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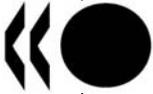
# The Reform of the Health Care System in Portugal

**Stéphanie Guichard**

<https://dx.doi.org/10.1787/080445552681>

**Unclassified**

**ECO/WKP(2004)28**



Organisation de Coopération et de Développement Economiques  
Organisation for Economic Co-operation and Development

**06-Oct-2004**

**English - Or. English**

**ECONOMICS DEPARTMENT**

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by  
**Stéphanie Guichard**

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## ABSTRACT/RÉSUMÉ

### **The reform of the health care system in Portugal**

An ambitious reform to increase efficiency of the Portuguese health care system was launched in 2002. In contrast to previous attempts of gradual reforms, which were never fully implemented, the strategy has been to create a big bang in the health sector, making changes essentially irreversible. The reform has two main aims: to deliver better-quality public health services than at present but at no higher cost; and to reduce the underlying growth rate of public health-care spending over the medium term. New legislation approved includes the separation of the functions of regulation, financing and provision of health care services; setting up new models of financing for providers, which impose harder budget constraints; the introduction of incentives towards productivity, management and quality improvements; the possibility for the private sector to play a larger role in service provision; and the promotion of generic drugs. After assessing the strengths and weaknesses of the Portuguese health care system before this reform, the paper describes in details the on-going reform programme. It assesses to what extent it addresses the weaknesses of the Portuguese health care system and can increase its performance. The paper concludes that the effective implementation of the whole reform programme will be key to achieving durable results and that, nevertheless, additional measures will be needed to further raise efficiency, reduce current cost pressures and improve health status.

*JEL classification:* I10, I11, I12, I18.

*Keywords:* Health, Portugal.

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### **La réforme du système de santé au Portugal**

Une réforme ambitieuse a été engagée en 2002 au Portugal pour accroître l'efficacité du système de santé. Contrairement aux tentatives précédentes de réformes graduelles, qui n'ont jamais été totalement mises en œuvre, la stratégie consiste à susciter un *big-bang* dans le secteur de la santé, rendant les efforts de réforme pour l'essentiel irréversibles. Cette réforme a deux objectifs principaux : améliorer la qualité des services de santé publique sans augmenter les coûts et réduire le taux de croissance sous-jacent des dépenses de santé publique à moyen terme. Les nouvelles législations incluent: la séparation des fonctions de réglementation, de financement et de prestation de services de santé publique ; la mise en place de nouvelles modalités de financement pour les prestataires, qui imposent des contraintes budgétaires plus rigoureuses ; l'introduction d'incitations en faveur de la productivité, de la gestion et de l'amélioration de la qualité; la possibilité pour le secteur privé de jouer un plus grand rôle dans la prestation de services ; et la promotion des médicaments génériques. Après avoir évalué les forces et les faiblesses du système de santé portugais avant la réforme, cette étude décrit en détail la réforme en cours. Elle montre dans quelle mesure la réforme répond aux faiblesses du système portugais de santé et peut améliorer ses performances. L'étude conclut qu'une mise en œuvre effective de l'ensemble du programme de réforme est essentielle pour obtenir des résultats durables, et que néanmoins des mesures supplémentaires seront nécessaires pour accroître plus encore l'efficacité, réduire les pressions actuelles sur les coûts et améliorer l'état de santé de la population.

*Classification JEL :* I10, I11, I12, I18

*Mots-clés :* Santé, Portugal.

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## THE REFORM OF THE HEALTH CARE SYSTEM IN PORTUGAL

Stéphanie Guichard<sup>1</sup>

1. The current system providing health care and insurance in Portugal was established in the second half of the 1970s, after the democratic revolution, as a response to very low health care coverage and poor health status of the population.<sup>2</sup> The system has succeeded in drastically improving the health status of the population and bringing it close to the European average in many respects in less than 30 years. Despite this success, numerous shortcomings have appeared, and the system faces strong pressures to adapt. In 1998, the *OECD Economic Survey of Portugal* assessed the system as “beset by serious inefficiencies and misallocation of resources”, identified the key challenges facing it and made various recommendations. A reform programme was initiated at that time, but it was short-lived. A new, more ambitious reform programme was initiated in 2002 under the pressure for fiscal consolidation with a view to further improving the quality of the health care system and raising health outcomes, while limiting health expenditure pressures over the medium term.

2. This paper first reviews the main characteristics of the Portuguese health care system at the beginning of this decade. Then, it assesses the performance of this system in terms of both equity and efficiency, highlighting areas in need of improvement. Subsequently it describes the ongoing reform process and shows to what extent it addresses the main weaknesses of the system. Although it is still early to have a complete view of the way this reform process is being implemented and of its real impact on the functioning of the health care system, the paper finishes by a tentative assessment of the reform as well as recommendations to help its success (summarised in Box 2).

### Overview of the system in the early 2000s

3. The Portuguese health care system was put in place in the late 1970s as a public-integrated model.<sup>3</sup> The insurance and provision functions are merged and health care is organised and operated by the

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1. Stéphanie Guichard is an economist in the Country Studies Branch of the Economics Department of the OECD. This paper was originally produced for the *OECD Economic Survey of Portugal* published in September 2004 under the authority of the Economic and Development Review Committee of the OECD. The author is indebted to Howard Oxley, Yutaka Imai, Andrew Dean, Jørgen Elmeskov, Bénédicte Larre, Nick Vanston and other colleagues in the OECD secretariat, for valuable comments. Special thanks go to Sylvie Toly for excellent research assistance. The paper has also benefited from discussions with numerous Portuguese experts in the Ministry of Health and other health institutions.

2. In the early 1970s, only 40 per cent of the population was covered by insurance for health care (the lowest share in Europe) and indicators of health status were far behind other European countries (for instance infant mortality, above 50 per 1 000, was twice the European average).

3. Public-integrated systems exist also in the Nordic countries, Australia (public hospitals), Italy and Greece and existed, before reforms of the early 1990s, in New Zealand and the United Kingdom. Other models are *i)* the public-contract model, where public payers contract at arms length with private or public health-care providers, or a mix of the two (this system exists in most of the remaining Continental European countries, Japan, and, since the reforms, in the United Kingdom and New Zealand); *ii)* the private insurance/provider model which uses private insurance combined with private (often for-profit) providers like in the United States or Switzerland. See Docteur and Oxley (2003).

*Serviço Nacional de Saúde* (National Health Service, NHS), which functions like any other government department. Health professionals are public sector employees paid on salary, although physicians working for the NHS are also allowed to have private practices. Well-identified strengths of the public-integrated model are its ability to ensure complete population coverage and to contain the growth of overall costs. On the other hand, such system usually provides weak incentives to improve efficiency and maintain quality and responsiveness to patients' needs (Docteur and Oxley, 2003). Since the mid-1990s, reforms have been introduced gradually and the system has been moving towards a public-contract model, with the private sector being given an increasing role. Providers to the NHS are organised into three networks: the primary health care centres, the hospitals and the long-term care units. The NHS was decentralised in 1993 and organised in five health regions, administrated and managed by autonomous Regional Health Administration (RHAs), responsible for monitoring the health status of the population, supervising the providers to the three networks, and allocating financial resources to providers, in the health region they manage (the annex reports background information, including a description of the health care system, Figure A1.1).<sup>4</sup>

4. Besides the NHS, there are several "corporatist" health insurance sub-systems financed through social contributions. They cover about one quarter of the population (mainly civil servants and employees of private financial institutions) and health care is provided either directly by the insurer or through contracts with private and/or public health care providers. People covered by these sub-systems usually also have access to the NHS services. In fact, about one fourth of the population benefit from double or triple coverage via the sub-systems inducing a waste of scarce resources.<sup>5</sup>

5. Over the past two decades, health care expenditure has increased rapidly as a percentage of GDP, from well below the OECD average to just above (Figure 1).<sup>6</sup> In particular, public expenditure, notably in hospitals and on pharmaceuticals, has grown faster than in other countries (Table 1). This trend has followed the rise in standards of living. By the early 2000s, health expenditure per capita was broadly in line with what could be expected for countries with the per capita income of Portugal (Figure 2). The financing of the expenditure combines public and private sources, with public financing accounting for more than two-thirds of total health care spending.<sup>7</sup> Ninety per cent of the NHS budget is financed by central government transfers (*i.e.* the tax system). The remaining 10 per cent comes from NHS own receipts, mainly fees for services charged by hospitals. The annual general budget establishes a ceiling for total NHS spending, usually on a historical basis. However, this initial allocation has almost never been respected and supplementary budgets have become the norm. From 1993 to 2002 spending always exceeded the initial budget by an average of 7.5 per cent (with highest overruns in 1999 and 2002, 10.8 per cent and 19.6 per cent respectively).<sup>8</sup> The bulk of private financing comes from out-of-pocket payments, which account for about one third of total health care expenditure and are particularly high for

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4. The five Regional Health Administrations are Alentejo, Algarve, Centro, Lisboa e Vale do Tejo, Norte. These regions are subdivided into 18 districts.

5. See also OECD (1998) and Oliveira and Bevan (2003) for more details. The use of the NHS patient Identity Card, mandatory since 2000, has been considered for long as a way to limit such overlapping, but it has yet to be fully implemented.

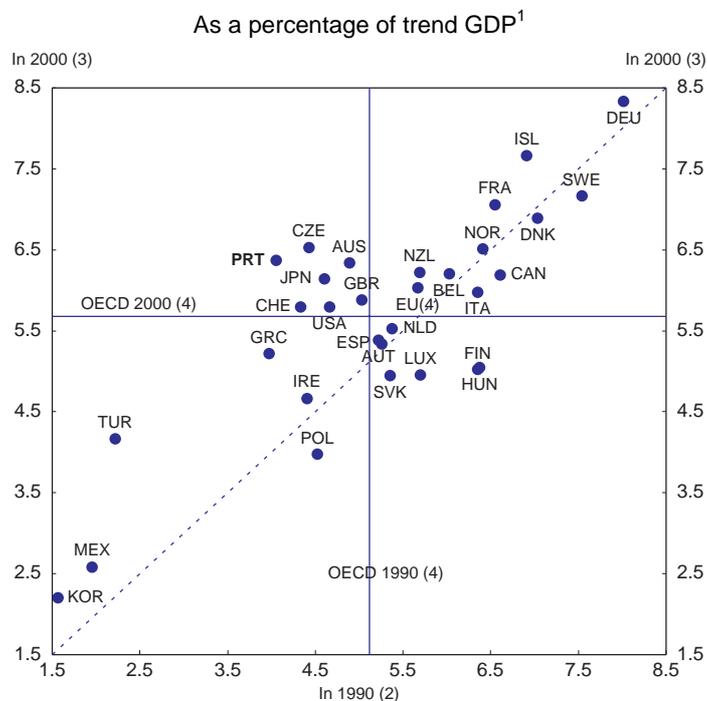
6. Total health care expenditure represented 9 per cent of GDP in Portugal in 2000 compared with 8 per cent on average in the OECD. When measured relative to trend GDP, it was about ½ percentage point above the OECD average. Based on USD purchasing power parity (PPP), Portugal's per capita spending on health care was below the EU15 average of USD 2123, and close to other EU countries, such as Greece and Spain.

7. This share does not take into account tax expenditure linked to the partial deductibility of private health expenditure, which represents between 0.2 and 0.3 per cent of GDP, according to 2000 estimates.

8. See for instance Campos (2003b).

pharmaceuticals and therapeutic products.<sup>9</sup> The role of voluntary private health insurance is still limited in Portugal (less than 2 per cent of total expenditure), but the share is increasing.

**Figure 1. Public expenditure on health care in 1990 and 2000**



1. GDP used as the denominator instead of trend GDP for the Czech Republic, Hungary, Korea, Luxembourg, Mexico, Poland, the Slovak Republic and Turkey. See Annex 4 Table A1.1 for more detailed data.

2. Data refer to 1991 for Hungary; 1992 for Germany; 1995 for Belgium; 1997 for the Slovak Republic.

3. Data refer to 1997 for the Netherlands.

4. Unweighted average; includes all available countries at the relevant point of time.

Source: OECD Health Data, 2004; OECD, *Economic Outlook* No.75 (June 2004).

9. There are no official data concerning the share of out-of-pocket spending in total health expenditure. Estimates range between 25 and 35 per cent, substantially higher than the 18.7 per cent OECD average. Drugs and therapeutic products account for more than half of out-of-pocket payments. The co-payment on drugs generally varies from 40 to 100 per cent, depending on the therapeutic value of the drug.

**Table 1. Categories of health spending<sup>1</sup>**  
Per cent of GDP

	1980	1985	1990	1995	2001
Hospitals	1.6	1.6	2.0	2.8	..
Public	1.5	1.4	1.8	2.6	..
Private	0.2	0.3	0.2	0.2	..
OECD average	3.4	3.3	3.3	3.3	3.1
Ambulatory care <sup>2</sup>	1.4	1.6	1.5	1.8	..
OECD average	1.1	1.3	1.3	1.4	1.5
Pharmaceutical goods	1.1	1.5	1.5	1.9	2.0 <sup>3</sup>
Public	0.8	1.0	1.0	1.2	..
Private	0.3	0.5	0.5	0.7	..
OECD average	0.9	0.9	1.0	1.2	1.4

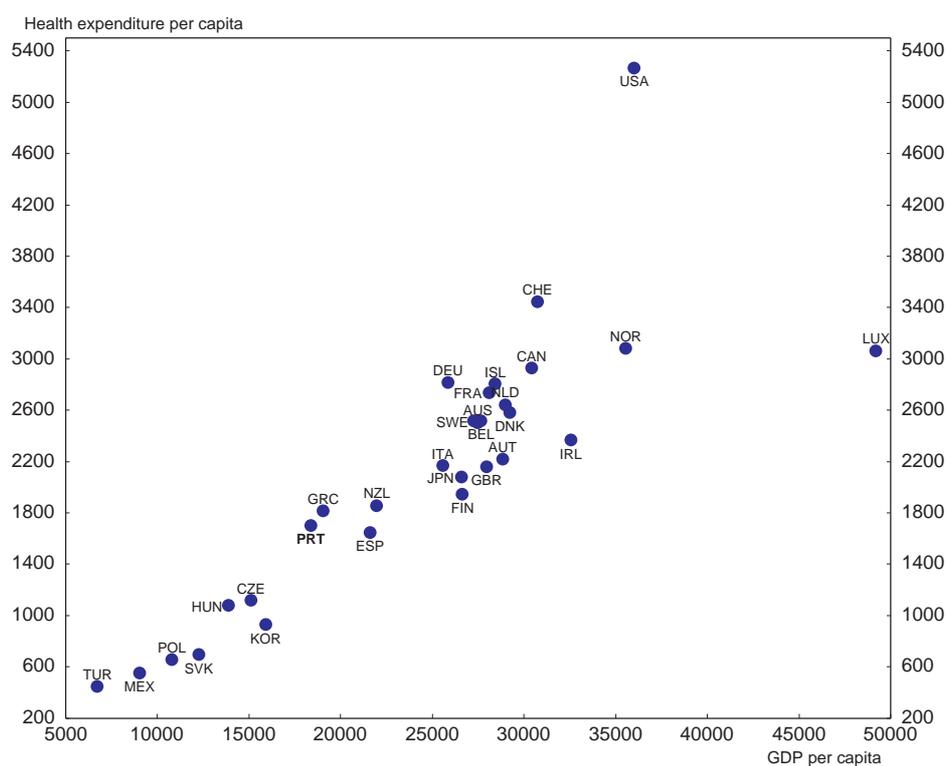
1. Total does not match total expenditure numbers since some items have been omitted in the breakdown.

2. Public expenditure.

3. 1998.

Source: OECD Health Data, 2004.

**Figure 2. Per capita health expenditure and per capita GDP<sup>1</sup>**  
In USD PPP



1. In 2002 or latest year available.

Source: OECD Health Data, 2004.

## **Performance of the system**

6. The performance of the Portuguese health system has to be assessed against both equity and efficiency objectives. The former covers equity of financing and of access to health services across the population.<sup>10</sup> Efficiency encompasses: spending an adequate share of GDP on the health care system (macroeconomic efficiency); and maximising productive efficiency, quality of care and the responsiveness of the system (microeconomic efficiency).

### *Some inequities persist in access to health services*

7. The Portuguese system is based on the principle of universal coverage and was conceived with equity as a main policy objective. Nevertheless, there remain some shortcomings as regards both equity of access and equity of financing.

