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HEALTH CARE SYSTEMS IN THE EU

A COMPARATIVE STUDY

Public Health and Consumer Protection Series

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CONTENTS

INTRODUCTION

The following report provides essential facts on health and health care in the 15 EU Member States. This new study of the health care systems of the 15 European Union (EU) Member States replaces two existing studies carried out in 1990 and 1993.

The 1991 Maastricht Treaty gave the Union new competences in public health and more scope for international cooperation. Joint action with the Member States was identified for health promotion and health protection, the subsidising of medical and health policy research, and the establishment of international information systems. The Commission has already developed specific policies in fields such as AIDS, tobacco and alcohol abuse, and environmental causes of ill-health. The 1997 Treaty of Amsterdam provides for a new direction of Community action towards illness and diseases, and alleviating sources of danger to human health. The single European market and increasing migration within the Union are encouraging further policy convergence and new routes for the exchange of medical technology, health services and manpower resources.

However, health policy-making is firmly guided by the principle of subsidiarity. The harmonisation of national laws is specifically excluded in Article 129 of the European Union Treaty.

Health care systems stem from specific political, historical, cultural and socio-economic traditions. As a result, the organisational arrangements for health care differ considerably between Member States - as does the allocation of capital and human resources.

The principal forms of health care organisation in the European Union are the tax-financed national health service systems and those operating with social insurance in which insurance funds may be independent of the government.

However, this fundamental division between the systems is weakening. Countries such as the United Kingdom have opened up their NHS to internal competition to diversify supply and increase purchasing power. In contrast, in some traditional social insurance systems sickness funds are being merged and cost control increased on the part of the central government. This trend towards convergence is an attempt to retain the relative advantages of each system.

Health care in the EU is at a cross-roads between challenges and opportunities. The Member States are facing common challenges in delivering equal, efficient and high quality health services at affordable cost in times when the amount of care to be delivered is starting to exceed the resource base. The demand for health care in Europe - as elsewhere among industrialised countries - is growing as a result of ageing populations and rising public expectations. The combination of demographic changes and technological developments increases the cost of provision.

In consequence, the systems face the same problems of rationing services in order to cut costs owing to an increasing demand and a decreasing tax base to pay for that demand. At the same time, it is increasingly difficult to develop widely accepted health policies and maintain public consent.

On the other hand, there are new opportunities to secure substantial improvements in health. There is growing interest in disease prevention and health promotion, clinical advances are enabling more

effective and efficient use of resources, and information on health and health care can be circulated more rapidly.

Strategies employed by the Member States to meet the challenges and opportunities in health differ. For one thing they reflect substantial differences in the organisational framework in which health services are financed and delivered. Furthermore, definitions of what constitutes health and health care differ from country to country and different levels in health outcomes reflect different problems to be tackled. Each system has its own strengths and weaknesses and none of the systems provides a wholly successful solution. Hence each has something to learn from the experience of the other fourteen.

In essence, the fifteen health care systems in the EU reflect a variety of different philosophies and approaches and retain their own peculiarities. Comparative studies of these systems aid the process of learning from one another to improve the health of all citizens of the Union.

This report aims to provide up to date comparable information on health care systems in the European Union.

Part 1 provides an overview of the key components of the health care systems studied and major trends in challenges to health and health care.

Part 2 gives a detailed account of the health care system in each of the fifteen Member States.

The **synoptic table** in the final section aims to summarise the main characteristics of the systems at a glance and the **glossary** provides for short definitions of technical terms.

Methodological Issues

Comparisons of data on health and health care between the Member States are generally hindered due to the different methods of data collection and interpretation employed. Thus, conclusions from comparative statistical data have to be drawn with great caution. This applies to information on health status, health care costs and resources, including their utilisation. The standardisation of data definitions and methods of data collection has not yet been fully realised, though subject to substantial international effort.

In the detailed account of the health systems in the Member States, use is made of EU average values. These estimates are presented inside brackets to compare particular indicators. The fundamental source of statistical information used in this study is "OECD Health Data 98(97)", the data are those available at the end of May 1998. Whenever possible, OECD data have been compared with a second data source, most frequently derived from the WHO "Health for All" database. Differences between the two sources exceeding 10% are presented in angular brackets. This comparison with a second data source is limited because of a lack of availability of data for the same year.

PART ONE:

A comparative Outline of the Health Care Systems

of the EU Member States

FRAMEWORK

The framework used to describe the health care systems has **three** basic features.

Need and Demand for Health Care provides a portrait of the mission of health care at present and for the future.

Health Care Finance and Organisation and **Health Care Resources and Utilisation** are crucial for understanding the nature, structure and individual characteristics of the health care systems in the European Union.

Current Issues in Health Care, is a summary outline of common and different challenges and solutions to contemporary health care in the Member States.

1. Need and Demand for Health Care

Each system attempts to meet the population's need for health and health care. A complex issue is to what extent the demand for health care appropriately reflects the actual population health need and to what extent it is met by health care service provision and utilisation (figure 1). Population health need can translate into "justified" demand and appropriate use of health services, but some health care need might be neglected due to lack of demand and utilisation. Thus, a particular challenge for health care systems is to move closer to the identification of the real need for health care, satisfying justified demand and promoting demand where appropriate.

Figure 1:

Population health need with possible implications on health care demand and health care service provision and utilisation. This theoretical model cannot reflect real proportions which have not been reliably quantified and are likely to differ from system to system.

The quantification and qualification of health is a prerequisite for the identification of population health need and translation into health care provision.

Health cannot be measured directly. Useful indicators for the size and nature of health need include population characteristics and so-called "indicators" of health such as life expectancy, morbidity and mortality. The latter can also be viewed as outcome indicators for health care. However, many determinants of health fall beyond the impact of the health care sector. Among these are, for example, socio-economic conditions and education. A particular challenge is to balance inequities in health caused by such factors.

Finally, advances in medical science will give rise to new demand for health care by increasing the capacity to prevent, diagnose, treat, cure and rehabilitate diseases. This often translates into a higher volume of service provision and utilisation in spite of the many direct cost-reducing effects of medical technological innovation. In effect, public expectations and health care demand will rise as those who use health services get accustomed to higher standards of care.

The synopsis of health status indices can give a global impression of the quantity and quality of life of Europeans. However, cross-country comparisons of health status indices are only valid within the limits of data availability and comparability.

2. Finance and Organisation of Health Care

Finance and organisation of health care in the EU Member States is based on national political and socio-economic traditions. It translates into certain social objectives in health care finance and delivery such as equity, efficiency and affordable cost. There is considerable variation both between health care systems in the EU and between health care and other policy sectors in each country in the relative value assigned to each objective.

To finance a health care system, money has to be transferred from the population or patient - the first party, to the service provider - the second party. All systems in the European Union employ a third party to pay or to insure health expenses for beneficiaries for the times when they are patients. The aim is to share the costs for medical care between the sick and the well and to adjust for different levels of ability to pay. This mechanism of solidarity reflects consensus in the European Union that health care should not be left to a free market alone.

3. Health Care Resources and Utilisation

The allocation of health care resources differs considerably between the health care systems of the Member States as does utilisation by the population they serve. Each health service is complex in this regard. Resources and facilities range from large hospitals to single room clinics, from specialist surgeons to chiropodists. To make a comparative analysis feasible, the major resources and facilities have been identified as hospitals, primary health services and ambulatory care, capital-intensive medical technology[1] and health employment.

[1] Capital intensive medical technologies, for example diagnostic equipment such as Magnetic Resonance Imaging Scanners (MRI) and Computed Tomography Scanners (CT) as well as therapeutic technologies, for example Radiotherapy Units (RU) have recently become one indicator for resources allocated to health care. Ref.: Lázaro & Fitch (1995).

In times of restricted resources, there is an increasing interest in deploying health care resources in an optimal fashion. Variations in health care expenditure and resources among EU Member States suggest that there are many different ways of achieving the same objective and thus a broad scope for comparison of international experience of getting the best value for money.

4. Current Issues in Health Care

The three basic features of the nature and structure of EU health care systems conform to current challenges in health and health care. Solutions, common or different, are reflected in health care reforms.

NEED AND DEMAND FOR HEALTH CARE

1. Demographic Determinants

The size, age and sex structure of the population served is the most basic determinant of health care demand.

EU Member State populations range from 421,000 in Luxembourg to 82 million in Germany (1997). The relatively slow population growth in the EU in the past three decades makes it a weaker indicator for changing levels in health care demand than in other parts of the world.

The population distribution between age/sex groups and household status can also be very important in determining the demand for health care: younger women and single status cause higher demands on health services compared to persons within the same age group.

The age structure of the population is particularly crucial in determining health care demand and is also a topical issue in public health. The percentage of the population aged 65 and over has grown substantially in the last 20 years as illustrated in figure 2.

Figure 2:

Population aged 65 and over as a percentage of the total population in 1975, 1985 and 1995 in the EU Member States. Data for Luxembourg are incomplete for 1975, and data for Denmark are incomplete for 1995.

The percentage of the population aged 75 and over ranges from 4.7% in Ireland to 8.2% in Sweden (1996), the EU mean[2] for the population is projected to increase from 6.5% in 1990 to 8.9% in 2010[3].

The type of health care demanded alters with increasing age, partly because the elderly tend to need health care more frequently as they develop more chronic, mainly cardiovascular and respiratory diseases. The incidence of cancer also rises with age.

[2] Excluding Austria and Finland.

[3] Ref.: Walker et al. 1994.

2. Health Status Indices

Health status indices are commonly employed to determine the level of health care need. Available international data on health status indices often are associated with life expectancy and premature mortality.

Table 1: Health Indicators: Life expectancy at birth and mortality rates[1]

Countries	Life Expectancy at birth (1996)		Rate of Infant Mortality (per 1,000 live births) (1996)	Rate of Perinatal Mortality (per 1,000 total births) (1995)	Rate of Standardised Mortality (per 1,000) (1993)
	Female	Male			
Austria	80.2	73.9	5.1	6.9	7.8
Belgium	81.0	74.3	6.0	8.4[2]	8.2[5]
Denmark	78.0	72.8	5.2	7.5	8.7
Finland	80.5	73.0	4.0	5.1	8.3
France	82.0	74.1	4.9	7.4	6.7
Germany	79.9	73.6	5.0	6.9	9.5
Greece	80.4	75.1	7.3	10.9	7.2
Ireland	78.5	73.2	5.5	9.0	9.0
Italy	81.3	74.9	5.8	8.8[3]	7.1[2]
Luxembourg	80.0	73.0	4.9	7.0	8.0
Netherlands	80.4	74.7	5.2	7.9	9.0
Portugal	78.5	71.2	6.9	9.0	9.3
Spain	81.6	74.4	5.0	6.5[4]	7.0[2]
Sweden	81.5	76.5	4.0	5.5	6.9
UK	79.3	74.4	6.1	8.9[4]	7.9[2]
EU average	80.2	73.9	5.4	7.5[6]	8.2[6]

1 Ref.: OECD Data File 1998.
2 1992.
3 1993.
4 1994.
5 1989.
6 Excluding Belgium, Italy, Spain and the UK.

Life expectancy at birth provides a composite indication of health status, varying by 4.0 years for females and 5.3 for males within the European Union. There are differences in rankings between females and males in all Member States. Life expectancy at birth has substantially increased in all countries of the EU during recent decades. Higher life expectancy in the southern European countries is sometimes attributed to the Mediterranean diet consumed by their populations[4].

Infant mortality, derived by deaths of children aged 1 year or less per 1,000 live births, largely reflects socio-economic conditions. All Member States have experienced decreases since systematic data collection in the 1960s. This is particularly notable in southern European countries. Differences in infant mortality levels between EU Member States are now less pronounced in comparison to the 1960s.

The perinatal mortality rate (all deaths occurring in the first week of life per 1,000 total births) can be a more sensitive measure for the state of prenatal and obstetric care and thus is regarded as one outcome measure of health care. Perinatal mortality differs substantially among the Member States of the EU, the rates in Greece and Portugal being almost twice as high as in Finland and Sweden.

Life expectancy and mortality rates can in part be explained by a more detailed study of the causes of death. Potential Years of Life Lost (PYLL) and studies into leading causes of death provide more detailed information on the distribution of mortal conditions.

In determining PYLL, life years lost to specific diseases are calculated by counting deaths from specific causes between birth and the age of 69, weighted in each case by the number of years between death and age 70.

Table 2 provides a synopsis of three groups of diseases which impose a substantial burden on populations and determine health care need: years lost to ischaemic heart diseases (e.g. cardiac infarction), cerebrovascular diseases (e.g. stroke) and cancer diseases (e.g. lung cancer).

[4] Ref. Abel-Smith et al. 1995.

Table 2: Potential Years of Life Lost under 70 years per 100,000 population (1993)[1]						
Country	Ischaemic Heart Disease		Cerebrovascular disease		Cancer	
	Female	Male	Female	Male	Female	Male
Austria	235.3	830.8	157.7	238.0	1203.9	1508.3
Belgium[2]	127.5	544.3	142.0	183.4	1232.5	1683.4
Denmark	246.6	809.2	181.6	197.7	1556.2	1479.8
Finland	190.3	1206.2	208.2	340.1	943.5	1148.7
France	61.4	380.5	100.3	191.4	1011.5	1936.4
Germany	214.9	860.4	149.5	227.4	1306.3	1649.7
Greece	148.6	781.1	165.8	275.2	961.6	1424.9
Ireland	300.4	1305.7	151.7	206.0	1372.4	1457.3
Italy	115.2	562.2	155.0	220.2	1125.8	1625.3
Luxembourg	181.1	731.4	234.8	179.1	1249.8	1634.7
Netherlands	198.2	692.2	134.2	164.1	1266.5	1448.7
Portugal	157.1	617.1	279.6	533.4	1119.3	1569.9
Spain	93.1	523.6	121.9	237.0	1000.3	1694.3
Sweden	167.6	746.0	115.3	183.8	1108.3	991.7
UK	311.5	1198.9	172.4	208.2	1370.6	1398.7
EU Average[3]	187.2	803.2	166.3	243	1185.4	1497.7

[1] Ref.: OECD Health Data File 1997.
[2] 1992.
[3] Excluding Belgium.

Leading causes of death allow determination of health care need for different genders, age groups, races and social classes.

Considering only age and gender, leading causes of death are summarised below:

Table 3: Leading causes of death by age and gender in the European Union[1]		
Age group (years)	Female	Male
under 1	Hypoxia and respiratory conditions	Hypoxia and respiratory conditions
1-29	Motor vehicle accidents	Motor vehicle accidents
30-34	Suicide	Motor vehicle accidents
35-39	Breast cancer	Suicide
40-64	Breast cancer	Cardiac infarcation
65-79	Cardiac infarction	Cardiac infarcation
80-84	Stroke	Cardiac infarcation
over 85	Cardiovascular and pulmonary conditions	Cardiovascular and pulmonary conditions

[1] Ref.: Abel-Smith et al. 1995.

Considering all ages, the majority of deaths of EU citizens are somewhat related to lifestyle factors such as tobacco and alcohol, diet and accidents.

Tobacco, in spite of slight decrease in consumption in the EU in recent decades, is still one of the biggest causes of cardiovascular conditions and is strongly related to a number of cancers.

However, health care need is at best incompletely reflected by analysing the causes of death within a population. The nature and distribution of diseases (morbidity) is equally crucial for determining the appropriate level of health care supply for those who are ill or will suffer from disease in the future.

An example of a decrease in need for health care is dental care. Due to broad socio-economic factors, including fluoridated toothpaste, there has been an overwhelming decrease in dental caries among children in a number of European countries over the last two decades.

Internationally comparable morbidity data are scarce and often lack reliability. Efforts to establish comparable EU information have increased in recent years. Some conditions (e.g. AIDS) are already very well documented (Table 4).

Table 4: Documented new cases of AIDS per million EU-population[1]

EU Countries	1982	1984	1986	1988	1990	1992	1994	1996
Austria	N/A	1.1	3.3	13.9	21	23.8	20.3	16
Belgium	1.5	5.3	7.5	14.2	20.6	24.5	25	18.8
Denmark	0.6	3.3	13.5	24.6	38.3	40.5	45.6	31.6
Finland	0.2	0.6	1.4	3.4	3	4.2	8.5	4.5
France	0.5	4.1	22.3	53	74.2	87.8	95.1	72.1
Germany	N/A	1.9	8.3	19.2	22.6	21.7	22.3	18.4
Greece	N/A	0.6	2.4	7.1	13.9	18.7	20.1	24.8
Ireland	0.6	0.9	1.7	12.5	18.6	19.9	20.9	25
Italy	N/A	0.7	7.9	31.1	55	74.5	97.2	91.8
Luxembourg	N/A	N/A	8.2	10.7	23.6	30.8	32.4	29.3
Netherlands	0.3	2.1	9.4	22	28	33.5	30.2	25.1
Portugal	N/A	0.4	3.8	13.2	25.3	40.2	64.8	81.1
Spain	0.1	1.3	12.5	57.4	96.8	124.1	178.3	162.5
Sweden	0.1	1.3	6.7	10.5	15.4	14.7	21.2	16
UK	0.2	1.8	8.3	15.7	21.6	27	30.5	24
EU Average	0.5	1.8	7.8	20.6	31.9	39.1	47.5	42.7

[1] Ref.: OECD Health Data File 1997.

The number of newly-reported cases of AIDS differs considerably between EU Member States which might in part be due to differing patterns of surveillance. On the other hand, there is some clear indication that preventative measures such as health promotion have had some long-lasting effect on the spread of HIV infection. There is a general trend towards more constant or decreasing

numbers of newly reported cases of AIDS in most of the Member States since 1994. However, in Greece, Ireland and Portugal there is still a clear upward trend.

3. Inequalities in Health

The difference between need and demand for health care varies between population groups. This is partly due to specific causes of death and disease. In the last decade it has been increasingly recognised in a number of EU countries that there are also underlying factors of ill-health which stem from broader socio-economic, cultural and ethnic conditions.

Inequalities in health comprise inequalities in health status itself and inequalities in finance and delivery of health services.

In a number of European countries, for example the UK, there is increasing concern about inequality (uneven share) and inequity (unfairness) in health because recent observations have shown that differences in health status (as measured by life expectancy, mortality and morbidity) are increasing between different social classes, generally discriminating against the disadvantaged. Studies undertaken into causes of this health divide offer different theories.

However, it follows from most research undertaken that strategies to tackle inequalities (other than biological variations) need to concern sectors other than health, for example finance, education, employment, and social policies.

Observation over time suggests that the health status of the resident population of the EU has improved substantially. This has resulted in ageing populations, and has in effect increased the demand for health care. At the same time, with people living longer, patterns of disease have shifted from acute to chronic conditions. These, however are to a large extent avoidable and thus suggest orientation towards more preventive care. There is furthermore far-reaching consensus in the EU that unnecessary inequality in health is an increasing challenge.

FINANCE AND ORGANISATION OF HEALTH CARE

1. Finance of Health Care

Although EU countries have each developed their own funding mechanisms, similar objectives and common historical developments have resulted in systems which have much in common. All systems rely on a mixture of funding sources, but the majority of funds are state-controlled, whether directly or indirectly. Only a small proportion comes from direct fee-for-services.

State regulation in the Member States provides for universal health insurance or service coverage (Denmark, Finland, Greece[5], Italy, Portugal, Sweden, United Kingdom) or nearly universal coverage (99 and 99.5% of the population in Austria, Belgium, France, Luxembourg, Spain, and 92.2% of the population in Germany) for health care through compulsory schemes. In Ireland, universal

[5] Universal coverage refers only to public hospitals.

coverage for primary care only applies to low income groups. In the Netherlands, compulsory health insurance covers only 60% of the population. The rest of the population are usually covered by voluntary private or public insurance (Belgium, France, Germany, Luxembourg, and the Netherlands.)

Health care in the EU systems is either financed through general taxation or by contributions to health insurance funds.

There are three predominant systems of health care finance in the European Union. The first is public finance by general taxation (often referred to as the Beveridge[6] model). Secondly, there is public finance based on compulsory social insurance (the Bismarck[7] model). Thirdly, there is private finance based on voluntary insurance, which covers only a small minority of EU citizens entirely, but which also operates on top of social insurance as a supplementary form of funding health care.

Table 5: Methods of Financing Health Care in the Member States of the EU

Countries	Predominant system of finance	Main supplementary system of finance
Finland, Greece, Ireland, Italy, Sweden, Spain, United Kingdom	public: taxation	private voluntary insurance, direct payments
Denmark, Portugal	public: taxation	direct payments
Austria, Belgium, France, Germany, Luxembourg	public: compulsory social insurance	private voluntary insurance, direct payments, public taxation
Netherlands	mixed compulsory social insurance and private voluntary insurance	public taxation, direct payments

Cost-sharing by patients contributes to health care finance in all of the Member States to a varied extent, with the aim of maintaining cost control, in principle by making the patient more aware of the costs of medical care.

The EU Member States employ different methods for cost-sharing. Co-payments to services are most frequently applied to prescribed pharmaceuticals either at a flat rate or at a percentage of the price of the product which is to be met by the patients. Co-payments to prescribed pharmaceuticals are in principle deployed in all Member States.

