarly, several civil society organizations of informal carers have shown interest in helping the government to create the “Informal Carer Status” by the end of 2016. It is expected that this status will acknowledge several legal, fiscal, labour and social issues that are currently missing for those who take care of elderly or dependent people.

As an example of the mobilization of civil society, a network of informal carers was established in Portugal (*Cuidadores de Portugal*), a non-profit organization that is part of the European network of informal carers (*Eurocare*). This network provides information to carers and has established partnerships with universities, municipalities and research centres to promote inclusion, social innovation and the development of new technologies that can be useful to both carers and people receiving care (<http://www.cuidadoresportugal.pt>).

5.10 Palliative care

The National Programme for Palliative Care was approved by the Ministry of Health in 2004 to be applied within the scope of the NHS. The palliative care organization is still incipient in Portugal, and therefore there are no available data that allow the estimation of unmet needs in this area. However, looking at the data provided by the International Association for Hospice and Palliative Care, in countries where palliative care has developed in recent decades there are approximately 1000 sick people per 1 million population per year in need of differentiated palliative care.

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

The RNCCI was responsible for ensuring provision of palliative care services until 2015. These are provided in an inpatient setting, with its own physical space, preferably in a hospital. The network aims to keep track of the treatment and clinical situation of suffering patients in complex situations that are severe, advanced, incurable and progressive, according to the National Plan for Palliative Care standards. It guarantees daily medical care, permanent nursing care, radiological, laboratorial and complementary diagnosis examinations, prescription and administration of pharmaceutical products, physiotherapy care, consultations, guidance and patients' health assessment, psychosocial and spiritual support, maintenance activities, hygiene, comfort, nutrition, socialization and leisure. These services are financed through the NHS.

Law No. 52/2012, of 5 September 2012 defined the right of citizens to have access to palliative care. It also set the basic regulation of access and creates the National Network of Palliative Care (*Rede Nacional de Cuidados Paliativos*), which complements existing structures (Ordinance No. 340/2015, of 8 October 2015). The National Programme for Palliative Care aims to:

- promote patients' access to palliative care across the country and as close to the patients' residence as possible;
- make a wide range of palliative care, both in hospital units and at home, available to patients;
- ensure the quality of palliative care provision through monitoring and evaluation;
- promote equity in access to palliative care;
- enhance differentiated and advanced training in palliative care.

5.11 Mental health care

Subsequent to Decree-Law No. 2118/1963, of 3 April 1963, which approved the principles of mental care provision, mental primary care centres were created in 1964 in the different districts as well as in the larger cities: Lisbon, Coimbra and Oporto. At the beginning of the 1970s, the need to integrate mental health services in the general system of health care provision became obvious. As such, in 1984 the Directorate-General for Primary Healthcare was created with a Division of Mental Health Services. Later, Decree-Law No. 127/1992, of 3 July 1992 integrated the mental primary care centres into the general hospitals. Considering the recommendations of the United Nations and the WHO with respect to the emphasis on community services, it was necessary to change this organization, with a focus on rehabilitation and social integration. Decree-Law No. 36/1999, of 24 July 1999 regulated the organization of services in this sector and created a clear referral system as well as a community care network. In 2006, the Ministry of Health nominated a specialized Commission for the Restructuring and Development of Mental Health Services. By 2007, the Commission published the National Plan for Mental Health Services 2007–2016. The National Plan highlights the advantages of a model of continued and family-oriented mental care when compared with hospital-based therapy.

The current organization of services is characterized by the following:

- The referral model is that of community care.
- The local mental health services are the basis of the care system, linked to primary care centres and hospitals.
- When local mental health services cannot be established, they are organized regionally.
- The mental care teams are multidisciplinary, for a population of approximately 80 000.
- Ambulatory services are based in primary care centres, and inpatient admissions and emergencies are treated in hospitals.
- Care for children and adolescents is given by specific teams at the local level.
- Social rehabilitation is carried out in conjunction with the state health sector, social security and employment departments.
- Psychiatric hospitals support the local health teams, provide specialized and inpatient care, and provide residential services for patients without any family or social support system.

Following the Dispatch No. 3250/2014, of 27 February 2014, a Task Force, coordinated by the ACSS, assembled relevant information to assess mental care provision and current needs. Available data show major red flags regarding inpatient beds (four beds for adults per 25 000 population) and rehabilitation units (152 beds, of which 94 at hospitals, and an additional 209 places in joint response with the social sector) (DGS, 2015d). Like most health care resources in Portugal, mental care provision is mostly in coastal areas, leaving the interior population underserved: Alentejo (1.81) and Algarve (1.51) have a lower ratio than the national ratio of 2.6 psychiatrists for 75 000 in public hospitals. Regarding clinical psychologists, national average is 1 per 50 000 population, the same as Alentejo and Algarve (ERS, 2015d). Professionals and resources are mostly concentrated in the Greater Lisbon area.

5.12 Dental care

The publicly funded oral care system in Portugal is not comprehensive. There are very few NHS dental care professionals in this sector, so people normally use the private sector (see section 5.2). There has been an increase in financing for dental care projects aimed at school populations, which has been associated with an increase in children without tooth decay: from 33% in 2000 to 54% in 2013 (DGS, 2015a).

Some dentists contract with one or more health subsystems or VHI. Each plan defines its own list of eligible treatments and fees. Those dentists not under contract may provide care to patients covered by the plans; patients pay directly and are then partially reimbursed by the scheme. Dental hygienists also provide dental care, although this must be carried out under the direction of a dentist. In Portugal, dentists are self-employed and their activity is regulated by the Dentists Association.

To reduce inequalities in access to dental care, in 2008 the government created the dental pay cheque, targeting children, pregnant women, elderly who receive social benefits, and certain patient groups (see sections 2.5.2 and 3.3.1, *Scope: what is covered?*). Since 2014, the National Programme for Oral Health Promotion has issued dental pay cheques to cover early interventions aimed to prevent oral cancer.

6. Principal health reforms

Chapter summary

- The Economic and Financial Adjustment Programme set a number of measures to be implemented in the health sector in Portugal aimed at increasing cost-containment, improving efficiency, and increasing regulation.
- Reforms implemented since 2011 by the Ministry of Health are outlined in five dimensions: regulation and governance; health promotion; pharmaceutical market; long-term and palliative care; and primary and hospital care.
- Measures have particularly focused on the pharmaceutical market, given the high level of public pharmaceutical expenditure in Portugal.
- Recently implemented measures were in line with reforms enacted in previous years, such as in primary health care, hospital care and long-term care.
- Main concerns in the period 2011–2015 were: to reduce prices in the NHS through salary decrease, pharmaceutical prices and contracting with private providers. Future challenges include the balance between financial sustainability with NHS improvements in underserved fields such as dental care, mental health and palliative care, human resources planning and payment, hospital management and the pursuing of primary care reform.
- Recent reforms have focused on reprioritizing the primary care reform as well as increasing patient choice and information for the Portuguese population.

6.1 Analysis of recent reforms

Recent reforms in the health sector in Portugal are inevitably linked to the MoU (MoU, 2011) signed between the Portuguese Government and the three international institutions (European Commission, European Central Bank and International Monetary Fund), in exchange for a €78 billion loan (see section 1.2). The document, which was evaluated every 3 months and successively revised during these evaluations, included a list of mandatory measures (in order to unblock payments from International Monetary Fund, European Central Bank and European Commission) linked to the health sector, which were implemented by the Ministry of Health in recent years.

The reforms implemented by the Ministry of Health since 2011 can be summarized in five dimensions:

- regulation and governance
- health promotion
- pharmaceutical market
- long-term and palliative care
- primary and hospital care.

Table 6.1 shows the key policy areas undergoing reforms from 2010 onwards and their related goals. Although most measures enacted since 2011 were determined by the MoU, in some areas, such as primary and hospital care, reforms launched before 2011 continue to be pursued to develop the Primary Healthcare reform (ongoing since 2005, and reprioritized in 2016; see section 6.1.5) and to facilitate the reorganization of the hospitals in hospital centres.

Table 6.1
Major policy measures, 2010–2016

Policy measures	Goals
<i>Regulation and governance</i>	
Reinforcement of the HRA's powers (2014)	Strengthen regulation; improve health quality and safety
Reorganization of the Ministry of Health structure, including merge/extinction of some entities (2012–2014)	Improve efficiency; cost-containment
<i>Health promotion</i>	
National Health Plan 2012–2020	Health gains, focusing on equity and access to health care, health citizenship, health quality and healthy policies
Priority Health Programmes (2012 onwards)	Health gains through prioritization of 11 health programmes: diabetes, cerebro-cardiovascular diseases, oncological diseases, mental health, tobacco control, respiratory diseases, healthy nutrition, physical activity, prevention and control of antimicrobial resistance and infections, viral hepatitis, and HIV/AIDS
<i>Pharmaceutical market</i>	
Changes to the structure of distribution margins (since 2012)	Reduce public pharmaceutical expenditure
Promotion of generic drugs (since 2012)	Reduce public pharmaceutical expenditure
Revision of chosen countries for setting reference price (since 2012)	Reduce public pharmaceutical expenditure
Revision of reimbursement rules in the NHS (2010–2015)	Cost-containment
Use of clinical guidelines for prescription (since 2010)	Improve effectiveness and efficiency
<i>Long-term and palliative care</i>	
Expansion of the National Network for Long-term Care (2012 onwards)	Expand long-term coverage through contracting with private and social providers; reduce the length of stay in acute care hospitals
Creation of the National Network of Palliative Care (2012)	Improve access to palliative care; more effective delivery of palliative care
<i>Primary and hospital care</i>	
Benchmarking analysis of hospitals (since 2013) and primary health care groups (since 2014)	Improve effectiveness and comparability of performance among providers
New rules for contracting both with primary health care and hospitals (since 2012)	Pay by results; cost-containment
“Strategic Plan for Primary Healthcare Reform” (2016)	Reprioritize 2005 primary care reform
Improved patient choice across NHS hospitals (2016)	Reduce waiting times; improve patient information

6.1.1 Regulation and governance

The publication of the framework law for all regulatory bodies (Law No. 67/2013, of 28 August 2013) led to a strengthening of the powers of the HRA, created in 2003. The new status of the HRA, published in August 2014 (Decree-Law 126/2014, of 22 August 2014), gives the HRA exclusive jurisdiction for assessing and monitoring all complaints by users of all health care services. Additionally, the HRA also supervises the process of licensing all health care providers, including issuing, maintaining and revoking licenses, as well as inspecting facilities. The HRA's new status has strengthened regulation in areas directly contributing to safeguarding patients' rights and to the quality and safety of health care provision.