### *Health services are not well distributed*

8. The geographical distribution of health services is uneven. Medical facilities (hospitals and high technology equipments) are concentrated in three main urban areas (near Lisbon, Porto and Coimbra) leaving the central part of the country under-served (particularly for high-technology equipment<sup>11</sup>). With doctors and nurses concentrated on the coastal areas, human resources are in short supply elsewhere. Inadequate service levels are particularly notable in rural as well as low-income urban areas (see Annex 4 Table A1.2). Oliveira and Bevan (2003) show important geographical inequities by comparing actual resources levels with estimated needs reflected by a capitation formula including population, gender, age, and mortality. However, no official reliable measure of geographic inequities has been designed that could be used to develop and assess corrective measures.

9. Although the uneven distribution reflects weak incentives for staff to work in underserved areas,<sup>12</sup> the problem is compounded by the overall deficit in the number of some categories of health care professionals. In particular, while there seem to be enough practicing doctors overall, nurses, technical personnel, as well as general practitioners (GPs) or specialists in obstetric, paediatric and emergency care are in short supply. An increasing number of positions have been filled by foreign professionals, mainly from Spain and Brazil, but shortages persist. Most doctors also work in the private sector to complement their flat-rate remuneration in the public sector, which limits further the resources available in the public sector (in terms of working time).<sup>13</sup> Perceived low flat-rate pay is also reflected in weak doctor productivity when working in the public sector. The ageing of health professionals and more than a decade of low *numerus clausus* are expected to intensify the short supplies of doctors starting in the mid-2010s

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10. An equitable health care system allocates health care services across the country in line with needs, does not distribute the burden of paying for health care in a regressive manner, and provides high-risk groups with adequate access to health care at favourable rates.

11. For example, the National Health Plan (NHP) mentions the case of linear accelerators for cancer treatment that are largely unavailable in central areas of the country.

12. It is only during the internship period that financial incentives are provided to doctors working in understaffed hospitals.

13. If overtime payments, which make up a large proportion of income (about one fifth of a doctor's remuneration on average in 1999), are taken into account, the total income per doctor is high in comparison with the average wage. However, in general, doctors perceive their salaries to be relatively low. (See European Observatory on Health Care, 2004).

when an increasing number of doctors retire.<sup>14</sup> Once again, low-income urban areas and some rural areas are likely to be the most affected.

10. The lack of certain categories of health professionals, combined with factors reducing the system's productivity (see sections below), has another unfavourable impact on equity. Waiting times to access public health care have become increasingly long in the last decade, above acceptable levels for elective surgery,<sup>15</sup> but also high for access to a GP or a specialist, as pointed out by patient surveys. As in most countries, this form of rationing creates inequities across the population with well-off members of the population able to avoid waiting lists for NHS services by paying for private providers or even by getting treatment and surgery abroad, sometimes making timely access to health services dependent on the patients' ability and willingness to pay.

#### *The financing of health care is regressive*

11. As mentioned above, the important share of co-financing for health care, pharmaceuticals in particular, results in relatively high private expenditure on health, especially when compared with other countries with public-integrated systems like the Nordic countries or Italy. The partial tax deductibility of private health expenditure, which benefits mainly higher income households, tends to amplify this regressive feature. De Graeve and Van Ourti (2003), using the 1990 household survey, find that Portugal is in the group of European countries where the distribution of health care payments is regressive (mainly because of out-of-pocket payments). A cross-country comparison of equity in access to physicians and dentists and for hospital care was performed in 2003 for 21 OECD countries in the context of the OECD Health Project. It showed that the distribution of the probability of at least one annual doctor visit (GPs and specialists combined) was significantly 'pro-rich' in Portugal.<sup>16</sup>

#### *Disadvantaged and high-risk groups are not fully protected*

12. Many OECD countries have exempted the poor and other vulnerable groups from cost sharing in public programmes and/or have set ceilings on annual charges. In Portugal, poor pensioners benefit from lower co-payments for pharmaceuticals (see below Table 4) and the chronically ill are exempt from co-payments for specific medicines related to their illness.<sup>17</sup> Besides that, there are no specific programmes or exemptions to attenuate the regressive effect of high co-payments for low-income groups.

#### *Efficiency could be improved*

13. Public integrated systems, such as the one in Portugal, typically face problems of inefficiency and low responsiveness to patients needs. In particular, weak budget constraints and a lack of management autonomy and accountability tend to exacerbate inefficiencies in the NHS and provide poor incentives for productivity and quality. Due to limited data availability, it is not easy to assess the efficiency of the

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14. The *numerus clausus* for doctors went down from 800 in the late 1970s to below 200 in the mid-1980s and remained in the range 400-550 in the 1990s. Since 2002, it has been raised above 1 000 (see below). See *Grupo e Missão para a Saúde* (2001). The problem is even more acute for emergency services where doctors older than 55 are not permitted to work. (The statutory retirement age in Portugal is 65 years).

15. It was estimated that the average waiting time of the 123 000 people on the NHS waiting list for elective surgery in 2002 was six years (see below).

16. See Framework paper ECO/CPE/WP1(2003)10 -- Figure 1. Only two countries were found to have more "pro-rich" health care than Portugal: Sweden and the United States.

17. Anti-diabetics, anti-epileptics, anti-Parkinson's, anti-neoplasm and immuno-modulators, growth and anti-diuretic hormones, specific drugs for haemodialysis, cystic fibrosis treatments, glaucoma treatments, haemophilia treatments and anti-tuberculosis and anti-leprosy drugs are fully paid for by the NHS.

Portuguese health system and compare it with other OECD countries.<sup>18</sup> Nevertheless, several studies have concluded that overall efficiency is low and needs to be increased. (see for instance OECD, 1998 and St. Aubyn, 2002).

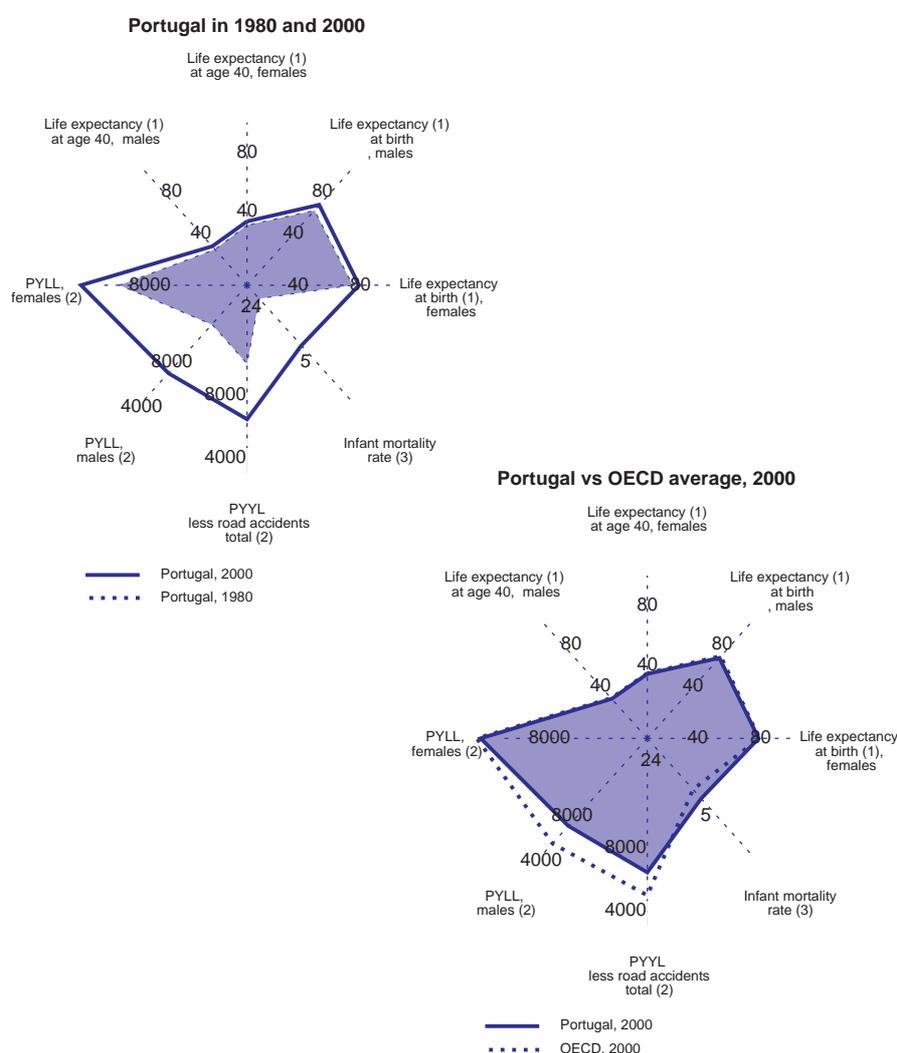
14. Increased expenditure on health care has gone together with an impressive reduction in the gap in health status *vis-à-vis* the rest of the OECD, especially regarding years of potential life lost and infant mortality (Figure 3 and Annex Figure A1.2). Nevertheless, although data availability is limited, it seems that in some respect Portugal's health status has improved in parallel to other OECD countries but that Portugal remains among the worst performing countries and is still lagging most other EU countries in several areas. While much lower than two decades ago, tuberculosis incidence at 38.8 per 10 000 inhabitants in 2001 (half the incidence in the late 1970s) remained well above EU average (15 member countries). There is also some evidence that clinical outcomes lag other countries. For instance although incidence of cancer is lower than the EU average,<sup>19</sup> according to Campos (2003b), mortality from cancer is close to the EU average and cancer mortality for patients affected by the disease for five years is higher than in most European countries.

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18. The lack of data on the system efficiency also limits the ability of the authorities to monitor and improve the performance of the health sector. In addition, it affects more directly the efficiency of the system by making epidemiological surveillance difficult. Several actions have been taken in recent years to improve health data availability. Information efforts are being made to collect data according to System of Health Account (SHA), and new data set are planned for 2005. In 2003, a national survey about Health of Youth in School (between 11 and 19) was launched; data should be available in 2004. Lastly, the Institute for Financial Management and Informatics, IGIF, coordinates the implementation of the OECD health account manual (output expected by end-2006).

19. See European Commission (Eurostat) (2002).

Figure 3. Portugal health status



Note: A larger surface denotes more favourable status.

1. In years.

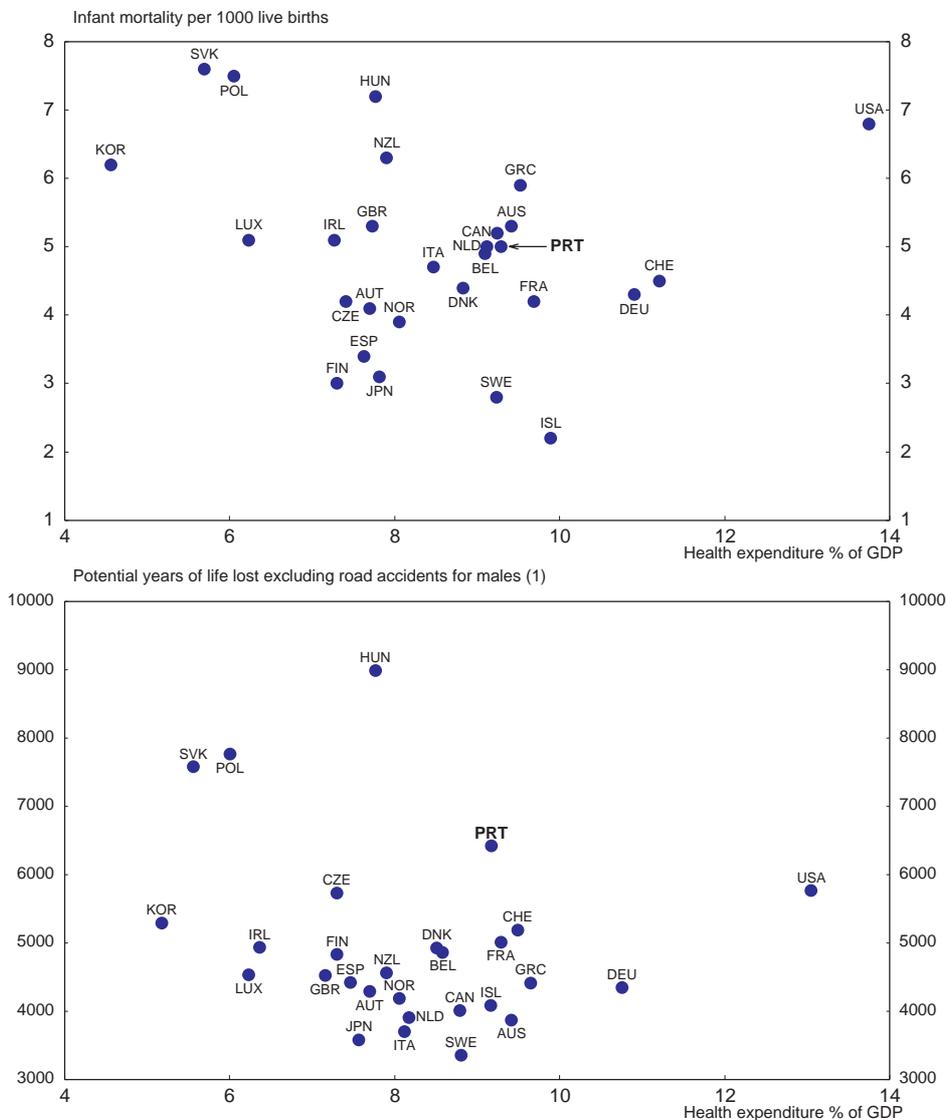
2. PYLL: Potential Years of Life Lost. Reversed scales. Rates per 100 000. OECD average excludes Belgium, the Czech Republic, Iceland, Korea, Mexico the Slovak Republic and Turkey. The Potential Years of Life Lost (PYLL) is a summary measure of premature mortality which provides an explicit way of weighting deaths occurring at younger ages (before 70 years), which are, a priori, preventable.

3. Reversed scale. Deaths per 1 000 live births. OECD average excludes Korea and Mexico.

Source: OECD Health Data, 2004.

**Figure 4. Expenditure and health status in OECD countries**

In 2002 or latest year available



Note: No data available for Mexico and Turkey

1. Males aged less than 70. For the definition of potential years of life lost see Figure 3.

Source: OECD Health Data, 2004.

15. In fact, most countries that channel a similar level of resources into the health sector achieve superior results and some other countries, including Spain and Italy, achieve the same or better results with less spending (see Figure 4). To some extent, this might reflect the fact that these countries have been spending this amount of resources for longer, so that cumulative spending is higher than in Portugal, as well as the presence of other factors than health care (including lifestyles) affecting negatively health status in Portugal. However, it also suggests that Portugal’s health sector might suffer from a lower degree of efficiency and that there is potential room for increasing health status via better health outcomes without necessarily increasing expenditure.

16. Levels of consumer and patient satisfaction are taken more and more into account by countries when assessing their health care system responsiveness. In the late 1990s, the Portuguese population was the most dissatisfied in Europe with its health care system.<sup>20</sup> This dissatisfaction, which seems somewhat in contradiction to the progress made in the last two decades, concerns in particular public hospitals and primary health care centres, and is largely related to waiting time, reception and equipment. Recent national surveys suggest that the degree of satisfaction has improved only moderately. In an attempt to address this quality issue, an Institute for Quality in Health (*Instituto da Qualidade em Saúde*, IQS) was created in 1999. It is in charge in particular of a voluntary accreditation programme of hospitals and primary health care centres financed with EU funds.<sup>21</sup>

17. Measures to increase health outcomes, and thereby status, without necessarily increasing expenditure are all the more necessary in the light of tight budget constraints and pressures on spending that are likely to arise in the future.

With an ageing population, as in other OECD countries, pressures on public spending will intensify. Ageing will require progress in areas where Portugal does not perform well compared with more advanced countries, such as cancer treatments and long-term care. Not taking into account needs for long-term care, the Portuguese Ministry of Finance estimates that the increase in health expenditure by 2050 will be pushed up by an additional 1 to 2 percentage points of GDP depending on assumptions on GDP and population growth (see Caldas and Rodrigues, 2003 and OECD, 2004).

Technological progress has been a major driver of health-care costs and, if this pattern continues, there will be an additional pressure on expenditures. Such pressure will be all the more important in Portugal as the standard of technical equipment is still much below the OECD average and high-cost equipment such as imaging devices is still in short supply.<sup>22</sup> However, there is no explicit policy to deal with this issue as no system to assess cost-effectiveness of new technologies has been put in place, except in the area of pharmaceuticals.

In a context where the authorities aim at lowering tax rates, a way to reconcile budget constraints and increasing demand for health is to improve efficiency at the micro level, by maximising the output of health-care services, the quality and the health outcomes with a given level of resources and costs.