6 Integrated system of mainly state finance and provision of health care within a National Health Service.

7 Model system for social insurance.

Some Member States (Austria, Belgium, Denmark[8], Finland, France, Italy, Ireland, Portugal) also apply a co-payment system for specialist physician care whereas co-payments for services provided by general practitioners are less frequently applied (Austria, Belgium, France). Co-payments for inpatient hospital care are in operation in Austria, Belgium, Germany, France, Luxembourg, Portugal, and Sweden. Co-payments for dental services can amount to 100% in a number of EU countries.

Co-insurance is another form of cost-sharing whereby the insured person has to pay for a set proportion of all services delivered (France).

In most Member States there is a provision to exclude low-income groups and other disadvantaged population groups from cost-sharing.

Compulsory and voluntary insurance is administered by insurance funds - autonomous organisations which collect a share of work-related income and in turn provide payment for health care either at the time of use, or by repayment afterwards.

Most of the tax-based systems operate with a national health service where services are provided through a central public institution. However, it does not necessary follow that finance from government budgets leads to services owned by the government and that all staff working in the health services are salaried staff. Only in Greece and Portugal do salaried staff predominate among doctors working in ambulatory care. Alternative payment systems in office-based care are: fee-for-service (payments according to fixed service charges), and capitation (where the provider receives a fixed amount per enrolled person). More recently-developed forms of payment to the primary care provider include payment by a lump sum (budget) under which services have to be managed. Under study are payment systems based on a certain diagnosis or on achieved medical outcome. In General Practice and Specialist care out-of-hospital, fee-for-service arrangements tend to be the predominant payment type in social insurance systems in the EU (Belgium, France, Germany and Luxembourg). There is substantial effort to reform fee-for-service arrangements as they tend to promote the overuse of manpower and capital resources.

Allocation of hospital funds differs widely between the Member States, the main basic elements being per-diem payments, budget payments, and payments based on the clinical diagnosis ("Diagnosis Related Groups").

2. Health Care Expenditure

Health care expenditure is particularly difficult to compare on the international level because reliable comparisons depend heavily on equivalent definitions and methods of collection. Furthermore, the boundaries of what constitutes the health care sector and which expenses are attributed to others, for example social welfare, varies from country to country.

Within these limits, there are major differences in real health care expenditure, mainly in the hospital sector, ambulatory care and pharmaceutical costs.

[8] Accounts for some groups of patients only.

Figure 3: Health Care Expenditure per head in the EU in 1996

Figure 3 reveals that health care expenditure per head was highest in Germany, Luxembourg and France, and considerably lower in Greece, Portugal and Ireland.

Health care expenditure as a share of national resources, measured by Gross Domestic Product (GDP), has increased in all EU Member States since the 1960s, in part this is ascribed to stagnation in the growth of national economies.

Figure 4 illustrates the development of health care expenditure in relation to GDP in selected EU Member States between 1990 and 1995.

Generalising and simplifying the case, it tends to be the national health service systems which are more successful in maintaining control over financial resources than systems based on social insurance.

Figure 4: Growth of health care expenditure as a share of GDP in selected EU Member States, 1960 to 1995[1]

[1] Ref.: OECD Health Data File 1997.

Several causes have been evoked for the increase in health care expenditure over time in the EU and elsewhere. The two principle factors are related to population ageing and the effects of health care technology innovation.

The impact of ageing on health care expenditure is more complex than at first sight. A number of EU countries such as Belgium, France, the Netherlands and the United Kingdom have found that health care expenses multiply between the age of 65 to 75 in comparison with the younger and middle age groups. However, there is some indication that increased demand and costs of the very aged (80 and older) fall more on other sectors of social care. Thus, it seems to be the younger old rather than the very old who need expensive medical care. These observations require the acquisition of more reliable data.

Innovation in health care technology over time has led to great advances in the prevention, treatment, and cure of diseases and has contributed to increased length and quality of life. Technology innovation for health care promotes the industrial sector and has a tremendous potential to reduce costs. However, health care technology resources are not always deployed in an optimal fashion: wasteful provision and utilisation by those who provide and utilise health care technology is often attributed to a lack of cost-consciousness. New health care technology is frequently

acquired and utilised without clear evidence that it provides a better and cheaper or more cost-effective alternative to existing technologies.

HEALTH CARE RESOURCES AND UTILISATION

1. Health Care Resources and Utilisation

The question of whether to set up a National Health Service has been important in all Member States and there is a wide range of different attitudes and approaches to this issue. A fully developed NHS implies that resources and services are largely provided directly by the public sector and consumed free at the point of use.

None of the EU countries provides a wholly public sector service and, in fact, the trend has been towards a decrease in the state's role in service provision, for example in the United Kingdom and Italy. In ambulatory medical and dental care a private practitioner approach is the norm in the European Union.

The situation is somewhat different in relation to more expensive hospital based services. In some countries, such as Denmark, Italy and Ireland, state controlled hospitals are a dominant feature whereas in others, such as Germany, France and Belgium, the private sector holds a large share of service provision. In a number of countries such as the UK, Portugal and Ireland there have been recent developments allowing major hospital services a greater degree of freedom from state control. The 1990 health care reform in the UK has provided for hospitals to become 'Trusts' which are more operationally independent from the state than has previously been the case. Similarly, the introduction of the General Practitioner (GP)-fundholding system in the UK has provided for a number of practitioners to supply primary care services themselves and to contract for secondary care (hospital and specialist) services, all of which have to be paid for out of a fixed budget.

This mechanism is primarily associated with a change in financing models, but eventually will also have an impact on the provision of services.

The aim of this move towards an 'internal market' in health service provision is to introduce competitive pressures leading to greater cost-effectiveness and higher service quality. There is some indication that patients prefer independently managed units and that GP fundholders operate quite efficiently.

There is a lack of availability of reliable and recent comparable data on health care input factors and utilisation rates. Provision and utilisation of hospital care differs by up to a factor of six in the European Union Member States but country data are highly controversial among different sources.

Table 6 indicates that the number of inpatient hospital beds per thousand population is highest in Luxembourg, the Netherlands, Finland and Germany and lowest in Spain and Portugal. Inpatient bed rates have decreased in all countries over the last decades.

Average length of stay in acute care is particularly high in Germany, the Netherlands and Luxembourg but decreased in nearly all Member States over the past two decades.

The trend is somewhat the reverse for admissions to acute care hospitals and a recent study has shown that despite of an overall reduction in bed availability and average lengths of stay in acute hospital care, admission rates and expenditures have generally been increasing over the same period[9].

In terms of health care productivity, hospital data are in favour of those countries with a comparatively low number of inpatient beds, namely the United Kingdom and Denmark.

In ambulatory care, utilisation of services in Germany and Italy is three times as high as in Portugal as measured by the number of home and office visits to a general practitioner or to an office based specialist (data not illustrated). Consumption of prescribed drugs also varies considerably among the Member States of the EU.

Table 6: Input and throughput in hospital and ambulatory care[1], [2]

Countries	Inpatient beds per 1,000 in acute care (1995)	Inpatient bed-days per head in acute care (1995)	Average length of stay in acute care in days (1995)	Admission rate in acute care of % of the population (1995)	Number of cases treated per bed (1993)
Austria	6.6	1.8	7.9	23.1	33.9
Belgium	5.3	1.3	7.8	18.0	25.5
Denmark	4.0	1.2	6	19.2	44
Finland	4.0	1.1	5.5	20.0	28.2
France	4.6	1.3	5.9	20.3	25
Germany	6.3	2.1	12.1	18.0	24.4
Greece	3.9 (1992)	N/A	N/A	N/A	N/A
Ireland	3.3	1	6.7	14.8	31
Italy	5.1	1.3	8.8	15.8	26.4
Luxembourg	6.7 (1994)	1.8	9.8	18.4 (1994)	N/A
Netherlands	3.9	1	9.9	10.3	25.2
Portugal	3.6	0.8	7.9	11.1	32.2
Spain	3.2 (1994)	0.8	8.8	10.5 (1994)	31.7
Sweden	3.0	0.8	5.2	16.2	32
UK	2.0	0.8	4.8	21.2	47.8
EU Average	4.3[3]	1.25[4]	7.6	17.3[3]	31.3

1 Ref.: OECD Health Data File 1997.
2 Data are not readily comparable with a second data source due to different definitions deployed because most data sources relate to overall inpatient data.
3 Excluding Greece, Luxembourg and Spain.
4 Excluding Greece.

9 Ref.: Wiley 1996.

Primary medical care in most EU countries is provided by a mixed system of independent physicians in private practice and salaried physicians in public centres.

The valuation of primary medical care in EU health care systems varies, as is reflected in the different numbers of general practitioners as a proportion of all physicians (table 7). Several EU Member States have attempted to decrease the number of specialists, which usually deploy more costly technical services, and to increase the role of general practice.

Table 7 summarises the level of doctors, nurses, pharmacists and dentists which show a striking diversity in the countries of the European Union. The numbers of physicians vary by a factor of more than two between the highest and lowest levels, the number of dentists by more than three, the number of nurses by approximately four and pharmacists by nearly six. There is however a high degree of data variability among different national and international sources with some substantial controversy, for example for the case of Italian doctors. Overall, comparably high manpower resources for health are employed by Finland, while the United Kingdom allocates human input resources more sparingly.

Table 7: Human Resources employed for Health Care[1]

Countries	Practising physicians per 10,000 population (1994)	General practitioners, % of all physicians (1994)	Practising dentists per 10,000 population (1993)	Certified nurses per 10,000 population (1993)[2]	Practising pharmacists per 10,000 population (1994)
Austria	25.6[3]	474	4.4	80.0	5.0
Belgium	37.4	N/A	6.8	N/A	13.5
Denmark	29.0	218	5.2	67.3	1.8
Finland	26.9	430	9.1	200.2	14.0
France	28.5	505	6.8	56.7	9.7
Germany	32.8	338	7.2	47.9	5.4
Greece	38.8	N/A	10.4	35.9	7.8
Ireland	20.0	234	4.0	73.8	3.2
Italy	53.0[4]	N/A	5.5 (1992)	40.8 (1992)	9.6 (1992)
Luxembourg	21.6	359	5.1	N/A	8.6 (1992)
Netherlands	25 (1990)[5]	N/A	5.3 (1990)	N/A	1.6
Portugal	29.3	211	2.1	31.3	12.4
Spain	40.8 (1993)	N/A	3.1	43.0	10.1 (1993)
Sweden	30.2[6]	178	10.6	98.7	6.6
UK	15.6	378	3.7	N/A	5.9 (1993)
EU average	28.1	277	5.9	70.5	7.7

1 Ref.: OECD Health Data File 1997.
2 Substantial differences to other data sources might be explained by a different categorisation.
3 [33] Reference Source: WHO Health for All Data Base.
4 [4.7].
5 Reference Source: WHO Health for All Data Base.
6 [21.9] Reference Source: ibidem.

These data do not allow recommendations about the appropriate level of health care resources because indicators give insufficient information about the effectiveness of a certain pattern of health care provision and utilisation. However, data comparison, confined within limits of comparability, clearly indicate that there are different ways of achieving a desired outcome and that international experience can be a guide to more effective health care provision and utilisation.

2. The Public Perception of Health Services

Public expectations of resource provision in health care have two major health policy consequences: first, the public's expectation of their health care services is seen as contributing to increasing health care costs. In addition, the public's view of health care service provision might help monitor health care reform.

A recent EU-study on satisfaction from health systems in the 15 EU Member States concludes that public perception of their health care system seems to be, at least in part, related to the level of health care spending[10]. Table 8 summarises the main findings of the survey conducted in 1993.

Table 8: Satisfaction from health care systems in the 15 EU-Member States[1]

	Very satisfied	Fairly satisfied	Fairly Dissatisfied	Very Dissatisfied	Other
Austria	17	46.3	4.1	0.6	32
Belgium	10.9	59.2	7.2	1.1	21.6
Denmark	54.2	35.8	4.5	1.2	4.3
Finland	15.1	71.3	5.3	0.7	7.6
France	10	55.1	12.8	1.8	20.3
Germany	12.8	53.2	9.8	1.1	23.1
Greece	1.5	16.9	29.7	24.2	27.7
Italy	0.8	15.5	33.5	25.9	24.3
Ireland	9.4	40.5	18.2	10.9	21
Luxembourg	13.6	57.5	7.5	1.4	20
Netherlands	14.2	58.6	13.6	3.8	9.8
Portugal	0.8	19.1	37.4	21.9	20.8
Spain	3.7	31.9	20.4	8.2	35.8
Sweden	13.1	54.2	11.4	2.8	18.5
UK	7.6	40.5	25.7	15.2	11
EU Average	8.8	41.5	18.8	9.5	21.4

[1] Ref.: Mossialos 1996.

[10] Ref.: Mossialos 1996.

The study concludes that satisfaction relates, at least in part, to higher spending on health care with the exceptions of Italy, a high spender with low public satisfaction, and Denmark, a low spender with a high degree of population satisfaction.

The citizens of the southern European countries in general show lower satisfaction with health care service provision than the northern countries of the European Union.

CURRENT ISSUES IN HEALTH CARE

Some dissatisfaction with the methods of finance and delivery of health care has emerged in all of the Member States. Main common problems, albeit to different degrees, are deficiency of systems to cope with changing disease patterns, to provide equitable access to services, maintain control over costs, to utilise health care resources efficiently and to provide high quality medical care. Common concerns result in similar and different strategies for solution.

Priority for social stability will be to secure adequate **care of the elderly**, in providing a balance of home based, community based and hospital based services.

In addition, ageing populations imply alterations of disease towards chronic conditions. Thus, increased focus will have to be on those diseases which are readily preventable - with or without medical care. **Preventive care** potentially offers a cost-effective alternative to high-cost technology medical care.

Universal rights for health care access are granted in the majority of Member States, but **equality of access** remains a permanent concern for most health care systems, because it relies on many factors which are not all directly related to health care. Thus, direction of improvement is multidisciplinary and directs attention towards health education and balance of social deprivation.

Solutions for **cost containment** are searched for because ageing populations, costly implications of technological development and increasing expectations of consumers result in inflationary health care systems in all of the EU Member States.

Greater **cost effectiveness** is seen as a route for more health care per Euro spent. The search for increased **efficiency** implies the search for improved or stable quality service provision within given financial limits to achieve health and satisfaction among the population served. This might require for health care systems to integrate the population into the process of establishing standards for quality care. This also requires good quality comparable **information** on patients treated, on outcome and costs of health care and from the reform of the system.

For example more efficient use of resources is aimed at by introducing management elements into health care and competition is used to enhance quality care at a lower price. Payment systems are increasingly reformed to reduce waste of resources in hospital and office based ambulatory care. Also, health care practices and technologies are evaluated more closely to give some scope for **setting priorities**.

Measures are increasingly focused on reshaping health care systems towards measurable outcomes such as quality of health and a high degree of satisfaction among the population served.

PART TWO:

The Health Care Systems of the Individual Member States

AUSTRIA

OVERVIEW

The 1956 General Social Insurance Law (Allgemeines Sozialversicherungsgesetz) mandates health care as a legal right. Austria's social security system is based on the principle of mandatory public insurance, with 99% of the population covered. Insured persons and their dependants are entitled to four major categories of benefits: health insurance, accident insurance, pension insurance and unemployment insurance. The Austrian health care system is in many ways similar to the German health care system. Main differences are direct ambulatory service provision by the sickness funds and negotiation of ambulatory service fees throughout regional physician chambers rather than through physician associations.

The overall state of health is one of the highest in the EU. The range of service provision under health insurance is comprehensive and the majority of the population, 63.3%, is either very or fairly satisfied with the system {50.3%}[11]. Health care expenditure growth has been substantial following the trend in other EU social insurance systems.

Particular challenges for the health care system are the progressive ageing of the Austrian population and a shift towards chronic disorders that has caused concentration on the provision of long-term care and investment in preventive care.

Also, there is increased work towards more efficient provision of hospital services, further integration of hospital and ambulatory care and strengthening the role of primary and ambulatory medical care.

POPULATION AND HEALTH STATUS

The **population** of Austria in 1997 was 8.1 million. The proportion of the population under the age of 20 was 23.7% {24.6%}. The proportion of elderly is low by EU standards with 14.6% over 65 {15} and 6% over 75 {6.1%}. The average age of the population is expected to rise over the next few decades with the proportion of the population over 75 increasing significantly.

The **unemployment rate,** at 1.7%, was second lowest in the European Union in 1994 {4.7}.

Life expectancy at birth was within the EU average, amounting to 80.2 years for females {80.2} and 73.9 years for males {73.9}. **Standardised mortality** amounted to 7.8 per 1,000 population in 1993 {8.2}.

Infant mortality in 1996 stood at 5.1 per 1,000 live births - lower than the EU average {5.4}. **Perinatal mortality** was 6.9 in 1995 {7.5} - obstetric care is perceived to be of particularly high quality in Austria. Major causes of death are cardiovascular diseases (50%) and cancer diseases

[11] Ref.: Mossialos 1997.

(23%). Nonetheless, **potential years of life lost** to cardiovascular diseases and cancer are below the EU average (table 2).

Suicide rates are high in Austria, especially among men; in 1993, Potential Years of Life Lost (PYLL) through suicide were 651 per 100,000 males and 196 per 100,000 females (EU10: 543).

AIDS incidence was 16 new cases per million population in 1996 {EU: 42.7}.

The DMF-indicator for dental diseases among 12 years old was 4.2 in 1990, above the EU average {3.1}.

Alcohol consumption is relatively high. Alcohol consumption was 12.6 litres per year in 1990 {11.6}. This decreased to 11.9 litres in 1995.

Tobacco consumption was below the EU average 1991 for both genders. 35.5% of males over 15 smoked and 20.3% of females {EU9: 37% and 30%}.

FINANCE AND ORGANISATION

1. Structure of the System

Austria is a federal state with nine provinces. The provinces (Länder) differ in size from 270,000 to 1.55 million (Vienna). The Austrian health care system is highly decentralised with a constitutional division of responsibilities between the federal and provincial authorities. The role of the Ministry of Health is limited to formulating the policy framework under which services are delivered and it is also responsible for the approval of new pharmaceuticals. Provincial authorities, which consist of elected assemblies and governments, have responsibility for the management and administration of health care delivery.

The Federal Ministry of Labour and Social Affairs functions as the supervisory body for the health insurance system and monitors the sickness funds. The Main Federation of Social Insurance Funds, 'Hauptverband der Sozialversicherungsträger' is an influential institution, responsible for setting the level of reimbursement for prescribed pharmaceuticals, for making political recommendations and establishing guidelines for the provision of services, for establishing contracts with all health care providers and for coordinating the work of the funds which cover insurance for medical and social care. The funds cover insurance of three types: emergency health care, disease-related health care and social security, the latter being mainly based on cash benefits.

The benefit package of the social health insurance includes medical treatment by general practitioners and specialists, dental treatment, hospital care, sick pay and also programmes for preventive medicine and screening. Insurance coverage is compulsory for employees and their dependants and pensioners. Around 99% of the population is insured with one of the 24 sickness funds. The allocation of insured persons to the funds depends on occupational status, regional and historical criteria. The 24 sickness funds are autonomous institutions. There are slight differences in the extent of coverage provided by the different funds. Their income consists mainly of

contributions (about 90%). Approximately 40% of the Austrian population takes out additional private insurance.

2. Finance

Finance of the Austrian health care system is by funding through sickness funds (approximately 59%), taxation (approximately 24%), private insurance (approximately 7.5%). Around 14% is financed through co-payments to services.

Contributions to the sickness funds are financed by employer and employee, are income related and vary between roughly 6-8.5% of gross income in the various sickness funds.

Co-payments levied depend on the fund, there may be co-payments for prescriptions, medical treatments, therapeutic appliances, dental treatment and inpatient care. Employees and their dependants are excluded from co-payments to ambulatory care services and basic dental care, whereas there is a co-payment rate of approximately 20% for the self-employed and farmers. Co-payments to prescriptions, devices, and a small amount to days in hospital (the share differs between the provinces, co-payment is for a maximum of 28 days per year) are paid by all members of the sickness funds, although the level of co-payments differ between the different schemes. Individuals with low income can be exempted from co-payments.

Hospital financing has changed since 1995. The hospital infrastructure and its equipment in public and non-profit hospitals earlier on was mainly financed by the owner of the hospital, the province and the local government with some allowances from the Ministry of Health. Operating costs were previously covered to 50% by the sickness funds based on a per-diem rate, and a lump-sum subsidy by the KRAZAF ('Hospitals Cooperation Fund'), which was financed by social insurance, federal, Länder and local governments. Since 1995, a prospective payment system similar to the system for Diagnosis Related Groups (DRG) is being gradually implemented following a pilot project for DRG implementation in 20 Austrian hospitals. The purpose is to make a transition towards a more performance-related system (Leistungsorientierte Krankenanstaltenfinanzierung - LKF). For this purpose, a minimum basic data set has been documented for all inpatients in 20 hospitals across the country since 1989. Executive authority for implementation of DRGs lies within the KRAZAF. Most acute care services are reimbursed prospectively since 1997. Doctors working in the hospitals are salaried, for patients with private insurance, payment of services is by a separate fee-schedule.

Doctors working in private practice receive payments via fee-for-service. The fees are mainly paid by the sickness funds or by private health insurance.

The payment of medical fees is based on the master contracts negotiated between the Main Federation of Social Insurance Funds and the regional Chambers of Physicians.

Individual contracts based on the master contracts are then concluded between the individual physicians and the sickness funds.