The ACSS also saw its powers being reinforced by assuming an increasing role in the health system (see sections 3.3.3 and 3.7.1, *Payment of hospitals*). Some previous bodies within the Ministry of Health have been integrated in the ACSS, which currently leads the process of human and financial resources planning and allocation within the NHS, contracting with all NHS providers, linking the Ministry of Health with other bodies and entities, developing and implementing IT within public health care providers, as well as managing the RNCCI.

6.1.2 Health promotion

The National Health Plan (2012–2016) was recently extended until 2020 and provides the main strategies for public health action to be implemented in the next years. As main goals, the Plan sets the decrease of premature (before age 70 years) mortality by 20%, the increase of healthy life expectancy at age 65 by 30%, and the reduction of risk factors for noncommunicable diseases such as smoking and child obesity (with no quantitative objective attached).

The new extended Plan (2012–2020) defines four main strategic axes to guide health policies in Portugal in the next years: health citizenship, equity and appropriate access to health care, quality and policies to improve lifestyles (see section 5.1).

The DGH is responsible for the Plan's design and implementation (see sections 2.4 and 5.1). The Plan seeks the involvement of the public, private and social sectors, in order to achieve the goals and obtain health gains in the Portuguese population, assuring equity, quality and financial sustainability of the health system.

Another recent change regarding health promotion was the termination in 2012 of the four national vertical programmes on HIV/AIDS, oncological diseases, cardiovascular diseases and mental health, which were replaced with priority health programmes. Those resulted from the reorganization of the four existing national vertical programmes as mentioned above and existing initiatives on respiratory diseases, tobacco control, healthy nutrition, control of antimicrobial resistance and diabetes. The goal was to prioritize the main causes of mortality and morbidity in Portugal, as well as the important risk factors that are prevalent among the population, such as overweight, smoking and sedentary lifestyle (see section 1.4). Each priority health programme is organized in accordance with the national health strategies, as included in the National Health Plan, and has a 4-year term. In 2016, the length of programmes was extended (2016–2020) and two more programmes were added: viral hepatitis and physical activity (Dispatch No. 6401/2016, of 16 May 2016). The new Programme for Physical Activity aims to promote healthy lifestyles and tackle sedentary lifestyle, whereas the new Programme for Viral Hepatitis aspires to develop hepatitis prevention and control strategies, scale-up best practices for hepatitis C management, particularly among patients in prison, and promote hepatitis monitoring and surveillance (see section 5.1).

6.1.3 Pharmaceutical market

Among the reforms implemented in Portugal since 2011, the pharmaceutical sector has seen significant changes following shifts towards the generic market and strengthening of procurement processes. Main reforms, which were linked to the MoU, include changes to the structure of distribution margins, the promotion of generic drugs, the use of clinical guidelines by physicians, and the redefinition of the international referencing rules that establish prices of new pharmaceutical products.

As a result, public pharmaceutical expenditure in ambulatory care decreased by approximately 12% between 2011 and 2014. Overall, there was a price reduction of drugs that counterbalanced the increasing consumption in that period, with the decrease on the overall pharmaceutical expenditure achieved by price reductions rather than reduced access to drugs or reduced re-imburement from the NHS (Barros, 2015).

6.1.4 Long-term and palliative care

The RNCCI (*Rede Nacional de Cuidados Continuados Integrados*) was created in 2006 together with a task force that coordinated it (see section 5.8). It filled the gap of the increasing need for long-term care in the public sector. The network provides three types of care through convalescence (recovery) units, medium-term care and rehabilitation units, and long-term care units, with different goals according to each type of unit. The resources available and the payment systems are also different among these units.

The RNCCI has significantly expanded since its inception. Mostly, the expansion of the network occurred through contracts with private facilities, which increased the supply of long-term care beds (see section 5.8). Recent changes introduced to the RNCCI include the integration of the coordination of the public network of long-term care beds in the ACSS, from December 2012. Additionally, the National Network of Palliative Care was created in 2012 under the responsibility of the Ministry of Health. This network complements and expands existing structures, such as those that already existed in the RNCCI. The network is coordinated by a National Commission for Palliative Care in close touch with regional and local structures, and aims to providing palliative care to ill people, irrespective of their age and pathology, who are suffering due to advanced disease (Law No. 52/2012, of 5 September 2012).

6.1.5 Primary and hospital care

Other major reforms have been undertaken in the hospital and primary health care settings. In acute care, Portugal has pursued a number of reforms to rationalize its hospital sector through the specialization and concentration of hospital services. New management models and payment systems have been introduced, with the transformation of public hospitals into public enterprises (*Hospitais EPE*) (see section 2.1.1). To tackle the increased operational costs of NHS hospitals, additional measures were taken, including the reduction of overtime payment, restrictions to hiring new personnel, and restrictions to external service contracting. Ambulatory surgery has been strongly promoted in recent years, namely through incentives to hospitals, the creation of infrastructures, benchmarking monitoring and price revision. The main goal was to promote better resource allocation and increased efficiency among NHS hospitals. The model of P-PPs was applied in some hospitals, but no more P-PPs are being planned for the health sector (see section 4.1.1; *Investment funding*).

Further, some measures have been recently approved to improve patient choice across NHS hospitals. Since May 2016, NHS users can be referred to a hospital outside their residence area, as long as waiting times for a given procedure or outpatient consultation are shorter than in their residential area (Decision No. 6170-A/2016, of 9 May 2016). The brand new NHS website (<https://www.nhs.gov.pt>) was launched in February 2016 and provides information on waiting times regarding outpatient consultations for several specialties. The NHS users are now able to analyse together with their GP with their GP the best option in order to receive timely treatment in an NHS hospital. The GP, in agreement with the patient's best interest, will refer the patient for the first time to any of the NHS hospitals where there is the specialty concerned, by using criteria of geographical proximity and average response times for the relevant consultation.

In primary care, the reform enacted in 2007 was pursued, although at a slower pace. Therefore, the goal of expanding FHUs and including all NHS users in a GP patient list was not achieved. In 2008, primary health care units were reorganized under groups of health care centres (ACES), with the aim of increasing efficiency and enforcing health policies and strategies at the local and regional levels. Given the emergency services overuse by the population, a number of measures were taken to promote patients' use of primary health care and alleviate emergency rooms at NHS hospitals, including hiring new GPs, expanding FHUs and facilitating access to primary health care (by expanding the number of NHS users registered with a GP).

In February 2016, the Ministry of Health launched the "Strategic Plan for Primary Healthcare Reform" to reprioritize the 2005 Primary Healthcare Reform and expand the number of NHS users enrolled in a GP patient list. For this purpose, the Ministry of Health has facilitated retired physicians to return to the NHS.

The Plan also comprises a number of measures regarding primary health care contracting in terms of selected indicators. The Plan is intended to create a global reference framework of indicators for primary health care in a range of areas. There are no major changes to the 2005 Primary Healthcare Reform, which aims to improve the quality of primary healthcare provision mainly through expanding FHUs and interlinking to hospital care. Recently, the Ministry of Health has established a maximum number of FHUs to transit from a remuneration model without financial incentives (model A) to one with financial incentives (model B) during 2016 (Dispatch No. 6739-A/2016, of 20 May 2016).

6.2 Future developments

The Government Programme (2015–2019) and the National Health Plan 2012–2020 are the main strategic documents for health policy. While the National Health Plan provides a generic guidance to monitor health gains, the Government Programme is the main reference for the practical implementation of policy measures.

Despite some developments in recent years (see section 6.1), several challenges remain in the Portuguese health system. One of the first challenges is how to increase healthy life expectancy at age 65. While Portugal is in a comfortable position regarding life expectancy at birth (see section 1.4), health problems at age 65 are hampering life expectancy in the country. The Government Programme foresees an integrated health promotion process that encompasses all public policies influencing population health. This programme is expected to involve several ministries and civil society partners.

An additional challenge is to achieve a balance between financial sustainability and the possibility of expansion for the NHS. In fact, the high health care spending and the unsatisfactory efficiency of the NHS was, for some time, hampering the possibility of improvement in underserved fields such as dental health, mental health or palliative care and general NHS quality. The majority of costs in the health system are related to caring for people with long-term chronic conditions. It has been argued that financial sustainability will only be achieved through reducing the incidence of these diseases, developing new models of health care provision for them and ensuring that evidence is systematically applied everywhere and waste (i.e. system inefficiencies) is reduced to a minimum (Crisp et al., 2014). The financial sustainability of the health system will depend on political willingness to introduce health in all policies, which has not been introduced yet, effective health promotion and concerted actions by citizens, the society and health care professionals. The next years will provide an answer to the question of whether recent changes in budgetary procedures implemented across the public sector in Portugal will be able to contain debt accumulation by NHS institutions (e.g. price reductions across the NHS, particularly in payments to private providers).