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20. See European Commission (Eurostat) (2002). These results need to be balanced by two surveys of health care users. The 2002 survey by the *Ordem dos Farmacêuticos* shows a somewhat higher satisfaction, but does not provide international comparisons. (See *Ordem dos Farmacêuticos* (2002) “*Os que os Portugueses pensam dos Serviços de Saúde*”). See also *Fundação Antero de Quental* (1999) “*Sondagem Nacional sobre a Prestação dos Serviços de Saúde*”. Key problems identified in this survey regarding health care centres and hospitals concern the waiting time, the organization and lack of doctors, while the technical ability of professionals was assessed as good.

21. Twenty-one hospitals are participating into the accreditation programme and three hospitals have already received full accreditation. According to the IQS (*Instituto da Qualidade em Saúde*), the programme has already led to significant progress in terms of safety as well as efficiency. The Ministry of Health is planning to launch a parallel accreditation programme to complement work done by the IQS. The IQS is also in charge of a project setting principles for the management of inputs and processes leading to quality of results in the form of a self-regulatory strategy by the management board at each health centre (The *MoniQuOr.CS*, launched in 1998). Finally, it is also in charge of issuing norms for the preparation of clinical guidelines.

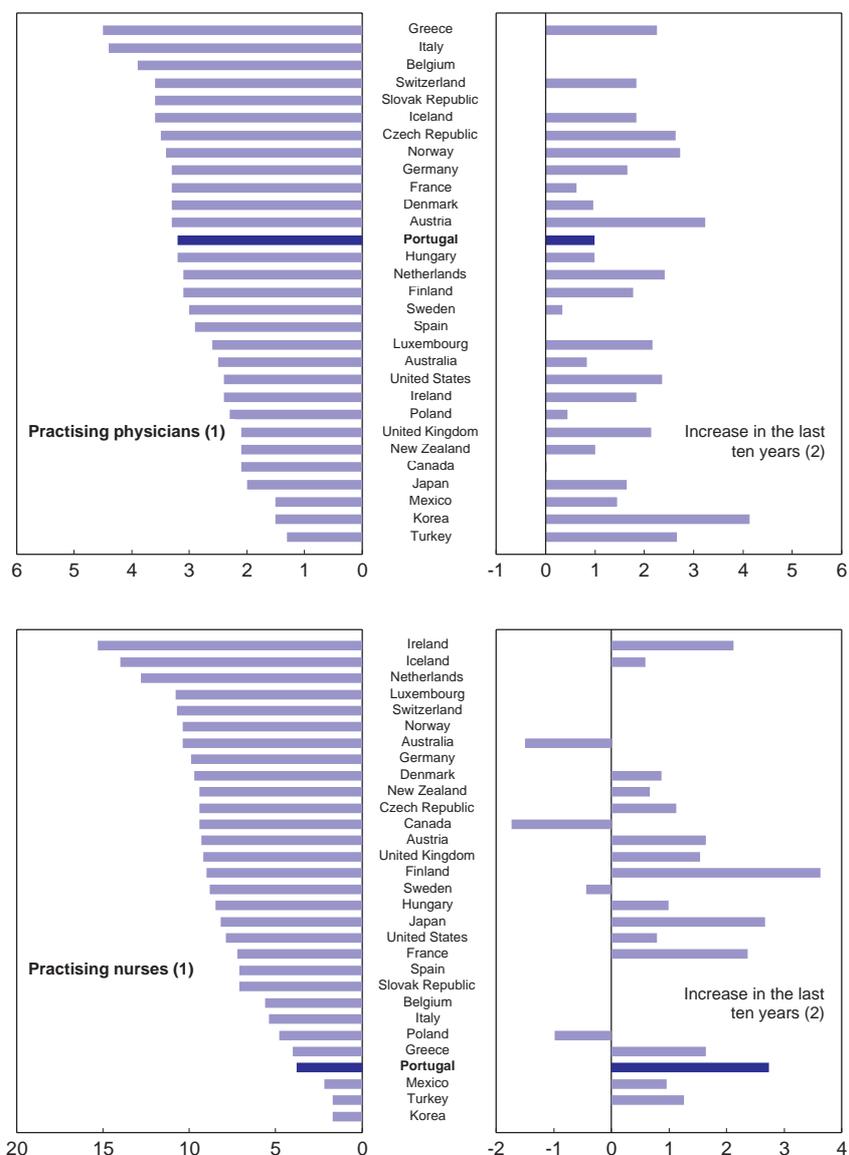
22. Medical technology equipment per million inhabitants is still well below the OECD average. It is the case for computed tomography, magnetic resonance imaging scanners, radiation therapy equipments, lithotripters, and mammography equipments (see OECD, Health data, 2003).

18. Lack of information by sectors or units limits the analysis of productivity in the NHS. A few quantitative studies, such as St. Aubyn (2002), have nevertheless concluded that the sector displays inefficiencies and that the same expenditure level could buy better health than is currently the case. Potential productivity gains in the hospital sector are estimated to range from 10 to 20 per cent depending on the methodology (Pita Barros, 2003). This view is broadly shared by most health specialists in Portugal based on day-to-day observations. A rough illustration can be given by comparing the key resources used in the production of health care (acute-care beds, high-technology equipment, labour input, pharmaceutical drugs) with total spending on health care across the OECD (Figures 5 and 6 and Annex Table A1.3). It shows that resources available are generally lower in Portugal than the OECD average except for pharmaceuticals, while spending is not. In particular, while resources used in the production of health care are much lower than in Italy or Finland, overall health care expenditure as a share of GDP is higher in Portugal (Figure 7). These findings might partly reflect relatively more expensive high-tech equipment in Portugal (given its lower GDP per capita), but they might also indicate scope to improve micro-efficiency.<sup>23</sup>

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23. Another indicator of low productivity could be the low number of NHS consultations per capita (3.4 in 1997, one of the lowest in the OECD) despite an above average number of doctors per capita, in a context where there is significant waiting time to see a doctor in the NHS. These data need however to be interpreted with caution since they say little about the relative quality of care, the length of consultations or outcomes. Moreover, they also reflect the fact that most doctors work only part time for the NHS, the rest being devoted to private practices which is not included in the data.

**Figure 5. Practising doctors and practising nurses**  
In 2002 or latest year available

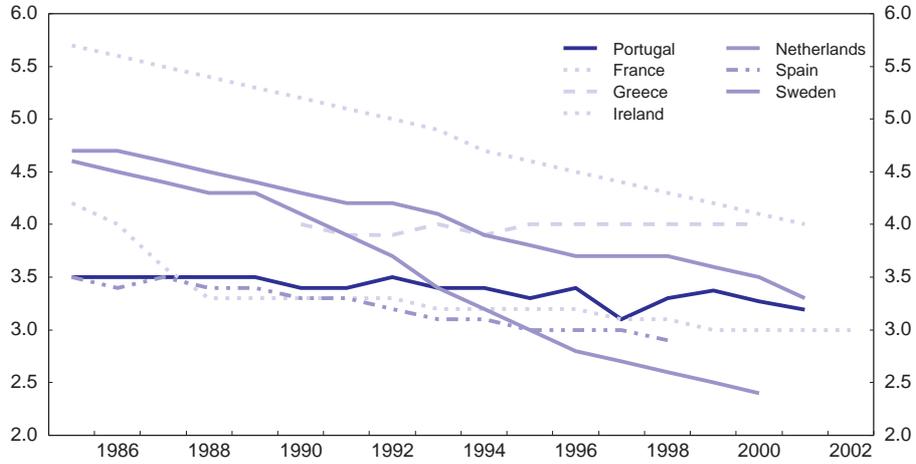


1. Per 1 000 population.

2. Average annual percentage change (when available).

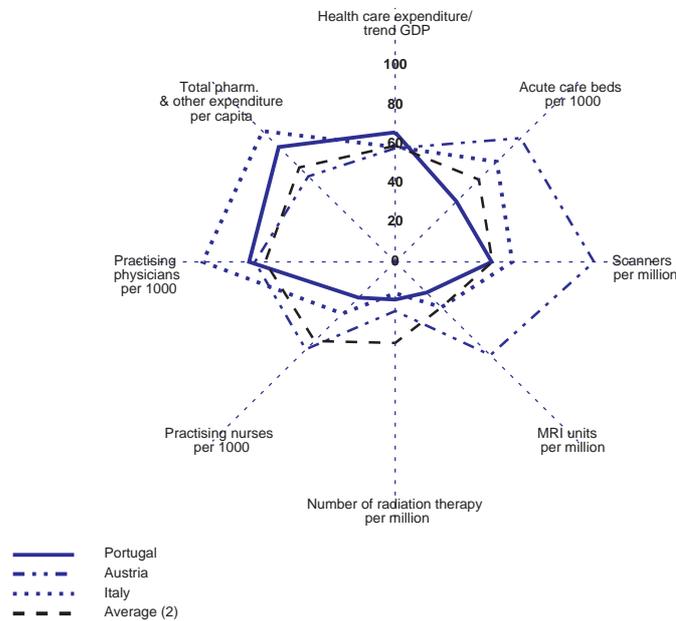
Source: OECD Health Data, 2004.

**Figure 6. Trends in acute care beds in selected OECD countries**  
Per 1 000 population



Source: OECD Health Data, 2004.

**Figure 7. Resource use in health care supply in Portugal and selected OECD countries**  
In 1997



1. A larger surface denotes more favourable outcome. Data are shown relative to the highest OECD value in 1997.

2. Average of OECD countries for which the specific items are available in 1997.

Source: OECD Health Data, 2004.

19. Besides efficiency problems typical of countries with public-integrated systems, there are additional features of the Portuguese system that may have amplified these problems. In particular, Portugal remains one of the few EU countries where performance is not at all taken into consideration in the remuneration of the health professionals in public ambulatory and hospital sectors. Doctors and nurses employed by the NHS are paid on a fixed salary according to their professional category and length of service, irrespective of productivity, providing no individual incentives to improve performance and quality. Another major source of inefficiency is the lack of integration between the different NHS provider networks, *i.e.* health care centres, hospitals, pre-hospital emergency, long-term care. The disconnection concerns both administrative and clinical procedures. It might result in a duplication of acts, with most tests already done at the primary care level repeated once the patient enters a hospital. The GP's role, including his ability to provide the follow-up care that the patient requires after hospital treatment, tends to be weakened because the GP does not always receive a report of the outcomes and diagnostics for follow-up.

20. Moreover, prevention seems to have a lower role than it deserves in Portugal. Defining the appropriate balance between prevention and cure is delicate, but it seems that the overall system efficiency might be improved by increased attention to information and prevention. Important progress has been achieved regarding vaccination against communicable diseases, but improvement in other areas is needed. Portugal has now the second highest AIDS incidence in the OECD and it is the only country where no significant decline in incidence has been recorded since the early 1990s' peak. As mentioned earlier, the fact that delayed detection contributes to a lower than EU average cancer survival rate for patients affected by the disease for five years (Campos, 2003b) calls for more active information and detection campaigns.

21. Finally, the system creates incentives for high demand. Patients face only a low marginal cost, apart from their own time, for obtaining a "second opinion", resulting in a duplication of diagnostic tests and prescriptions. Both the overlapping of NHS and insurance sub-systems and the partial deductibility of health care expenditure from taxable income contribute to the problem.

### **The ongoing reform of the health care system**

22. The need to improve the health care system has been clearly identified by the authorities for several years but attempts of reforms launched in the late 1990s and early 2000s did not survive the political cycle and were never fully implemented.<sup>24</sup> A comprehensive reform of the health care system was undertaken in 2002. In contrast with past reform programmes, which were rather gradual, the strategy now is to create a "big bang" in the health sector, making reform efforts essentially irreversible. New legislation has been approved separating functions of regulation, financing and provision of health care, setting up new models of financing (implying harder budget constraints), improving management, introducing incentives towards productivity and quality improvement, increasing the role of the private sector, and promoting the use of generic drugs. The trend towards a public contract model has therefore been accelerated. In addition, the authorities have been preparing a 10-year framework aiming at continuing to improve the health status of the population by integrating in the health strategy factors of health that are not linked to the health care system and defining guidelines for the future steps of the system reform. A strategic document was made public in 2003 as a basis for a wide public debate involving all actors

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24. For instance, in 1998, a new regulatory framework was approved, creating management teams for primary health care centres (the "third generation health centres") with greater autonomy and financially accountable. However, this reform was only implemented on a pilot basis. A voluntary Experimental Remuneration Model (RRE) for GPs involving 500 doctors was also launched in 1998. It included adjusted "capitation" income and a system of bonus for the completion of specific health care episodes (such as pre-natal surveillance). Another pilot project, at the *Unidade Local de Saúde de Matosinhos*, near Porto, has grouped together the town hospital and four primary health care centres. These pilot-experiences have shown positive results.

including the civil society. Subsequent to this debate, a final version was presented to parliament and approved. The sections below describe the main issues for each sector of the health care delivery system as well as ongoing efforts to address them.

### **Primary care**

#### *Issues in primary care*

23. Primary care plays a key role in health care since it is usually the first contact point for the population. Its role and organisation are therefore critical for the overall efficiency of health-care systems. In Portugal, primary care is organised around primary health care centres (created in 1979). People are free to choose a GP (general practitioner or family doctor) from a health centre within their residential area with whom they have to register. The GP plays then the role of gatekeeper, referring, when needed, his patients to public hospitals or private specialists approved by the NHS. Centres are directly run by the 18 districts which are part of the RHAs and do not have any financial or managerial autonomy.<sup>25</sup>

24. Several problems have been identified regarding the primary health care centres that the reform to be implemented from 2004 will try to address.

*Global resource allocation within the health care system is not favourable to primary care.* With hospitals' wage bills and medical fees claiming the bulk of resources, health centres have typically been under-equipped, and under-endowed in terms of high quality staff, especially in poor regions.

*The allocation of these scarce resources is sub-optimal.* The absence of financial and managerial autonomy, combined with the bureaucratic rules governing the centres, has led to inefficient patterns of service, for instance as regards consultation management and scheduling (for example medical appointments cannot be scheduled by phone in many centres). Organisational weaknesses are reinforced by lack of certain types of professionals. In particular, the shortage of nurses limits the ability to organise activity in multidiscipline teams and to develop home support programmes. Moreover, the shortage of administrative staff makes it difficult to improve organizational support.

*Primary care supply is insufficient.* A substantial number of Portuguese (about 1 million people *i.e.* 10 per cent of the population) are waiting to be enlisted with a GP.<sup>26</sup> While the number of specialists per 1 000 inhabitants is among the highest in the OECD, the number of GPs is below the OECD average (see Figure 8) and they have to devote a significant part of their working time to administrative tasks.<sup>27</sup> Overtime by GPs tends to represent an important share of expenditure. While patients are

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25. There are 363 primary health care centres in Portugal with an average of 84 health professionals per centre (including 20 doctors and 19 nurses). Following the integration of social welfare medical services into the National Health Service in the early 1980s, some health centres also provide specialized care (mental health, psychiatry, dermatology, paediatrics, gynaecology and obstetrics and surgery). The Ministry of Health allocates funds to the RHAs, which in turn determine the budget of each centre mainly on a historical basis. A council headed by a doctor, and comprising a nurse and an administrative member, is in charge of day-to-day management.

26. According to a **survey** carried out by the RHAs.

27. In Portugal, general practice is in fact a speciality, requiring a specific training. In this study "specialist" refers nevertheless to physicians that are not GPs. In primary health centres, they can be offered three types of contracts: 35 hours of practice + private practice, 35 hours of exclusive practice + a bonus of 20 per cent, 42 hours of exclusive practice + a bonus of 20 per cent. It is estimated that around 15 per cent of the working time of GPs is assigned to administrative tasks. The same types of contract are used in hospitals.

usually satisfied by the quality of care received in health centres and their relationships with the GPs, waiting time and low accessibility are often mentioned as an issue by patient surveys.