The fee schedule for **dental services** is, in contrast, regulated at the federal level.

Reimbursement of **pharmaceuticals** is according to a positive list of reimbursable prescriptions. This accounted for about 2,700 products in 1993. Prices are set by ministerial decree. For the sale of products to private persons (**O**ver **T**he **C**ounter products, OTC) an additional 15% can be charged by the pharmacist.

3. Health Care Expenditure

Figure 5 illustrates the development of health care expenditure in the past three decades.

Figure 5: Total expenditure on health care as a share of GDP 1960 to 1995, and distribution of expenditure in 1992.

HEALTH CARE RESOURCES AND UTILISATION

Health promotion and **preventive care** is a recent focus of Austrian health care. It was only in 1992 that general disease prevention measures were added to the legal mandate of the social insurance system. Screening for diseases such as cardiovascular diseases, cancer and diabetes mellitus is increasingly utilised. There is a basic screening programme and a gynaecological programme. Preventive care is mainly provided by general practitioners and gynaecologists under insurance contract and the ambulatory services of the sickness funds. The emphasis on preventive care implies improvement of information and documentation on health status and health outcome of the population.

Primary health care is provided mainly by physicians in single practice. Austrian physicians are in principle free to set up independent practices but in reality it is necessary for most practitioners to contract with a sickness fund. Patients are free to choose their own doctor, but if patients covered by a social insurance consult a 'non panel' doctor, they must pay the fees directly and are later part-reimbursed. Some funds require co-payments whichever doctor is consulted. Specialists are normally only consulted following referral from a general practitioner. With regional differences, ambulatory care is provided in specialised clinics (dentistry, radiology, gynaecology, paediatrics) and also in outpatient departments of hospitals. Around half the clinics are operated by health

insurance agencies and over 60% of the private clinics have public contracts. Both the public clinics and hospital outpatient departments have increased their range of services in recent years, especially in regions with a shortage of private physicians. Voluntary welfare organisations and self-help groups provide substantial medical and social services and the Austrian Red Cross provides most of the ambulance and transportation services - up to 90% in some provinces.
Hospital planning was more or less up to the provinces until the beginning of 1997, when the Federal government and the Länder agreed on a framework for a hospital and major investment plan. Hospital beds are mostly public, mainly provided by Länder governments (54.5%), Communes (16%) and sickness funds (8%).

Hospital bed supply is above the EU average. Austria provided 53,115 **hospital beds** in acute care in 1994 and provided 6.6 inpatient hospital beds per 1,000 population {4.7}. There are substantial regional variations in the availability of beds in acute care. The number of hospitals beds in acute care has been reduced substantially since 1994. The inpatient **average length of stay** in acute care in spite of an above-average reduction during the past decades, at 7.9 days, is still fairly high by European standards {7.6}. The number of cases treated per hospital bed was 33.9 in 1993 {31.3}. The level of costly **medical equipment** is in the upper quartile of the EU, for example, the level of extra corporal shockwave lithotripters for the treatment of urinary and gallbladder stones was highest in the EU in 1990.

The number of **practising physicians,** 25.6 per 10,000 population, was below the EU average {28.1}, with general practitioners amounting to 12.1 {8.2} and specialists amounting to 13.4 per 10,000 population {11.3}. There are reported local shortages of qualified nursing staff in spite of an above EU-average level nationally. The number of dentists and pharmacists in particular is below the EU average.

Table 9: Number of Health Professionals in Austria

Professionals	Number per 10,000 population	EU average	Year
Practising physicians	26	28	1994
General practitioners	12	8	1994
Specialists and consultants	13	11	1994
Practising dentists	4	6	1993
Certified nurses	80	70	1993
Practising pharmacists	5	8	1994

CURRENT ISSUES IN HEALTH CARE

A major focus of current health care in Austria is the implementation of the hospital financing system. The new financing system, which resembles financing according to Diagnosis Related Groups, aims to stabilise expenditure growth in the Austrian hospital sector, increase efficiency of hospital care, decrease length of inpatient hospital stay and improve quality of hospital care. The

new system will crucially depend on data quality, as well as the quality of hospital information and communication systems. 'Quality strategies' are being tested in a number of model hospitals.

There are also powers to increase management capacities in public hospitals and to increase competition between the providers of hospital services.

There are still problems of coordination between hospital and primary care services. The structural changes in the hospital sector are expected to have an impact on ambulatory care services and there are some indications of reform of financing methods in ambulatory care. However, there is tension between the social health insurance authorities and the panel doctors in establishing new remuneration structures. Apart from that, there is a tendency to further strengthen the role of primary care in relation to secondary care and to increase initiatives for preventative service provision and health promotion. In this context there has been a call for the establishment of 'District Social Services and Health Units' to coordinate the wide range of medical and social services available.

There are shortages of long-term care facilities which has led to patients no longer needing acute care occupying costly acute-care beds. To counter this, a legal provision for the financing of long-term care was introduced by a special Nursing Care Act in 1993. Existing facilities for long-term care will be extended in three stages, starting in the year 2000.

BELGIUM

OVERVIEW

The health care system in Belgium is based on social health insurance which covers the entire Belgian population for major and minor risks. Administration is split between one public fund and five non-profit (mutualités) which mainly follow religious/political affiliations.

Health care delivery has a liberal tradition. Independent medical practice, (médicine libérale), has enjoyed substantial therapeutic freedom and autonomy, and service payment has been excessive within fee-for-service schemes. The patient is free to choose his physician, whether general practitioner or specialist. Access to the hospitals is direct. Because of the high density of physicians, waiting lists are virtually non-existent and geographic access to services is universal. Freedom of choice and access to a wide range of services translates into high satisfaction of the Belgian population with their health care system when compared with other European countries.

Problems of the system concern the containment of health care costs, raising sufficient revenues to cover the public share of health care expenses and efficient health care delivery. The system has promoted service over-supply. In particular, there has been no systematic manpower planning for health care delivery.

In addition, the Belgian health care system is one of the most complicated in Europe, making effective regulation more difficult.

POPULATION AND HEALTH STATUS

Social values have changed considerably over the past 25 years resulting in smaller families and a consequent drop in the population[12].

The population of Belgium in 1997 was 10 million, of which around 24% were aged under 20 {24.6%} and 16% over 65 which is comparatively high {15}. The proportion over 75 {6.3%} is likewise somewhat above average {6.1%} and is projected to reach a level of 9.1% in 2020 {8.9%}.

Overall indicators of health status are close to the EU average for life expectancy, and below the EU average for mortality measures. **Life expectancy** at birth in 1996 was 81 years for women {80.2} and 74.3 years for men {73.9}.

Mortality rates, as far as available, are in general high. **Infant mortality** at 6 per 1,000 live births in 1996 was higher than the EU average {5.4}. **Death rates** for cardiovascular diseases are relatively low. A cross-country comparison for specific causes of death is not possible because of a lack of comparable data in recent years.

[12] There are conflicting projections for the future proportion of elderly people.

AIDS incidence has decreased since 1994 as elsewhere in the EU and was 18.8 new cases per million population in 1996 which is less than half the EU average {42.7}.

The **DMF** indicator for dental disease among 12 year-olds was 2.7 in 1990, slightly below the EU average {3.1}.

Alcohol consumption was 11.2 litres per annum {11.2}.

Smoking is below the EU average with 31% of males {37.1} and 21% of females {25.8} above the age of 15 smoking tobacco products in 1992.

FINANCE AND ORGANISATION

1. Structure of the System

The role of the central government is limited to regulation and partial funding, leaving substantial autonomy to the providers of health care both in medical care and management. Seven Ministries on the national level have co-responsibility for health care in terms of health policy, regulation, and monitoring of the health care system. The Ministry for Social Security is responsible for all matters related to social insurance. Some of the cost-containment measures in the 1980s have restored elements of central regulation. The government fixes contribution rates to sickness funds and defines the basic insurance package. The Ministry of Public Health and Family Affairs can reorganise hospitals and services, and the installation of capital-intensive technology is subject to prior approval. The Minister of Social Security approves the level of payment to providers.

The compulsory national health insurance scheme covers major and minor risks for all employees, civil servants and retired and handicapped persons, making up about 88% of the population. Major risks incorporate inpatient care and technical services, minor risks, for example, outpatient care, pharmaceutical prescriptions and dental care. The self-employed and their families, approximately 12% of the population, are insured under a separate program, which only covers major risks. Insurance for minor risks has to be purchased additionally, and this is strictly regulated by the government.

The national health insurance programme is administered by five non-profit mutual benefit associations and one public sickness fund. Administration through the Health Insurance Associations (HIAs) takes place on the national level, with two associations dominating the scheme (National Alliance of Christian Mutual Funds, covering 45% of the population, and National Union of Socialist Mutual Funds, covering 27% of the population).

The mutual funds are aligned with political or religious institutions or ideologies. This determines the character of market competition for sickness fund members. The consumer is free to choose a sickness fund. Competition is limited to insurance for supplementary services because the basic benefit package as well as the contribution rate is set by ministerial decree.

Revenues are distributed by the National Institute for Sickness and Invalidity Insurance, composed of representatives of providers, third-party payers, employees, and the government. Social health insurance has been subject to health care reform cost-containment since the early eighties.

Contributions to health insurance were income-related until 1995. In 1993 the contribution rate of gross income was 3.8% from the employer and 3.55% from the employee. Since 1995, there is a collective contribution covering all social insurance contributions (health insurance, pension insurance and unemployment insurance). This contribution amounted to 13% of gross income in 1996. There is no threshold for mandatory membership. There is a small market for private supplementary insurance because major risks are in principal insured under the compulsory insurance scheme.

2. Finance

Finance of health care is by social health insurance (36%), general taxation (38%) and out-of-pocket payments (17%). 9% is financed by supplementary insurance and indirect taxation. Until recently, sickness funds simply received revenues from the Central Funds equal to their expenses. A 1994 law introduced fixed budgets to stimulate cost-control by allowing sickness funds to make profits and losses.

Hospital services, private or public, are directly financed by the sickness funds. Payment of services is based on a draft budget which is calculated on the basis of bed capacity, activity of the previous year, and hospital-specific features. Services of the nursing staff and doctors are paid via a combination of per-diem rates and fee-for-service. The majority of capital costs are financed by the state. Co-payment for inpatient care is raised in steps according to the length of stay.

Ambulatory care is mainly provided by private practitioners. They are paid directly by the patients, who are then reimbursed most of the cost by their sickness funds. The rest (on average 25%) is borne by the patient. Fees are negotiated between the sickness funds and the practitioners and approved by the Ministry. Service fees are monitored by a committee composed of representatives of third-party purchaser and provider groups. Service provision contracts between the practitioners and sickness funds last for two years.

Pharmaceuticals are reimbursed according to a positive list. Prices are fixed. Co-payments are divided into five categories, from 0 to 100% of the price plus a flat rate. On average, 29% of the price is paid by the patient.

Dental services are paid fee-for-service directly by the patients, who then claim reimbursement. Patient co-payment amounts to 25% on average.

Belgium has complex regulations for patient co-payments, the overall level of which is amongst the highest in the European Union.

3. Health care Expenditure

Belgium experienced a marked increase in health care expenditure between 1970 and 1985 (4.1% to 7.3% of GDP). Until 1990, health care expenditure fluctuated around 7.5% of GDP due to a number of cost-containment measures taken (particularly changes in hospital structure and financing and in the control and financing of drugs). The level exceeded 8% of GDP in the following year and has since been stable at that level. In 1995, health care expenditure still amounted to 8% of GDP {7.7}, equivalent to 1,627 ECU per capita {1,413}.

Figure 6: Total expenditure on health care as a share of GDP 1960 to 1995, and distribution of expenditure in 1992. The share of hospital services is relatively small.

HEALTH CARE RESOURCES AND UTILISATION

Delivery of health services is mainly provided by the private sector. 60% of hospitals are private non-profit institutions. A few hospitals are owned by specialists and around 5% of hospitals are owned by the HIA. The remainder are public hospitals.

The number of acute-care **hospital beds** in Belgium per 1,000 population has decreased from 5.9 in 1985 to 4.8 in 1994 {7.3}. The inpatient **average length of stay** in acute care was 7.8 days in 1995 {7.8}.

Current changes in the delivery system of hospital services include rationalisation of specialist services and the merger of hospitals. Hospital beds have been substantially decreased, while home care has been encouraged.

Ambulatory care is dominated by self-employed practitioners, namely medical doctors, dentists and pharmacists. The GPs often operate from single practices at home, and specialists operate from hospital outpatient departments. Competition in ambulatory medical care appears to be high and doctors are highly responsive to patient requirements. Patients have free choice of the doctor they wish to consult.

Consultations, at 8.0 per person and year in 1993, were substantially above the average of EU-countries registering for this indicator {5.2}.

The number of **practising physicians** at 37.4 per 10,000 population is very high compared with the EU average {28}(1994), the share of **specialists** and **general practitioners** being almost equal. The physician share of total health employment, at 17.1%, was also above the EU average in 1992 {15}.The number of pharmacists is also high in comparison with the EU average (table 10).

Table 10: Number of Health Professionals in Belgium

Professionals	Number per 10,000 population	EU average	Year
Practising physicians	37	28	1994
General practitioners	15	9	1995
Specialists and consultants	16	14	1995
Practising dentists	7	6	1995
Certified nurses	N/A	87	1994
Practising pharmacists	14	8	1994

CURRENT ISSUES IN HEALTH CARE

Within the global priority for cost-containment and the identification of funding sources for health care, the prime focus of reform in the 1990s has been the social insurance system.

The introduction of fixed budgets for insurance expenses enables sickness funds to make profits or losses. The aim is to give sickness funds incentives to purchase health care services more efficiently.

The fixing of sickness fund budgets is complex and has to be implemented gradually. Prerequisite is the definition of a global budget for health insurance and the allocation of a proportion of social insurance to health since 1995. The Belgian fixed budget model also provides for a mechanism to level out imbalances which occur due to varying risk structures of the respective sickness fund members, and provides for flexibility in the case of underestimation of the total social insurance budget.

DENMARK

OVERVIEW

Since 1973, all inhabitants of Denmark have been covered by the National Health Service. It is almost entirely financed, planned and run by public authorities. There is equal and almost free access to health care services. The system is mainly financed through general taxation.

The organisation of health care is delegated to the 14 counties, within a policy framework which is set by the central government and the Parliament. The system resembles the British National Health Service in that both systems operate a "gatekeeper" principle, where the primary care physician (GP) is always consulted in the first instance.

Denmark has maintained effective control over costs. Population surveys indicate substantial satisfaction with the system, 90% being very (54.2%) or fairly (35.8%) satisfied with the system. Indicators of population health status, on the other hand, range below the EU average and related lifestyle factors and mortality are of considerable concern in Denmark.

The strongly decentralised control has also led to some concern over efficient resource allocation and priority setting in health care.

POPULATION AND HEALTH STATUS

The total population of Denmark in 1996 was 5.24 million, of which 23.6% were under 20 {25.5} (1994) and 15.4% over 65 {14.6}. A relatively high proportion (7%) of the population are over 75 {6.1}. This level is expected to reach 8.2% in 2020 {8.9[13]}. Denmark has the highest population density of the Scandinavian countries with 85% of the population living in urban areas.

Life expectancy at birth at 78 for females {80.2} and 72.8 for males {73.9} was somewhat below the EU average in 1995.

Mortality ranged somewhat above the EU average: **standard mortality** at 8.7 per 1,000 population {8.2} in 1993, and **perinatal mortality** at 7.5 per 1,000 live and stillbirths in 1994 {7.5}. **Infant mortality** at 5.2 per 1,000 births was slightly lower than the EU average in 1995 {5.4}.

Mortality rates from cardiovascular diseases and cancer are among the highest in the European Union, as are **potential years life lost** (table 2).

AIDS incidence at 31.6 new cases per million population was below the EU average in 1996 {42.7} but is the highest of the Northern European countries.

[13] Mean value for EU-12 countries. Ref.: Walker et al. 1994.

Tobacco consumption is increasing to one of the highest levels in the European Union. In 1992, 49.5% {EU37.4} of males and 40.1% {EU 25.1}of females over 15 smoked.

Alcohol consumption was above the EU average in 1992 at 11.8 litres per year {EU 10.4}.

The 1989 'Health Promotion Programme' defined priorities as the prevention of cancer, cardiovascular disease, accidents, and mental disease.

FINANCE AND ORGANISATION

1. Structure of the System

The Danish health care system is a highly decentralised system in which responsibility for implementation of service provision is devolved to the 14 counties and to the roughly 275 municipalities (including Copenhagen and Frederiksberg). Counties, serving between 300,000 and 500,000 inhabitants, are responsible for hospital care, primary care and health promotion initiatives and are financed mainly through their own county income taxes. Municipalities are responsible for home nursing care, preventive programmes and most of the social welfare system. Administrative support to county and municipal councils is provided by county directors of hospital services and their staff.

The Ministry of Health is the principal health authority and is responsible for coordinating the health care system, and for the licensing of pharmaceuticals and health professionals. However the Ministry only issues guidance and provides advice, action is carried through by negotiations with the associations and municipalities. The Ministry also monitors planning for all county and municipal curative and preventive services by setting objectives in advance.

A National Board of Health, headed by the Chief Medical Officer, advises in all matters requiring medical, dental, nursing and pharmaceutical knowledge and expertise.

Health coverage is universal. For primary care, cover is provided through the 'Sygesikring' (Sickness Insurance), the only compulsory sickness insurance fund in Denmark. Membership is mandatory for the Danish population. Within the scheme the population can choose between two arrangements of cover for ambulatory care services.

In Group 1 access to all secondary care is provided through designated family practitioners and ambulatory service fees are fixed.

In Group 2 there is free choice of general practitioner and specialist, but doctors are free to charge patients above the agreed fee schedule.

This explains why the majority of the population (more than 95%) belongs to Group 1. Approximately 20% of the Danish population has private insurance, mainly in the form of voluntary insurance for supplementary cover for co-payment.

Preventive services are particularly good in Denmark, accounting for a wide range of screening measures, pre-natal care, child health preventive measures including dental care, and immunisation against infectious diseases. The system also provides for free sterilisation and abortion within the first 12 weeks of pregnancy.

2. Finance

In 1997, 83% of funding was provided by public sources, mostly by taxation at state, county and municipal level. The remainder was financed by co-payments (15%) and less than 2% by private insurance.

Co-payments are associated for the most part with dental care and pharmaceuticals plus extra billing for the small number of Group 2 patients in the primary care sector. They have risen steadily over the past ten years, especially for dental services. For prescription pharmaceuticals, they account on average for 8% of the price. Some co-payments are also levied on medical appliances and care in nursing homes.

Service fees in ambulatory care are negotiated between the 'Association of the Sickness Councils' and the 'Association of General Practitioners' and subject to approval by the government. Remuneration of services provided by general practitioners is partly by capitation but mainly by fee-for-service arrangements. Tariffs for Group 2 patients are in general higher than for Group 1. The difference is paid by the patient.

Dental care is free up to the age of 18. Above 18 payments are in part covered by Sickness Insurance, and in part paid directly by the patient. Co-payments for dental care are substantial for reconstructive work. Prosthetic dental care is usually not covered by the national scheme and has to be paid for in full by the patient. Payment to the dentist is by fee-for-service, the schedule being negotiated between the respective Associations.

Hospitals are funded by the municipalities, using a system of payment for services or cases, adjusted for speciality since 1993.

Only **pharmaceuticals** on a Ministry of Health positive list are reimbursed. In addition, a reference price system was enacted in 1993, which covers around a third of total drug sales.

3. Health Care Expenditure

Health care expenditure in Denmark as a share of GDP grew steadily from 3.6% in 1960 to 6.5% in 1975. Since then the figure has stabilised, and stood at 6.4% in 1995 - below the EU average {7.7%}. This is equivalent to ECU 1,611 per capita {1,413} (figure 7).

Distribution of expenditure has been relatively stable over the past decade being illustrated for 1992 (figure 7). The large share spent on long-term nursing care is notable. Expenses in ambulatory care however are very low when compared to other EU Member States.

Figure 7: Total expenditure on health care between 1960 and 1995, distribution of expenditure in 1992

HEALTH CARE RESOURCES AND UTILISATION

Health protection and disease prevention is coordinated by the Ministry of Health, implemented by counties and municipalities, and provided mainly by general practitioners. Preventive measures are extensive within the national scheme. Priority has been given to cancer prevention, cardiovascular diseases, accidents and mental health.

Primary medical care is mainly provided by self-employed general practitioners who act as gatekeepers to the specialists and hospitals for the majority of the population who belong to Group 1 insurance. Group 2 patients have free choice of general practitioner and specialist and access to hospital without referral. The GP operates as an independent contractor in individual or group practice.

Hospitals are the responsibility of the counties, home nursing and care for the elderly are administered and strongly promoted by the municipalities. The only hospital directly under the resource-planning supervision of the central government is the University Hospital in Copenhagen. Hospital ambulatory services and day-services are particularly promoted. Of a total of approximately 25,500 beds, only 4.0 beds per 1,000 population were devoted to acute care in 1994 {4.7}. The inpatient **average length of stay** in acute care, at 6.0 days per 1,000 population in 1994, is below the EU average {7.6}. **Admission to acute care hospitals** was above average, amounting to 19.7 admissions per year and 1,000 population in 1993. Waiting lists have been reduced significantly on introduction of a list of guaranteed waiting times. Mental health centres to which patients have direct access exist all over the country. Since 1992, patients have free choice on the hospital they wish to be admitted to.