Another challenge relates to the wages of health care workers in the public sector. Although most of the wage cuts introduced in 2012 are currently being reversed, the payment to health care workers in the NHS, particularly physicians, is lower than in the private sector (not to mention other European countries). Recent years saw a wave of emigration among health care workers in Portugal, mainly nurses, and the challenge in the coming years for the NHS is to be able

to maintain the motivation of its workforce, and to contain and reverse the drain of professionals (see section 4.2.3). Given that private health care providers receive higher salaries, both doctors and nurses have been moving to the private sector or even to other countries.

At an organizational level there are two main future challenges. The first one relates to the reorganization of the hospital network. The recent creation of hospital centres (with two or more hospitals) lacks an assessment from which to generate evidence that those reforms have produced the desired efficiency gains. Also, which internal model works better to improve hospital management, achieve permanent cost savings and promote efficiency in a highly pressured sector remains a question to be answered in the next years. Internal functioning of NHS hospitals needs to be redefined, as their autonomy has been reduced since 2008, with the employment of new staff being subject to the government's approval through the Ministry of Finance. Although the previous government postponed any decision in this regard, political pressure at both national and local levels, is forcing decisions on the construction of some new hospitals. The technical and scientific evidence to support political decisions about the construction of new hospitals, P-PPs, hospital centres and local health units is still very weak.

The second major organizational challenge is the primary care network and its integration with other levels of care. The goal of including every NHS user in a GP patient list can only be achieved with serious investments in human resources and infrastructure, but is crucial to tackling the inequalities in accessing health care, which are still real in the Portuguese NHS. Additionally, referral to other levels of care (including the RNCCI) needs to be improved to promote efficiency in the system. Lastly, the role of public health units at local level needs to be clearly defined and the near future will tell whether, with the necessary investment, they will become active agents of health promotion and disease prevention.

In this regard, the Ministry of Health has tried to simplify the recruitment process of new GPs in order to shorten the gap between the tender and the effective placement. For example, in June 2016, a tender was launched, making 338 places available in several primary care units (Announcement No. 7530-B/2016, of 15 June 2016), and in November 2016, a new tender made 108 places available (Announcement No. 14426-A/2016, of 17 November 2016). As a result, by the end of 2016, the number of NHS users registered with a GP has decreased to 769 537 (from 1 053 844 in December 2015), and the proportion of NHS users covered by a GP reached 92.1% (ACSS, 2017).

Skill mix in the NHS, meaning a more efficient combination of health professions, is a discussion that was only recently initiated in Portugal. Nowadays, the training and qualifications of nurses and allied health professions encompass wide-ranging and substantial knowledge, but their role in the health system has not changed and the health system is still centred on the physician. The promotion of the recently created role of Family Nurse is still awaiting further government measures.

Finally, civil society participation in the design and evaluation of health policies, and the empowerment of citizens are important challenges for the Portuguese health system. The creation, in 2016, of the National Health Council, which includes representatives of patients, health workers, municipalities, universities and many other entities, can represent an important step in this regard. In May 2016, the Ministry of Health published a law facilitating the referral of NHS users from primary care settings to outpatient consultations in NHS hospitals out of their referral area. This has increased the freedom of choice within the NHS and constitutes an important step towards patient empowerment.

7. Assessment of the health system

Chapter summary

- The period between 2011 and 2015 has been characterized both by the consolidation of previous launched reforms and the introduction of some reforms, particularly on the pharmaceutical market.
- Portugal has an extensive information infrastructure, which plays a central role in monitoring the health system performance, but not all data sources are effectively connected and some challenges in patient privacy and the legal basis for connecting patient data remain.
- The distribution of social health determinants is not equitable in Portugal (by geography, income and health literacy), despite the high legal and political commitment to social rights.
- Although the main source of funding of the Portuguese National Health Service is general taxation, out-of-pocket payments are one of the most important sources of financing of the Portuguese health system (27.6% of total health expenditure in 2015).
- Total health expenditure as % of the GDP (9.5%) puts Portugal among the average countries of the EU.
- The process of resource allocation in Portugal is moving from history-based allocation of funds towards a needs-based allocation, but there is scope for further efficiency gains in health care delivery (e.g. using health technology assessment to monitor and so improve the system's quality).
- The system has progressively become more transparent mainly due to the creation of the NHS Portal, where information on waiting times in emergency departments and for outpatient consultations of NHS hospitals are available in real time.

- The National Health Council, created in 2016, is an independent body gathering stakeholders in the health sector, and might have a relevant role improving accountability, by: reaching consensus, acting as a consultant body for the government and producing studies and recommendations on all issues related with health policies.

7.1 Monitoring health system performance

Portugal has an extensive information infrastructure that spans almost all levels of care, and these data are also in many instances actively used to drive quality improvements (OECD, 2015a). Data sources include setting-specific information structures (e.g. primary care settings, hospitals), and disease-specific registers and data sources.

Much of Portugal's data infrastructure involves the use of electronic patient records and unique patient identifiers. These records go towards the Portuguese Health Data Platform (*Plataforma de Dados da Saúde*, PDS), which consists of a Patient Portal (*Portal do Utente*), a Professional Portal (*Portal do Profissional*), an Institutional Portal (*Portal Institucional*) and an International Portal (*Portal Internacional*). Since February 2016, access to those portals has been possible through the new NHS website (www.sns.gov.pt). The different portals hold different information, to be used in different ways. For example, in the citizen's portal, the citizens – using their health care identification number – can access information about electronic prescriptions, scheduled appointments and health-related information. Citizens can also add information regarding their health status. However, how these data are going to be used is yet to be defined.

The PDS is intended to be an information sharing system, allowing the same information to be fragmented and sent to different agents (patients and professionals within or outside the NHS). PDS includes a range of data, including prescriptions, disease-specific registers (e.g. chronic kidney disease register), surgical safety checklists and birth reports; it also has long-term care information such as the RNCCI database. The platform is managed by the SPMS, which is the body within the Ministry of Health responsible for managing health information technologies.

There are other platforms used to monitor the health system's performance. Operating since 2010, under the ACSS, the Centre for Controlling and Monitoring the NHS (*Centro de Controlo e Monitorização*) manages all activities related to invoice processing and is an important tool in fighting

corruption and fraud within the health sector. The scope of the Centre for Controlling and Monitoring the NHS is expected to be expanded to hospital pharmacies and patient transport.

In 2015, the Ministry of Health launched SiNATS, with the aim of assessing health technology and its utilization. Managed by INFARMED, SiNATS covers all public and private institutions that produce, commercialize or use health technologies, and its assessment covers all health technologies.

Finally, the ACSS is also responsible for benchmarking analysis within the NHS. Both NHS hospitals and primary care units are currently included in the benchmarking analysis, whose methodology covers performance and activity-based indicators on access, quality, productivity and financing. The benchmarking analysis was introduced in 2013, including public and P-PP hospitals only, and was expanded to primary care in 2014 (see section 5.4). The benchmarking process aims to improve access and quality of service to users and to identify relevant aspects to improve the economic and financial performance of institutions as well as their quality. Information is made available to allow a comparison between institutions and to explain differences in economic and financial performance and quality indicators and to assess the potential for improvement of each hospital. In the area of quality, the following indicators are assessed: percentage of readmissions within 30 days, percentage of patients discharged with a length of stay above the maximum threshold, percentage of outpatient ambulatory surgical procedures, percentage of hip surgeries performed within the first 48 hours, percentage of deliveries by caesarean section, the mean adjusted delay rate, and the adjusted mortality rate.

Despite this extensive information infrastructure, which plays a central role in monitoring the health system performance, challenges around protecting patient privacy, the legal basis for connecting patient data, and administrative and technical hurdles still remain (OECD, 2015a).

7.1.1 Information systems

The PDS database consists of several modules that allow records to be kept of the following (OECD, 2015a):

- medical, nursing and social service evaluations;
- assessments by other professionals (e.g. rehabilitation medicine, physiotherapy, psychology, occupational therapy);
- results from the Integrated bio-psychosocial Evaluating Instrument (*Instrumento de Avaliação Integrada*), used in long-term care;

- pressure ulcer risk evaluations and recordings;
- falls risk evaluations;
- health care associated infections;
- pain evaluations;
- discharge abstracts;
- diabetes assessments;
- adverse drug reaction notifications;
- reports on acute exacerbations.

There are also some mandatory minimum data sets:

- For hospital discharge teams and primary care referral teams: medical, nursing and social evaluations; evaluations of physical autonomy; the existence of pressure ulcers; pain assessments.
- For integrated home care teams, and for inpatient facilities: medical, nursing and social evaluations, evaluations of physical autonomy, pressure ulcers and pain assessments upon admission, during care and on discharge. In addition: recording of falls, diabetes, pressure ulcers risk, and an intervention plan tailored for the patient.

Nonetheless, not all of Portugal's abundant data can be linked together or accessed from all health care services, and hence, in practice, patients cannot easily be followed across care settings. For example, GPs in primary care settings cannot access all information on their patient's hospitalizations through their systems, because hospitals and primary care settings have different data modules.

The primary care information system is called *SClinico*, and covers most facilities. Information available includes demographic data (name, gender, date of birth, etc.) and clinical data (health problems, allergies, personal and family history, medical history, medication and prescriptions, appointments, referrals) (OECD, 2015a). All health care providers working in primary care have access to this information, and home-based care can be added to the platform. GPs can also use the PDS platform through which they can access hospital data on their patients.

The information infrastructure in hospitals is also extensive and facilitates high-level planning and quality monitoring for all NHS hospitals in Portugal. The information infrastructure is nationally standardized across certain aspects

such as discharge summaries, reports of allergies or the use of surgical checklists, all under national clinical guidelines (OECD, 2015a). However, the IT platforms are not the same across the country; for example, a hospital in the North will not use exactly the same system to record all the information as a hospital in Algarve, although they have some aspects in common. Performance and activity-based hospital indicators are collected and made available to hospital providers and service users on an online platform on a monthly basis. However, the available hospital data are not effectively connected with many other data sources such as disease-based and vertical data collections and institutional databases like *SClinico* (OECD, 2015a).