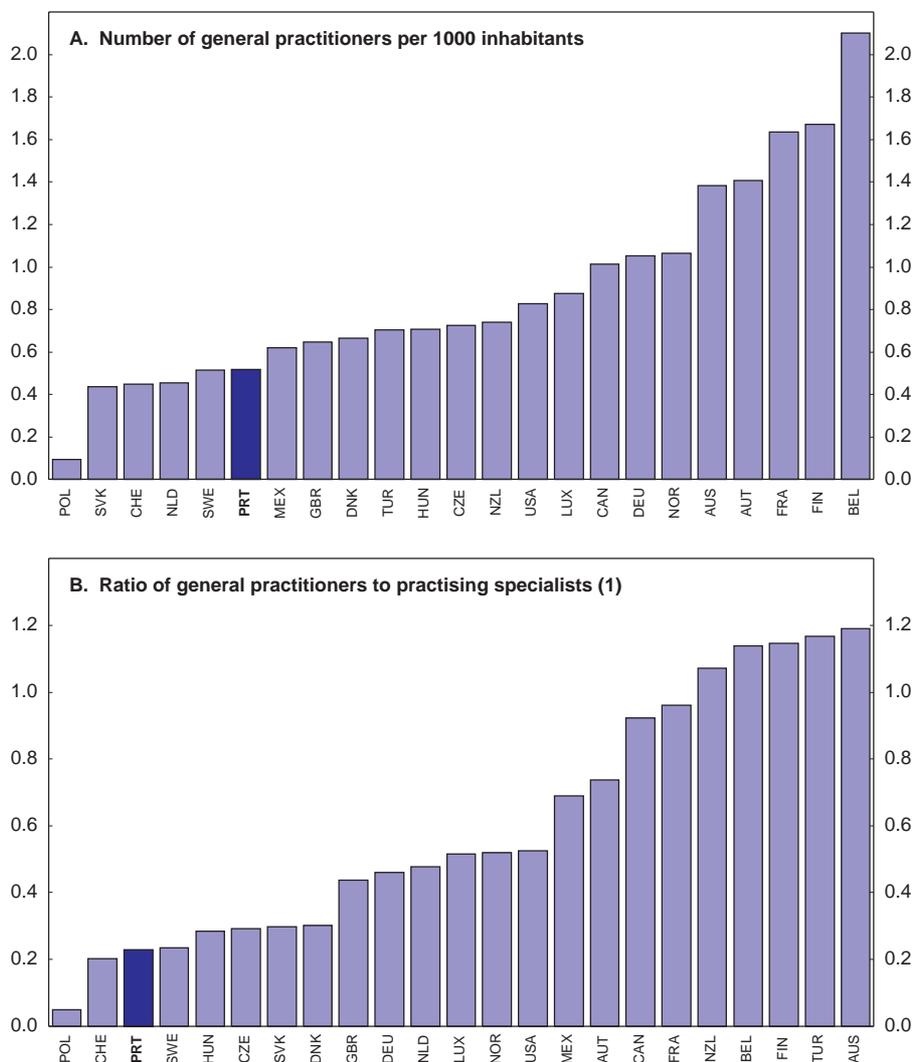
*The gate-keeping system by GPs has had some unwelcome effects.* While assigning a gate-keeping role to GPs usually encourages continuity and permits primary care doctors to filter and co-ordinate care, in many countries, gate-keeping has also been shown to reduce patient's choice, and hence satisfaction, potentially leading to duplication of visits and delays whenever a specialist consultation is deemed appropriate. This is especially the case when, as in Portugal, the primary care network is poorly coordinated with hospitals. As a response to delays in obtaining consultations with specialists,<sup>28</sup> many people go directly to emergency departments in hospitals. It is estimated, that around one quarter of the people going to hospital emergency units do not need immediate care.<sup>29</sup>

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28. According to a survey published in 2004 by *Teste Saúde*, 20 per cent of patients referred to hospitals for an urgent specialist consultation and half the patients referred for a non-urgent specialist consultation had to wait for two months to see the specialist.

29. See Bentes *et al.* (2004).

**Figure 8. General practitioners and practising specialists**  
In 2002 or latest year available



Note: No data available for Spain, Greece, Ireland, Iceland, Italy or Japan.

1. This ratio should be treated with caution because of the lack of standardisation of speciality boundaries across countries.

Source: OECD Health Data, 2004.

*Ongoing reforms*

25. New legislation to address these issues was approved in April 2003,<sup>30</sup> but its implementation was postponed until after the Health Regulatory Agency was to start its activity (see below). It provides a general framework making new forms of management and financing possible (including capitation). This general framework is supposed to be completed by additional legislation by 2005. It foresees a new model for health care recognising that activities of management and coordination must be financially rewarded,

30. Decree Law 60/2003.

and that the accountability for professional performance (both managers and health professionals) requires strengthening. In particular, it foresees:

*The introduction of new financing arrangements of the health care centres based on a weighted per capita basis as of 2004.* The calculation of capitation will be based on the size of the population using each centre, the demographic structure of this population, the degree of dependency of the users (number of pregnant women and patients with disabilities), and the geographic accessibility to the nearest hospital.

*The setting up of performance indicators to be published regularly.*

*Changes in the management of centres.* The three-member council will be replaced by a single manager (preferably a doctor) appointed for three years by the Ministry of Health after proposition by the regional administrations RHAs.

*The introduction of individual work contracts and the possibility to introduce capitation and performance components in remunerations.* The scheme will be based on lessons to be drawn from the assessment of the Experimental Remuneration Model (RRE) experience that has been extended till end-2004. Payment of doctors could be based on capitation as well as performance. Such an approach may improve the incentives to increase efficiency, which are weak in pure capitation arrangements and maybe too strong in pure performance based systems.

*Possibilities for centres to be managed by private (profit or non-profit) entities.*

26. Another important aspect of the reform is to open the door for more and better integration of the primary care network with hospitals, which should help avoid duplication of tests and excessive use of hospital emergency services. Pilot projects have been launched to create computer networks between the two systems.<sup>31</sup> This is however at a very early stage and the new framework, while making integration easier, only considers this approach as an option.

27. Fifteen short-term initiatives to improve quality, access, and efficiency have already been implemented in a few pilot centres before being generalised. These include: the possibility of making medical appointments by phone; automatic referral of patients to hospital consultations; improvement of patient reception; removing more systematically patients that moved (or died) from the GP lists so as to integrate new patients; personal identification cards distributed to all users of health centres (ongoing); exchange of information on know-how and relevant experiences through the network of primary health care units. The new possibility of renewable prescriptions should also help reduce waiting time to get an appointment by reducing frequency of some patients' visit to their family doctors. First evaluations of these new pilot experiences are not yet available.

## **Hospitals**

### *Keys issues*

28. The hospital sector accounts for about half of NHS expenditure. Some progress was made in making budget allocations more therapy-based, including the introduction in 1997 of a case-mix system based on a diagnostic related group (DRG) approach. This system, which concerned less than one third of hospitals' initial budget allocation in 2000, concerned about half in 2002. Some pilot experiences to

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31. Financed by European funds under *Saúde XXI* a seven-year programme (2000-06) that receives financing of two European structural funds (FEDER and ESF). For more details see [<http://www.saudexxi.org>].

improve management were also launched in the mid-1990s.<sup>32</sup> As in most OECD countries, there has also been a trend to increase productivity, as shown by rising bed occupancy since 1990 and declining length of stay in hospital (Table 2 and Figure 9).

**Table 2. Hospital indicators**

	1985	1990	1995	2002 <sup>1</sup>
<b>Average bed occupancy for acute care (per cent of available beds)</b>				
Portugal	67.7	66.7	72.6	69.9
United States	64.8	66.8	62.8	65.7
Germany	84.1	84.4	83.3	79.9
France	79.1	77.3	76.0	75.2
Italy	67.9	69.3	70.7	76.0
United Kingdom	76.1	..	79.0	84.0
Greece	66.0	63.2	62.1	68.0
Ireland	75.9	84.5	82.5	84.4
Spain	72.2	73.5	76.4	77.1
Unweighted average	72.6	73.2	73.9	75.6
<b>Average length of hospital stay for acute care (number of days)</b>				
Portugal	11.1	8.4	7.9	7.3
United States	7.1	7.3	6.5	5.8
Germany	18.0	16.7	14.2	11.6
France	8.6	7.0	6.2	5.7
Italy	..	9.5	8.4	6.9
United Kingdom	8.1	5.9	7.0	6.9
Greece	8.9	7.5	6.4	6.3
Ireland	7.4	6.7	6.6	6.4
Spain	10.1	9.6	8.8	7.1
Unweighted average	9.9	8.7	8.0	7.1

32. An experience of private management of a public hospital was launched in Hospital Fernando Fonseca Amadora Sintra in 1996. This experiment was close to that of a public-private partnership, PPP, in the sense that the business risk was transferred to the private sector. New management techniques were introduced at Hospital de São Sebastião in Santa Maria da Feira (in 1998) or more recently at Nossa Senhora do Rosário near Lisbon. Both experiences have resulted in efficiency gains. See OECD (2003) Box 7 for more details on the experiences. A recent report by the “Tribunal de Contas” highlights the good results of Hospital de São Sebastião over 1999-2001 concerning both productivity and quality.

**Table 2. Hospital indicators (continued)**

<b>Hospital discharge rate (per 100 000 population)</b>			
	1990	1995	2002 <sup>1</sup>
Portugal	6 813	8 601	7 797
United States <sup>2</sup>	12 334	11 538	9 808
Germany	..	18 159	19 730
France	..	23 370	25 211
Italy	..	15 209	14 677
United Kingdom	..	..	25 153
Greece	12 599	14 321	15 919
Ireland	..	11 460	12 277
Spain	9 502	10 697	10 728
Unweighted average	..	14 169	15 478

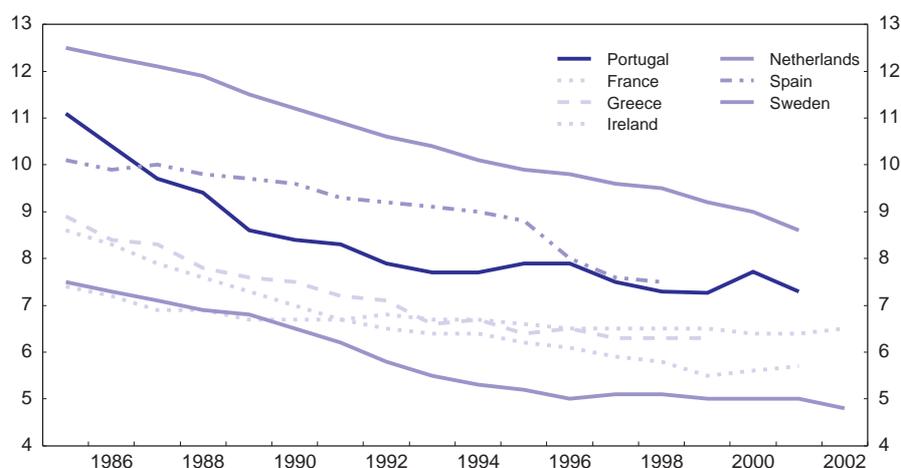
Note: For definitions and limits on cross-country comparability, see OECD Health Data, 2004.

1. Or latest year available.

2. Includes same-day separations.

Source: OECD Health Data, 2004.

**Figure 9. Trends in average length of stay in acute care in selected OECD countries**  
Number of days



Source: OECD Health Data, 2004.

29. Several weaknesses in the management of Portuguese hospitals were identified in the early 2000s.

*There was no effective hard budget constraint on public hospitals.* Budget allocation was based mostly on historical figures; and, in practice, the NHS directly and passively covered most unexpected expenditure by supplementary allocations. Administrative penalties for excess spending were

increasingly applied, but remained rare. As a result, control of current costs was weak and the debt to suppliers, especially to the pharmaceutical industry, kept on climbing.<sup>33</sup>

*Quality control was absent.* There were no standardised information systems that could have enabled the monitoring of the performance of managers and institutions. At the same time, managers and administrators were not given incentives to improve hospital performance, and had limited management autonomy, notably concerning staff policy.

*Hospitals suffered important staffing problems.* The inflation of current costs, in the absence of effective budget constraints, has contributed to crowding out investment in capital equipment and new recruitments in understaffed areas so as to limit budget targets overshooting. While doctors per bed have been above the OECD average for many years, the number of nurses has remained close to half the OECD average affecting the efficiency and quality of care.

*The waiting list for non-urgent surgery for NHS patients was getting longer and longer.* It is estimated that in July 2002, 123 000 people (1 per cent of the population) were on a waiting list with an average waiting time of about six years. Siciliani and Hust (2003) using cross-country analysis for 12 OECD countries show that long waiting times tend to be positively associated with lower capacity (number of beds or practising doctors) and lower health spending. Salaried remuneration of doctors, that gives little incentive for productivity, and fixed budget for hospitals also tend to be associated with long waiting times. With Portugal close to the OECD average for acute beds per inhabitant, and above the average for total spending as a share of GDP and the number of practising doctors per inhabitant, key factors in the waiting list appear to have been low productivity in NHS hospitals, limited doctor availability because of time spent in private practice, and lack of nurses.

*Misuse of emergency rooms.* As mentioned earlier, the emergency rooms were crowded with people trying to get faster access to specialists.<sup>34</sup>

#### *The 2002 reform*

30. An in-depth reform of the hospital sector was launched in 2002, introducing new forms of management, so as to improve efficiency and quality of service. The strategy was to transform medium-size financially sound hospitals into public corporations while leaving the largest and smallest ones under direct, but modernised, public management and to use public-private partnership (PPP) for new structures (see Box 1). Therefore, following the November 2002 law, four different legal statuses for hospitals co-exist: incorporated (public) hospitals (“hospitals SA”), public hospitals (“hospitals SPA”), PPP hospitals and finally, private corporations contracted by the state.

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33. According to Apifarma, the pharmaceutical companies’ association, at end-2003 the average payment delay the pharmaceutical industry was close to 11 months. Total debt reached 647 million euros, 87 per cent higher than a year ago and debt with arrears older than 90 days increase by 60 per cent in 2003.

34. At the beginning of 1999, it was announced that out-patients with referral letters from their GP would be given priority, so as to provide an incentive to patients to use primary care services and to reduce the number of patients by-passing the referral process. But to be effective, this measure would have required a well organised and appropriately staffed primary care network.

### Box 1. The three categories of public hospitals after the 2002 reform

Hospitals SA: public corporations with the state as exclusive shareholder (under the corporate law). They were created through the transformation of 34 public hospitals, chosen as medium-sized ones, with a debt below 35 per cent of total expenditure and having previously demonstrated some management ability. These public corporations received their own capital<sup>1</sup> and took over all assets and liabilities of the former public units. They have financial and administrative autonomy. Hospital boards are independent and accountable for operational and financial results. The new regulation sets an upper limit on corporate hospitals indebtedness at 30 per cent of the social capital (the board approval is required when new borrowing raises the debt above 10 per cent of the social capital). The hospitals SA started to operate in January 2003 with new management teams appointed by the Ministry of Health (details on the selection criteria for those teams is not public).

Public hospitals (SPA): public institutions with administrative and financial autonomy, but under public management, (under the public sector administrative law). Concerns the 51 remaining public hospitals.

Public-private partnership (PPP) hospitals: public institutions with administrative, financial and asset management autonomy under contracted private management (under the public sector administrative law). Ten PPP hospitals (including eight substitutions to existing old facilities and two additional units) are planned to be built by 2010. The first one should be inaugurated in 2008 in Loures; bidding has been launched and the construction should start by early 2006. The authorities plan to issue three tenders a year, in the 2005-08 period, to complete the tender phase by early 2008 and have all units operating by end 2010.

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1. Hospitals were recapitalised before being transformed in corporations so as to cover existing obligations and ensure that the hospitals had enough working capital to effectively manage their balance sheets. This recapitalisation represented about 1 per cent of GDP.

#### *i) Incorporated hospitals (Hospitals SA)*

31. The most salient aspect of the hospital sector reform was the transformation of 34 public hospitals (half of the hospital sector health supply) into 31 public corporations, which started to operate in 2003. This transformation followed the success of pilot programmes that gave more managerial and financial autonomy to some public hospitals (see above). It creates a functional separation between the financing/purchaser entity and the provider of health care services. Multi-annual-contract programmes for 2004 and beyond have been agreed with the Institute for Financial Management and Informatics (IGIF), setting quantitative and qualitative targets, and investment needs.<sup>35</sup> Payments are based upon contracted production levels, with production above contracted levels plus 10 per cent paid at marginal cost. Reference prices are based on estimates of the volume of services performed -- *i.e.* in-patient treatment, emergencies, appointments and out-patient treatment -- adjusted by a case-mix index (complexity of pathologies) and weighted according to the level of technological sophistication of each hospital. Case-related payment systems are an appropriate answer to low efficiency in the context of waiting lists and unused productivity reserves. New staff are hired on individual contracts, while current staff on public contracts have been offered the option to switch to individual contracts. Very few employees changed status in 2003. Since individual contracts will include some performance-related financial incentives, hospital SA managers estimate that a majority of the young staff will opt for them, once collective agreements and career paths for people holding these contracts are clearly defined by the social partners.<sup>36</sup>

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35. The contract-programmes refer only to the provision of health care to the NHS, excluding the provision of services to other health sub-systems. The latter are negotiated separately.
  36. For more details see *Hospitais SA -- Relatório Actividade 2003* on [[http://www.hospitaissa.min-saude.pt/SiteHSA\\_pt-PT/Downloads/](http://www.hospitaissa.min-saude.pt/SiteHSA_pt-PT/Downloads/)].