Dental care is provided by privately practising dentists. Preventive care is organised by regional health offices.

Denmark has a remarkable network of community care and invests heavily in **long-term nursing care** which is mainly institutionalised as home care. The Legal basis for **long-term** care is the 'Housing for the Elderly Act', which placed the emphasis on home, rather than on hospital long-term care and on the highest possible degree of autonomy and privacy for the elderly patient. This is unique in the EU, especially the provision for a 24 hour emergency call for nursing care (although this is now being introduced in the UK (1998).

The total number of **physicians** has increased significantly in recent years and stood at 29.0 per 10,000 population in 1994 {28.1}. The majority work in general practice, and many are still in postgraduate medical education. In 1994, the number of general practitioners and specialists per population was substantially below the EU average, this is even more pronounced for specialists working in Denmark.

The numbers of most other groups of health professionals are also below the EU average.

Table 11: Number of Health Professionals in Denmark

Professionals	Number per 10,000 population	EU average	Year
Practising physicians	29	28	1994
General practitioners	6	8	1994
Specialists and consultants	2	11	1994
Practising dentists	5	6	1994
Certified nurses	67	70	1993
Practising pharmacists	2	8	1994

CURRENT ISSUES IN HEALTH CARE

The Danish system seems to perform well in satisfying the population's expectation of its health care system, and in organising and financing health care in an effective fashion. Local initiatives are regarded as important in contemporary Danish health care with local support being seen as essential for successful implementation and public consent to planned changes. Some of the initiatives which initially started locally have eventually spread throughout the country, for example the provision for the 24-hour service for home nursing care.

There are only minor changes planned in the Danish health care system and many of their objectives focus on the improvement of the health status of the population and prevention of disease.

The Danish National Board of Health instituted a programme of developing practice guidelines based on systematic reviews of researched-based scientific evidence - this is in line with initiatives in other EU-Member States.

Efforts to stabilise health care expenditure are directed at co-payments to services, which (apart from dental co-payments) are still low by EU standards.

FINLAND

OVERVIEW

The current Finnish health care system is a publicly-planned health care delivery system, financed mainly by taxation. The system provides universal coverage for a wide range of health care services.

Health care administration, management, planning and provision has long been the responsibility of the 455 urban and rural municipalities (average size 11,000 inhabitants). There is a strong central input to health care planning in particular from the Ministry of Social Affairs and Health, exercised by the use of State subsidies as an incentive. The 1993 State subsidy reform has led to some decrease in State regulation.

The Primary Health care Act of 1972 and a National Plan set up at the same time laid emphasis on primary health care and implementation on the municipal level. In 1982 Finland made an agreement with the World Health Organization to act as a **pioneer** country with regard to health care following its successful effort to build up primary care and preventive services through a system of public health centres, by reporting its health policy developments internationally.

Health status is a priority issue in formulating policy in Finland. Health Indicators rank close to average in the European Union, but there is some concern over relatively low life expectancy, in part attributable to high premature mortality from cardiovascular diseases. Suicide is a major problem and social indicators such as high unemployment suggest a focus on interdisciplinary effort.

Health services appear to perform well in yielding satisfaction among the Finnish population. Of a sample population surveyed in 1993 54.2% were very and 35.8% fairly satisfied with the health care system[14]. The percentage of the sample population very satisfied with the health care system is the highest in the EU.

In the past decade Finnish health policy decision-making has devolved from the central to the local level with a continuous decrease of state regulation. In addition, several models for a regulated health care market have gained political support.

POPULATION AND HEALTH STATUS

Finland had a population of 5.1 million in 1997. In 1994 25.4% were under 20 {24.6} and 15.4% were over 65 {14.6%}. 5.8% were over 75, below the EU average {6.1%}. Finland's population is ageing less rapidly than other Northern European countries.

[14] Ref.: Mossialos 1997.

In 1996 **life expectancy** at birth was almost average for females at 80.5 {80.2} and at 73.0 below the EU average for males {73.9}.

In 1992 **standard mortality** ranged somewhat above the EU average, at 8.3 per 1,000 population {8.2}, but in 1996 **infant mortality** at 4.0 per 1,000 births {5.7} and **perinatal mortality** at 5.1 per 1,000 births in 1994 {7.9} was lower.

Potential years life lost are high for cardiovascular diseases, in particular among males (table 2). **AIDS** incidence has decreased since 1994 and stood at 4.5 new cases per million population - the lowest in the EU in 1996 {42.7}.

Consumption of tobacco is below EU average. In 1992 33% of males {EU 37.4} and 20% of females {EU 25.1} over 15 smoked.

Alcohol consumption of 11.8 litres in 1992 was higher than the EU average {10.4}.

FINANCE AND ORGANISATION

1. Structure of the System

The Ministry of Social Affairs and Health is responsible for policies concerning social and health care and sets national priorities. The Ministry establishes guidelines within a national rolling four year plan, prepares reforms and monitors their implementation. The Basic Security Council is meant to "police" appropriate health and social services provision by the municipalities and assist where deficiencies are observed. In practice, its role has been minimal.

Since summer 1997 Finland has been divided into 5 provinces plus the autonomous area of the Åland Islands.

Responsibility for provision of care, health service administration and implementation of health policy is devolved to the 455 municipalities, which are governed by elected municipal councils. The Councils have the power to levy proportional income taxes to raise funds for health care finance and in addition they receive a state subsidy. The decision-making process for health and social services planning differs somewhat between the municipalities. The general trend has been further delegation of power to subordinate levels, for example to health boards and leading officials.

Planning for health services is a joint responsibility of the health boards, the municipal councils and the municipal governments. In all municipalities, senior staff from the health centres also take part in active planning for health services. In more than 25% of municipalities, boards of social services and health services have been merged and are administered jointly.

For planning and delivery of secondary and tertiary hospital services the country is divided into 21 districts, Helsinki University Hospital being a separate entity. In each hospital district the municipalities form a federation which owns and runs the hospitals. Each district has a council consisting of members appointed by the municipalities, a hospital board appointed by the council,

and an executive management typically including the hospital district director, a medical director and a nursing director.

Coverage and benefits for certain services are administered under a compulsory national insurance scheme. The Social Insurance Institute is attached to the Finnish Parliament and carries out part-reimbursement to patients for prescribed pharmaceuticals, private medical care, occupational care and others.

2. Finance

Finance of health care is mainly out of public funds jointly for social services, with municipalities contributing about 33% of total funding on average. Municipalities raise their taxes by a set tax on income which is on average 17% but varies between the municipalities. 29% comes from state subsidies, mainly raised by general taxation. Finance through the national insurance scheme amounts to 13% the reminder being financed through private sources and co-payments by patients. Private insurance only contributes approximately 2% to overall funding.

Contribution to the national insurance fund is on a flat rate basis by the employee and a set percentage of the earnings paid by the employer. Contributions to the national scheme are borne equally by the Finnish population. However, since the national scheme provides for services which are not equally utilised by the population (e.g. private services), this has raised some equity concern. The National Insurance fund pays 50% of the costs of prescribed pharmaceuticals in excess of a fixed minimum and all other pharmaceutical costs not otherwise covered in excess of a maximum per year.

Co-payments are associated for the most part with dental care and pharmaceuticals, but municipalities can now decide whether to charge for certain inpatient, outpatient and ambulatory care services, and can decide on the level of charges within limits set by the national government. The share of co-payments in total health care financing has been increasing in the past decade.

Payment of **general practitioners** in Finland working in health centres is either by salary or by a mixture comprised of salary (60%), capitation payments (20%), fee-for-service (15%) and local allowances (5%). The level of payments is subject to negotiations between the Physicians' Union and the Associations of Municipalities.

Municipalities jointly own **hospital services** on behalf of their resident population. Thus, there is some local autonomy for payment of hospital services which is, in principle, per item of service since 1993. In addition, hospital districts have to implement an equalisation mechanism under which the resident population pays into a solidarity fund for expensive hospital treatment for individual catastrophic risks. Hospital personnel is salaried.

3. Health Care Expenditure

The central government in Helsinki has firm control over all major investments. The total health expenditure share of GDP grew from 3.9% in 1960 to 5.8% in 1968 where it remained until 1974. By 1976 the proportion rose to 6.7% and then remained steady until the early eighties. By 1989 the

figure had risen to 7.4% and it rose steeply thereafter to 9.1% in 1991, mainly due to a marked economic recession and decrease in GDP.

The Finnish economy has been recovering since 1993 resulting in a steady reduction in GDP devoted to health care to 7.5% in 1995 {7.7%}. This is equivalent to 1,445 ECU per capita {1,413} (figure 8).

The variation in expenditure between municipalities is significant and has been the object of closer evaluation.

In 1992 the largest share of expenditure (44.4%), was on hospitals. Expenditure on ambulatory care was 34.5% and on pharmaceuticals 9.9% (figure 8).

Figure 8: Total expenditure on health care between 1960 and 1995, and distribution of expenditure in 1992

HEALTH CARE PROVISION AND UTILISATION

Primary health care including **health protection, prevention** and **dental care** is mainly provided by 250 health centres (1995) which have been established since the 1972 Primary Health Care Act. Health centres provide or administer the bulk of primary ambulatory medical care, preventive services, home nursing care and occupational health care, the latter being supplemented by employers arrangements. Roughly 2/3 of consultations with physicians take place at primary care level. Roughly half the population live in areas where they are assigned to a particular GP. Recent reforms have aimed at improving continuity of care, patient and staff satisfaction, and productivity of the health centres.

The provision of hospital services is the responsibility of the municipalities. Access is by referral from any practising physician, thus the public primary services do not provide a true "gatekeeper" function.

In 1995, there were 416 hospitals in total, including among the public acute somatic hospitals 5 university hospitals, 17 central hospitals and 30 less specialized hospitals. Only a few of these are private undertakings. The total number of inpatient hospital beds (including private, rehabilitation and mental hospitals) in 1995 was 47,000 (9 per 1,000 population). Of these, 4.5 beds per 1,000 population were devoted to acute care {4.7}. The inpatient **average length of stay** in acute care is below the EU average at 5.5 days per 1,000 population in 1994 {7.6}. **Admission to acute care hospitals** was above average, amounting to 19.8 admissions per year and 1,000 population in 1994.

Long-term nursing care is mainly provided by the inpatient facilities of the health centres run by the municipalities as well as nursing homes run by social services. Other arrangements provide for home nursing care and day care. Home care was encouraged in the 1991/2 National Action Plan.

The number of **practising physicians** was 26.9 per 10,000 population in 1994 {28.1}. The number of professionals employed in health care is relatively high compared to the EU average.

Table 12: Number of Health Professionals in Finland

Professionals	Number per 10,000 population	EU average	Year
Practising physicians	27	28	1994
General practitioners	12	8	1994
Specialists and consultants	15	11	1994
Practising dentists	9	6	1994
Certified nurses	200	70	1993
Practising pharmacists	14	8	1994

CURRENT ISSUES IN HEALTH CARE

The 1993 state subsidy reform introduced some changes in the financial and organisational framework for health care in Finland.

A major objective of the reform was to decrease state regulation of health care service administration and to increase administration, management, and accountability at local level. The rationale was not primarily the introduction of a purchaser-provider split, but a reflection of a general trend towards administrative decentralisation. Municipalities are now more free to deploy their resources in ways more appropriate to their local needs. They can purchase health care services from any provider they wish including private providers. However, in the case of hospital services, the districts are seen as holding a local monopoly for specialised inpatient services.

Their role is not entirely defined within the novel setting of a planned market which would in theory imply some potential for competitive bidding between providers. In addition, most municipalities appear to lack negotiating skills.

A current issue is the complexity of the public funding system in Finnish health care which is thought to result in service inefficiencies, overlapping capacities and waiting lists, and inequitable distribution among the population. Although there is no inclination towards an insurance model - all key players (apart perhaps from the medical profession) remaining in favour of a primarily tax-funded system - experts increasingly express the need to simplify the public funding structure.

The Finnish health care system is in a transitionary stage and some questions remain as to how services should be financed and organised. Main issues include how to increase genuine competition among health care providers and what incentives can be used to increase cost-effectiveness.

The diminished role of national strategic planning and the introduction of competitive elements into the health care delivery system have yet to be evaluated in order to estimate the full consequences of recent changes and establish the future direction for health care in Finland.

FRANCE

OVERVIEW

France has a complex mix between private and public sector for both service provision and financing of health care. The system is based on compulsory public health insurance, which is supplemented to a very large extent by voluntary insurance.

The system has managed to achieve nearly universal coverage. A wide range and nearly unlimited volume of health services is available in both the hospital sector and in ambulatory care and patients are granted freedom of choice between providers. The system has performed very well in satisfying the expectations of the French population. The French do well in comparison with the rest of the EU in terms of life expectancy at birth and standardised mortality. However, there are also some shortcomings in public health, for example AIDS incidence and high consumption of alcohol and tobacco. Of particular concern is the widening gap in mortality between socio-economic classes in France.

Rising expenditure and consequent deficits in statutory health insurance, together with a slowing of economic growth, rising unemployment and progressive population ageing is of prime concern. The system is amongst the most expensive in Europe. Cost-containment policies aiming at limiting supply and restricting coverage has been hindered by public discontent and ardent opposition by the medical professions which traditionally enjoy very liberal conditions of independent medical practice.

POPULATION AND HEALTH STATUS

France had a population of 58.5 million people in 1997 and is close to the EU average in the distribution of age groups. Of the total population, 26% are under 20 {24.6%} and 15.4% are 65 {15%}. The proportion over 75 is 6.6% which is relatively high {6.1%}, but this is projected to reach 8.2% in 2020, which is below the anticipated EU average {8.9}.

Approximately 75% of the French population is concentrated in a few urban areas. The Paris conurbation has 9 million people, other conurbations such as Lille, Lyon and Marseille have populations of a million or more.

The health status of the French is quite satisfactory by EU standards. **Life expectancy** at birth has shown a clear upwards trend over the past decades for both sexes. In 1996 life expectancy stood at 74.1 years for males {73.9} and at 82.0 years for females {80.2 years} which is the highest in the EU. The difference between male and female life expectancy is also the highest in the European Union.

France had the lowest **standardised mortality** rates in 1992 at 6.7 per 1,000 inhabitants {7.8}. The **infant mortality rate** is likewise very low, having decreased to 4.9 per 1,000 live births {5.4},

starting from 27.4 in 1960! The reduction has mainly been in **perinatal mortality** which stood at 7.4 per thousand of all births in 1995 {7.5 per 1,000}.

Cardiovascular diseases and cancer are the main causes of death in France, accounting for 33.5% and 27.3% respectively of all deaths. Male mortality rates for cancer are particularly high, being the main cause of death among men. Cardiovascular diseases are the main causes of death for French women. Death rates for all external causes of injury and poisoning in 1990 at 20 per 100,000 population , were well below the EU average {27.3}.

Estimates of **potential years life lost** per 100,000 population in 1993 for the main pathologies were relatively low compared with the EU average (table 2).

AIDS incidence is high despite a notable decrease since 1994, placing France, with 72 new cases per million population, third in the EU in 1996 {42.7}.

Dental disease incidence, at 2.1 {1.9} in 1993 has decreased alongside the EU average.

Consumption of alcohol and **tobacco** is high in France, surprising when one considers the relatively low mortality rates for alcohol and tobacco-related diseases.

38% of all men over 15 smoked at least 20 cigarettes per day in 1992 {37.1}, and 20% of all women {25.1}.

Alcohol consumption, at 15.7 litres, was well above the EU average {11.2} in 1992. Currently 63% of men and 30% of women drink at least one glass of alcohol equivalent a day.

Social inequalities appear to be pronounced in France. The risk of premature death is higher for the disadvantaged and for manual labourers.

FINANCE AND ORGANISATION

1. Structure of the System

The health care system in France is closely regulated by the government, which has prime responsibility for the protection of all citizens. Central government assumes responsibility for the public's health in general and secures social protection, controls relations between institutions financing care, exercises regulatory authority over the public hospital system, and organises training of health professionals. The ministries of social affairs and health are the key institutions for health policy on the national level assisted by subordinate authorities such as the French Drug Authority and the French Blood Agency. The High Commission of Public Health, chaired by the Minister of Health, formulates public health goals. ANAES, the national agency for hospital accreditation and development of medical evaluation, is concerned with evaluating medical practice and economic performance in health care.

At the local level there are 22 regional bureaux of health and social affairs (DRASS). Their main responsibility is to plan health and social services through annual budget controls, and to monitor

the 'health plans' which establish the number of hospital beds by speciality and area and establish rules for the installation of costly medical equipment. The DRASS also exercises close control over inpatient treatment facilities and regional sickness funds.

Universal access to health care is guaranteed by the national health insurance system (NHI), a branch of the compulsory social security system. The NHI, closely supervised by the Ministry of Social Affairs, covers 99% of the population. It is administered through different schemes according to occupation. The general scheme covers about 80% of the population, mainly salaried workers belonging to the commercial and industrial sectors and their families. The remainder are insured with schemes for agriculture, independent professions and specific groups (for example civil servants, medical doctors or students). The very poor can qualify for medical aid provided by various charitable organisations. Coverage for services through NHI is not exhaustive and approximately 87% of the population either take out supplementary voluntary insurance with non-profit mutual benefit societies or purchase private insurance. The main purpose is to cover the large share of expenses which are not reimbursed by the national insurance funds after the patient has paid the initial bill.

The different compulsory health insurance schemes provide similar benefits, ensuring financial coverage for a wide range of diagnostic and therapeutic services, both ambulatory and hospital. To be covered by NHI, diagnostic and therapeutic services must be officially listed and provided or prescribed by a physician.

2. Finance

The general insurance scheme is financed through employer and employee payroll taxes, 12.8% of the gross salary from the employer and 6.8% from the employee (1994). Retirees are subject to lower levels.

Nearly 74% of total health care expenditure is covered by the NHI at present. The recent tendency is for this share to decrease. Mutual societies cover approximately 6.8% and private insurers 5% of health care expenses. Less than 3% comes from general taxation and the remainder, more than 13%, is covered by co-payment on the part of the patient. Co-payment levels, after remaining stable over 25 years, have recently become an important tool for cost-containment in France.

The NHI plays a major role in setting the payment of providers in private practice and private hospitals. The government determines the level of funding in public hospitals.

Since 1985, **public hospitals** and private hospitals which participate in the NHI schemes are financed under a global budget based on the previous year's expenditure. Funding is through reimbursement of services per diem, but there are also attempts to adapt the concept of diagnosis related groups (DRG) to the French system. Capital investment is regulated by regional health plans. All personnel working in public hospitals is salaried, staff in private hospitals are usually paid by fee-for-service.

Private hospitals (for-profit) are funded by a combination of per-diem fees and fee-for-service within a global cost target.

Doctors in **ambulatory care** (la médecine libérale) contracted with the national insurance funds (sector 1 physicians) are paid by fee-for-service according to negotiated schedules . The schedule consists of two elements, first a frequently-revised relative scale for medical procedures and second the actual fees negotiated annually for each procedure between representatives of the medical profession, sickness funds and the government.

There is a second group of doctors (sector 2 physicians) who have chosen to opt out of the national insurance scheme. Doctors belonging to sector 2 can set their own fees which may exceed the official fee schedule on average by 50%, the excess being covered by the patient.

The division of the French primary care sector has resulted in major equity concerns for both finance and access to care.

Pharmaceuticals are placed on a list of reimbursable medicines. Prices and the level of reimbursement are set by ministerial decree. Over-the-counter medicines, which are not reimbursed by the sickness funds, are not regulated. Direct payments from patients average approximately 20%, although they range from zero for necessary medicines up to 65% for so-called comfort medicines. There is no budget ceiling on pharmaceutical expenditure in France and no limit on prescriptions.

3. Health Care Expenditure

Health care expenditure in France has grown faster than the French economy. Between 1965 and 1995 national health care expenditure grew rapidly from 5.2% to 9.9% of GDP, amongst the highest in the EU {7.7%}, equivalent to 2,000 ECU per capita {1,413 ECU}. There have been a number of short-term political initiatives to contain costs over the past 20 years, mainly by efforts to raise revenue or reduce expenditure by the national health insurance. In spite of some short-term effects such as the introduction in 1985 of budgets in the public hospital sector, none of the ministerial plans resulted in long-term stability of expenditure.

Figure 9 illustrates the distribution of expenditure, of which hospital care had the largest share in 1995, followed by primary care.

Figure 9: Total expenditure on health care between 1960 and 1995, distribution of expenditure in 1992

HEALTH CARE RESOURCES AND UTILISATION

The French enjoy free choice of a panoply of services in primary and secondary medical care. There is no limitation on doctors' or patients' freedom of choice and no General Practitioner gatekeeping role for hospital services.

Health care consumption is highly concentrated among a small group of people, a high level of medical care being consumed in the first year of life and beyond the age of 50. In addition, utilisation differs significantly between social classes.

The public sector dominates service provision in the **hospital sector** in France, which comprises three legal entities: public hospitals and profit and non-profit private hospitals.

Public hospitals tend to be larger than private hospitals, are generally well-equipped and provide facilities for research and training of medical students and personnel. Managerial autonomy of public hospitals was strengthened by the 1991 Hospital Law. Public hospitals provide nearly two-thirds of all hospital beds. Just over half of private-sector beds are found in profit-making hospitals, the rest in private non-profit hospitals.