7.1.2 Health information management

Several information systems are run by the National Health Observatory (*Observatório Nacional de Saúde*): the National Health Survey, the Sentinel Network of GPs, the national register of birth defects, and the home and leisure accidents surveillance system. Reports on the health of the population have been produced by the DGH since 1997 (see section 5.1).

The introduction of a patient identity card in Portugal in 1995 followed an international trend that emerged within the EU. The main advantage of a patient identity card is to identify clearly the entity that is financially responsible for the care provided to each patient on the one hand, and to identify exemptions from co-payments that legally exist, on the other. The main impetus for the creation of the patient identity card originated in the early 1990s, but its roll out was slow. The card is free of charge to citizens. The RHAs are responsible for issuing the card. Despite the slow rollout, in a short period of time there were more cards than people, meaning that too many cards have been issued. A new (and broader) Citizen Card was introduced in 2008, centralizing all the individual's information (identity, tax, social security and health) in a single card (see section 4.1.4).

Two of the main institutes under the jurisdiction of the Ministry of Health have specific areas devoted to R&D. In 2004, INFARMED formed an R&D office, in an attempt to develop a connection between industry, university and the Institute itself. The government regards R&D in the national pharmaceutical industry as an important sector for the Portuguese economy. Portugal has several R&D centres and laboratories, whose work is focused on infectious and genetic diseases, nutrition and food safety, chronic diseases, environmental and health determinants. Traditionally, health research financing has been carried out by the Ministry of Health and through the Portuguese Foundation for Science and Technology (*Fundação para a Ciência e a Tecnologia*).

7.1.3 Stated objectives of the health system

Article 64 of the Portuguese Constitution states: “*The right to health protection is fulfilled through a universal and comprehensive national health service and, taking into consideration citizens’ economic and social conditions, tends toward being free of charge*”.

The goal of the health system is to protect the health of the population living in Portugal. To achieve this goal, the government may act directly as a provider of health care or contract with private providers. Health policies should promote equality of access to health care for all citizens, irrespective of the economic condition and geographic location, and should ensure equity in the distribution of resources and use of health care services across the population (Law No. 48/90, 24 August 1990, with changes introduced by Law No. 27/2002, 8 November 2002).

According to the National Health Plan and the Government Programme, equality of access should be translated into the universal coverage of all NHS users to GPs, which is still far from being achieved (see section 5.3). The introduction of average guaranteed response times for hospital visits was useful because it enabled the identification of units that respond later to the demand for health care, but waiting times remain at very high levels. In surgical interventions, the Integrated System to Manage the List of Patients Enrolled for Surgery (*Sistema Integrado de Gestão de Inscritos para Cirurgia*) (see section 5.4) allows the patient to choose another public or a private hospital contracted with the NHS, when the clinically acceptable waiting time is reached.

In short, there is a considerable gap between the rights legally enshrined and the effective exercise of those rights by the NHS users, especially regarding the access to NHS units by patients. This was the main reason for the excessive use of hospital emergency departments and, on the other hand, the significant growth of private provision in terms of hospitalization, observed between 2011 and 2015.

7.2 Health system impact on population health

It is not possible to provide an estimate of improvements in health status that can be attributed to the health system, making a distinction between alternative sources of improvement (health care, public health, lifestyle changes, income,

environmental factors). Few studies have tried to link health care interventions and health status improvements in Portugal. Establishing evidence on this issue remains a challenge for health policy-makers and analysts in Portugal.

Mortality amenable to health care – defined as causes of death that should not occur in the presence of effective and timely health care – improved between 2000 and 2014 (Fig. 7.1a). Portugal shows similar results to the United Kingdom, and amenable mortality is below the EU average. However, Portugal still records higher rates of amenable mortality than France, Spain and Italy (Fig. 7.1a). Regarding preventable mortality, Portugal is also below the EU average and records lower rates than France, Italy, Spain, the United Kingdom and Latvia (Fig. 7.1b).

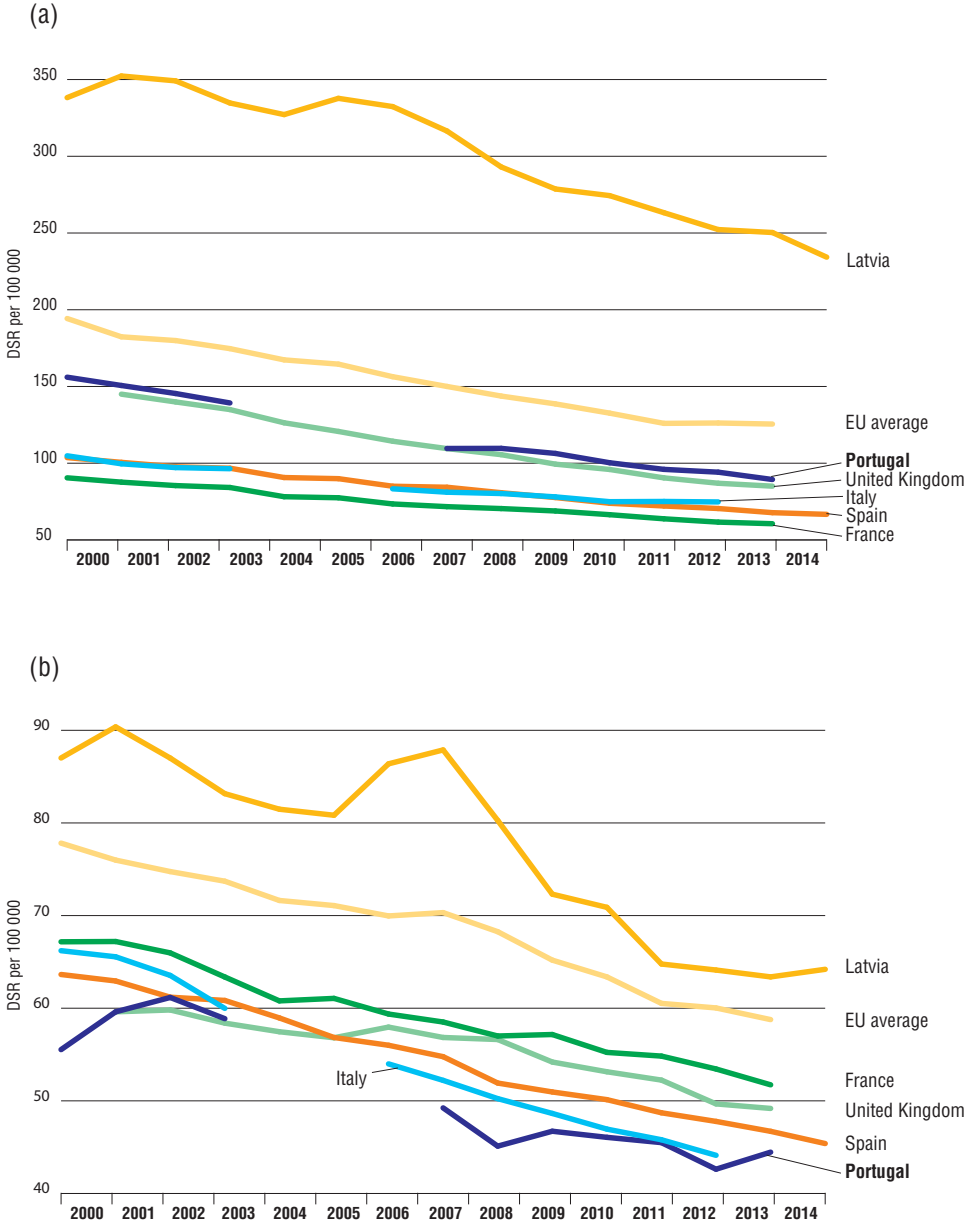
The OECD health care quality indicators show a mixed picture of health outcomes and health care delivery in Portugal: avoidable admissions and obstetric trauma are low, but mortality following acute myocardial infarction and after admission for ischaemic stroke are high (OECD, 2015a). In the case of fatality after admission for acute myocardial infarction, Portugal has a marginally higher rate than the OECD average, at 8.4 per 100 admissions (over 45 years of age) compared with 7.9 for the OECD (2013 data) (OECD, 2015a). Case fatality after admission for ischaemic stroke is higher in Portugal than the OECD average; in 2011, case fatality per 100 admissions was 10.5 in Portugal, compared with 8.5 across the OECD (OECD, 2015a). Low rates of obstetric trauma reflect positively on care quality in Portugal, but rates of surgical complication show a mixed picture: there is good performance on postoperative pulmonary embolism or deep vein thrombosis in adults, but for postoperative sepsis Portugal shows poor performance compared with the OECD average (OECD, 2015a). Additionally, avoidable hospital admissions for asthma, chronic obstructive pulmonary disease and diabetes in Portugal are among the lowest in the OECD (OECD, 2015a), which suggests good quality of primary care in Portugal.

Some health determinants are hampering the improvement of health outcomes in Portugal, such as the persistence of some structural fragilities in public social policies, or the negative impact of the economic crisis on the income of families and, consequently, on their health status (Ferrinho et al., 2014).

EU countries follow a number of different approaches with regards to the prevention and early diagnosis of cervical cancer. WHO recommends HPV vaccinations as part of national immunization programmes primarily to girls aged 9–13 years. The Portuguese National Immunization Programme

Fig. 7.1

Amenable mortality (a) and preventable mortality (b) in Portugal and selected countries, 2000–2014



Source: Calculations based on WHO, 2016b.
 Note: List of amenable and preventable mortality as defined by Nolte & McKee, 2004.

includes the HPV vaccine for girls only and the vaccine is routinely administered in two doses to all girls at age 10 years. Immunization rates in Portugal are high, reaching 95% or more for vaccines such as those against measles, polio, diphtheria, pertussis, hepatitis B and meningitis, and around 85% for HPV vaccine (see section 1.4).