With older staff likely to remain on protected public contracts, most hospitals will have to manage two different types of staff. Hospitals SA have also been required to prepare medium-term (three years) business plans and improvement programmes.

32. While the hospitals SA remain under the supervision of the RHAs, their development and performance have been monitored closely by a special task force (*Unidade de Missão Hospitais SA*) directly attached to the Minister of Health.<sup>37</sup> In particular, benchmarking of hospitals is made on a monthly basis, with a focus on productivity and efficacy of resource management (see Annex B.). At this stage, the benchmarking includes very few quality indicators, and quality monitoring depends essentially on each hospital. There are plans to add more quality indicators in the future and launch patient satisfaction surveys. Some hospitals (for instance Pulido Valente SA in Lisbon) have also contracted auditors to run clinical audits and this is in the process of being generalised. A “quick wins” programme was launched in five pilot hospitals with the goal of testing key improvement programmes.<sup>38</sup>

33. Results for the first year of operation of the hospitals SA published in March 2004 are encouraging; activity increased more than twice as fast as costs, implying lower unit costs (see Table 3). The situation is however very heterogeneous from one hospital to the other, with unit cost variations ranging from +18.2 to -36 per cent. Making information about hospital debt available on a comparable basis and disseminating it in a clear and synthetic way would facilitate external assessment of the efficiency gains of the hospital SA sector as a whole. Such information is necessary to ensure that apparent efficiency gains in some hospitals do not hide higher debt. In the future, besides results published by the Ministry of Health, the Ministry of Finance will conduct financial inspection in the hospitals SA.

**Table 3. Some key results of the hospitals SA in 2003**  
Percentage changes from 2002

	All hospitals SA	That hospital SA with the largest unit cost increase <sup>1</sup>	That hospital SA with the largest unit cost decrease <sup>1</sup>
Provision of services			
In-patient discharges	4.2	-1.9	-1.3
Surgeries	16.3	15.9	10.4
External consultation	9.3	14.3	7.1
Day hospital sessions	17.8	22.9	22.8
Urgency episodes	1.0	-1.4	5.3
Total hospital activity indicator	8.7	-4.8	7.6
Total costs	3.9 <sup>2</sup>	12.6	-31.1
Unit costs	-5.8	18.2	-36.0

1. All the results reported in the column refer to that hospital showing the largest unit cost increase (decrease) in 2003.

2. The cost increase is 2.4 per cent if the 2002 data are adjusted for payments to the CGA and changes in the payments of pharmaceuticals by RHA.

Source: Ministry of Health.

37. This task force is also in charge of supporting the development of the hospitals SA network, promoting the implementation of operational and financial improvement initiatives, helping find synergies among different hospitals, launching quality improvement programs, developing human resource management.

38. These hospitals are Amarante, Aveiro, Pulido Valente, Santa Marta and Santarém. The programme includes a reduction in waiting times for consultations and ancillary tests, the revision of reference processes between primary care centres and hospitals, and the optimization of invoicing and control of payments.

*ii) Public hospitals (SPA)*

34. The modernisation of the management of the remaining 51 public hospitals (hospital SPA, *i.e.* *hospital do Sector Público Administrativo*)<sup>39</sup> is essential to avoid creating a two-speed system. It started in August 2003 with the adoption of new regulations that try to replicate as much as possible the hospital SA experience within the public sector. New management teams were appointed at end-2003 (details on the selection criteria are not public). Contract-programmes will be established with each hospital, setting objectives and quantitative targets, priorities and modalities for the provision of services, quality standards, monitoring and evaluation systems. A new financing scheme close to that for hospitals SA is expected to be implemented in 2005. The new legislation includes the possibility of providing additional financing to hospitals as a reward for improved outcomes, quality and productivity. Non-financial incentives for productivity (training for instance) are envisaged for staff. Special task forces have been created and trained within the five RHAs to monitor these hospitals. Performance indicators, similar to the ones used for hospitals SA, and management improvements are already monitored for 15 pilot cases.

35. Preliminary estimates for all SPA show that, in 2003, production increased but also costs, and debt continued to rise, by about 60 per cent. In parallel, the government has been working on a project to reduce the debt of SPA hospitals *vis-à-vis* the pharmaceutical sector. The plan concerns the debt older than 90 days for the 10 hospitals with the oldest arrears.

*iii) Public-private partnerships (PPPs)*

36. The reform of the hospital sector also foresees the creation of ten hospitals under public-private partnerships (PPP schemes).<sup>40</sup> The legal regime was approved in 2002, and the first government programme for public-private partnerships was approved in 2003. Ten-year contracts for the operations and thirty-year contracts for the infrastructure will be granted after competitive bidding, with technical competence and economic terms offered being the most relevant criteria. Most hospitals under PPP will be linked with one university, so as to increase the number of doctors in the future. In terms of initial investment in facilities and equipments, the programme represents about 1 billion euros. The only previous experience of a PPP in the health care sector in Portugal started in 1995 with Amadora Sintra pilot experience.<sup>41</sup> The main lesson from that experience, which encountered mixed success, is the need to put in place a very strong legislation as regards supervision of these PPPs, which was missing until recently. It will be also important to ensure close monitoring of the performance of these PPPs which has lacked in most of the other PPP projects in Portugal (see OECD, 2003).

*iv) The waiting list reduction programme*

37. The strategy of the authorities to win quick visible results also includes a special programme to eliminate, within two years, the waiting lists for surgery (*Programa Especial de Combate às Listas de Espera Cirúrgicas*, PECLEC). The programme relies on contracting some private (profit and non-profit, if necessary foreign) hospitals, which are being paid on a DRG basis, as well as a more productive use of resources in the public sector resulting from the changes in management reviewed above, and extra financial resources provided to public services and staff engaged in the programme.<sup>42</sup> From July 2002 to

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39. This group is quite diverse, including both large university hospitals and small local ones.

40. Existing examples of PPP use in the health sector are the UK (see Van den Noord (2002)) and Spain. Besides hospitals, PPP might also be considered in the future in primary care and long-term care.

41. Outside the health sector, Portugal has made significant use of public-private partnerships for large infrastructure investment (transport, water and energy for instance). See Bronchi (2003) for more details.

42. The financing is provided by IGIF to the providers selected for the programme via the RHAs.

April 2004, most of the 123 000 people that were on the waiting list in July 2002 had surgery.<sup>43</sup> However, while the list existing in 2002 was reduced, a new list has built up, partly maybe because much shorter waiting time has increased demand. The Ministry of Health estimates that 150 000 people were on this new list in April 2004, with the list growing on average at a pace of 6 600 people a month.

38. Under the new system to be implemented from June 2004 in two pilot regions, the Integrated System of Management of Patients Enrolled for Surgery (*Sistema Integrado de Gestão de Inscritos para Cirurgia, SIGIC*), any person who has been waiting more than the acceptable time (about six months) can go for surgery in any hospital (even social or private) with a convention and the state will finance it.<sup>44</sup>

### *Long-term care*

39. Long-term care is insufficiently developed in Portugal and has long been neglected. This concerns mainly the elderly but also people who have been victims of accidents, are suffering from chronic or degenerative diseases or other physical or psychological conditions. The insufficient development of these services is related to the role traditionally played by families, in Portugal as in other southern European countries, in providing long-term care. Family patterns have changed but the availability of long-term care services has lagged. Because of the lack of appropriate public infrastructure, the elderly tend to use hospitals to seek assistance, blocking beds that would be otherwise used for acute care. In 2000, the Government approved the ISO 9001:2000 norm as national quality standard for elderly home care, together with a national plan for the accreditation of all special long-term care institutions (the *Plano Avô* -- Grandfather Plan) and a Private and Social Support Plan to improve infrastructures and train staff for these institutions. To strengthen long-term care, the creation of a Long-Term Care National Network was approved in 2002 and a new bill is expected by end-2004, providing norms related to the quality, financing and general management of long-term care units. The goal is to create a strong network, including units for long-term hospitalisation, home care and day care, well integrated with primary and hospital networks. This network will be mainly built via contracting with private entities, in particular the non-profit *misericórdias*.<sup>45</sup> There are no estimates of the cost of this network neither of the increase in long-term care costs associated with the ageing of the Portuguese population.

### *Pharmaceuticals*

40. The pharmaceutical market consists of the drugs used by hospitals and the ones sold in pharmacies. Pharmaceuticals used by NHS hospitals are financed from hospitals budget directly, and represent close to 40 per cent of total NHS spending on pharmaceuticals. The NHS also reimburses patients for drugs bought from pharmacies when prescribed within the NHS system as well as when prescribed under private treatment.<sup>46</sup> Private co-participation is substantial (Table 4). The pharmaceutical

43. In April 2004, only 8 000 people were still waiting. One third of the patients on the waiting list were directed to the private sector, 5 per cent of which contracted to foreign units (in Spain). It seems that half of the people who were directed to surgery in the private sector refused it, possibly because these people were called for surgery on short notice (as has been done in other countries in the past). See *Público* 23/01/2004).

44. The new system will be extended progressively to other regions by 2006. For more details see [[http://www.governo.gov.pt/NR/rdonlyres/E0463BA2-9358-43CA-8A00-6CCD70A150B7/0/Depres\\_SIGIC.pdf](http://www.governo.gov.pt/NR/rdonlyres/E0463BA2-9358-43CA-8A00-6CCD70A150B7/0/Depres_SIGIC.pdf)]. A document defining more precisely the maximum acceptable waiting time for each pathology is under preparation.

45. *Misericórdias* are independent non-profit institutions (historically they were religious charities health care units and played a central role in the Portuguese health care system).

46. Payments by the NHS to pharmacies is under the responsibility of the RHAs, with the primary care centres and hospitals playing an intermediation role for respectively GP and hospital doctors' prescriptions. The reimbursement of pharmaceuticals prescribed under private treatment accounted for 18.1 per cent of the

market is characterised by a freedom of prescription for doctors, largely unregulated drug prices, and monopolistic power for the pharmacists who sell drugs (see Oliveira and Pinto (2003)). Pharmacies' mark-up margins are flat and controlled by the Ministry of Finance (the retail margin is 20 per cent and the wholesale margin 8 per cent). A particularity of Portugal is the existence of a large market for copies, which developed till 1995, as the legislation did not protect patents and trade marks. The legislation was changed in 1995 but copies commercialized before that date were allowed to remain on the market.<sup>47</sup> On the other hand, the penetration of generic products is low compared with other OECD countries, reflecting the fact that till recently there were little incentives for the production/use of generic medicines (Figure 10).

**Table 4. Reimbursement of pharmaceuticals**

Category	Definition consumption	Standard reimbursement rate	Reimbursement for pensioners <sup>1</sup>	Reimbursement if generic
A	Substances vital for survival or used to treat chronic diseases	100%	100%	100%
B	Essential drugs needed in the treatment of serious illnesses, requiring prolonged therapy	70%	85%	80%
C	Non-priority medicines, with confirmed therapeutic value	40%	55%	50%
D	New products of which therapeutic value is not yet proven (since 2000)	20%	35%	30%

1. Over 65 years of age with income not exceeding three times the minimum wage.

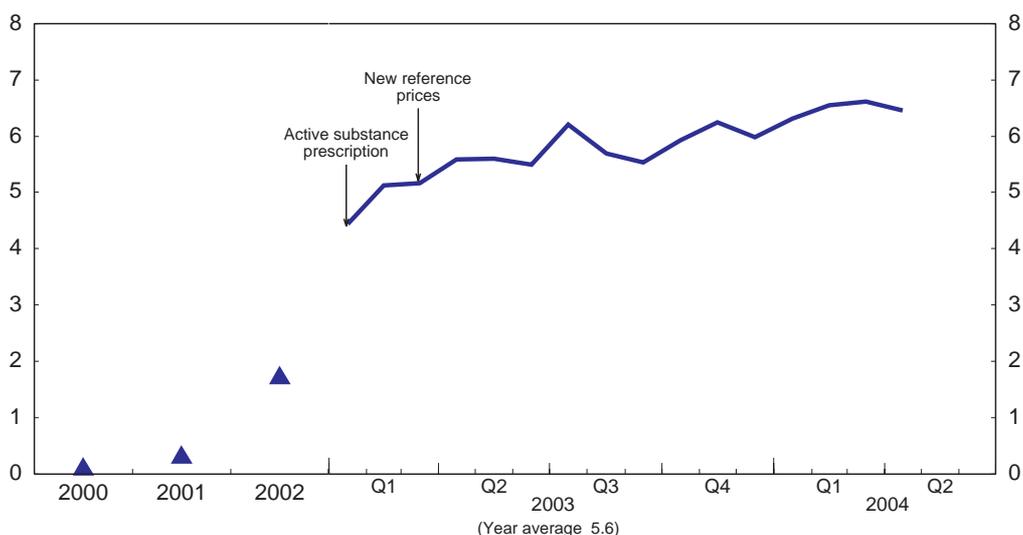
Source: OECD; Oliveira and Pinto (2003); Martikainen and Rajaniemi (2002).

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reimbursement by RHAs in 2001 (see IGIF, *Serviço Nacional de Saúde, Contas Globais* 2001). The National Institute of Pharmaceuticals and Medicine, INFARMED, created in 1993, is responsible for the regulation of pharmaceuticals and is in charge of deciding whether new products are reimbursed, as well as ensuring the quality, safety and efficacy of pharmaceuticals. For more details see Oliveira and Pinto (2003) and [[www.infarmed.pt](http://www.infarmed.pt)].

47. Copies represented about ¼ of the market in 2003. They are sold at a higher price than generic drugs and therefore companies have no incentives to convert them into generic drugs.

**Figure 10. Market share of generics<sup>1</sup>**  
Per cent of sales



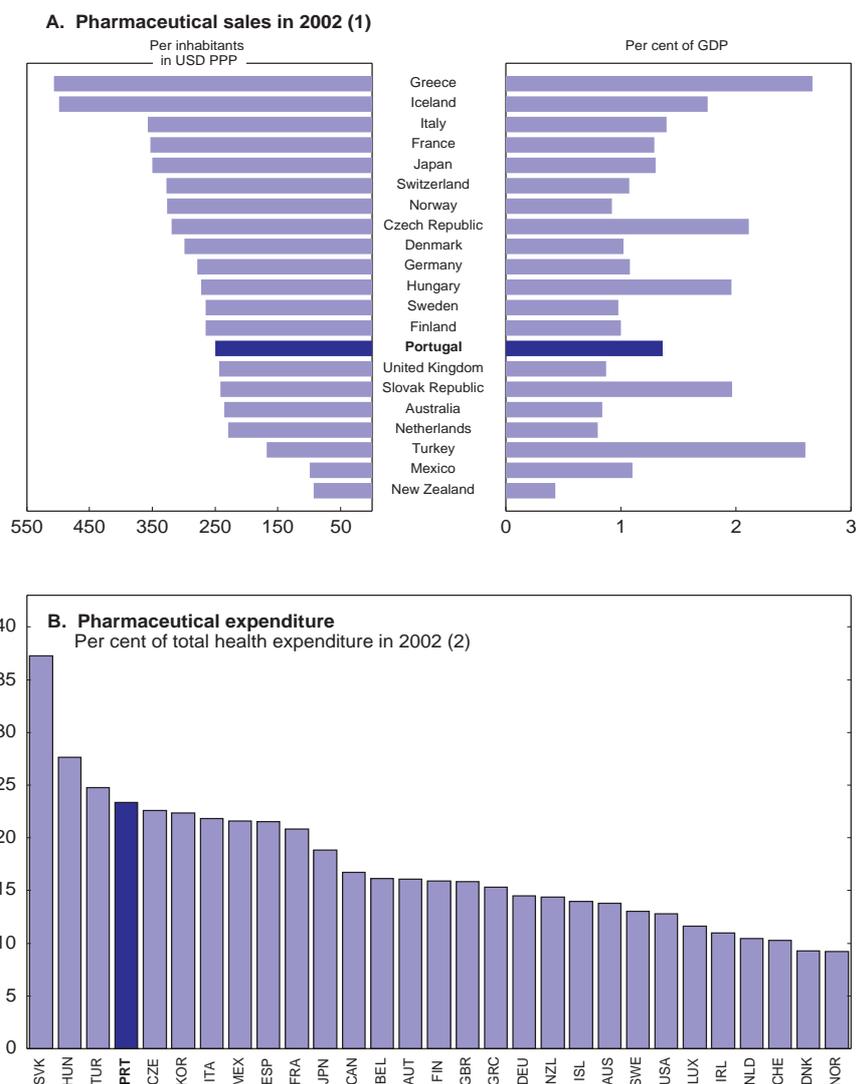
1. Annual averages are shown for 2000-02; monthly data are available starting in 2003.

Source: Infarmed.