France had 9 **hospital beds** per 1,000 population in 1994 {7.3}, with a slight decrease of inpatient care beds and acute care beds and, as in many other European countries, a notable increase in beds in long-term nursing care homes. France has planned the closure of 2,000 hospital beds since 1993 but has not yet succeeded in overcoming strong public resistance.

The inpatient **average length of stay** in acute care has fallen dramatically from 12 days in 1975 to 5.9 days and stands well below the EU average {7.6}. Admission rates have increased from 17.5 to 20.3 admissions per year and population between 1980 and 1994.

Health care personnel and associated enterprises and organisations for **ambulatory care** are mostly in the private sector in France. Outpatient care is provided by generalists and specialists, and also by outpatient departments of hospitals. Competition between GPs and between GPs and specialists appears to be fierce. However, specialised medicine increasingly concentrates on the use of high-technology diagnostic techniques, while general medicine focuses more on care of the elderly.

Consultation of physicians is frequent in France. On average, ambulatory patients consulted a doctor 6.3 times {4.8} and a dentist 1.1 times per year.

There are also about 1,000 municipal health centres where salaried doctors provide primary and preventive care, usually in urban areas. They are operated by municipalities, mutual benefit organisations and other groups and play an important role in providing services for the poor.

The number of **practising physicians** in 1994 was 29 per 10,000 population, slightly above the EU average {28}, the share of **specialists** and **general practitioners** being almost equal. The majority of practising medical doctors are concentrated in metropolitan France and operate essentially as independent practitioners. The physician share of total health employment (9.5% in 1992) is substantially below the EU average {15}. There is a considerable shortage of nurses. Nursing is a fairly unpopular career in France.

Table 13: Number of Health Professionals in France (to the nearest whole number)

Professionals	Number per 10,000 population	EU average	Year
Practising physicians	29	28	1994
General practitioners	14	8	1994
Specialists and consultants	14	11	1994
Practising dentists	7	6	1993
Certified nurses	57	70	1993
Practising pharmacists	10	8	1994

CURRENT ISSUES IN HEALTH CARE

Of prime concern is the stability of social insurance in France which has experienced a substantial slowdown in contributions due to low economic growth and increase in unemployment. Ensuring an equilibrium between various health care schemes remains a high priority in France. Measures taken have been directed towards the restriction of health services in the health plans and control of the diffusion of high technology. The system has also tried reducing the number of medical practitioners by medical school quota systems and by increasing cost-participation by the patient. However, these measures have yet to prove effective in breaking the inflationary dynamic of the French health care system.

The introduction of global budgeting for hospitals appears partially successful in limiting growth in this area of expenditure but the government moved to control the growth in particular of primary

care spending which has been ardently opposed by the public and the independent medical profession.

There are plans to curb spending in ambulatory care by setting national targets with collective and individual sanctions for overshoot, and by linking physicians' fees with the levels of prescriptions and overall spending.

Other current issues in the French health care system are medical guidelines and medical references, medical dossiers, and the development of computerised management tools.

ANAES is a well-established institution for the development of quality assurance programs and evaluation of medical technology in France.

The introduction of patient records aims to limit recourse to multiple practitioners and thereby avoid redundant prescriptions.

While recent developments, for example hospice care, partial hospitalisation and day surgery care have increased the role for alternatives to inpatient hospitalisation in France, there is still a significant shortfall of long-term care which is not keeping pace with the growing needs of an ageing population, leading to serious financial burdens.

GERMANY

OVERVIEW

From 1945 to 1990 Germany was divided into East and West and had two separate health care systems. Liberal democracy had modelled finance and organisation of health care in West Germany. Health care in the East was determined by centralised planning and control.

The health care system in the new Länder of the former East Germany has been reformed since German reunification in 1990 to bring it into line with the organisational and financial structure of the west. This has now (1998) nearly been achieved. However, the state of public health after the political, economic and social separation of 45 years in an otherwise homogeneous population still needs to be analysed. Most health status indicators in the new Länder still range below those in the old Länder.

The German health care system is a model system of compulsory social insurance. The system has experienced no fundamental structural change since its foundations were laid by Bismarck in 1883, although it has expanded significantly and there have been some fundamental reforms in health insurance structure.

The system has managed to achieve comprehensive health care coverage and provides for equal access to a high volume of advanced medical services. A majority of the German population seems to consider its health care system as either very or fairly satisfactory (sample survey in the European Union[15]).

The reason for this success has been attributed to the highly decentralised decision-making and an effective negotiation system between provider parties and third-party payers at central, state, and local level.

The system however suffers from some substantial problems. An ageing population jeopardises the stability of the pay-as-you-go basis upon which social security is based. In considering the growth and level of health care expenditure, per capita as well as by share of GDP, the German health care system is amongst the most expensive in the EU. This translates into a high level of health care resources which have to be evaluated in the search for cost-stabilisation and efficiency gains, requiring further health care reform.

POPULATION AND HEALTH STATUS

In 1997 Germany had a population of 82 million. The proportion of young people is low for Europe with approximately 21.6% aged under 20 {24.6%}. Conversely, 15.3% of the population are over 65 which is comparatively high {15%}. 6.2% of the population is over 75 {6.1%}, and this is projected to reach 10.6% in 2020 {8.9%} and to stabilise by 2030.

[15] Ref. Mossialos 1997.

Life expectancy has advanced at different rates in the West and East, initially increasing faster in the East but more or less stagnating in the 1970s and 80s while it continued to improve in the West[16]. The gap in life expectancy between East and West widened for both genders between 1980 and 1990. In 1993 male life expectancy was 73.4 in the West and only 70.3 in the East. Female life expectancy was 79.7 in the West and 77.7 in the East. The major cause of this difference in life expectancy is cardiovascular disease attributable to differences in diet, better living conditions in the West, differences in access to high technology care and better health care at all levels in the West[17].

In the unified country, **life expectancy rates** at birth were slightly below the EU average in 1995, 73.6 for males {73.9}, and 79.9 for females {80.2}. **Standardised mortality** at 9.0 per 1,000 inhabitants was above the EU average in 1993 {8.2}. The **infant mortality** rate was relatively low compared with the EU average, at 5.0 per 1,000 births {5.4}. **Perinatal mortality** accounted for 6.9 per 1,000 births in 1994 {7.5}.

Death rates were above the EU average for diseases of the circulatory system and for suicide and self-inflicted injury. Death rates for lower income groups are more than double those of the highest income groups between 30 and 59 years of age[18].

AIDS incidence is reported unchanged since the early 1990s and at 18.4 new reported cases per million population amongst the lowest in the EU {42.7} in 1996.

Dental diseases on the other hand remain a problem with Germany having one of the highest indexes of decayed, missing, and filled teeth for 12 year-olds of all EU countries (4.1 DMFT per child age 12 {3.1}).

Consumption of tobacco, with 36.8% of the male population smoking above the age of 15 in 1992 {37.4} is near the EU average, but below the EU average for females (21.5% smoked in 1992 {25.1}).

Alcohol consumption, at 14.2 litres, was well above the EU average in 1991 {11.2}.

FINANCE AND ORGANISATION

1. Structure of the system

Organisation and finance of health care in Germany is based on the traditional principles of social solidarity, decentralisation and self-regulation. The role of the central government is limited to providing the legislative framework in which health services are delivered while much of the executive responsibility lies with the administrations of the individual states (Länder). The Federal Ministry of Health is the key institution on the federal level, assisted by subordinate authorities with

16 Ref.: Busse and Schwartz 1997.

17 Ref.: McKee et al. 1996.

18 Ref.: Mielke 1994.

scientific expertise. The 'Advisory Council for Concerted Action' in health care plays an advisory role in medical and broader economic matters.

The statutory social insurance system covers nearly 88% of the German population. Workers below a certain income threshold are required to take out statutory health insurance, the unemployed are entirely covered by the State. In 1997, 75% of the population were mandatory members and 13% voluntary members of the approximately 600 sickness funds, the number of which has been constantly reduced through mergers since the early 1990s. Another 10% of Germans, mainly civil servants, are covered by their employers and high income earners are privately insured with one of the 45 private insurance companies. Less than 0.5% of the population is uninsured. Sickness funds are either organised by districts, occupation, or specific enterprises. Employees have been granted free choice of sickness funds since 1996.

The benefit package for social insurance is regulated by federal legislation, providing for the following benefits in kind: prevention of disease, screening for disease, diagnostic procedures, treatment of disease, rehabilitation, and transportation.

2. Finance

Around 60% of funding is derived from compulsory and voluntary contributions to statutory health insurance, about 21% is derived from general taxation, private insurance accounts for approximately 7% and the remaining 11% is covered by direct payments by the patient.

Contributions to sickness funds are collected from all work-related income, payroll taxes being divided equally between employer and employee. Additionally, there has been a significant variation of contribution rates between the different funds, depending on the risk structure of the fund's members, i.e. the different health risks of their insured (e.g. as a result of age and gender profile). This led in 1994 to the introduction of a financial compensation system between the sickness funds. This risk structure mechanism provides for a financial balancing-out between the sickness funds. Payment into and out of the pool is based on a complex calculation primarily based on the age, gender and geographical factors of the insured. The average contribution rate was 13.5% of gross income in 1997.

There is a strict separation of purchasers (sickness funds) and health care services in the German system. Service fees are subject to a highly decentralised process of bargaining between the major health care institutions.

Hospitals, whether public or private, listed on plans established by the Länder, are financed by a dual system involving coverage of capital costs by the Länder and payment of operating costs by the sickness funds. Since 1996, operating costs under statutory insurance have been financed on the basis of a complex calculation combining case-fees related to a specific diagnosis (according to Diagnosis Related Groups), procedure fees and departmental charges per diem. The new payment system replaced a system in which hospital services were financed on a per-diem basis regardless of the care required and aims to reduce the average length of stay in acute hospital care. Hospital services for privately-insured patients are reimbursed according to separate fee-schedules. Co-payments for hospital services have been increased gradually in recent years. Since the principle of full-cost coverage has been abolished, hospitals can make profits and losses.

Ambulatory care is financed throughout a complex formal negotiation process between representatives of the sickness funds and physician and dental associations. To provide services to members of statutory insurance funds, practitioners are required to join the respective associations.

The principal mechanism of reimbursement is **fee-for-service** for general practitioner, specialist services and dental care. There is a federal fee schedule, the Uniform Evaluation Standard. The actual monetary value is negotiated regionally, adjusted to the overall income of physicians. There are no direct charges for patients for ambulatory medical care. In contrast, **dental care** requires up to 100% co-payments especially for prosthetic services.

There are uniform prices for drugs in Germany. The majority of **pharmaceuticals** are reimbursed on the basis of a reference-price system. The physician is free to prescribe a more expensive product but the patient has to pay extra when the price of the prescribed drug exceeds its reference price. The budget for pharmaceutical and for ambulatory expenditure was abolished in 1997. In spite of a gradual increase, the co-payment rate for drugs is still one of the lowest in the European Union.

3. Health Care Expenditure[19]

Figure 10 illustrates the growth of health care expenditure in Germany between 1960 and 1995. Health care expenditure in West Germany grew rapidly from 4.1% of GDP in 1960 to 8.1% in 1980 and rose again to 8.4% in 1981, but following the Health Reform Law of 1989, came down slightly to 8.2% in 1990 {7.2%}. German reunification caused a sharp increase in health care expenditure to 9.6% of Gross Domestic Product in 1991. This was caused by the low level of national resources in the East while health care expenditure rapidly grew towards the level of the West. The latest figures demonstrate a further upward trend between 1992 and 1995. In 1995, the proportion of German GDP devoted to health care reached the highest level in the EU at 10.4% {7.7}, this is equivalent to 2,362 ECU per head {1,412.7}.

Distribution of sickness fund expenditure following German reunification differed somewhat between the new and the old Länder, with expenditure on dental care and pharmaceuticals contributing a higher share in the new compared to the old Länder. Hospital and ambulatory care had a higher expenditure share in the sickness funds of the old Länder.

[19] Before German unification in 1990, data on total expenditure on health care refer to the former Federal Republic of Germany. Data from 1991 onwards are those for the unified country.

Figure 10: Total expenditure on health care 1960 to 1995 in the Federal Republic of Germany until 1990 and unified Germany thereafter, distribution of expenditure in 1995

HEALTH CARE UTILISATION

Preventive Care is provided both by the 360 public health offices and private practitioners. The latter provide most of the immunisations, and screening for cardiovascular and cancers included in the basic benefit packages of the sickness funds. Health promotion was a mandatory task of the sickness funds between 1989 and 1996. Monitoring and information on health within health reporting is underdeveloped but is currently being extended.

There is a sharp division between ambulatory and hospital care in Germany. Practitioners (with few exceptions) have no access to hospital practice. Hospital care is by referral only, so that office-based doctors act as "gatekeepers" to the hospitals. Hospitals, on the other hand, have long been limited in offering outpatient services. The strict separation between ambulatory and hospital care has led to long referral chains, duplication of technical equipment and repetition of diagnostic tests.

Legislation set forth in the 1993 Health Care Structure Act provides for outpatient surgery in hospitals, for increased integration of ambulatory services in preparation of inpatient procedures and for joint acquisition of high-cost technical equipment.

In the **hospital sector** there are three main types of hospitals: public hospitals, non-profit hospitals run mainly by charitable organisations, and private for-profit hospitals. In 1995, 49.8% of hospital beds were in public hospitals, 34.5% in charitable hospitals and 15.8% in private hospitals. The overall number of **hospital beds** (including rehabilitation clinics) per 1,000 population has remained stable during the past 30 years at 9.7, well above the EU average in 1994 {7.3}. The most recent trend has been a decreasing number of beds in psychiatric and general hospitals and an increasing number in preventive and rehabilitative institutions. Thus, the number of beds in acute care has decreased in recent years but still stood at 7.0 beds per 1,000 population, above the EU average {4.7}. The **average length of stay** in acute care has fallen noticeably but is at 11.4 days still the highest in the EU {7.6}.

Doctors traditionally held a monopoly position in ambulatory care which is currently being tackled by increased encouragement of outpatient surgery as a result of the recent Health Care Structure Law. In **ambulatory care** patients have free access to health care services and advanced technical equipment provided by general practitioners, specialists and dentists. The level of capital intensive medical equipment is among the highest in the EU. The supply of services is guaranteed by the physicians associations. There is an over-average supply of ambulatory services partially caused by high financial incentives for technically advanced and specialised services and the populations' demand for sophisticated medical care. In effect, the German system has long been regarded as encouraging increased health care demand and inhibitive of efficient primary care and preventive medicine. The number of consultations of office-based practitioners, 6.4 consultations per person per year, is higher than in every other EU Member State {4.8}. Restriction of licensing to set up medical practices, promotion of preventive primary care, alteration of fee schedules and an increase in co-payments (for prescribed medical and dental services) are among the legislative measures taken to increase efficiency in ambulatory care.

There has long been no regulation on the number of practitioners, apart from restrictions on medical school admission, in Germany. The number of **practising physicians** in 1994, at 32.8 per 10,000 population was significantly above the EU average {28.1}. The share of physicians in total health employment, at 11.6%, is rather low {15%}. A particular problem is the high proportion of **specialists** compared to **general practitioners**. About 50% of all active specialists work in private practice, 45% in hospitals.

There has long been a relative shortage of nursing personnel in Germany, since nursing is an unpopular career because of heavy workloads and relatively low pay. However, in the first half of the 1990s the number of nurses increased significantly.

Table 14: Number of Health Professionals in Germany

Professionals	Number per 10,000 population	EU average	Year
Practising physicians	33	28	1994
General practitioners	11	8	1994
Specialists and consultants	19	11	1994
Practising dentists	7	6	1993
Certified nurses	48	70	1993
Practising pharmacists	5	8	1994

CURRENT ISSUES IN HEALTH CARE

Social insurance has long been at the centre of political debate in Germany. The growing financial deficit of social insurance funds following reunification has imposed substantial pressure on the country's economy. One prime focus of attention will therefore remain the balance of income and expenditure in social insurance.

There have been two principal cost-containment mechanisms in recent legislation in Germany. One has been to increase control over expenditure at the central level, the other has been to enhance the self-determination mechanism on the purchasing side of the sickness funds and on competition among providers. Thus, the German system is still at the cross-roads between regulation and decentralisation of health care finance and organisation.

Insurance for long-term care was introduced in 1995/96 to counterbalance the effect of an ageing population on decreasing income and increasing costs of social insurance.

Sickness funds have been given more power to control health care service provision and to cancel contracts with service providers they consider inefficient. This has resulted in more competitive conditions for the health care providers.

The number of office-based practitioners has been geographically regulated since 1993. The Advisory Council of 'Concerted Action in Health Care' in its 1997 Report recommends adjusting payment systems towards medical outcome. There is increased effort on the part of sickness fund physicians, backed by the Federal Associations of Sickness Funds to promote those procedures and innovations which have proven effective. In addition, quality assurance is now a statutory requirement for hospitals and is the subject of current negotiation between the sickness funds and the physician's organisations.

While the hospital payment system has undergone recent reform, payment systems in ambulatory care are presently under review for similar orientation towards medical activity. Debate indicates some interest in alternative financing systems provided under Managed Care. There is an increasing effort by the federal associations of sickness funds and sickness fund physicians to promote effective procedures and innovations in technically advanced diagnostic and curative medical care.

GREECE

OVERVIEW

The Greek health care system is based on a system of compulsory social insurance. Health care is financed by taxation and to a smaller degree by income-related contributions to sickness funds. Thus the system can neither be classified as the pure Beveridge nor Bismarck type of financing. The system incorporates considerable private sector involvement, both in financing and provision of services. The provision and finance of services is strongly regulated by central government.

The Greek National Health System (ESY) was introduced in 1983 at the same time as national health services were introduced into most other southern European countries. It was based on a reform of existing health services in an attempt to improve access to health care, slow down the growth of the private sector, place a stronger emphasis on primary care and community participation and revise the conditions for medical staff working in hospitals. However, the Greek National Health System has only been partially implemented and previous structures have largely remained unchanged.

The traditional problems of the Greek health care system, namely unequal access to health services, gaps in the provision of services - especially in urban areas, inefficiency in service provision and rise of health care costs remain. Some health status indicators record rather high levels, however there is substantial concern over the reliability of Greek data due to measurement and registration problems in Greece. Satisfaction with the health care system is fairly low. Only 18.4% of the surveyed population were very or fairly satisfied {50.3%}[20]. Structural changes are hindered due to a lack of consensus among political, social and medical-professional groups. Since the early 1990s, emphasis for reform has shifted towards a more managerial and market-oriented approach.

POPULATION AND HEALTH STATUS

The total population of Greece was approximately 10.5 million in 1997. The Greek population is ageing: approximately 24% of Greeks are aged less than 20 - below the EU average {24.6%} and 16.4% were over 65 - above the EU average {15%}. 6.2% of the population is over 75, near the EU average {6.1%}. The proportion over 65 is set to rise to around 9.2% by the year 2020 {8.9%}.

Life expectancy at birth for both sexes has shown a clear upward trend in the past few decades and is (1996) among the highest in the European Union at 75.1 years for males {73.9} and at 80.4 years for females {80.2}. The difference of 5.3 years between male and female life expectancy is relatively small in comparison with most other EU countries.

The **standardised mortality** rate in Greece at 7.2 per 1,000 inhabitants was comparatively low in 1993 {8.2}. However, infant and perinatal mortality are high. The **infant mortality rate** at 8.1 per

[20] Ref.: Mossialos 1997.

1,000 live births was highest in the European Union in 1995 {5.7}. **Perinatal mortality** at 10.9 per 1,000 births in 1993 was the highest in the European Union {7.7}.

Cardiovascular diseases and cancer are the main causes of death in Greece, but cancer is still a less frequent cause of death compared with some European neighbours. Death rates for all external causes of injury and poisoning in 1990 at 7 per 100,000 population were substantially below the EU average {27.3}.

Estimates of **potential life years lost** per 100,000 population from selected pathologies are overall around the EU average (see table 2).

AIDS incidence at 24.8 new cases per million population in 1996, is relatively low {42.7}.

Dental disease is relatively common with 2.1 decayed missed or filled teeth per 12 year old child in 1990 {1.9}.

Consumption of tobacco is relatively high in Greece, in particular for men. In 1992, 57% of Greek males over 15 smoked at least 20 cigarettes per day {37.4%}, and 24% of females {25.1%}.

In contrast, **alcohol consumption** at 2.3 litres in 1989[21] was well below the EU average {10.7} for both sexes.

Poverty and health inequalities are of considerable concern in the Greek health care system, and uneven geographical service distribution intensifies inequalities of access to health care.

FINANCE AND ORGANISATION

1. Structure of the System

The Ministry of Health and Welfare is responsible for developing health policy for the whole country. The Ministry regulates the provision and finance of the National Health Service and ensures health care and social service access to the underprivileged. The Central Health Council (KESY), composed of a cross-section of professional (mainly medical) providers and consumers, advises the Ministry of Health on health policy and research. Following the 1983 reforms, the Ministry of Health took over the supervision of health-related activities such as environmental health from the Ministry of Environment and Public Works, and medical education from the Ministry of Education. The ongoing overlap of activities results in excessive bureaucracy, conflicting priorities and a lack of accountability for health policy in Greece[22]. Social insurance was transferred to the Ministry of Labour in 1995. The Ministerial services are administered under three Directorates. The Directorate-General for Health is responsible for public health and health care.