Screening rates for cervical cancer in Portugal are above the EU average but below the rate observed in Austria, Sweden, Ireland, the United Kingdom, France and Slovenia (OECD/EU, 2016). Cancer survival is one of the key measures of the effectiveness of cancer care systems, taking into account both early detection of the disease and the effectiveness of treatment. The 5-year relative survival for cervical cancer has increased slightly in Portugal between 2003 and 2013, but is still lower than in countries such as Italy, Denmark, Finland, Estonia, Sweden, France, Czech Republic, Germany, the Netherlands and Belgium (OECD/EU, 2016).

Breast cancer screening rates for women aged 50–69 years in Portugal are over 80% and show a notable improvement since 2004 (OECD/EU, 2016). Over the last decade, the 5-year relative breast cancer survival has improved throughout the EU, and Portugal has been no exception, recording rates only lower than those observed in Sweden and Finland (OECD/EU, 2016).

Advances in diagnosis and treatment of colorectal cancer, including improved surgical techniques, radiation therapy and combined chemotherapy along with increased access, have contributed to increased survival over the last decade. Portugal showed improvement in 5-year relative survival for colorectal cancer between 2003 and 2013, reaching 60% (OECD/EU, 2016). In most EU countries, colorectal cancer survival is higher for women but in Portugal, the Netherlands and Austria men have a slightly higher survival (OECD/EU, 2016).

7.2.1 Equity of outcomes

Comparing the results of the National Health Survey in 2005/2006 with 2014 data, health inequalities remain a major concern, with people with no or basic education showing higher risk for diabetes (four times higher) and chronic obstructive pulmonary disease (three times higher), compared with those with secondary education or more (OPSS, 2016).

The recent National Health Survey with Physical Examination (INSA, 2016) identified that the prevalence of high blood pressure, diabetes and overweight was higher among men than women, whereas obesity affected more women than men (see section 1.4). However, comparing regions and removing the effects of sex and age, the Survey found that standardized prevalence:

- for high blood pressure and obesity was highest in the North Region;
- for diabetes was highest in Azores;
- for dyslipidaemia was highest in the Centre Region.

Also, age- and sex-standardized prevalences for high blood pressure, diabetes, overweight, obesity and dyslipidaemia were higher among those with low or no education, and among those with unpaid occupations (INSA, 2016).

The population with the highest educational level (i.e. tertiary education) showed higher prevalence of fruit and vegetable consumption (81.5% and 80%, respectively), whereas the unemployed had the lowest prevalence of fruit and vegetable consumption (71.5% and 68.5%, respectively) (INSA, 2016). Sedentary lifestyle was also high among the unemployed (46.9%), those with low education (51.6%) and those living in the Azores (52.5%), whereas the highest levels of physical exercise were recorded among those living in the Region of Lisbon and the Tagus Valley (40.3%), those with higher education (49.6%) and those in employment (38.4%) (INSA, 2016).

Regarding smoking, Azores (42.8%) and Algarve (22.2%) recorded the highest rates of smoking among men and women, respectively in 2014. Among women, tobacco consumption increased with education level; whereas among men, smoking was more prevalent among those with mid-education (e.g. men with primary education and tertiary education are less likely to smoke than those with secondary education) (INSA, 2016). The unemployed population recorded the highest prevalence of smoking for both sexes (43.0% males and 27.0% females) (INSA, 2016). Finally, Alentejo and Madeira showed the highest prevalence of binge drinking in both sexes: Alentejo – 51.6% men and 11.3% women; Madeira – 49.9% men and 10.8% women.

These differences are important in the analysis of mortality data across regions in Portugal (see section 1.4). In 2014, standardized death rate (SDR) for malignant neoplasms was higher in Madeira and Azores (INE, 2016c). However, Azores recorded the highest SDR for the following (INE, 2016a):

- trachea, bronchus and lung cancer (43.3 per 100 000 population), both for men (82.3/100 000) and women (12.2/100 000);

- chronic obstructive pulmonary disease (31.7/100 000) in Portugal, both for men (57.0/100 000) and women (15.4/100 000);
- circulatory system diseases (230.8/100 000), for both men (276.4/100 000) and women (194.0/100 000);
- ischaemic heart diseases (71.1/100 000), for both men (107.0/100 000) and women (43.1/100 000);
- acute myocardial infarction (46.5/100 000), for both men (70.3/100 000) and women (27.0/100 000).

Finally, Madeira recorded the highest SDR for respiratory diseases (120.5/100 000) in Portugal, for both men (150.0/100 000) and women (104.2/100 000), and the second highest SDR for alcohol abuse – 2.3 deaths per 100 000 population (INE, 2016c).

Despite the high constitutional commitment to social rights, the distribution of social health determinants is not equitable, making Portugal the most unequal country among the EU countries, which is reflected in the existence of inequalities in health (Ferrinho et al., 2014). The main contributions to health inequalities are disparities in income, education and physical activity. Health inequalities remain one of the key challenges for the Portuguese NHS in the future.

Political decisions to improve this situation are not yet visible. Other inequalities are to a large extent dependent on the evolution of the country's economic and financial situation. The budget for the NHS has not significantly increased since 2010, making the hiring of more health professionals to the NHS difficult, which is one of the current problems of the NHS.

7.3 Access

All residents in Portugal are covered by the NHS, irrespective of their socioeconomic, employment or legal status. As noted before, the NHS is universal, comprehensive and almost free at the point of delivery. However, there are gaps in provision due to geographical imbalances, as hospitals located outside great metropolitan areas like Lisbon, Oporto and Coimbra do not provide for all medical specialties.

The NHS predominantly provides primary care and acute general and specialized hospital care. Dental care, diagnostic services, renal dialysis and physiotherapy treatments are more commonly provided in the private sector, but

with public funding to a considerable extent. Diagnostic services, renal dialysis and physiotherapy treatments are provided under contractual arrangements with the NHS. Most dental care is paid for OOP (see section 5.12), as are many specialist consultations in private ambulatory care. Theoretically, there are no services explicitly excluded from NHS coverage, but, in general, throughout Portugal, the NHS does not cover dental care: it is neither provided nor funded by the NHS.

The role of the private sector has increased during the last decade, moving from a supply model, mainly based in outpatient care and medical diagnostic and treatment procedures, to investment in progressively more differentiated health services, capable of competing in some areas with public health services (Campos and Simões, 2014). This is due both to NHS shortages – with long waiting times – and a tradition, from before the creation of the NHS, of direct access to physicians' private offices. Overall, the scope of coverage in the NHS is comprehensive.

User charges are in place for most NHS services. Also, user charges are most visible to the population in emergency visits, and visits to GPs and specialists. However, the current government has revised both values and exemptions to user charges in 2016 (see section 3.4.1).

The definition of average times in the health sector allows patients to know the maximum response times for hospital care in NHS hospitals (available at the NHS Portal www.sns.gov.pt). In emergency rooms, patients are subject to screening upon arrival and are given a priority level corresponding to a colour (according to the Manchester Triage): Immediate care – red; Very urgent – orange (less than 60 minutes); Urgent – yellow (maximum 60 minutes); Standard – green (maximum 120 minutes); Not urgent – blue (maximum 240 minutes).

Regarding primary care, between 2010 and 2014, the number of NHS users on a GP patient list decreased by 2% at a national level, but that reduction was more significant in the Lisbon and the Tagus Valley Region (ERS, 2016a). In 2014, 87% of all NHS users were included in a GP patient list. That proportion was close to 100% in FHUs compared with PHCUs. Rates of utilization of primary care consultations, given by the number of NHS users who had at least a medical appointment in a year, are higher in FHUs. Also, between 2012 and 2014, average rates of utilization of nursing appointments, home medical or nursing care, and family planning were also higher in FHUs. In contrast, PHCUs have recorded longer waiting times for medical appointments with a GP than FHUs, both for programmed and urgent appointments (ERS, 2016a).

Regarding outpatient consultations, information is made public on the average time of response to the first outpatient consultation (in days) requested by primary care units, by specialty and priority level, for each hospital institution and the number of patients who are waiting for consultation. According to the Ordinance No. 95/2013, of 4 March 2013, the maximum guaranteed response time is: High Priority – 30 days; Priority – 60 days; Standard – 150 days.