### *Key issues*

41. Although pharmaceutical expenditure is close to OECD average on a per capita basis, when taken as a percentage of GDP it is well above and represents more than 20 per cent of total health expenditure, the fourth highest rate in the OECD (Figure 11). Expenditure grew at a double digit pace annually from 1991 to 2001. Several programmes were launched in the 1990s and early 2000s with a view to curb this upward trend by promoting a more rational use of pharmaceuticals via changes in prices and in the reimbursement system, or via agreements with the industry.<sup>48</sup> However, these measures were not sufficient to slow the growth of pharmaceutical expenditure.

48. For instance, in May 1996, the government reached an agreement with the pharmaceutical industry under which the industry would make a payment to the NHS equivalent to 64.3 per cent of the growth in drug spending in excess of 4 per cent in 1997 -- with no payment to be made for increases above 11 per cent, thus creating a perverse incentive for inflating expenditure by more than 11 per cent. In 2001, there were revisions to drug packaging, with smaller packets for drugs of quick and intensive use and bigger ones for drugs used for chronic illnesses.

**Figure 11. Pharmaceutical sales in OECD countries**

1. Or latest year available. No data available for Austria, Belgium, Canada, Spain, Ireland, Korea, Luxembourg, Poland, Turkey and United States.

2. Or latest year available. No data available for Poland.

Source: OECD Health Data, 2004.

42. Oliveira and Pinto (2003) identify four main factors behind the high and rising pharmaceutical consumption in Portugal:

The high and growing level of consumption due both to high demand by patients (as a result of cultural factors but also of the deductibility provisions of health costs from the personal income tax that limits consumers' perception of real costs) and inappropriate use and over-prescription by doctors (doctors have no incentives to limit prescription);<sup>49</sup>

A tendency to switch to more expensive drugs;

49. As reflected for instance by a higher use of antibiotics in Portugal than in most other OECD countries (see Observatório Português dos Sistemas de Saúde, 2003).

A weak design (and inadequacy) of measures to control costs such as in negotiating agreements with the industry;

Successive delays in defining policies to tackle the structural problems of the sector.

The study also identifies the lack of competition in the pharmacy sector as an important issue. The profession of pharmacists in Portugal is for instance one of the most regulated compared with other OECD countries. Pharmaceuticals, including over-the-counter drugs, can only be purchased in pharmacies, and the location and number of pharmacies is tightly regulated, resulting in each pharmacy having a monopoly over a certain geographical area.<sup>50</sup>

43. Pharmaceuticals expenditures by hospitals have been growing even faster than reimbursement of prescriptions.<sup>51</sup> One factor behind this increase in spending and the growing debt of hospitals is the market structure, which favours price increases. On the one hand, producers enjoy some monopoly in many high volume consumption drugs. On the other hand, the hospital sector has shown limited ability to put in place strong central purchasing units to negotiate lower prices. For instance in 2003, pharmaceuticals companies used their market power to increase prices so as to compensate for lower margins on the retail sales market triggered by the reform (see below). The lack of effective information systems using ICT, as well as some weaknesses in management at the hospital level have also impeded spending control.

#### *Reform in the pharmaceutical sector*

44. It is hoped that more rational prescription habits will emerge following other changes in the accountability of health professional resulting from the reform of health care centres and hospitals. In addition, changes to the pharmaceutical drug policy aimed at reducing expenditure on drugs were approved in 2002. They concern mainly the reimbursement of drugs sold in pharmacies. Regarding prescriptions, since 1<sup>st</sup> of January 2003, drugs with a generic equivalent should be prescribed by the International Common Denomination (active substance) so that patients can choose the least expensive medicament. However, doctors kept the right to add a brand name and refuse substitution.<sup>52</sup> Both the physicians and the pharmacists are required to provide all the information on available generics and their costs both when the prescription is issued and when it is dispensed. A new price reference system for the cost-sharing of medicines by the NHS was set up in March 2003, whereby payments by the NHS are not higher than payment for the most expensive generic equivalent sold in the market.<sup>53</sup> A new and standardised

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50. All drugs, including over-the-counter ones, can only be sold in pharmacies. The location of pharmacies is highly regulated, with a maximum number of pharmacists permitted in each community. For the Ministry of Health to give authorization for a new pharmacy in an expanding residential area, there must be proof that there are at least 4 000 new clients and that there is no other pharmacy within 200 meters.

51. See Campos (2003b). In 2001, pharmaceuticals accounted for close to 17 per cent of the hospitals costs. (IGIF (2003), *Serviço Nacional de Saúde, Contas Globais 2000*).

52. In practice, in September 2003, it was estimated that, in the case generics were available, only 20 per cent of doctors prescribed according to International Common Denomination, the remaining 80 per cent prescribing either by International Common Denomination with a brand name or by brand name only. Furthermore, 47.3 per cent of prescriptions did not authorise substitution. See CEFAR, *Estudo sobre o Padrão de Utilização da Nova Receita Médica*, Oct. 2003.

53. For pharmaceuticals below or at the reference price, reimbursements are calculated as the rates shown in Table 4.4 applied to the effective prices. For pharmaceuticals above the reference price, these rates are applied to the reference price. Until end-2003, the reference price for the pensioners whose pension is equal or inferior to the national minimum wage will be increased by 25 per cent in order to limit the financial impact on the pensioners. This was extended to 2004. Generic drugs have to be 35 per cent cheaper than the original product (20 per cent till 2000).

prescription form was adopted which should facilitate electronic prescribing. This new form establishes specific rules concerning the number of medicinal products and packs that can be prescribed. In addition, a programme to convert pre-1995 copies (see above) into generic drugs was launched in 2003 to boost the market share of generics in the future. Producers have been given a limited delay to convert these products into generics and to reduce their price to near reference prices. There are a number of criteria that must be filled for a medicinal product to be considered as a generic and the applicant is responsible for checking that there are no patent rights in force regarding the reference medicinal product.<sup>54</sup>

45. These measures were expected to reduce both the aggregate price of pharmaceuticals (by giving patients incentives to opt for cheaper products and encouraging the industry both to reduce prices towards the reference prices and to put new generics on the market) and on volumes (by increasing cost sharing). No incentives were given to pharmacies to sell generics and the fixed margins they earn on each product sold might in fact act as a disincentive. Nevertheless, the first results of the reform are already visible. First, this new policy has led to an increase in the generic market share (to 6½ per cent in April 2004, up from 1.8 per cent in 2002) (Figure 10). Second, prices of pharmaceuticals with a generic equivalent have decreased by up to 50 per cent for some products.<sup>55</sup> Overall, NHS spending on pharmaceuticals decelerated markedly, to 3.7 per cent in 2003 down from 7 per cent or more in 2001 and 2002. There is not yet evidence, though, that demand for drugs has fallen.

46. Concerning the use of pharmaceuticals in hospitals, a plan to increase efficacy and quality was launched in 2000, but the achievements have been below expectations. As a result, some changes to that plan were made in November 2002 to simplify the project, clarify responsibilities and roles in the Ministry of Health, improve the information collection, and define a new framework for hospital pharmacies.<sup>56</sup> However, there is no evidence that expenditure slowed down in 2003-04 and the debt of hospitals *vis-à-vis* the pharmaceutical industry has continued to grow. A pilot project has been launched based on integrated electronic purchase arrangement managed by a central management network. If proven effective, it will be implemented in all hospitals in the future.

### ***The Health Regulatory Agency, ERS***

47. The creation of the Health Regulatory Agency (*Entidade Reguladora da Saúde*, ERS) was approved in November 2003. This approach, apparently with few precedents in other countries, responds to the new public, private and non-profit mix of health care providers to the NHS (for hospitals, health care centres and continuous care) and the need to separate the state's tasks of provider and financing from its regulation role. The new entity is a public body with financial and administrative autonomy (broadly in line with international best practices in designing sectoral regulatory agencies). The board is composed of a president and two members designed by the cabinet following a proposal from the Health Minister.<sup>57</sup> It will

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54. The criteria for a copy to be converted into a generic product are: *i*) essential similarity with the reference medicinal product; *ii*) property rights relating to the active substance or manufacturing process must have expired; *iii*) a different therapeutic indication from the one authorised for the reference product cannot be claimed. When the conversion of a copy into a generic is required, it is for the applicant to verify that the reference medicinal product is not covered by a patent (be it a product or a process patent, whether granted before or after 1995).

55. Drugs with a generic equivalent represent about 20 per cent of the drugs available.

56. See *Resolução do Conselho de Ministros* No 128/2002.

57. The President and members of the Health Regulatory Agency (ERS) have a five-year mandate (starting with two years, for the two members) renewable once. Professional activities in the two years before and after being a board member are strictly limited so as to avoid conflict of interests. Board members cannot be revoked except for serious professional fault. The agency will be staffed by people hired on individual contracts or civil servants in mobility. Of the 40 or 50 staff members, it is planned to have about ten

be financed through fines (40 per cent of the fines collected will be kept by the ERS, the rest going to the Treasury), fees on services (registration, provision of certificate) and budgetary transfers.

48. The ERS regulates all actors providing health care services to the NHS including private actors, excluding activities that are already submitted to a specific sectoral regulation (such as the pharmacies). It is in charge of ensuring equity in access to health care, compliance to quality requirements and protection of patients' rights and security. In particular, the ERS is in charge of preventing and fighting adverse selection and "cream-skimming", as well as supplier-induced demand, which is more likely to occur when providers are paid according to activity. At the request of the Ministry of Health, it can assess contracts with providers and rules governing the sector. The entity can impose sanctions, including fines that will be made public. It will be also the entity in charge of collecting patients' claims. The ERS will start its activity in 2004. The introduction of this independent regulatory body designed to ensure that productivity gains are not detrimental to quality and equity is an important step in the reform process. Care should be taken to redefine clearly the tasks of other structures already in charge of regulating the sector and ensuring quality of care - IGIF, the Directorate General of Health, the National Institute of Pharmaceuticals and Medicine (INFARMED) and the Institute for Quality in Health (IQS) - so as to limit overlaps.

#### *Other aspects of the ongoing reform*

49. As mentioned in sections above, the shortage of health professionals is a major concern to be addressed. According to a recent survey, three quarters of the Portuguese considered that this was already an important concern, and, as noted, estimates suggest that human resource problems will become even more acute over the coming 15 years in some specialties/regions.<sup>58</sup> In the short term, pressure on staffing could be reduced through the ongoing changes aimed at increasing productivity in hospitals and primary health care centres. For a longer-term response, the *numerus clausus* on medical students was increased in recent years to its early 1980s level. New universities have been opened and there are plans to open some more, including private ones. Plans to increase the number of nurses are under consideration.

50. The reform also foresees some changes as concerns emergency services in order to increase their efficiency. An important step is the efforts being made to better integrate emergency services with the hospitals.<sup>59</sup>

#### **Assessment and agenda for future reforms**

##### *The reform is going in the right direction*

51. If successful, the ongoing reform should enable Portugal to continue raising the quality of health services and the health status of the population, and solve equity issues while putting public finances on a sounder medium-term path. Most legislation has been approved in less than two years and seems in line with earlier OECD recommendations. This is already an important step forward.<sup>60</sup> However, now, the key

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inspectors who will be doing ground work in coordination with other entities involved in regulating the sector.

58. Health is the only sector where hiring was permitted after the 2002 budget freeze, in services that are understaffed. (However, the new hiring was based on regular civil servant contracts because the hiring freeze on fixed term and individual contracts applied also to the health sector).

59. A specialisation of emergency doctors is envisaged; some doctors will become "competent on" emergency care. A pilot experience has been launched in Coimbra. Lastly, all emergency service staff will change status and switch to private contracts as of 2005.

60. For instance, IQS and INFARMED are also in charge of ensuring quality in health care and IGIF is, among other things, in charge of ensuring equitable access to health care.

challenge is the implementation of the reform. There are some positive first results and public spending on health care decelerated in 2003 (reflecting mainly lower spending on reimbursement of pharmaceuticals and a slower growth of spending in hospitals SA). However consolidating these short-term achievements will be a difficult task. Given the low starting point, regarding for instance the share of generic products on the pharmaceutical market or hospital efficiency, short-term positive results may be easy to reach, but it will be more difficult to replicate these achievements in the longer term. It is also still too early to have a broad view of the impact of measures implemented. In particular, the increase in hospital production observed in 2003 should result in better health outcomes and public satisfaction, but it is difficult at this stage to assess the medium-term impact of the reform on both public finance sustainability and micro-efficiency of expenditure. In particular, it is very likely that as supply increases demand will also increase, as already observed concerning elective surgeries. Moreover the new remuneration frameworks for health professional might result in wages increases. If, as a result, expenditures increase above what can be absorbed by productivity gains, this would imply some inevitable cost increases. The Portuguese authorities must anticipate this risk.

***Several ingredients are needed to ensure durable success.***

*Strengthening the global strategy*

52. Availability of information about the reform process and its progress needs to be strengthened. Details on the process have not always been made public. The strategy is to win large popular support by achieving highly visible “quick wins” in some areas. This approach may backfire if there are doubts about the way the reform is conducted and the accuracy of indicators used to assess results. For instance, greater clarity about the criteria used in the nomination of new managers for hospitals and health care centres would limit polemics regarding possible unjustified appointments. In addition, the assessment of reform progress would be all the more credible if it could be confirmed externally by actors not directly in charge of implementing the reform. Overall, better communication and pedagogy about the aims and difficulties of the reform process could help improve public support, particularly if the public understands that the full impact of reforms may take some time to appear.

53. Moreover, more and better medium-term planning is necessary. It would help secure continuity in health policy. Past experience has shown that there have been discontinuities in health policy, due to changes in government or even changes within the same government. The National Health Plan is a possible vehicle for this medium-term planning but, at this stage, the articulation between the ongoing reform and this 10-year plan is not clear. In particular, the National Health Plan does not include enough details on how the reform is going to help achieving its goals of improving health status, and on areas where problems are foreseen. The reform strategy should, in return, integrate better the long-term goals defined in the National Health Plan, and the next steps of the reform should be designed accordingly. There is also a need to articulate better the health care reform within a broader framework considering the global environment in which the reform is being implemented. Several factors outside the health sector reform can help make the reform more effective. First, information campaigns are needed to improve public health and help changing lifestyles that put health at risk and could limit improvements in the health status. This concerns in particular road accidents, which is the 6<sup>th</sup> cause of death in Portugal, or the lack of exercise, alcohol consumption and obesity (see Annex Figures A1.3 to A1.7). The National Plan for an Integrated Action on the Health Factors Related to Lifestyles (*Programa Nacional de Intervenção Integrada sobre Determinantes da Saúde Relacionados com os Estilos de Vida*) which was approved in January 2004 has therefore to be implemented without delays. More recently, new national health programmes were approved related to the prevention of cardiovascular diseases and rheumatology diseases as well as the development of palliative care and elderly care. Furthermore, a better-educated population would be more able to refrain from excessive health care demand and to understand public information campaign. Lastly,

efforts should be made to ensure that public and private governance strengthens and does not become an issue in the new multi-providers health sector.

*Modernising the health administration*

54. The health administration needs to be modernised, especially at the regional level. The tasks and role of RHAs are affected by the new status of hospitals and primary health care centres. Already, special task forces have been created to monitor SPA hospitals. Within the new framework, the role of the RHAs as purchasers of health care is enhanced, as well as their responsibility to the budgetary authorities for cost control and to the patients for care quality and access to care. Options should be considered to adapt the RHAs functioning and expertise to these new responsibilities and the associated costs should not be underestimated.

*Further increasing efficiency and reducing current pressures on costs*

55. Additional measures are needed to increase efficiency further and ensure that cost pressures are contained and the system is sustainable.

More emphasis should be put on the integration of the provider networks (primary care/ hospitals/long-term care). An active strategy by the authorities, besides the few pilot experiences, should help favour this integration, which is key to reduce inefficiencies and duplication of acts and improve the quality of follow-up of patients across the system.

A system to assess the cost-effectiveness of new technologies before they are generalised in public hospitals is needed to better control expenditure at the hospital level. This is all the more necessary that prospective payment prices to providers will have to be adjusted regularly to take into account the impact of changing technology. In this context, the project to develop a programme for information and communication technologies in the NHS should be implemented without delay. International cooperation on this issue can help and should be sought.<sup>61</sup>

Additional steps are needed in pharmaceuticals: *i*) a closer monitoring of pharmaceutical expenditure by hospitals and measures to tackle their upward trend; *ii*) a better supervision of the observance of prescription guidelines is necessary to change over-prescription habits; *iii*) setting the reference prices at the price of the cheapest generic, instead of the most expensive, could be also considered to increase price competition on the generic market (though the possible increase in co-payments might be an obstacle); *iv*) steps towards the deregulation of the pharmacy sector and the pharmacist profession, in line with the recently proposed EU Directive to cut red tape that stifles Europe's competitiveness, should be taken.