[21] Last available data for alcoholic beverage intake in Greece.

[22] Ref.: Venieris 1997.

13 regions and 52 districts determine the sub-structure of the NHS. Each district has at least one hospital. Regional university- or teaching hospitals have been established for seven regions. 1983 legislation provided for decentralisation through the provision of 176 NHS rural health centres, delivering primary health care services to 2.5 million Greeks.

Neither the establishment of urban health centres nor the establishment of Regional Health Councils to improve health care management and make planning more adequate to local needs has materialised. However, there are some initiatives to transfer the administration of the system from central government to regions and districts.

Almost all the population is covered by one of roughly 300 different social sickness funds which are self-governed and administered as public entities. Membership is compulsory for employees and their dependants and is based on occupation.

IKA (Institute for Social Insurance) covers nearly 50% of the population, mainly blue- and white collar workers and the urban population. OGA (Organisation of Agricultural Insurance) covers 25% of the population (mostly rural), and 13% of the population is registered with TEVE-TAE, the Fund for Merchants, Manufacturers and Small Businessmen.

9% of the population is covered by the state, and the remainder is insured with one of the numerous small funds. The number of members of the IKA is constantly increasing.

The range of basic services covered as well as contribution rates are strongly regulated by central government. The range of services provided varies substantially between the funds, with IKA offering the most comprehensive package including dental services and coverage for optical devices. Most of the smaller social insurance funds provide additional insurance and benefits.

2. Finance

The system is financed through a mixture of general taxation and social insurance. With the introduction of the NHS in 1983 the system has moved away from the Bismarck system towards the Beveridge system.

IKA, the largest insurance fund, is financed throughout income related-contributions, shared 2/3 by the employer and 1/3 by the employee. The level is set by the central government. Insurance contributions are strongly supplemented by the central budget. OGA is financed entirely by the state. To date there is no clear financial demarcation between the social insurance funds and the state.

Public NHS-hospitals are mainly financed from the state budget (70% of hospital revenues) and to a smaller extent by the sickness funds (30%) who contract inpatient services for their members. NHS-hospitals are financed on the basis of per-diem reimbursement rates which increased substantially in the early 1990s. Staff working in public NHS- and non NHS- hospitals are salaried. Public hospitals not belonging to the NHS, for example military hospitals and IKA hospitals, and private hospitals with contracts with the insurance funds, are reimbursed on a per-diem basis with additional fees for certain diagnostic and curative procedures. Prices of services are set by the Ministry of Health and have to be approved by the Ministry of Labour and Social Insurance.

Private sector hospitals are financed by a mixture of reimbursement by sickness funds, private out-of pocket payments by the patients and voluntary insurance.

The national scheme does not provide for co-payments for inpatient hospital care but considerable underground activity exists in this respect owing to shortcomings in the public provision of services. "Unofficial" payments to doctors in private and public hospitals are considered routine in the Greek health care system.

Insurance funds play a significant role in the financing and provision of **ambulatory care** in Greece. Doctors working in IKA-hospitals are paid by salary to provide primary medical care and dental services. In addition, insurance funds contract out for primary care services provided by private practitioners who are reimbursed on a fee-for-service basis. A number of services provided by physicians in private practice and by private diagnostic centres are paid directly by the patient based on a formal or informal private agreement.

Diagnostic centres under contract with insurance funds for services are reimbursed through fee-for -service arrangements.

Not all insurance funds have a positive or negative list for **pharmaceuticals**. Reference prices of pharmaceuticals are set by the Ministry of Trade based on the lowest reference price in the EU. Sickness funds reimburse patients the amount of this reference price, the rest (on average 25%) being met by the patient.

3. Health care Expenditure

Health care expenditure has increased substantially in recent years, in both the public and the private sector in Greece. Total health care expenditure grew rapidly from 2.6% to 5.8% of GDP between 1965 and 1995 - still the lowest level in the EU {7.7}, equivalent to 483 ECU per capita {1,413} (figure 11). However, it has been repeatedly suggested that the OECD data underestimate public and private health care expenditure in Greece. National accounts estimate total health care expenditure of 8.5% of GDP in 1995. There is a considerable degree of hidden payment.

Expenditure growth was highest between 1980 and 1990. Following the 1983 reforms there was a significant increase in public expenditure in the late 1980s owing to a moratorium on new private hospitals building between 1983 and 1992 and the merger of some private with public hospitals. Since 1992, when restrictions on private hospitals were removed, there has been a significant increase in private health care expenditure.

In 1996, the public share of health care expenditure amounted to 82.9%, the remainder being privately financed. As in other European countries hospital care had the largest share of expenditure (42,7% in 1992). The share of inpatient expenditure has constantly increased, the share of pharmaceuticals in contrast declined during the 1980s.

Figure 11: Total expenditure on health care 1960 to 1995, and distribution of expenditure in 1992

HEALTH CARE RESOURCES AND UTILISATION

The Greek health care delivery system is characterised by a strong emphasis on hospital care. Hospital outpatient departments are frequently used for primary care. The Greeks have access to numerous provider institutions which often offer both primary and secondary care. There is no formal referral system in operation to date.

Preventive care is focused on cancer, AIDS, cardiovascular disease, infectious diseases, and lifestyle factors. A national cancer register is being established and priority is being given to strengthening information systems for monitoring of communicable diseases and environmental health effects.

Ambulatory care is provided by hospital outpatient departments, by physicians in private practice and by diagnostic centres. Access to outpatient departments of public hospitals is universal.

IKA plays a dominant role in the provision of **primary care** in urban areas. It operates nearly 200 urban polyclinics and clinics. Primary care in rural areas is delivered by provincial clinics and the 176 NHS rural health centres which mainly serve members of the OGA.

The remainder of primary care service is provided by private practitioners and private hospital outpatient departments, based on contracted agreements with the sickness funds, voluntary health insurance funds, or direct agreements with the patients. The role of local authorities in delivering primary care services is very limited.

The spread of **diagnostic centres** since 1985 is significant because it compensates for the moratorium on new private hospital building between 1983 and 1992. The nearly 200 diagnostic centres are a special feature of the Greek health care system today. They are well-equipped, especially with capital-intensive technologies. Nonetheless, the overall national level of capital-intensive medical technologies is low in comparison with other EU countries.

The **hospital sector** comprises three legal entities:

1) NHS public hospitals, including 96 district and 23 regional hospitals constituting 63.5% of all hospital beds.
2) There are 27 public hospitals under the operation of the Ministry of Defence (13 military hospitals), the Ministry of Justice, the Ministry of Education (3 teaching hospitals), and the IKA. Public hospitals outside the NHS make up 7.7% of all hospital beds.
3) Private, mainly for-profit hospitals, account for 28.8% of total hospital beds. Some private hospitals offer luxury standards but are often poorly staffed in comparison with public hospitals. They are concentrated in the urban areas of Athens and Thessaloniki and have a total of less than 100 beds.

The number of **hospital beds**, at 5.0 per 1,000 population in 1994 was relatively low {7.3}[23], and slightly decreased during the past decade. Per-capita inpatient days in acute care amounted to 1.3, below the EU-12 average in 1992 {2.4}[23]. **Admission rates** per 1000 population amounted to 13.1 per year in 1991, which is also comparatively low {16.2}.

Greece had a total of 40,500 **practising physicians** in 1994 which, at 38.8 per 10,000 population, is above the EU average {28.1}. The percentage of physicians as a proportion of total health-sector employment was 30.7% - well above the EU average in 1992 {15.1%}, owing to weak planning of manpower resources. The level of nurses is below the EU average (table 15). The share of doctors and nurses working in the public and voluntary sector significantly increased during the 1980s.

Table 15: Number of Health Professionals in Greece

Professionals	Number per 10,000 population	EU average	Year
Practising physicians	39	28	1994
General practitioners	13	9	1990
Specialists and consultants	21	13	1992
Practising dentists	10	6	1994
Certified nurses	36	70	1993
Practising pharmacists	8	8	1994

CURRENT ISSUES IN HEALTH CARE

Current issues are the shortcomings of the Greek health care system that were not effectively tackled by the 1983 reforms. One of the most substantial improvements has been in access to health care through the establishment of NHS rural health centres. Major concerns remain: the multiplication of funding resources, costly provider payment systems, unequal geographical distribution of health care services, centralised decision-making with a lack of response to local needs, lack of coordination between the private and public sector providers, and inefficient service provision due to a lack of managerial devolution, systematic resource planning and monitoring.

[23] Total number of inpatient beds.

Thus the prime focus of recent reform proposals in 1994,95 and 96 is to improve efficiency in the provision and finance of services. The proposals provide for more emphasis on primary health care; community participation and the establishment of a family doctor and referral system. Sickness funds are to be unified. NHS management to be strengthened at national, regional and district level. Also, there is increasing effort to increase the autonomy and management capabilities of hospitals.

Public satisfaction with the system still appears to be low according to the most recent survey, and reform is therefore seen as pressing.

However, historical experience in Greece has shown that implementation of reforms has frequently been hindered due to substantial public and professional discontent, and conflicting policy interests which have tended to result in permanent postponement of health policy reforms.

IRELAND

OVERVIEW

Health care for the Irish population is mainly provided by a publicly-financed health care system under central public control through which all inhabitants are entitled to health care benefits. In contrast to the National Health Service in the United Kingdom, entitlement to free or partially free services is based on ability to pay and the population is split into two categories.

Of the Irish population, 35% belong to category I which covers the lowest income groups. Citizens in category I are eligible for the full range of services free of charge. The majority 65% of the population falls in category II and has either to pay directly or take out voluntary insurance for general practice and medical services. Treatment and maintenance in public hospitals is subject to a moderate co-payment rate per day. Nearly one third of the Irish population, half of the members in category II, belongs to the Voluntary Health Insurance (VHI) Board, founded in 1957 to provide for complementary insurance.

Most health indicators of the Irish population are still below EU average values, but have improved substantially over the past two decades. Actual spending on health care has increased alongside the rapidly growing economy, but health care spending as a share of GDP is within the EU average range.

Satisfaction with the system is comparable with the EU average. 49.9% of the Irish are very or fairly satisfied with their system {50.3%}. Irish strategies to increase the performance of the system focus on the planning, organisation and delivery of health care services, rather than on funding levels.

POPULATION AND HEALTH STATUS

The total population of Ireland in 1997 was 3.55 million, of which around 33% were under 20 {24.6} and 11.3% were 65 or over {15} with only 4.7% over 75 {6.1}.This figure is projected to reach 9.1% in 2020 {8.9}. This shows a strongly youthful balance of the Irish population. Unemployment is a problem. In 1994, 9.0% of the Irish population was registered unemployed {4.7}. This figure would be even higher were it not for the high rate of emigration of the young.

Female **life expectancy** at birth, at 78.5 years, was lower than the EU average in 1996 {80.2} and at 73.2 years, was also slightly lower for men {73.9}. Life expectancy increased more slowly during the 1970s compared to other EU Member States.

Mortality rates are comparatively high. **Standardised mortality** was 9.0 per 1,000 population in 1993, among the highest in the EU {8.2}. **Infant mortality** at 5.5 per 1,000 live births was slightly higher than the EU average {5.4} in 1996 and **perinatal mortality** stood at 9.0 per 1,000 in 1995 {7.5}.

Death rate for cardiovascular disease is the highest in the EU and estimates for Potential Years Life Lost to ischaemic heart disease place Ireland second in the EU (see table 2).

AIDS incidence, although lower at 25 new cases per million population in 1996 {42.7} has steadily increased since 1982[24], contrary to trends in other EU Member States.

The **DMF-indicator for dental diseases** among 12 year-olds, at 2.7 in 1990, was slightly below the EU average {3.1}.

Smoking among females is more prevalent than the EU average, among males it is below the EU average. In 1992 30% of males {37.4} and 30% of females {25.1}over 15 smoked.

Alcohol consumption rose from 9 litres in 1990 to 11.2 litres in 1994 {11.6}.

FINANCE AND ORGANISATION

1. Structure of the System

The core of the Irish national health care system is a national scheme for the population in category I under which the lowest income groups, approximately 35% of the Irish population is fully covered for health care free of charge. Eligibility is according to income, number of dependants, age, and other factors. Prerequisite for access to free care is the Medical Card which is distributed by one of the eight Health Boards. Primary care is provided free of charge under the General Medical Services Scheme. Patients in category II have to pay for all services provided in ambulatory care.

Expenditure on pharmaceuticals beyond a specific level is reimbursable irrespective of income. Hospital services in public hospitals are likewise free of charge for patients in category I, patients in category II have had to bear a moderate co-payment rate since 1987.

Certain services are provided free of charge to all patients, such as treatment of infectious diseases and certain child health services.

The national scheme concentrates on the less well-off. The Voluntary Health Insurance Board and BUPA Ireland, more recently instituted, provide for voluntary insurance. Legal provision for private health insurance is mandated by the 1994 Health Insurance Act. It mandates that for any specific level of benefits a health insurer must charge the same premium in respect of all insured lives regardless of age, sex, and health risks. The premia are set according to a specific process of community rating which incorporates a risk equalization mechanism. The Act also ensures that private insurers have to operate on an open enrolment basis, meaning that an insurer is obliged to form a contract with all aspirants for private insurance. The Health insurance act furthermore mandates that the privately insured are entitled to lifetime cover and that insurers cannot terminate the contract without the agreement of the insured member. In 1994, approximately half of the Category II population was privately insured to cover for co-payment expenses in ambulatory and

[24] Conflicting values on AIDS-incidence in 1994, see table 4.

inpatient care and for services provided in private hospitals. Insurance can be purchased in different categories according to preference, for example to cover expenses for private hospital services.

The health care system in Ireland is highly centralised. The Department of Health is responsible for social security and the development of health policy and the overall planning of health services at the national level.

The Hospital Board and the National Health Board advise the Minister of Health on matters of health policy and operation of health care services. Local government has played no direct role in policy making since the 1960s.

At regional level, health services are administered through eight Health Boards serving populations ranging between 200,000 and 1.2 million. Each board has its own CEO and comprises elected local representatives, a few ministerial nominees and representatives of certain health professions employed by the Board. A wide variety of voluntary organisations play a significant role in service delivery and the health boards are empowered by the 1970 Health Act to make arrangements with them.

2. Finance

The government has tight budgetary control over public health expenditure. The budgets of the health boards are set annually on the basis of demographic factors and the level of health care provision within each region. The budgets are under tight monthly monitoring.

Finance of the Irish health care system is mainly public (around 78%). Around 13.5% is financed through co-payments to services. The main share of public funding of health care is raised by general taxation and a specific health contribution of 1.25% of gross income excluding the population in category I.

Funding of **hospitals** under the control of the Health Boards is by a prospective budget. Voluntary public hospitals (mainly teaching hospitals) are given budgets directly from the Department of Health. Co-payments for hospital inpatients are moderate and only paid by category II patients. In 1993, the Irish Department of health initiated a case-mix adjustment within the resource-allocation process for major acute hospitals in Ireland. Private hospitals rely heavily on patients insured with the VHI and on direct payments.

Doctors who provide outpatient services in publicly-funded hospitals are salaried. Those at consultant level are paid for their category I patients under a collective contract and category II patients are charged separately. General practitioners are paid by capitation by the Health Boards under the Medical Service Scheme. The capitation fee of general practitioners is based on the age, sex and geographical location of their patients, plus a lump sum for overheads.

Payments for category II patients are by fee-for-service. The service fee schedule is negotiated between the Irish Medical Association and the Ministry of Health.

Dentists employed by the Health Boards are salaried. Free practising dentists are paid by fee-for-service, the fee schedule being subject to negotiations between the Irish Dental Association and the

Ministry of Health. Dental services are free of charge for category I patients except for a small co-payment charge levied only for reconstructive dentistry.

Pharmaceuticals for patients in category I are placed on a positive list for prescribable drugs. This accounted for about 3,100 products in 1993. Pharmaceuticals are free-of-charge for category I patients. A co-payment system for pharmaceuticals operates for category II patients. Prescribing is monitored for category I patients. Prices are set by the Department of Health with reference to prices in five other EU-countries.

3. Health Care Expenditure

Cost-containment programmes have been in operation for years. They have been particularly successful in maintaining public hospital sector expenditure stable during the 1980s.

Figure 12 illustrates the development of health care expenditure in the past three decades. Total expenditure rose sharply from 3.8% of GDP in 1960 to 8.8% in 1980, the figure steadily declined during the 1980s to 6.6% in 1990 and declined to 6.4% in 1995 {7.7%} equivalent to 877 ECU per capita {1,413 ECU}. The stability of health care expenditure in Ireland is partly due to tight budgetary control over the public hospital sector.

Distribution of expenditure is still concentrated on the hospital sector, but this imbalance is slowly changing towards primary care. Expenditure in public dental care is notably low because the majority of dental services for adults are purchased on a private basis.

Figure 12: Total expenditure on health care 1960 to 1995, and distribution of expenditure in 1992.

HEALTH CARE RESOURCES AND UTILISATION

Preventive services are provided mainly through community care programmes which include community protection such as prevention of infectious diseases, special programmes for child health

and health promotion. The 1993 National health strategy to improve the health status of the Irish population focuses on prevention of alcohol-related health risks and closer orientation to needs on the regional level.

Primary health care is provided by general practitioners who mainly work in individual practices, although the number of group practices is increasing. Primary health services are under the direct control of the Health Boards. Ireland grants free patient choice of general practitioner. GPs play a gatekeeping role for specialist services which are mainly provided by hospital outpatient departments.

There are three main categories of acute **hospitals** in Ireland: those owned and financed by the Health Boards (roughly 60%), voluntary public hospitals providing services on behalf of the Health Boards (24%) and private hospitals (14%). There are three levels of hospitals within the health board system: regional, general (county) and district hospitals. Regional hospitals (12%) provide a comprehensive range of specialist services and are located in the major population centres. General hospitals (30%) provide services for country catchment areas and have consultant-staffed units for general medicine, general surgery, obstetrics, gynaecology and paediatrics. District hospitals (52%) are small hospitals with 20-40 beds, staffed on a part-time basis by GPs for the provision of medical and minor surgical treatment. Some district hospitals have become homes for the elderly. Within the public voluntary system, the majority are general teaching hospitals which offer treatment in the major specialities and are often associated with the medical schools. In 1994, Ireland provided 11,853 **hospital beds** for acute hospital care which translates into 5.0 hospital beds per 1,000 population {7.3}. The number of hospitals and in particular hospital beds in the public sector has been substantially reduced since 1982. The inpatient **average length of stay** in acute care has fallen to 6.7 days in 1995 which is comparatively low for the EU {7.6}. The number of cases treated per hospital bed was 31.0 in 1993 {31.3}. There is some indication of increased provision and utilisation of day-care and day-surgery.

The Ministry of Health maintains tight control over capital-intensive **medical equipment** for public services and the level of high cost medical technologies is almost the lowest in the European Union.

Likewise the Ministry controls all staff appointed by the Health Boards and this control over manpower resources was particularly stringent in the second half of the 1980s. Hence the level of manpower resources employed for health care is overall rather low (table 16), especially the number of **practising physicians**. Doctors made up only 9.9% of total health employment in 1990 {15.1}. The proportion of **specialists** to **general practitioners** is almost one third to two thirds. Entry of general practitioners to the General Medical Scheme for lower income groups is strictly regulated by the Health Boards. The number of dentists in particular is below the EU average, whereas the number of nurses is within the average range.

Medical education is recognised as being of very high quality.

Table 16: Number of Health Professionals in Ireland

Professionals	Number per 10,000 population	EU average	Year
Practising physicians	20	28	1994
General practitioners	5	8	1994
Specialists and consultants	3	11	1994
Practising dentists	4	6	1993
Certified nurses	74	70	1993
Practising pharmacists	3	8	1994

CURRENT ISSUES IN HEALTH CARE

The Commission on Health Funding, appointed by the government in 1987 to respond to political controversy over sharp cuts in public expenditure, concluded early that the solution to the problems facing the Irish health services did not lie primarily in the methods of funding, but rather in the way in which services were planned, organised and delivered. There were calls for better representation of consumers, improved information management and a cautious endorsement of competition amongst providers.

In the meantime, main initiatives focused on improving services in the hospital sector - aiming to improve coordination and integration of hospital and ambulatory services according to the proposals of the Dublin Hospital Initiative. There has also been a significant move towards the utilisation of day-care and day-surgery.

Priority has been given to waiting lists, especially for patients without private insurance. Increased managerial involvement of consultants in the public health care system has been enforced. There is a general move towards tighter monitoring of physicians' services and prescriptions and quality measures are increasingly enforced which mainly focus on clinical practice, service provision and organisation.

It would be expected that, in the future there might be an increased market for private health insurance within the regulatory framework of the 1994 health insurance Act.

ITALY

OVERVIEW

The Italian National Health Service, Servizio Sanitario Nazionale (SSN), was founded in 1978 in order to introduce universal access to health care largely free at the point of delivery. Finance of health care is mainly public - out of general taxation and social insurance. Service provision is mixed - public and private. The Italian health care system is highly decentralised in contrast to its prototype, the British NHS. Parliament establishes the minimum service levels to be guaranteed throughout the country and specifies conditions under which people can use the private sector. The implementation, planning, financing and monitoring of the health care system is the duty of the 21 regions. The health care system is highly fragmented owing to a history of frequently changing national governments and a resultant lack of central coordination.