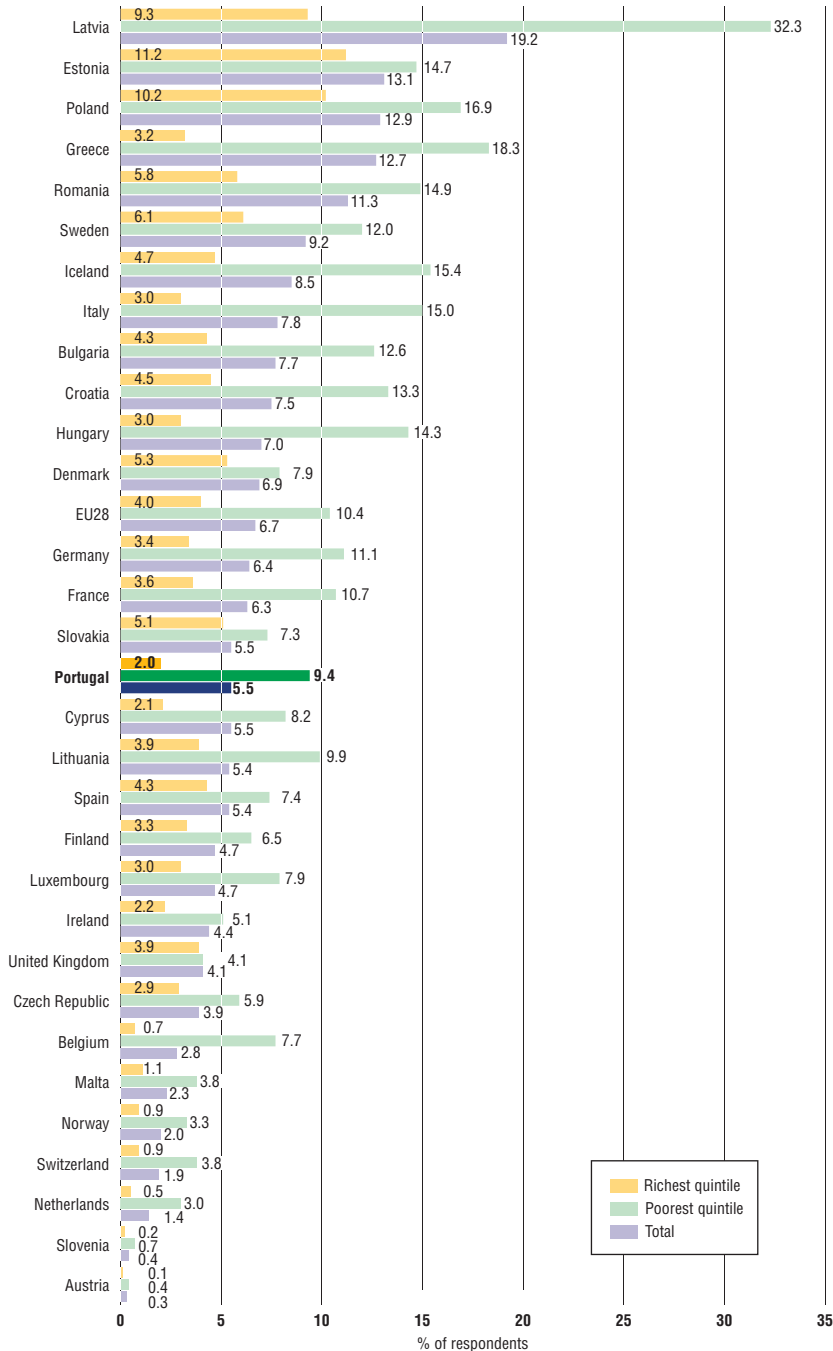
There is also publicly available information on the average waiting time for elective surgery (in days), by specialty, priority and pathology, for each hospital institution, as well as the number of patients who are waiting for scheduled surgery. The waiting time for elective surgery, the length of time between the proposal (date of registration) and the day of the respective surgery are considered. According to Ordinance No. 87/2015 of 15 March 2015, the maximum guaranteed response time, by priority and pathology, is: High Priority (oncological or non-oncological disease) – 15 days; Priority – 45 days for oncological disease and 60 days for non-oncological disease; Standard – 60 days for oncological disease and 270 days for non-oncological disease. However, there are no effective mechanisms to enforce these targets.

The analysis of unmet needs for physical examination shows that 5.5% of the Portuguese population could not access health care due to financial or other reasons (Fig. 7.2). When analysing the results by income quintile, 9.4% of those belonging to the poorest quintile could not access health care for financial or other reasons but that percentage falls to 2% in the richest quintile (Fig. 7.2). Regarding dental care, 48.7% of the population aged 15 years or older had a visit to the dentist in the previous year (INE/INSA, 2016). However, the proportion of those who visited a dentist in the past year decreased with age: from 64.2% in the age group 15–24 years to only 21.7% in those aged 75 years or older. Overall, Portugal is below the EU average but still shows a high level of inequality in accessing health care, considering the universal and comprehensive NHS.

Concerning economic evaluation and consequent provision of coverage for pharmaceutical expenses, in Portugal, as in other countries, pharmaceutical products face an economic hurdle before they are included under NHS coverage. Each recent pharmaceutical available for sale in pharmacies is subject to an economic evaluation. No major changes to the NHS coverage are expected.

Fig. 7.2

Unmet needs for a medical examination (for financial or other reasons), by income quintile, EU/EEA countries, 2014



Source: Eurostat, 2016a.

Notes: EEA: European Economic Agreement; EU28: European Union Member States at July 2013.

7.4 Financial protection

The main source of funding is general taxation, which in Portugal is slightly progressive due to progressive income taxation. The progressive income tax system in Portugal turns out to be slightly regressive for health care financing due to the high share of OOP payments along with a heavy reliance on indirect taxes (see section 3.1). Further, OOP payments introduce a regressive element.

OOP payments are one of the most important sources of financing of the Portuguese health system: 27.6% of total health expenditure in 2015 (INE, 2016f) (see section 3.2). In recent years, several countries, including Portugal, have tried to increase patients' OOP payments to ensure financial sustainability of the NHS. Patients pay a large share of pharmaceutical expenditure, due to the low co-payment rates by the NHS, few patients exempted from payment, and the high level of pharmaceutical consumption in Portugal (Simões, Barros & Pereira, 2007).

Box 7.1

Universal health coverage

Universal health coverage is enforced by the Constitution of the Portuguese Republic (1976) and was also inscribed in the Law, which enacted the National Health Service (1979).

The Portuguese NHS is indeed universal, with the exception of dental care, which is provided through the private sector (through OOP payment or VHI). This scenario was slightly improved with the creation of dental pay cheques (2008), which allows school-aged children, pregnant women and the elderly who receive social benefits to have free access to dental care. The government has recently announced the intention of providing dental care in some primary care settings.

The Portuguese NHS has been able to provide quality health care irrespective of social and economic status, ensuring that those in need are able to use the services. The NHS makes efforts to ensure an equitable access to health care (e.g. exemptions in user charges). Thus, those experiencing financial problems and/or belonging to certain patient groups are exempted from paying user charges and there are also benefits regarding pharmaceuticals co-insurance by the NHS (see section 3.4.1).

The primary health care and hospital network scattered all over the country is a condition for universal coverage and for the improvement of the delivery of health care services. However, equity in geographic coverage of hospital care remains a challenge for the upcoming years.

7.5 Health system efficiency

7.5.1 Allocative efficiency

Financial resources directed towards health care reached 9.5% of the GDP in 2014, which puts Portugal in line with the EU average (see section 3.1). Until 2010, there has been a steady growth in public health expenditure, with private expenditure remaining relatively constant. Since 2010, public spending has declined, whereas private expenditure has increased (see Table 3.3 in section 3.2).

Taking the 2017 Government Budget as an example to illustrate the resource allocation in the NHS, hospital care accounts for approximately 53% of the NHS budget, while primary care receives 42% of the resources (Ministry of Health, 2016).

The process of resource allocation in Portugal is moving away from history-based allocation of funds towards an approach close to needs-based allocation. This is the case for primary care, especially since 2012. Hospital care is moving towards a contract-based approach, where explicit targets for “production” are set and the corresponding payment is specified. Whenever the levels of activity define the approximate health care needs of the population, the system moves closer to a needs-based approach.

Recent years have shown a movement towards the correction of some imbalances regarding human resources for health in Portugal. Previously characterized by a big emphasis on specialist hospital care, relative scarcity of physicians and low productivity, human resources planning is now focused on increasing the number of GPs in order to scale-up primary care and alleviate hospitals. The government introduced changes to the policy regarding vacancies for postgraduate medical training for different specialties in NHS institutions. This has been implemented progressively, with vacancies for GP training increasing every year.

Priorities and health strategies are foreseen in the National Health Plan (DGS, 2015b). Governments have requested independent studies on many health policy matters to the HRA: in 2015/2016 studies were carried out on context-related costs in the health sector; performance of local health units; health insurance; access to health care by immigrants; access and quality in mental care; access, quality and competition in continued and palliative care;

coverage of the emergency network; access to health information; comparison of FHU and PHCU; the restructuring of the ADSE; and the evaluation of P-PPs in the health sector.

7.5.2 Technical efficiency

The recent evolution of the Portuguese health system suggests that improvements have been made in terms of providing value for money. In particular, health gains and increased activity in the NHS were obtained without adding extra resources, indicating both an improvement in value for money provided and that large inefficiencies were (and still are) present in the system. Increases in productivity, measured by a higher growth in activity than in expenditure, have been present over recent years, and were the aim of the Economic and Financial Adjustment Programme. Overall, the system became cheaper (due to cuts in spending) and more productive (due to increased working hours and contracting with institutions). However, this type of evolution has natural limitations, and in the near future productivity gains will most likely entail an increase in spending, as opportunities for waste reduction become exhausted.

There is still much room for further efficiency gains in health care delivery in Portugal, namely through the scale-up of health technology to improve both the system's quality and monitoring (see section 7.1).

Technical efficiency is to be further enhanced by the changes in the payment mechanisms set for providers, even within the NHS but changes are taking place slowly. Performance-related pay is currently being implemented in primary care (for the model B FHUs) and prospective budgets (*contratos programa*) are being used for hospital care. In both cases, the way in which providers are paid seems to have some bearing on their efficiency level: model B FHUs and hospitals are paid based on their performance; hence, theoretically, the more efficient they are, the more money they get. Overall, FHUs, particularly those belonging to the B model, are more efficient than PHCUs. That efficiency might be related to the incentive mechanisms to health workers in those units, which do not exist at the PHCUs. Regarding recent mergers, the literature suggests that there are economies of scale and scope to explore, but only mergers of relatively small and similar hospitals were successful (Azevedo & Mateus, 2014).

7.6 Health care quality and safety

Two key documents on quality and safety were published in 2015: The National Strategy for Health Quality 2015–2020 and the National Plan for Patient Safety 2015–2020.

The National Strategy for Health Quality (Dispatch No. 5613/2015, of 27 May 2015) aims to reinforce equity as the core dimension of the NHS in a framework of continued improvement in quality and safety. This Strategy highlights the need to scale up the accreditation of institutions and health care providers and the continued investment in clinical and organizational quality improvement. The Strategy adopts the following targets:

- focus on interventions at the local, facility and institutional levels
- clinical and organizational quality improvement
- enhanced adherence to clinical guidelines
- strengthening patient safety
- strengthening clinical research
- routine monitoring of quality and safety
- dissemination of comparable performance data
- accreditation of health care quality at facility level
- transparent information to the citizen and enhanced citizen's capacity.