Prevention of illness and early detection need to be enhanced using the reformed health care centres and as this would tend to improve health outcomes and reduce the cost of health care associated with late detection.

Measures to discourage excessive demand, which are not at all envisaged by the reform, should be considered, for instance increasing the scale of co-payments (with safeguards to promote equity of

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61. Such systems exist in most more advanced EU countries (such as France, the Netherlands and the UK) where health technology assessments (HTAs) of new technologies and procedures are designed to ensure that only those which pass a certain benchmark for value-for-money are admitted for public reimbursement. See Docteur and Oxley (2003).

access) and rationalising the reimbursement of health services so as to avoid unnecessary duplication of care and recourse to second or third opinion.

Other actions which could almost certainly improve the population's health status, with very little impact on public finances, for instance running information campaigns on the benefits of "healthy lifestyles" and road security, should be considered.

### *Improving quality and equity in access*

56. Further efforts are also needed to ensure that progress in efficiency is followed by improvements in quality of care and health outcomes, where Portugal still lags more advanced EU countries.<sup>62</sup> The benchmarking of health institutions currently in place is mainly based on productivity rather than quality, and the latter needs to be strengthened in the next stages of the reform by developing and monitoring indicators of clinical quality and responsiveness to patients needs. Finally, as the new framework increases incentives to "cream-skim" patients and other adverse selection practices, safeguards have to be put in place and the creation of the ERS by itself does not guarantee that these behaviours will be avoided. The ability of the new institution to fulfil its mandate will have to be tested. Moreover, the coordination of its work with other institutions will need to be clarified in order to avoid confusion of responsibilities and duplication of tasks.

57. To improve equity in access and to reduce waiting times in a durable way, staffing issues have to be solved. First, the current shortage of nurses needs to be addressed; new education/qualification schemes should be envisaged. To complement the increase in the *numerus clausus*, a good incentive system should be introduced to allocate better human resources in regions and per speciality. The new incentive system that is being developed with the support of international consultants will have to take these considerations into account. While the resulting increase of supply should contribute to reducing waiting time for surgeries, specific measures improving the demand management of waiting lists need to be considered, such as the introduction of some prioritisation of elective patients, which seems to have been successful in New Zealand or Australia (Hurst and Siciliani, 2003).

#### **Box 2 Summary of recommendations to strengthen the health care reform**

##### **Strengthen the global strategy**

Improve transparency about the reform process and its progress

Improve medium-term planning.

##### **Modernise the regional health administrations**

**Favour more actively the integration of the provider networks to reduce inefficiencies and duplication of acts**

**Put in place a system to assess the cost-effectiveness of new technologies before they are generalised in public hospitals**

##### **Take additional steps to curb spending on pharmaceuticals on a durable basis**

Improve the monitoring of spending by hospitals and take measures to control their upward trend

62. Studies have shown that, in the UK, the reform of the 1990s has resulted in small improvements in some volume and efficiency indicators but has not succeeded in durably reducing waiting lists or waiting times, or clearly improving the clinical quality of care or health outcomes and, hence, patient satisfaction. See Docteur and Oxley (2003).

Control better the observance of prescription guidelines so as to tackle over-prescription habits

Consider setting the reference prices at the price of the cheapest generic, instead of the most expensive one

Deregulate the pharmacy sector and the pharmacist profession, in line with EU recommendations

**Enhance prevention and early detection**

**Consider measures to discourage excessive demand**

**Introduce more quality concern in the benchmarking of health institutions**

**Take additional measures to solve staffing issues**

Consider new education/qualification schemes for nurses.

Define and introduce a good incentive system to allocate better human resources in regions and per speciality.

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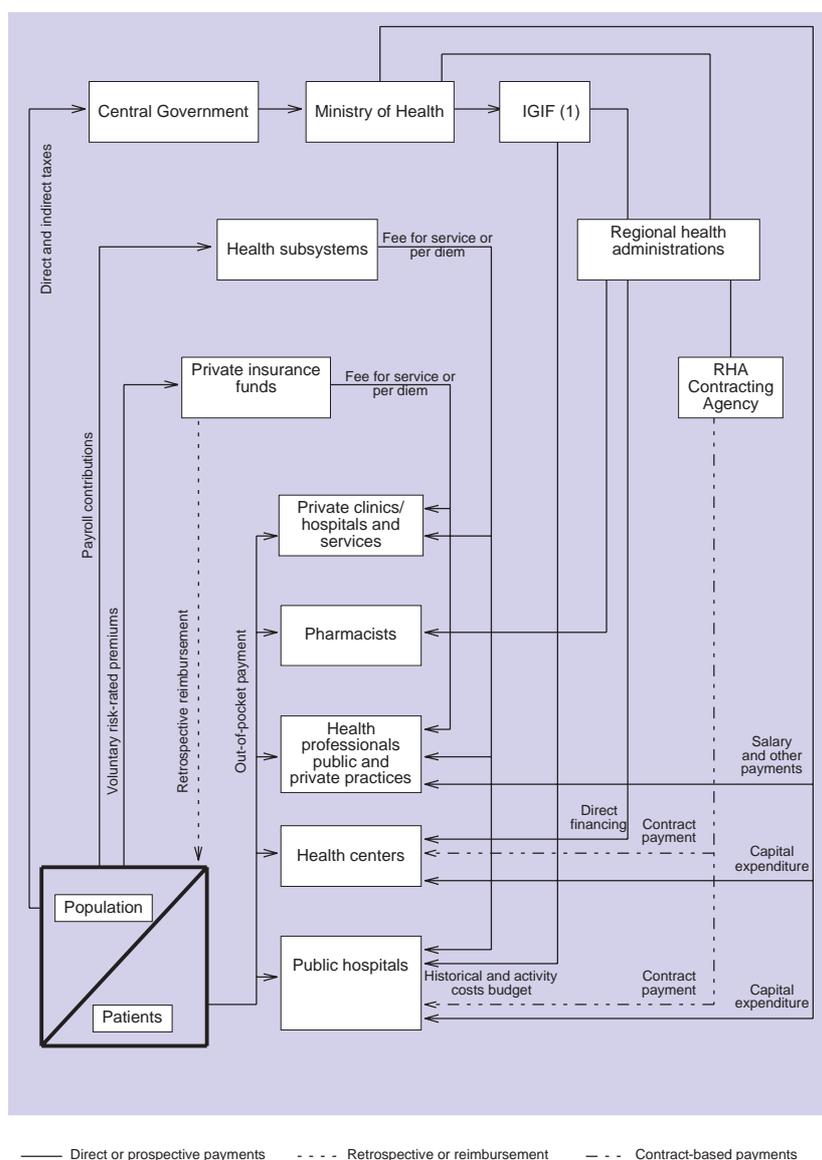
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**ANNEX 1. BACKGROUND INFORMATION**

**A. Background Figures and Tables**

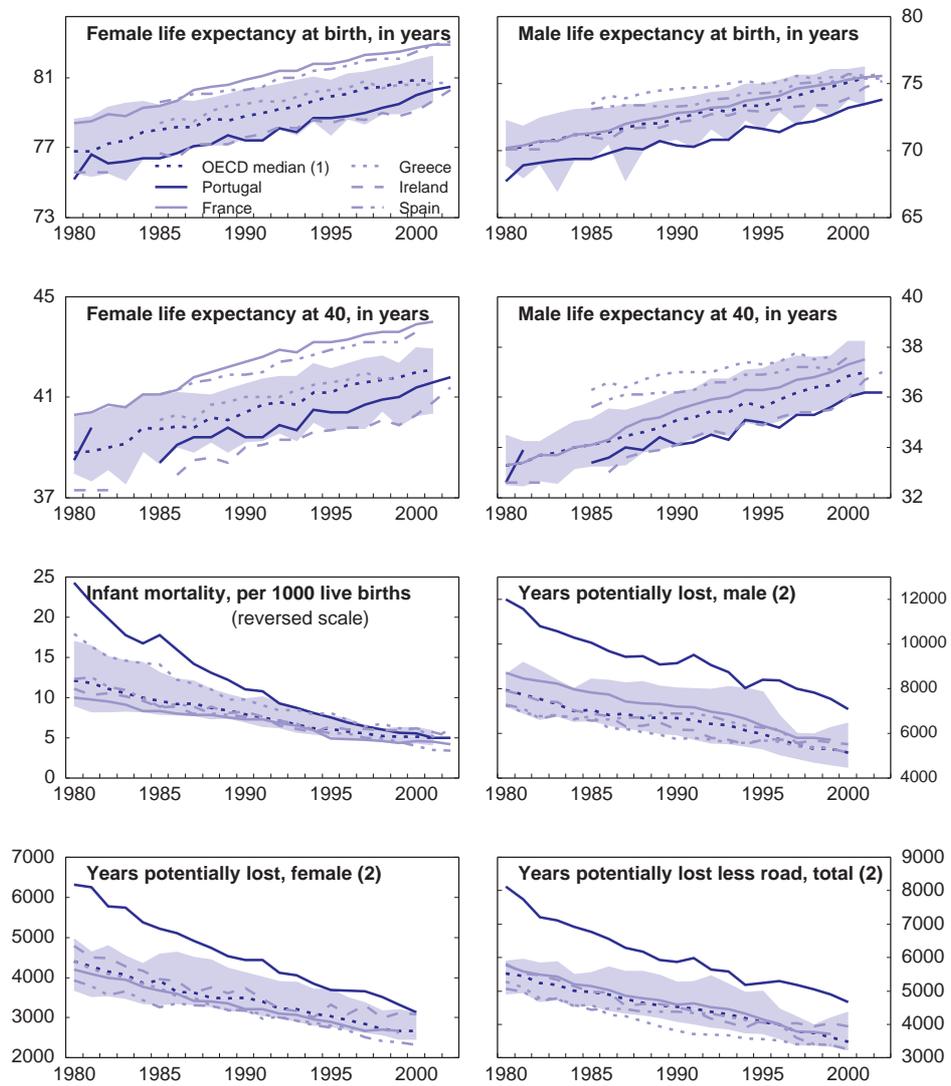
**Figure A.1. The health care system in 1999**



1. IGIF: Institute of Financial Management and Informatics.

Source: OECD Health Data, 2004.

Figure A.2. Health status



1. The shaded area denotes the inter-quartile range.

2. The Potential Years of Life Lost is a summary measure of premature mortality, which provides an explicit way of weighting deaths occurring at younger ages (before 70 years), which are, a priori, preventable.

Source: OECD Health Data, 2004.

**Table A1.1. Public expenditure on health care**  
As a percentage of trend GDP

	1980	1990 <sup>1</sup>	2000 <sup>2</sup>	Change 1980-1990	Change 1990-2000
Australia	4.6	4.9	6.3	0.2	1.5
Austria	5.2	5.2	5.4	-0.0	0.2
Belgium			6.2		
Canada	5.3	6.6	6.2	1.3	-0.4
Czech Republic <sup>3</sup>		4.4	6.5		2.1
Denmark	8.0	7.0	6.9	-1.0	-0.1
Finland	5.0	6.3	5.0	1.3	-1.3
France	5.7	6.6	7.1	0.8	0.5
Germany	6.8	6.5	8.3	-0.3	1.9
Greece	3.7	4.0	5.2	0.3	1.3
Hungary <sup>3</sup>		6.4	5.0		
Iceland	5.5	6.9	7.7	1.4	0.8
Ireland	6.8	4.4	4.7	-2.4	0.3
Italy		6.4	6.0		-0.4
Japan	4.6	4.6	6.1	0.0	1.5
Korea <sup>3</sup>		1.6	2.2		0.6
Luxembourg <sup>3</sup>	5.5	5.7	5.0	0.2	-0.7
Mexico <sup>3</sup>		2.0	2.6		0.6
Netherlands	5.2	5.4	5.5	0.2	..
New Zealand	5.4	5.7	6.2	0.3	0.5
Norway	5.9	6.4	6.5	0.5	0.1
Poland <sup>3</sup>		4.5	4.0		-0.5
<b>Portugal</b>	<b>3.6</b>	<b>4.1</b>	<b>6.4</b>	<b>0.5</b>	<b>2.3</b>
Slovak Republic <sup>3</sup>		5.4	4.9		
Spain	4.3	5.3	5.3	0.9	0.1
Sweden	8.4	7.5	7.2	-0.9	-0.4
Switzerland		4.3	5.8		1.5
Turkey <sup>3</sup>	0.9	2.2	4.2	1.3	1.9
United Kingdom	5.0	5.0	5.9	-0.0	0.9
United States	3.6	4.7	5.8	1.1	1.1
OECD <sup>4</sup>	5.2	5.1	5.7	-0.1	0.6
EU <sup>4</sup>	5.6	5.7	6.0	0.0	0.4

1. Data refer to 1991 for Hungary; 1995 for Belgium and 1997 for the Slovak Republic.

2. Data refer to 1997 for the Netherlands.

3. GDP used as the denominator instead of trend GDP.

4. Unweighted average; includes all available countries at the relevant point of time.

Source: OECD Health Data, 2004; OECD, Economic Outlook No. 75 (June 2004).

Table A1.2. Regional health data <sup>1</sup>

	Norte	Centro	Lisboa e Vale do Tejo	Alentejo	Algarve
Infant mortality rate /1000 births, 2002	5.6	3.6	5.1	4.8	5.1
Perinatal mortality rate /1000 births, 2002	6	4.4	6.2	6.8	7.5
Physicians' density <sup>1</sup> 2000	3.0	2.6	4.2	1.6	2.3
Nurses' density <sup>1</sup> 2000	3.6	3.5	3.7	3.7	3.1
Hospital beds <sup>1</sup> (NHS) 2001	2.2	2.6	2.5	2.2	1.9
Number of hospitals (NHS) 2001	26	26	28	5	3
Number of health centres (NHS) 2000	106	110	87	44	16
Population (in millions)	3.6	1.8	3.5	0.5	0.4

1. Per 1000 people.

Source: Ministry of Health, General Directorate for Health, INE

Table A1.3. Health employment indicators

	Health employment density <sup>1</sup>			Density of physicians <sup>1</sup>		Density of pharmacists <sup>1</sup>	
	1985	1990	2002 <sup>2</sup>	1990	2002 <sup>2</sup>	1990	2002 <sup>2</sup>
Portugal	10.2	11.0	13.6	2.8	3.2	0.5	0.8
United States	26.4	31.3	37.0	1.8	2.4	0.7	0.7
Germany	..	..	45.9	2.8	3.3	0.6	0.6
France	26.0	26.0	30.8	3.1	3.3	0.9	1.1
Italy	16.7	17.7	..	3.8	4.4	1.0	1.1
United Kingdom	21.6	23.7	31.9	1.5	2.1	0.6	0.5
Greece	11.4	13.5	15.3	3.4	4.4	0.7	0.9
Ireland	..	19.0	30.9	2.0	2.4	0.6	0.8
Spain	..	13.9	17.0	..	2.9	0.5	0.9
Unweighted average	18.7	19.5	27.8	2.7	3.2	0.7	0.8

	Dentists' density <sup>1</sup>		Number of hospital beds <sup>1</sup>		Nurse/Staff ratio <sup>3</sup>		Ambulatory sector Consultations with doctors per capita	
	1990	2002 <sup>2</sup>	1990	2002 <sup>2</sup>	1990	2002 <sup>2</sup>	1990	2002 <sup>2</sup>
Portugal	0.2	0.5	3.4	3.2	0.56	1.20	3.0	3.6
United States	0.5	0.5	3.7	2.9	1.05	1.36	..	8.9
Germany	0.7	0.8	..	9.0	0.42	0.48	5.3	7.3
France	0.7	0.7	5.2	4.0	0.39	0.50	5.9	6.9
Italy	0.4	0.5	6.2	4.6	0.64	1.04	6.8	6.1
United Kingdom	0.4	0.4	2.8	3.9	1.10	1.70	6.1	4.9
Greece	1.0	1.2	4.0	4.0	0.78	0.90	2.5	..
Ireland	0.4	0.5	3.3	3.0	1.20	1.50	..	..
Spain	0.3	0.5	3.3	2.8	0.68	0.90	..	8.7
Unweighted average	0.5	0.6	4.0	4.2	0.76	1.06	4.9	6.6

1. Per 1000 inhabitants.

2. Or latest year available.

3. Number of nurses per hospital bed.

Source: OECD Health Data, 2004.