Health care services are considered below the EU average. There are substantial inequalities between levels of service provision in the North and South of the country, favouring the North. However, the level of resource allocation for Italian health care is very high in terms of both capital and human resources, suggesting inappropriate and inefficient allocation, management and use.

Public satisfaction with the system is low compared to other EU populations and is declining for the public sector according to recent surveys.

Lack of broader effects of previous initiatives to reorganise health services, especially in the South of Italy underlies the rationale for the most recent reform, approved in late 1993 and currently being implemented. The reform aims to improve the chronic problem of deficits and to increase efficiency in service provision.

In spite of the substantial problems in consolidating equal and efficient health care provision and finance, overall health indicators of Italians are good compared to EU average values. Italy also provides outstanding medical expertise in certain areas.

POPULATION AND HEALTH STATUS

The total population of Italy in 1997 was 57 million, somewhat biased towards the elderly in comparison with EU norms. Around 21% are under 20 {24.6} and 16.4% are over 65 {15}. Around 6.2% were over 75, almost average for the EU {6.1}, but this is expected to reach 10.7% in 2020, substantially above the anticipated EU average {8.9}. Italy has one of the lowest population growth rates in the EU.

Although infant mortality is slightly above the EU average, in general terms health status indicators are favourable for Italy. **Life expectancy** at birth in 1996 was 74.9 for males {73.9} and 81.3 for females {80.2}.

Standardised mortality rates in 1993 stood at 7.1 per 1,000 inhabitants {8.2}. The **infant mortality rate** has decreased following the EU trend and stood at 5.8 per 1,000 live births in 1996 {5.4}.

Perinatal mortality, at 8.8% of 1,000 births in 1993, was above the EU average {7.9}.

Cardiovascular diseases and cancer are the main causes of death. Death rates for all external causes of injury and poisoning in 1994 amounted to 16.7 per 100,000 population {23}.

Estimates of **potential years life lost** per 100,000 population in 1992 for the main pathologies were slightly below the EU average, except for male cancers (table 2).

AIDS incidence, at 91.8 new cases per million in 1996 {EU 42.7} was the second highest after Spain.

Dental diseases , at 4.9 DMF teeth per 12-year-old in 1990 have decreased , but are still above the EU average {4.4}.

The proportion of the population who **smoke tobacco** is relatively high at 38.0% of males {37.1}, and 26% of females {25.1}over 15 in 1992.

Alcohol consumption, at 10.7 litres per annum for both sexes in 1992 was slightly below the EU average {11.2}

There are substantial regional differences in health status, especially between the north and the south. The northern population in general has a higher level of health care service supply, higher socio-economic indicators and higher health status indicators.

FINANCE AND ORGANISATION

1. Structure of the System

The Italian national health service provides universal coverage to the population. Administration of the system is regarded as highly bureaucratic with three institutional tiers at national, regional and local level.

The basic structure of the SSN is made up of the regional governments and the Local Health Units (LHU).

Italy is divided into 21 regions, including the autonomous region of Trentino/Alto Adige which comprises the provinces of Trento and Bolzano. The Regions are split into around 320 local health units (USL=Unitarie Sanitarie Locali), including 184 public but self-governing hospitals. USLs have had managerial responsibility for health care delivery since late 1992. Health care delivery in some regions is strongly horizontally integrated with the USL providing and purchasing all health care services within a defined territory. Thus, the USL is seen as the central focus of health care activity but with the regions in a strongly directive capacity via tightly-specified regional plans.

The implementation of health care delivery arrangements at regional level is performed by elected councils and funding mechanisms are set at local level.

The role of the central government in Rome is limited, since regions have substantial autonomy and are responsible for the planning, financing, monitoring and control of health care within their territories. Two major functions are pursued on the central level: the definition of global health care resources and their allocation to the regions on a per-capita basis - which is subject to approval by Parliament - and the definition of the minimum service level to be provided by the regions. The National Health Council, drawn from government, regions, central administration, professionals and social unions, is chaired by the Ministry of Health and advises the government.

2. Finance

Finance of Italian health care is mainly public, with social insurance contributing 40.8% and general taxation 37.5% of total funding (1995). The remainder, is financed by private expenditure, mainly co-payments to SSN services. Supplementary insurance was promoted by a 1993 reform.

Health contributions remain an important element of funding even though the Reform Law of 1978 advocated their abolition. Employers pay in theory 9.6% and employees pay 0.9% of gross wages but actual contributions can vary.

Generation of taxes and allocation of budgets takes place at the national level but regions enjoy considerable autonomy in spending, which implies the possibility of surpluses for reinvestment as well as deficits, which need to be covered.

It should be noted that there are some differences in the flow of funds between the regional governments and the USLs, which act as purchaser of health care and provider of hospital care in cases where hospitals are associated with the USL. Hospitals which participate in the SSN scheme are financed on a fee-for-service basis, their expenditure simply being met by the respective USL. Self-governing hospitals are funded by their regions, instead of the USL. Payment is in part on a historical basis and in part on a fee structure according to diagnostic-related groups. Private hospitals, under contract to the regions, are reimbursed by the USLs. Private-practice resources are in particular authorized when the public sector is not available. Payment of other categories of private hospital is by an agreed per diem rate for inpatient care and fee-for-service for outpatients.

Italian **General Practitioners** and Paediatricians are self-employed and usually paid on a capitation basis for primary care services. Recent reform has introduced fee-for-service for minor operations and co-payment for specialist ambulatory care. Staff working in the public hospitals are generally employed by the SSN and salaried.

Reimbursement criteria for prescribed **pharmaceuticals** are mainly set according to a positive list. Only pharmaceuticals listed in therapeutical formularies are used in hospitals. Co-payment by the patient of 50% applies to Class B prescription drugs in outpatient and ambulatory care. Class A drugs for severe and chronic illness are supplied virtually free of charge. Many patients are, in any case, exempt from all co-payments.

3. Health Care Expenditure

Total expenditure on health care in Italy has grown from 3.6% of GDP in 1960 to a relatively high 8% in 1993 {7%}. The trend since has been a decrease to 7.7% {EU 7.7%} owing to central cost-containment measures such as wage freezes-and budget cuts for new appointments. Total expenditure on health is divided between the major services very much in line with European norms, 47% for inpatient care, 30% for ambulatory care and 17% for pharmaceuticals.

Figure 13: Total expenditure on health care 1960 to 1995, and distribution of expenditure in 1992

HEALTH CARE RESOURCES AND UTILISATION

Health care provision is both public and private. The 1978 legislation provided for contractual relationships between the SSN and private health care providers both non-profit and profit. Contracts differ in volume and payment agreed according to the provider.

Although the public sector dominates service provision in the **hospital sector**, the SSN crucially depends on private sector provision in outpatient departments and diagnostic centres. Over 80% of hospital beds are public, less than 20% private. Public hospitals are self-governing trusts managed by appointees of the Region. Charitable and private hospitals operate outside the SSN. Patients have free choice of hospital, including private hospitals.

The result is a high risk of over-provision of hospital services and reverse incentives for efficient service provision as a result of payment arrangements. Italy had 5.3 **hospital beds** per 1,000 population in 1994 {4.7}. The inpatient **average length of stay** in acute care, although it has fallen, is still at the high level of 8.8 days per sickness period {7.6}. Admission rates increased to 15.5 inpatient admissions per 100 population in 1994 {16.7}. Home care and homes for the aged are poorly developed, especially in the South.

Physician consultations, at 11 home and office visits per capita per annum is substantially above the European norm {7}.

Primary care is provided by the SSN in general through the USLs. In addition, private practitioners are contracted to the SSN, often on a part-time basis alongside their hospital responsibilities. Patients usually register with either SSN-employed or self-employed GPs who, in theory, act as gatekeepers to secondary care.

Table 17: Number of Health Professionals in Italy

Professionals	Number per 10,000 population	EU average	Year
Practising physicians	53	28.1	1994
General practitioners	N/A	8	1994
Specialists and consultants	5	12	1993
Practising dentists	6	6	1992
Certified nurses	41	70	1992
Practising pharmacists	10	7	1992

CURRENT ISSUES IN HEALTH CARE

In the later 1990's primary emphasis has been on management of service provision, USLs have expanded, and hospitals have become self-governing trusts. Since the 1993 reform is still being implemented, it is too early to judge the outcome with regard to equity, efficiency and cost-containment. Managers are seen as being more interested in balancing the budget than improving medical care. Early observations suggest that the larger-sized USLs have experienced substantial management difficulties. The fate of private sector services remains uncertain to date, for rationing has stimulated greater utilisation but not provision of private health care services.

Due to ongoing dissatisfaction with the public health care system, the proportion of the population purchasing private insurance is permanently increasing, while private-sector services are generally favoured due to a higher standard of basic, non-medical services such as catering.

Increased regional autonomy has resulted in increased resistance to redistribution of fiscal revenues among regions, with an adverse effect on the unequal distribution of health care services between the north and south. The lack of a strategy to tackle substantial inequalities in health in Italy persists in spite of numerous reform efforts.

The pressures on the SSN remain considerable, and the prospects for change uncertain. On the one hand there are strong tiers of political party appointees who enjoy a high degree of autonomy. On the other hand there is weak central direction for consistent change.

LUXEMBOURG

OVERVIEW

Most of the inhabitants of Luxembourg are insured under compulsory health insurance (Assurance Maladie), which is divided into 9 social sickness funds. The funds are largely organised on occupational lines, with contributions being income-related and split between employer and employee. A large share of the population takes out supplementary insurance with one of the mutual societies (Mutuelles).

The most important difference in health care delivery in comparison with other EU Member States is that all physicians' services are provided by independently practising physicians.

There is a strong emphasis on specialist medical care. The population of the smallest EU Member State is fairly satisfied with its health care system, which is amongst the most expensive in terms of health care expenditure per capita. Health funding is a crucial issue because sickness funds and hospitals are increasingly registering deficits.

Health status indicators tend to be slightly worse than the EU average and demand for health care is increasing due to an ageing population. There is some concern over provision and financing of long-term care.

POPULATION AND HEALTH STATUS

In 1997, the population of Luxembourg was 412,000 with an average age group pyramid. 23.8% were less than 20 years of age {24.6}, 13.8% were over 65 {15} and 5.3% were over 75 {6.1}. This level is expected to increase to 8.2% by 2020 {8.9}.

Overall health status indicators tend to be slightly worse than EU average levels. **Life expectancy** levels at birth for both men and women are below the EU average. For women in 1995 it was 79.1 {80} and for men 72.6 {73.6}. The difference between genders (6.5 years) is slightly above the EU average {6.4}.

The **standardised mortality** rate in 1993 was 8.0 per 1,000 inhabitants {8.2}. The **infant mortality** rate was lower than the EU average, at 4.9 per 1,000 births in 1996 {5.4} as was **perinatal mortality** at 7.0% of 1,000 births in 1993 {7.5}. The biggest single cause of mortality for young people between the ages of 15 and 24 is automobile accidents.

Death rates for cardiovascular diseases (104) for both genders are below the EU average {139} and male death rates for cancer, at 303, above the EU average.

Estimates of **potential years life lost** per 100,000 population in 1993 from selected causes were particular high for cancers among males and cerebrovascular diseases among females (see table 1).

AIDS incidence has decreased since 1993 and was 29.3 newly reported cases per million population in 1996, significantly lower than the EU average {42.7}.

The indicator for **dental diseases** stood at 3.1 DMFT per child aged 12 years in 1990 {3.1}.

Consumption of tobacco is slightly above the EU average, accounting for 38% of males above the age of 15 in 1992 {37.1}, and for 26% of females {25.1}.

Alcohol consumption was 14.7 litres in 1990. This was amongst the highest in the EU{11.6}. However, these data have to be treated with caution because of substantial individual purchases of alcoholic beverages in Luxembourg by citizens of neighbouring countries.

The government plan "Santé pour Tous" has prioritized the reduction of premature and avoidable deaths and general improvement of the health status of the population.

FINANCE AND ORGANISATION

1. Structure of the system

Sickness funds are under the supervision of the Ministry of Labour and Social Insurance, administered by elected representatives of providers and sickness fund members. They are organised in a central body which is responsible for accounting and administration of payments to providers. The level of payments is subject to negotiations between the sickness funds and the providers. The central body, composed of the presidents and vice-presidents of all sickness funds, was instituted in 1994 to set up a global sickness fund budget. To enforce the budget the central body can regulate agreements with providers, change co-payment rates and sickness fund contributions.

The delivery of health services is under the direct responsibility of the Ministry of Health. The Luxembourg Hospital Association plays an advisory role to the Ministry on matters relating to hospital planning and organisation.

The Assurance Maladie covers the majority of the population, some occupational groups are insured in special occupational funds. There is no choice of membership. The benefit package for health insurance is uniform and determined by the government.

The extent of supplementary insurance in the mutual funds is usually limited, covering for special conditions in inpatient care and for dental services. Only 4,000 people (1%) had private insurance in 1992, but this share has increased substantially in recent years.

2. Finance

Funding comes mainly from contributions to the social sickness funds which are split 50/50 between the employer and employee and total around 5% of gross wages. Contribution rates are fixed (by the "Union des Caisses de Maladie"=UCM). In 1995, 60% of funding came from sickness

funds contributions. State subsidies to health benefits amounted to 31%, 8.5% was financed through co-payments and through private insurance.

Patients are usually reimbursed by the sickness funds, but there are powers for providers to be paid directly by the sickness funds.

All hospitals (public and private) have been paid under a budget since 1995. The introduction of hospital budgets replaced the previous payment system which was per diem. The budget for each individual hospital is subject to negotiations between the UCM and the hospitals. These budgets do not include payment of doctors, which continues to be fee-for-service, with the exception of one hospital. Maternity services are paid by a lump-sum. The government pays a share up to 80% to capital costs, and thus retains major control over capital investments. A flat rate co-payment to hospital services aims to cover expenses for catering.

In **ambulatory care**, service payment is by fee-for-service. The fee schedule is negotiated between representatives of doctors and the sickness funds and is binding for all parties. This also applies to private health insurance. Agreements have to be approved by an inter-ministerial committee. Patients are reimbursed by the sickness funds except for a co-payment of 5% (or 20% for the first home visit of the month).

Dentists are paid fee-for-service, fees are subject to negotiations between representatives of the dentists and sickness funds. Co-payment for prostheses is 20%. For other dentures, co-payment only applies to patients who cannot give proof of dental consultation in each of the two previous years.

Patient co-payment for **pharmaceuticals** is also by flat rate and amounts to 8% of the price. There is a negative list for reimbursable drugs for a small number of products. There is no positive list. The introduction of a reference price system is under consideration.

The prices are adjusted to those laid down in Belgium for certain products, but others are not regulated by price. A transparency list, set up by pharmacists and physicians to improve efficient prescription, is not binding for providers.

3. Health Care Expenditure

Health expenditure in Luxembourg rose sharply from 3.7% of GDP in 1970 to 6.4% in 1981. Since then the figure has increased more slowly and stood at 7.0% of GDP in 1995 which is below the EU average {7.2%}. This however represents 2,279 ECU per capita which is second highest in the EU {1,413}. This discrepancy is in part due to the strong growth of national income in Luxembourg. In addition, Luxembourg receives much of its income from abroad and there is a substantial discrepancy between total income and available income.

The distribution of expenditure mainly follows the EU average, with hospital expenditures having the largest share, followed by ambulatory care services and pharmaceuticals. The growth of expenditure has been particularly high in the pharmaceutical sector over the past decade.

Figure 14: Total expenditure on health care 1970 to 1995, and distribution of expenditure in 1992

HEALTH CARE RESOURCES AND UTILISATION

Health care delivery is mixed public and private. **Hospital** planning is according to a geographical plan. New hospital construction is subject to governmental approval.

Luxembourg had 18 hospitals and 4,443 hospital beds in 1994. Private hospitals are predominately charitable. Patients have free choice of the hospital they wish to be referred to, this also applies to hospitals in other Member States, but with prior approval through the respective sickness fund.

Supply of hospital beds in acute care is perceived to be in surplus. For long-term care there is a substantial shortage of hospital and nursing care facilities, resulting in long waiting lists.

The overall number of **hospital beds** per 1,000 population is high by European standards with 11.1 beds in 1994 {7.3}. This correlates with a relatively high number of inpatient bed-days per head in acute care of 1.8 {1.25}.

The **average length of stay** in acute care has fallen to 9.8 days 1993 which is still second highest in the European Union {7.6}.

In **ambulatory care** patients have free access to health care services and advanced technical equipment, provided by self-employed general practitioners, specialists and dentists. Primary care for children, such as check-ups and vaccinations, is provided by the State and local communities. The number of visits to a doctor per population per year in 1994 was 8.3 for females and 6.4 for males.

In proportion to the population, Luxembourg is fairly well equipped with capital-intensive medical technologies in diagnostic imaging and radiation therapy.

Luxembourg does not provide medical schools and all doctors receive their training abroad, usually in Germany, France, Belgium, Switzerland or the UK.

Doctors have to provide their services within the social insurance scheme. The number of **practising physicians** at 21.6 per 10,000 population, is below the EU average {28.1} (1994). Most are specialists. The share of physicians in total health employment was 11.1% in 1991 {13.5%}.

Table 18: Number of Health Professionals

Professionals	Number per 10,000 population	EU average	Year
Practising physicians	22	28	1994
General practitioners	8	8	1994
Specialists and consultants	13	13	1994
Practising dentists	5	6	1993
Certified nurses	68	86.8	1994 (W.H.O)
Practising pharmacists	9	8	1994

CURRENT ISSUES IN HEALTH CARE

The last major health care reform in 1992 mainly provided for the reorganisation of sickness funds. The funding of health care has become crucial because of increasing deficits in the social insurance funds. State subsidy in the meantime has been limited to a maximum of 40% of total health care expenses. Additional funding sources have to be established if the maximum is exceeded.

The 1992 health care reform did not systematically address the issue of provision and finance of long-term care which remains of prime concern for the population in Luxembourg.

The provision of nursing homes is crucial because of a substantial shortage of manpower resources in nursing care. There are attempts to transfer facilities from acute care to long-term care by reclassifying beds. The Ministry of Health has started to improve home visit services for the aged to prevent hospital admissions. Homecare programmes are expanded through local government, and by the payment of allowances for home care. The introduction of a nursing care insurance scheme is under consideration.

THE NETHERLANDS

OVERVIEW

The Dutch health care system is mainly financed by a mix of social and private insurance, with social insurance covering 62% of the population and private insurance covering 31% in 1993. A national insurance scheme (Algemene Wet Bijzondere Ziektekosten, AWBZ) covers for catastrophic risks, chronic illness, disability and psychiatric care. The private non-profit sector and self-employed professionals play a significant role in health care provision.

The Dutch are fairly satisfied with their health care system compared to other European citizens. Of a sample population, 72.8% were very or fairly satisfied with the system, this compares with the EU average of 50.3%[25]. One of the particular strengths of the system has been the provision of a comprehensive sector for ambulatory care and long-term nursing care for the elderly. Cost containment in the pharmaceutical sector has been particularly successful and health care expenses as share of GDP have remained stable in the 1990s, the decade of health care reform.

The 1986 Dekker Committee recommended two main lines for reform of the Dutch health system: the introduction of uniform compulsory insurance for basic health and social care for the whole population and regulated competition in the insurance and the provider market. The four main objectives of reform were: to coordinate financing of health and social care, to increase financial incentives for more efficient health care provision, to increase coordination between the financing and planning of health care services, and to increase self-regulation of the complex Dutch health insurance market. The Simon Plan of 1990 followed the principles of the 1986 Dekker plan and revised it. The government has since then moved towards implementation in stages by extending coverage of the existing universal scheme to non-catastrophic risks (e.g. medical appliances and ambulant prescribed drugs) and has taken steps towards market-orientation, transforming sickness funds from administrative bodies to risk-bearing enterprises, allowing sickness funds to contract selectively with physicians and pharmacists, to negotiate the level of fees beyond the officially approved level and to extent their catchment area for members. Competition is now conceivable based on the level of the flat rate premium, between the quality and quantity of services delivered by contracted providers.

Some major changes have taken place, such as substantial increase in activity to improve quality in health care provision and innovation in sickness fund administration. Implementation of the reforms is behind schedule due to strong resistance from interest groups and the technical and political complexity of the reform.

[25] Ref.: Mossialos 1997.

POPULATION AND HEALTH STATUS

In 1996, the population of the Netherlands was 15.5 million with a somewhat lower proportion of young and old than the EU average. The proportion of the elderly is more stable in comparison with other European countries.

Life expectancy at birth stood at 80.4 years for females {80.2}, and 74.7 years for males {73.9}.
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Mortality ranged below the EU average: **standard mortality** at 9.0 per 1,000 population {8.2} in 1993, **infant mortality** at 5.2 per 1,000 births in 1996 {5.4}, but **perinatal mortality** at 7.9% per 1,000 births in 1995 was above average {7.5}.

Mortality from cardiovascular diseases (118 for both genders) is lower than the EU average {139}, but cancer mortality for both sexes (295) is substantially higher than the EU average {200}.

AIDS incidence has decreased since 1992 and at 25.1 new cases per million population per year is well below the EU average {42.7}.