The National Plan for Patient Safety 2015–2020 (Dispatch No. 1400-A/2015, of 10 February 2015) aims to support managers and clinicians in the NHS to apply methods for improving management of risks associated with health care provision. The cycle of quality improvement applied to patient safety must identify and assess risks and place them in a hierarchy, identifying the actions to be implemented that will lead to improvement. Management of risks associated with health care provision should use these key principles, requiring on the one hand the identification of existing preventive actions, and on the other hand reactive and corrective measures following an incident. The Plan is based on a comprehensive vision of the NHS and requires serious commitment from all levels of health care governance, coordination and practice, in order to harmonize existing approaches to the management of risks associated with health care provision.

The National Plan for Patient Safety 2015–2020 must be adapted by each health care facility based on particular organizational features. The Plan intends to improve safe health care provision at all levels of care by encouraging cross-cutting actions such as enhancing a culture of safety and promoting the sharing of knowledge and information.

In 2013, the DGH launched the programme for the prevention and control of antimicrobial resistance and infections, recognizing health care-associated infections as an important cause of morbidity and mortality that leads to increased consumption of hospital and community resources. Considering that Portugal is one of the EU countries with the highest prevalence of nosocomial infections – the latest DGH estimates for 2013 show that 9.8% of patients were identified with a nosocomial infection – there had been a lack of action to reduce rates of health care-associated infections. For a long time, Portugal was above the EU average regarding antibiotic consumption in ambulatory care, but that trend was inverted in recent years (DGS, 2016). Since 2012, while the consumption of antibiotics in Europe has increased, there has been a sharp reduction in Portugal, ranking the country 16th of 30 European countries in 2014 and below the EU average, regarding antibiotic consumption in ambulatory care (DGS, 2016).

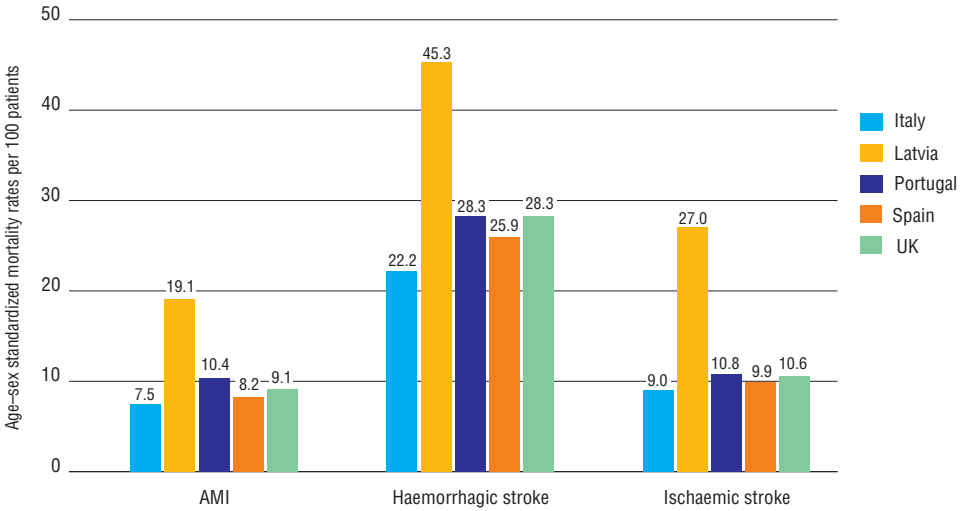
Data from the OECD database on health care quality and safety show that Portugal is in a comfortable position in terms of in-hospital mortality rates (deaths within 30 days of admission), quality of primary care for chronic conditions and complications following surgical procedures.

In terms of age and sex, the standardized in-hospital mortality rate per 100 patients for acute myocardial infarction in Portugal (10.4) is close to that for the United Kingdom (9.1) but is lower than Latvia (19.1) and higher than Italy (7.5) and Spain (8.2) according to 2013 data. A similar scenario is found for 30-day mortality after admission to hospital for ischaemic stroke and haemorrhagic stroke.

As for quality of primary care for chronic diseases, among the countries considered, Portugal is one of those with the lowest age- and sex-standardized rates per 100 000 population for avoidable admissions due to asthma, chronic obstructive pulmonary disease and congestive heart failure, which suggests that these conditions are being effectively managed at the primary health care level and that the care delivered at this level is of good quality. As for hypertension and diabetes, although the figures are also good and below those of France and Latvia, they are higher than for the United Kingdom and Spain, suggesting that there is space for improvement.

Fig. 7.3

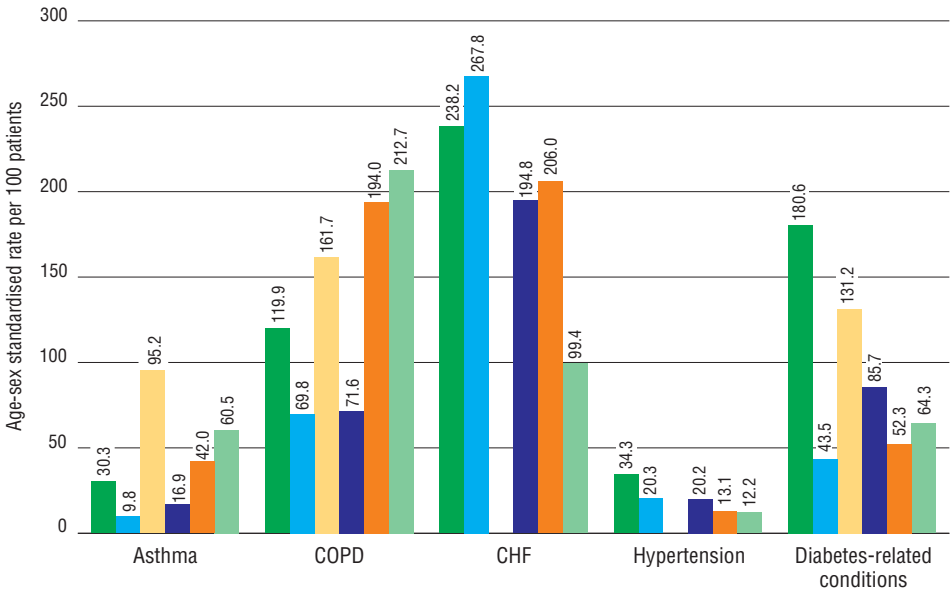
Thirty-day mortality after admission, 2013



Source: OECD, 2016a.

Fig. 7.4

Quality of primary care for chronic conditions – avoidable hospital admissions, 2013



Source: OECD, 2016a.

In terms of patient safety, in 2013, the crude rate of foreign body left during surgical procedure per 100 000 hospitalizations (considering surgery-related episodes) was 5.2, lower than the United Kingdom (7.1). The rate for postoperative pulmonary embolism or deep vein thrombosis was lower (218.9) than in France (705.6) and the United Kingdom (1366). In terms of the postsurgical complication of sepsis, the rate in Portugal (1154.2) was lower than in the United Kingdom (1522.4), but the difference was smaller than for previous indicators (OECD, 2016b).

7.7 Transparency and accountability

Public participation and patient empowerment are major health care goals inscribed in key legal documents across the last two decades in Portugal, but with little practical impact. However, two recent government decisions seem to emphasize those goals: the creation of the National Health Council (legally established for more than 25 years but never put to work) and the launch of the NHS portal (www.sns.gov.pt).

The National Health Council (*Conselho Nacional de Saúde*) is an independent consultative body for the Ministry of Health, composed by 30 members, and aims to ensure NHS users participation in the policy-making process and promote the system's transparency and accountability to the society. Most of all, the National Health Council seeks a broad consensus regarding health policies, including members from municipalities, health care professionals, universities and other higher education institutions, representatives from the Ethics Commission, the Social Consultation and the Autonomous Regions (Madeira and Azores).

Community participation in NHS institutions, particularly hospitals, is made through consultative councils, whose intervention is relatively weak.

The new NHS Portal provides detailed information about the functioning of NHS facilities, namely waiting times for outpatient consultations and emergency services and average time for surgeries. It also provides a Transparency area (<http://transparencia.sns.gov.pt/>), making available a wide range of indicators of access, efficiency and quality within the NHS in real time. In this area, the patient can, for example, discover how many surgeries have been performed in NHS hospitals in a given period, the public expenditure on pharmaceuticals

with real-time counting or the number of consultations in the several services provided by the NHS. This area seems to be crucial to improving the NHS's accountability to citizens.

Accountability in the Portuguese health system relies on other institutions. First, the Court of Auditors, which is the state's supreme body for external control of public finance. The Court of Auditors verifies if public funds are properly managed according to the law and the principles of efficacy, efficiency and effectiveness. This Court monitors and assesses relevant programmes and projects that are publicly funded, as well as privatizations, and identifies those responsible for managing public funds.

The parliament is responsible for passing the fundamental laws of the Republic, scrutinizing compliance with the Constitution and the laws, and monitoring the activity of the government and the public administration. The Health Committee, comprising members of parliament from several political parties, supervises sectors under the responsibility of the Ministry of Health, monitoring the NHS and health policies.

At regional and institutional levels, accountability in the health system is through a hierarchical network of services, with little citizen participation. However, patients' involvement in clinical decisions is organized differently. Patients' rights and duties are established in the Framework Health Law (*Lei de Bases da Saúde*), in the Penal Code and other diplomas, and are assembled in the Patient Charter (*Carta dos Direitos e Deveres dos Doentes*) (see section 2.5.3). This Charter has no binding status but summarizes in a comprehensive way the core features of a patient–doctor relationship.