**B. The indicators used in the benchmarking of hospitals SA (Source: Ministry of Health)**

58. The tools that are used in the benchmarking of Hospitals SA include five interconnected tables:

**1. *Synthesis table***

Economic result as a percentage of total revenue  
 Result gap based on pre-established objectives  
 Global Efficiency Index (measures the relative efficiency of each hospital *vis-à-vis* average)  
 Average Length of Stay - ALOS (case mix adjusted)  
 Inpatient utilization rate  
 Medical FTEs per 10 beds (case mix adjusted)  
 Costs with overtime *vis-à-vis* total labour costs

**2. *Economic performance***

Total economic result and as percentage of total revenue  
 Global efficiency index  
 Diversion from pre-established total cash operational cost objective  
 Diversion from pre-established total goods purchases cost objective  
 Diversion from pre-established external services cost objectives  
 Diversion from pre-established labour cost objectives  
 Suppliers debt as a percentage of equity  
 Client debt as percentage of equity  
 Total debt as a percentage of equity

**3. *Production.***

Activity volume

- Inpatient and ambulatory surgery (Inpatient users per bed, Inpatient occupancy rate, Inpatients per equivalent physician, Inpatients per equivalent nurse, Ambulatory surgery as a percentage of total surgery, Hospital transfereces as a percentage of total inpatient equivalent patients, Surgery SNS (NHS) production as a percentage of current year contracted production, Inpatient equivalent patients annual evolution, Inpatient days).
- External consultation (External consultations per equivalent physician, External consultations per consultation room, External consultation SNS (NHS) production as a percentage of current year contracted program, External consultations production annual evolution)
- Emergency (Emergencies per 100 external consultations, Emergencies per equivalent physician, Emergency surgeries as a percentage of total surgery, Emergency surgeries SNS (NHS) production as a percentage of current year contracted production, Emergency surgeries annual evolution)
- Day hospital (Day hospital occupancy rate, Day hospital SNS (NHS) production as a percentage of ALOS (simple and case mix adjusted)

Surgery room (occupancy rate (considering 12 hours of availability per day)), occupancy rate, monthly programmed surgeries per surgery room, ambulatory surgery annual evolution, total surgeries annual evolution)

**4. Human resources, other resources and client service**

Human resources (number of physicians FTE per 10 beds (case-mix adjusted)), number of nurses FTEs per 10 beds (case-mix adjusted), other FTEs per 10 beds, overtime hours as a percentage of total labour workable hours).

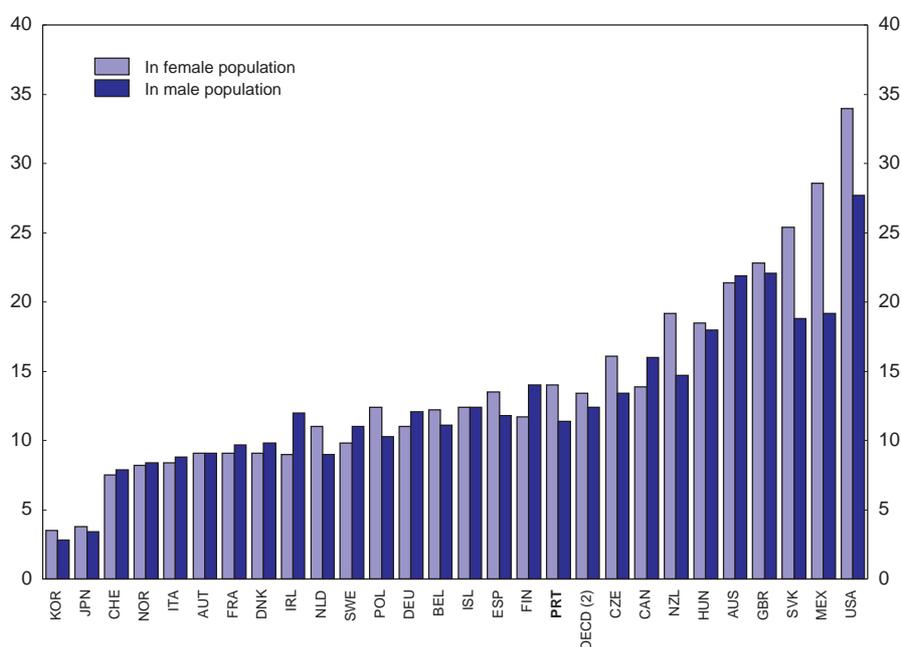
Other resources (drugs costs per patient (case mix adjusted)), other supplies and purchased goods per patient ((case mix adjusted), external services costs per patient)

Client service (client satisfaction index)

**C. Non medical determinants of health**

**Figure A1.3. The proportion of obese population is around OECD average<sup>1</sup>**

Body mass index of 30kg/m<sup>2</sup> or more

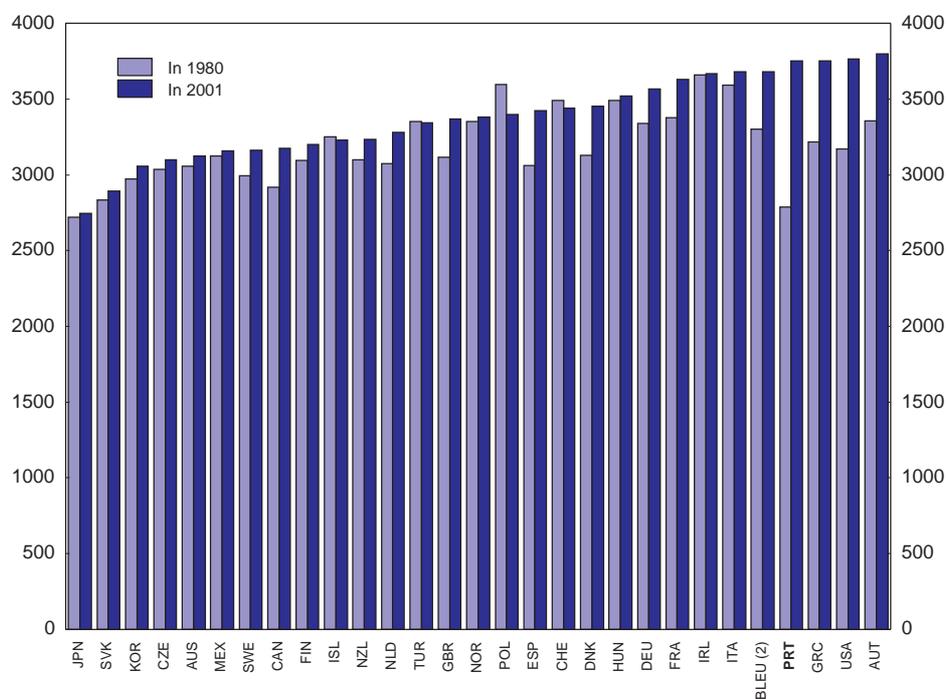


Note: except Greece, Luxembourg and Turkey.

1. 2002 or nearest year available. Share of adult population aged 15 and over. Except Norway and the United Kingdom: 16 and over; Portugal: 18 and over; Austria, Japan and the Netherlands: 20 and over; Finland: 15-64; Canada: 20-64; the United States: 20-74 and Australia 25-64.

2. Unweighted average of available data.

Source: OECD Health Data, 2004.

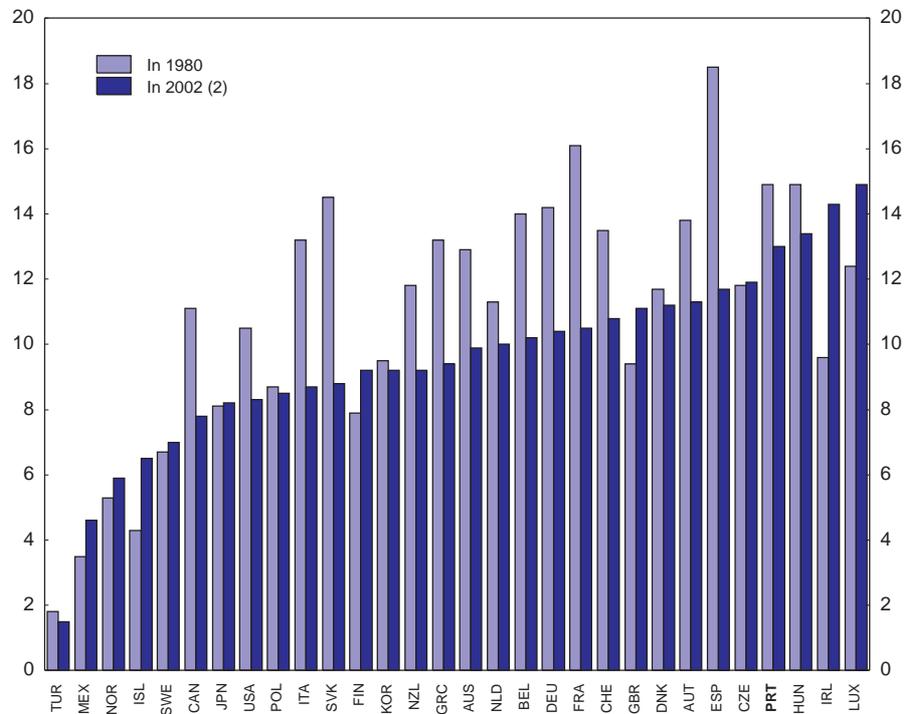
**Figure A1.4. Calories intake surged in the last two decades**Total calories per capita daily<sup>1</sup>

1. Refers to food consumption. Calories from wine, beer and alcohols are not taken into consideration.
2. Belgium data include Luxembourg consumption: the territorial unit is thus the BLEU.

Source: OECD Health Data, 2004.

**Figure A1.5. Alcohol consumption remains high**

Annual consumption of pure alcohol in litres per adult<sup>1</sup>

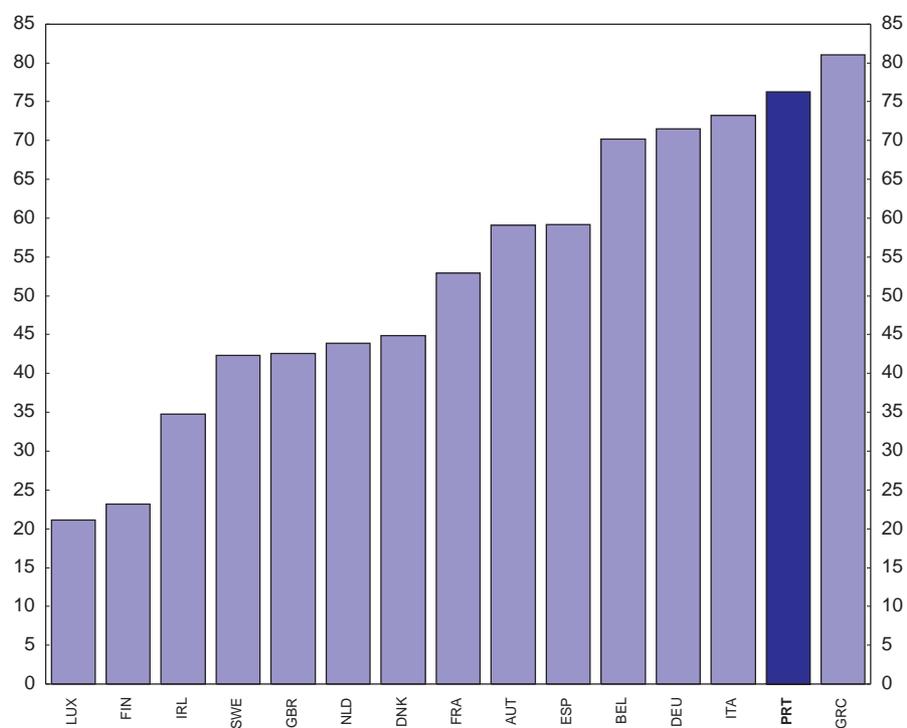


1. Population aged 15 and over.

2. Or nearest year available

Source: OECD Health Data, 2004.

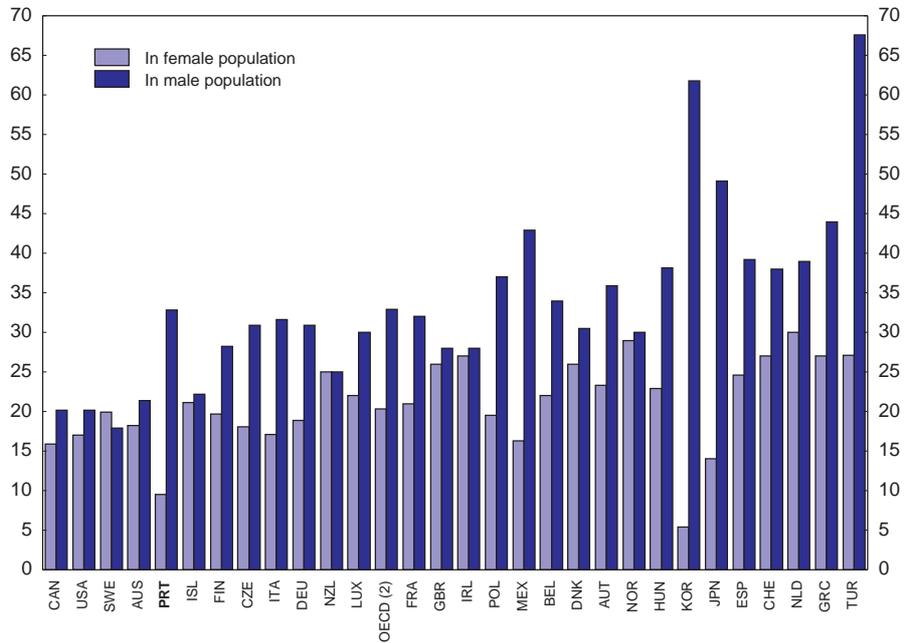
**Figure A1.6. The population does not exercise sufficiently**  
Percentage of population which does not exercise at least twice a week<sup>1</sup>



1. In 1999.

Source: Eurobarometer 52.1 - 1999.

**Figure A1.7. Tobacco consumption is relatively low**  
 Proportion of daily smokers in the population<sup>1</sup>



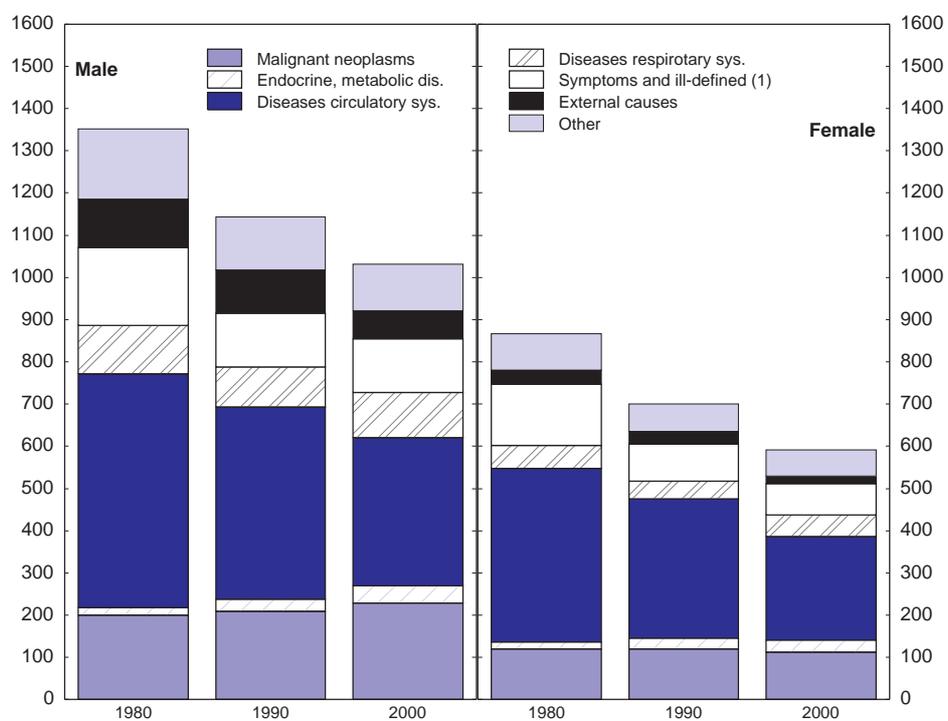
Note: except the Slovak Republic.

1. In 2002 or nearest year available in the adult population aged 15 and over. Except Italy: 14 and over; Austria and Spain : 16 and over; Hungary, Ireland and the United States: 18 and over; Korea: 20 and over; Mexico: 12-65; Finland: 15-64; Iceland : 15-79; Norway: 16-74 and Sweden: 16-84.

2. Unweighted average of available data.

Source: OECD Health Data, 2004.

**Figure A1.8. Causes of death**  
Age-standardised death rates per 100 000 male/female population



1. Symptoms, signs and subnormal clinical and laboratory findings, n.e.c.  
Source: OECD Health Data, 2004.

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