Patients have the right to free and informed consent, to informational self-determination, to access their own clinical information, to have their privacy respected and to make suggestions and complaints. The Patient's Cabinet links patients and services and mitigates the eventual conflict dynamics. In recent years, the increasing importance of the HRA is shown by the new powers of this body, namely the supervision of all complaints made by patients, the actions taken by health care providers, and the sanctions for any infraction.

8. Conclusions

Currently, there is a political consensus from all parties in the parliament that the health system is based on a universal, general and tendentially free at point of delivery NHS. There is also a consensus on the need to expand the network of primary health care provision and long-term care. In other words, the political dispute in Portugal is not centred on the general organization of the health system, but instead on the way to solve its main challenges. Despite the changes in government, in 2015, and respective health policy ruling the country, in general terms, the current government is pursuing some political measures introduced by the previous government, which aimed to increase efficiency and promote the financial sustainability of the NHS. However, several challenges remain.

The MoU signed between the Portuguese Government and the International Monetary Fund, the European Commission and the European Central Bank in May 2011 has been dominant in recent years (2011–2014) in Portugal. The MoU outlined the specific measures on economic policies to be adopted by Portugal in exchange for a €78 billion loan.

The MoU section dedicated to the health system defined policy measures aimed to

“improve efficiency and effectiveness in the health care system, inducing a more rational use of services and control of expenditures; generate additional savings in the area of pharmaceuticals to reduce the public spending on pharmaceutical (...); generate additional savings in hospital operating costs.”

To reach those goals, the document included 34 measures comprising a wide range of areas in the health system: financing of the NHS and public health subsystems, pharmaceutical market and pharmacies sector, prescription and monitoring of prescription, centralized purchasing and procurement, primary care and hospital services, and cross-sectoral services.

The real impact of the measures implemented by the MoU when analysing major indicators of health system performance is not fully understood because it cannot be easily dissociated from the economic crisis. The comparison of Portugal with the international context regarding resources allocated (health expenditure) and outcomes (life expectancy at birth and at age 65 years) shows that the Portuguese health system is among the most efficient in Europe. Major health indicators are improving, and total health expenditure has been controlled, mainly through cost-containment and price cuts.

In contrast, it seems that the balance between austerity measures and the maintenance of the health status and access to health care is the result of a decreased public share in total health expenditure. In fact, before the crisis, the financial burden on Portuguese families was already significant, bearing in mind the goal of universal coverage of the Portuguese NHS. Some recent health policies aimed at tackling the Portuguese NHS problems seem to have intensified this trend.

Since 2010, the amount spent on health care has decreased in both absolute and relative terms, after a strong growth pattern observed in the previous years. In the European context, public sources of spending as a percentage of total health expenditure in Portugal (64.7%) are among the lowest in the EU, whose average is 76.0%. Most private health expenditure is accounted for by OOP spending, in the form of co-payments and direct payments made by citizens for pharmaceuticals, examinations and outpatient consultations. OOP payments in Portugal are estimated to be among the highest in the EU, accounting for 26.8% of total health expenditure in 2014 and 27.6% in 2015 (provisional data).

In the pharmaceuticals market and pharmacies sector, retail prices have significantly decreased since 2011, due to measures such as the revision of distribution margins in consequence of changes in the countries included in the International Reference Pricing. Expenditure on prescribed medicines sold in pharmacies decreased by approximately 12% between 2011 and 2015. This came as a consequence of a notable price cut in pharmaceuticals that was able to counterbalance the effect of increased consumption on total expenditure and public expenditure for pharmaceuticals.

In primary health care, the main goal of the government was the total coverage of GPs across the population, so decreasing inequalities in accessing health care. However, despite the progress made, the goal of having all citizens registered with a GP in a NHS primary health care unit has not been achieved. However, the creation of FHUs, which are small multiprofessional teams, self-organized, that contract a basic package of services and receive incentives based on performance, represented a significant achievement to primary health care provision.

The RNCCI, which aims to provide health care and social support to patients in need, embodies the principles of continuum of care and promotion of autonomy, by avoiding treating, in the same unit, patients with very different conditions. The network of long-term care crosses the whole of the NHS, and links with the social sector.

The re-organization and rationalization of the hospital network is ongoing. A study carried out by the HRA found that there is an unbalanced distribution of hospital services across the country regarding the population's needs, with oversupply in some regions and scarcity in others. Reform must aim to reduce oversupply in some regions to transfer capacity and resources to underserved areas, hence, achieving the global optimization of resources.

The private sector has increased its supply and demand and has increased in recent years, particularly among those who can afford to pay for VHI or who have disposable income to pay for health expenses, especially for elective treatments. This growth of the private sector is mostly explained by the relatively long waiting times for consultations or surgeries in the NHS.

Finally, a further challenge to the government relates to the implementation of effective measures that ensure NHS financial sustainability. Measures implemented by the previous government are no longer possible: cuts in health workers salaries, cuts in pharmaceutical prices, and cuts in prices by private providers (namely, blood tests, imagery, dialysis and rehabilitation) with public funding. Hence, besides any growth in the NHS budget, financial sustainability can only be ensured by increasing efficiency in NHS health units. The increasing use of information and communication technologies is one of the government's objectives that can contribute to achieve this result.

9. Appendices

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- ERS (2015c). *Os seguros de saúde e o acesso dos cidadãos aos cuidados de saúde [Health insurance and citizens' access to health care]*. Oporto, Health Regulatory Agency.
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9.2 Useful web sites

Pordata

<http://www.pordata.pt/>

National Network for Long-term care

<http://www.acss.min-saude.pt/category/cuidados-de-saude/continuados/>

Portuguese National Health Service

<http://www.sns.gov.pt/>

Health Regulatory Agency

<https://www.ers.pt/>

Directorate-General for Health

<http://www.dgs.pt>

National Health Plan 2012–2020

<http://pns.dgs.pt/>

Central Administration of the Health System

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

INFARMED

<http://www.infarmed.pt>

INE- Statistics Portugal

<http://www.ine.pt>

NHS Portal

<http://www.sns.gov.pt>

Nurses Association

<http://www.ordemenfermeiros.pt>

Pharmacists Association

<http://www.ordemfarmaceuticos.pt/>

Medical Association

<http://www.ordemosmedicos.pt/>

9.3 HiT methodology and production process

HiTs are produced by country experts in collaboration with the Observatory's research directors and staff. They are based on a template that, revised periodically, provides detailed guidelines and specific questions, definitions, suggestions for data sources and examples needed to compile reviews. 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. This HiT has used a revised version of the template that is being piloted during 2016–2017 and will be available on the Observatory web site once it has been finalized. The previous (2010) version of the template is available online at: <http://www.euro.who.int/en/home/projects/observatory/publications/health-system-profiles-hits/hit-template-2010>.

Authors draw on multiple data sources for the compilation of HiTs, ranging from national statistics, national and regional policy documents to published literature. Furthermore, international data sources may be incorporated, such as those of the OECD and the World Bank. The OECD Health Data contain over 1200 indicators for the 34 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 database. The Health for All database contains more than 600 indicators defined by the WHO Regional Office for Europe for the purpose of monitoring Health in 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 Health for All data have been officially approved by national governments.

HiT authors are encouraged to discuss the data in the text in detail, including the standard figures prepared by the Observatory staff, especially if there are concerns about discrepancies between the data available from different sources.

A typical HiT consists of nine chapters.

1. Introduction: outlines the broader context of the health system, including geography and sociodemography, economic and political context, and population health.

2. Organization and governance: provides an overview of how the health system in the country is organized, governed, planned and regulated, as well as the historical background of the system; outlines the main actors and their decision-making powers; and describes the level of patient empowerment in the areas of information, choice, rights and cross-border health care.
3. Financing: provides information on the level of expenditure and the distribution of health spending across different service areas, sources of revenue, how resources are pooled and allocated, who is covered, what benefits are covered, the extent of user charges and other out-of-pocket payments, voluntary health insurance and how providers and health workers are paid.
4. Physical and human resources: deals with the planning and distribution of capital stock and investments, infrastructure and medical equipment; the context in which information technology systems operate; and human resource input into the health system, including information on workforce trends, professional mobility, training and career paths.
5. Provision of services: concentrates on the organization and delivery of services and patient flows, addressing public health, primary care, secondary and tertiary care, day care, emergency care, pharmaceutical care, rehabilitation, long-term care, services for informal carers, palliative care, mental health care and dental care.
6. Principal health reforms: reviews reforms, policies and organizational changes; and provides an overview of future developments.
7. Assessment of the health system: provides an assessment of systems for monitoring health system performance, the impact of the health system on population health, access to health services, financial protection, health system efficiency, health care quality and safety, and transparency and accountability.
8. Conclusions: identifies key findings, highlights the lessons learned from health system changes; and summarizes remaining challenges and future prospects.
9. Appendices: includes references and useful web sites.

The quality of HiTs is of real importance since they inform policy-making and meta-analysis. HiTs are the subject of wide consultation throughout the writing and editing process, which involves multiple iterations. They are then subject to the following:

- A rigorous review process.
- There are further efforts to ensure quality while the report is finalized that focus on copy-editing and proofreading.
- HiTs are disseminated (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 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.

One of the authors is also a member of the Observatory staff team and they are responsible for supporting the other authors throughout the writing and production process. They consult closely with each other to ensure that all stages of the process are as effective as possible and that HiTs meet the series standard and can support both national decision-making and comparisons across countries.

9.4 The review process

This consists of three stages. Initially the text of the HiT is checked, reviewed and approved by the series editors of the European Observatory. It is then sent for review to two independent academic experts, and their comments and amendments are incorporated into the text, and modifications are made accordingly. The text is then submitted to the relevant ministry of health, or appropriate authority, and policy-makers within those bodies are restricted to checking for factual errors within the HiT.

9.5 About the authors

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^h Spanish

ⁱ Turkish

* More recent versions are available from the Asia Pacific Observatory.



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