In 1992 42.9% of all males {37.4}and 30.5% of all females {25.1} over 15 **smoked**.

Alcohol consumption was 9.9 litres per year {11.7} in 1990.

Alcohol and tobacco consumption decreased during the 1980s and 1990s. This could be ascribed to a substantial increase in health promotion activity in the early 1990s and banning of smoking in public places under a 1990 law.

The **DMF** dental indicator for 12 year olds in 1990 was 1.7, much lower than the EU average {3.1}.

FINANCE AND ORGANISATION

1. Structure of the System

The national exceptional medical expenses scheme (AWBZ) accounts for chronic illness and long-term care and is compulsory for the whole population. The national insurance scheme has been gradually extended, psychiatric care, artificial limbs and appliances were added in 1989 and ambulant prescription drugs in 1992. Nonetheless the national insurance scheme still excludes the bulk of coverage for inpatient care.

The compulsory social insurance scheme (Verplichte Ziekenfondsverzekering, ZFW) is administered by approximately 40 sickness funds and covers approximately 60% of the Dutch population. The income threshold for social insurance is below that of other Bismarckian health care systems. A substantial part of the population, approximately 37%, principally higher income groups and the self-employed, who cannot enrol in the social insurance scheme by law, has to purchase private health insurance (Particular verzekering) to cover expenses for acute care services mainly provided by benefits in kind.

Public employees, approximately 6% of the Dutch population, are insured under a special compulsory scheme, providing benefits in kind for more comprehensive services in comparison to the ZWF.

Members of the social insurance funds can take out supplementary insurance (Aanvullende Ziekenfondsverzekering) to cover for additional risks. Approximately 90% of the social sick fund members take out supplementary insurance to cover for dental reconstructive care.

The Ministry of Public Health, Welfare and Sport (VWS) is the key authority for planning and implementation of health policy. The social insurance scheme is also under the responsibility of the VWS. The Minister determines the level of income-related premium to the sickness funds following the advice of the Sickness Fund Council. The Minister is in charge of the planning process of health care delivery, with the power to approve the installation of capital intensive medical technology and the establishment of hospital units. He also has final authority over the fees negotiated between the sickness funds and the doctors and the rates paid to the hospitals. All budgetary decisions are subject to approval by Parliament. The National Advisory Council for Public Health, the Hospital Council, and the Health Council are quasi-governmental organisations which advise the VWS.

2. Finance

Social insurance is the dominant form of finance of health care in the Netherlands, accounting for approximately 68% of health care expenditure in 1992. Private insurance accounted for 13.7% of expenditure. Finance is supplemented by direct co-payments and government subsidies.

An overall budget for health care expenditure is proposed by the Ministry and subject to approval by Parliament. In addition, there are spending targets imposed on several health care sectors, such as hospital and ambulatory care.

Sickness fund contributions are income-related and paid mainly by the employer (5.15% of gross income), the employee contribution is considerably lower (1.15% of gross income). The administration and distribution of contributions is through a central fund based on partially risk-adjusted capitation. In addition, members pay a small flat rate determined by each individual sickness fund. The flat rate accounted for 10% of all health care expenditure in 1995. Flat rate and capitation payments to sickness funds were introduced in 1993, replacing the former system of full reimbursement of sickness fund expenses.

Options to choose another sickness fund for membership have been enhanced, with sickness funds now being allowed to expand their membership. Sickness funds can compete on quality and quantity of services. Competition in private insurance has a longer standing tradition in the Dutch health care system. Private insurers are in particular familiar with competitive premium settings and entitlements to health care services and quality care. Contributions are individually set by the private insurers and predominately based on age.

Service fees are negotiated between the sickness funds or private insurers and the contracted health care providers. The maximum level of fees is set by the central government, but since 1992 lower fees can be negotiated.

Finance of **hospital services** is via a global budget applied by each County Council since 1983. The draft budget is now calculated for each individual hospital based on anticipated activities and expected expenses for capital investments and personnel. Functional differences between hospital departments and the resulting differences in expenses are taken into account. The budget is calculated by the Central Council for Tariff Control (Central Orgaan Tarieven Gesondheitszorg, COTG). Physicians working in the hospitals are paid by fee-for-service under tariffs laid down by the COTG.

The Netherlands has a long-standing tradition of public funding for different types of **long-term nursing care** and long-term inpatient capacity is among the highest in the world[26].

Medical technology is closely reviewed prior to approval and adoption into the insurance scheme. The most important institution for medical technology assessment in this respective is the Health Council whose role is defined by law. The Netherlands Organisation for Technology Assessment (NOTA) advises Parliament. The evaluation of health care intervention to improve beneficial effect is increasing in the Netherlands.

Private practitioners in general practice receive a capitation fee under the sickness fund scheme, and fee-for-service for patients with private insurance. Specialists are paid by a combination of capitation and fee-for-service for technical interventions and diagnostics. Efforts to cut the level of specialist fees have been of limited effect due to a compensatory increase in the volume of services provided.

Pharmaceuticals are placed on a positive list of reimbursable products. A reference price system was introduced in 1991 for approved products, set by an independent committee that reports to the Association of Sickness Funds. Patients have to pay any extra above the reference price.

Co-payments account on average for 8% of the price of prescribed drugs. Further co-payments are levied for dentistry, medical appliances and nursing homes.

3. Health Care Expenditure

Health care expenditure in the Netherlands as a share of GDP increased from 4.3% in 1965 to 8.3% in 1982 to which level, after rising slightly, it descended again in 1990. It then rose in 1992 to 8.6% and remained at this level in 1995. The figure is high compared to the EU average {7.7%}, equivalent to 1,711 ECU per capita {1,413 ECU} (figure 14).

Distribution of expenditure has been very stable over the past decade, being illustrated for 1992 (figure 14). The expenditure share for pharmaceuticals is one of the lowest in the EU. The share spent on inpatient care differs somewhat between different sources due to different definitions of hospital care which can cover both inpatient and outpatient expenditure.

Figure 15: Total expenditure on health care between 1960 and 1995 in the Netherlands, distribution of expenditure in 1992

[26] Ref.: Van het Loo, unpublished 1998.

HEALTH CARE PROVISION AND UTILISATION

Health protection and prevention is organised through national immunisation and screening programmes, and national health promotion campaigns. Preventive care is mainly provided by general practitioners who enjoy broad training in this respect. Prevention is covered by social insurance.

General practitioners play a key role in the Netherlands because they provide nearly all **primary medical care** and normally act as gatekeepers to the specialists who are predominately based in hospitals. GPs (Huisartsen) are independent contractors, with around 40% working in group practices or health centres. Although most specialists are self-employed, specialist care is almost exclusively organised by the hospitals.

Patients register with a general practitioner and also a pharmacist. Patients have to choose among those providers under contract with their sickness fund but in practice this includes almost all GPs in an area. Privately-insured patients and public employees are free to consult any GP. Co-payments for ambulatory care were abolished in 1990.

There are indications that homeopathic services are increasingly provided by general practitioners and increasingly utilised by patients. Homeopathic services are only minimally reimbursed by the sickness funds but often provided by supplementary insurance.

Dental care apart from preventive care is mainly subject to supplementary insurance. Cost-sharing by the patients is otherwise anything between 0 and 100% for reconstructive services.

Hospital care in the Netherlands is mainly provided by private non-profit hospitals with their own governing bodies. Approximately 85% of the 55,000 acute care beds in 1996 are private. Almost all of the 156 hospitals (1996) have outpatient facilities which form an integral part of the system. There is an increasing tendency towards the substitution of inpatient care by outpatient care with daycare services playing an increasing role. From 1988 onwards there has been an amalgamation of hospitals and provinces have decreased bed capacities in acute care. The Netherlands is still well

supplied with **acute care hospital beds** which decreased from 4.7 to 4.0 per 1,000 population between 1985 and 1994 {4.7}. The inpatient **average length of stay** in acute care is above the EU average 9.9 days per 1,000 population in 1994 {7.6}.

The number of **practising physicians** was 29.3 per 10,000 population {EU 28.0 in 1990}. In 1994, the number of specialists per 1,000 population, at 8.7 was substantially below the EU average {11}. Since 1984 there has been a decline in the number of specialists in training as a result of restrictions on capacity. However, shortages of medical staff are noticeable in orthopaedics, ophthalmology, rheumatology and psychiatry. The limitation of the number of doctors allowed to practise in particular areas was abolished in 1992. The number of medical students allowed to enter medical school is strictly planned.

The number of practising pharmacists is 1.6 per 10,000 population - amongst the lowest in the European Union {7.7}.

Table 19: Number of Health Professionals in the Netherlands

Professionals	Number per 10,000 population	EU average	Year
Practising physicians	29	28	1994
General practitioners	4	8	1994
Specialists and consultants	9	11	1994
Practising dentists	31	70	1993
Certified nurses	2	6	1993
Practising pharmacists	2	8	1994

CURRENT ISSUES IN HEALTH CARE

There have been substantial changes in the Dutch health care system within the last decade, major objectives being cost-containment and efficiency gains in service purchasing and provision. A prime instrument for cost-containment has been the setting of budget ceilings for total and sectoral expenditure.

The 1986 Dekker plan provided for a 'regulated market' to increase efficiency in health care service provision. Although the Dekker plan has never been fully implemented there has been some move towards a more market-oriented insurance and provider network. In this context, contracts are now negotiated between the sickness funds and the providers which has shifted the regulation of planning and contracting for health care services to the sickness funds.

On the other hand, the national insurance scheme for exceptional medical expenses (AWBZ) has been extended, following the Dekker plan for universal social insurance coverage for a wide range of medical services. AWBZ remains under tight central control.

The issue of comprehensive coverage of insurance remains disputed. The coexistence of the private and social insurance schemes with variations in quality and quantity of basic and advanced services provided has led to some discussion about moving the two systems more towards each other.

There is increasing governmental encouragement to form guidelines for effective and appropriate medical care in the Netherlands, although this is accepted as the ultimate responsibility of providers and their scientific associations and insurers in agreement with the patients they serve. Quality assurance involves all parties in a common effort to define and monitor standards of care. There are already some established programs suitable for expanding guidelines for effective, efficient and cost-effective quality medical care, for example the Dutch initiatives towards Technology Assessment in health care.

In addition, financial information systems are currently being institutionalised for assisting implementation and monitoring of cost-containment.

PORTUGAL

OVERVIEW

The Portuguese National Health System "Serviço National de Saúde" was introduced in 1979 to provide universal insurance coverage to the Portuguese population irrespective of income. The Constitution was amended in 1989 to the effect that the NHS would not be totally free, but would continue to follow a free "tendency" according to the individual ability to pay. Finance is mainly through taxation but some services are still provided within the social insurance scheme. Delivery of health services is mainly public.

Health care expenditure is very low in comparison to the EU average. The Portuguese population is fairly dissatisfied with the health care system when compared to other citizens of the EU. There have been a number of legal initiatives aiming at improving the standard of service provision in health care. Because public health service provision is still critical in satisfying the demand for health care, there has been a significant growth of private sector activity within the past decade, especially of private health insurance.

In spite of low financial resources for health care, health indicators have substantially improved over past decades. Most health indicators however are still below the EU average.

POPULATION AND HEALTH STATUS

The population was 9.8 million in 1997, of which nearly 25% were less than 20 years old {24.6%} and 15% were over 65 {15%}. The proportion over 75, 5.7% is low {6.1%}, but is projected to reach 8.7% in 2020 {8.9%} (EU12).

Portugal has a relatively poor position on a number of overall health status indicators although morbidity from cardiovascular diseases and cancer tends to be low.

Female **life expectancy** at birth has increased from 67.2 in 1960 to 78.5 in 1996 {80.2}, male life expectancy has increased from 61.7 in 1960 to 71.2 in 1996 {73.9}, a substantial increase for both genders, although still below the EU average. The difference between male and female life expectancy (7.3 years) is substantial.

Standardised mortality rates in 1993 were likewise high at 9.3 per 1,000 inhabitants {8.2}. The **infant mortality rate,** at 6.9 per 1,000 live births was second highest in the European Union in 1996 {5.4}. **Perinatal mortality** was above average at 9.0 of 1,000 births in 1995 {7.5}.

Death rates for all external causes of injury and poisoning in 1994, at 11.9 were lower than the EU average {23}.

Estimates of **potential years life lost** were relatively low for ischaemic heart diseases but fairly high for cerebrovascular diseases compared with the EU average (table 2).

AIDS incidence, in contrast to most other EU-Member States, has increased steadily since 1990 and at 81.1 new cases per million population per year in 1996 was the second highest in the EU {42.7}.

Dental diseases, as represented by the DMF-indicator, are slightly above the EU average, accounting for 3.2 DMF in 1990 {3.1}.

Tobacco consumption differs essentially between the genders. In 1992, 40% of all men smoked at least 20 cigarettes per day {37.1}, but only 12% of all females {25.1}.

Alcohol consumption, at 9.8 litres per capita, was below the EU average in 1990 {11.6}.

FINANCE AND ORGANISATION

1. Structure of the System

The Ministry of Health supervises activities within the NHS and the private sector, sets the levels of co-payments, decides on reimbursable drugs, and coordinates public health activities and preventive programmes for specific diseases and population groups. The National Health Council, composed of various health experts from different areas, advises the Ministry of Health.

The Portuguese National Health Service (NHS) covers approximately 75% of the population. The remaining 25% participates in special additional schemes arranged through their employers. This applies mainly to employees in the public sector, such as the civil service and the military.

Service provision is mainly through public providers within the NHS. The basic health law of 1990 provided for stronger cooperation between the NHS and the private sector based on contracts.

The Portuguese hospital plan is based on three geographical areas. For ambulatory care, Portugal is divided into 18 mainland districts.

On the mainland, the health authorities (ARS) are responsible for the integration of public and private sector and the location and administration of health centres.

1993 legislation continued the move towards decentralisation and 5 regions in Portugal including the Azores and Madeira, are now fully autonomous with their own health services managed by their respective governments.

2. Finance

Finance of health care is mainly by general taxation, which accounted for 61.6% of the total in 1992. Social insurance contributed 13.7% of health care finance. Social insurance contributions (which cover pensions, disability and unemployment as well) amount to an average 35% of gross income with the employer paying 24% and employee 11%. Private health insurance contributed 2.2% of overall health care finance in 1992. Patient co-payments, levied on all services except

public non-specialist outpatient medical and dental services and inpatient hospital care, contributed 21.9%.

Inpatient care in **public hospitals** is provided free at the point of use. Up to 1989, hospitals were funded on the basis of a global budget adjusted annually, but since 1989 a part of the annual global budgets has been analysed in prospect and computed on the basis of the sum total of different diagnosis-related group costs (DRG). Doctors are paid fee-for-service for private hospital services. When **private hospitals** are utilised within the social insurance scheme, the services are usually only reimbursed at the level of public hospital services, higher costs are reimbursed when public hospital services are not available at the point of need, however. These conditions lead to a variable share of user co-payments between 10 and 50%.

NHS **health centres** (centros de saúde) in charge of primary care, usually maintain their own budgets which are managed at district levels.

Dental care services are under the NHS, **dentists** in this case are directly employed and salaried. Contracted **private services** are reimbursed by tariffs set by the central government. User charges for prosthetics only are 25% on average.

Doctors working in public hospitals and public health centres as well as some specialists are directly employed by the NHS and salaried. In addition, doctors working in private office-based practice and doctors offering private services in hospitals are usually paid on a fee-for-service basis.

Pharmaceuticals are placed on a list of reimbursable drugs (positive list), a negative list exists for approximately 500 products. Co-payments for prescribed drugs vary between 0 and 50%, according to the severity of the underlying disease which is to be treated. On average, 23% of the price is met by the patient. Drug prices in Portugal are amongst the lowest in the EU.

3. Health Care Expenditure

Total health care expenditure grew rapidly from 2.8% of GDP in 1970 to 5.6% in 1975. It then fell to 4.9% in 1977 but rose again to a EU average value of 6.9% in 1986. The figure then fluctuated around 7% and was 7.2% in 1992. In the last 4 years, Portugal has experienced an increase of total heath expenditure to 8.2% of GDP in 1995, which is above the EU average {7.7%}. This equates however, in absolute terms, to only 644 ECU per inhabitant, the second lowest level in the EU in 1995 {1,413}.

The distribution of expenditure is somewhat weighted towards ambulatory care, with a relatively low share spent on inpatient care (Figure 16).

Figure 16: Total expenditure on health care 1970 to 1995, and distribution of expenditure in 1992

HEALTH CARE RESOURCES AND UTILISATION

The public sector dominates service provision in the **hospital sector** in Portugal. There are two main types of hospitals, the central hospitals and the district general hospitals. There are 15 central hospitals, most of them located in Lisbon, Porto and Coimbra providing all forms of specialist care and they are often linked to university establishments with the status of teaching hospitals. District general hospitals, of which there are 38, have all the usual specialities and provide both inpatient and outpatient care for populations of between 250,000 and 300,000.

In addition, there are 15 "specialised" hospitals (maternity, paediatrics, orthopaedic etc.), 6 psychiatric hospitals and 24 local hospitals.

Approximately 83% of beds belong to the public sector, the remainder are provided in private charitable and for-profit hospitals. Except for emergency care, access to hospitals is by referral. The level of supply of **hospital beds** is amongst the lowest in Europe. There were 4.3 inpatient care beds per 1,000 inhabitants in 1994, which is substantially below the EU average {7.3}, and the number of inpatient care beds is still decreasing in Portugal.

The **inpatient average length of stay** in acute care has fallen to 7.9 days and is below the EU average {9.8}. Admission rates have increased from 6.7 in 1970 to 11.3 admissions per year and total population in 1993. A particular problem is the increased utilisation of hospital emergency facilities instead of primary care facilities.

Primary care is provided mainly by the network of health centres. Some of these are private, but the majority is owned publicly and managed under the NHS. Patients have to register with a doctor in their local region.

Specialist care is increasingly provided by contracted private practitioners, who work part-time in the hospital and part-time in their office. This was legalised by the 1993 reforms. Private polyclinics providing, for example, laboratory services, diagnostic services and medical rehabilitation substantially supplement public service provision.

Consultation of doctors outside hospitals is, at 3.2 times per person per year, less frequent than in other EU countries {4.8}.

The number of **practising physicians** , at 29.3 per 10,000 population in 1994, was above the EU average {28.1}, the ratio of **general practitioners** to **specialists** being 3 to 1. Physicians' share of total health employment, at 25.3%, is much above the EU average in 1993 {15.1}. There is a considerable shortage of manpower for all areas of nursing care (table 20).

Table 20: Number of Health Professionals in Portugal

Professionals	Number per 10,000 population	EU average	Year
Practising physicians	29	28	1994
General practitioners	6	8	1994
Specialists and consultants	17	13	1994
Practising dentists	31	70	1993
Certified nurses	2	6	1993
Practising pharmacists	12	8	1994

CURRENT ISSUES IN HEALTH CARE

The decentralisation of management of health care delivery, deregulation, and internal market orientation were initiated by the 1990 reforms and continued with the 1993 reforms. The long-term aim is to improve public and professional satisfaction with the NHS. The prime focus has been to allow the private sector services, which are perceived to be of higher quality, to participate in the publicly financed health care scheme. The principal concept is "contracting out" services to private health care, particularly high technology services such as laboratory and radiology services, and primary care. The 1993 law provided for public services to be managed or provided under contract by other organisations, for example local health authorities, and voluntary organisations. Also, Regional Health Authorities are allowed to contract directly with private practitioners.

Consumers on the other hand are now encouraged to take out private insurance with premiums varying according to age and sex. This provision of the 1993 law is still one of the most controversial. Private insurers can receive a government co-payment when the level of contributions is below the average cost per head within the NHS. They can decide on how they pay providers. Private insurers are being considered for providing full health care to their clients in future.

Decentralisation so far has not been fully possible and cooperation between the hospital and primary care services has not yet been satisfactorily attained.

SPAIN

OVERVIEW

The current Spanish health care system was established by the General Health Law of 1986 confirming a universal right to health care which is granted by the 1978 Spanish Constitution. Since then, Spain has been working towards its own integrated National Health System ("Sistema National de la Salud", SNS) which covered nearly 98.5% of the population in 1997. Development has proceeded on a regional basis, the aim being for each region to manage its own health services. In 1998 this process of decentralisation had still to be completed in 10 of the 17 autonomous regions.

The introduction of the NHS has achieved nearly universal coverage for a wide range of services. Health status of Spaniards is above the EU average for several key indicators. The system is advancing in evaluating new medical practices and technologies prior to their introduction.

Efficiency in service provision remains a major concern. There are long waiting lists for a number of health care interventions which contributed to considerable early public dissatisfaction with the system compared to other EU-countries. However, there have been notable improvements in public acceptance of the Spanish health care system during the past 5 years, giving some indication of public consent to recent changes. The system also faces some difficulties in consolidating a stable system of finance, and in controlling increases in expenditure.

A challenge for health care in Spain is the ageing of the population which implies consideration of new sources of funding for long-term care of the elderly. Together with Italy, Spain has one of the lowest birthrates in the EU.

POPULATION AND HEALTH STATUS

The total population of Spain in 1997 was nearly 39.7 million. The age distribution is only slightly different from the EU norm, with 24% aged under 20 {26.6%} and 15.3% over 65 {15%}. The proportion over 75 is the EU average {6.1%} and this is projected to reach 7.9% in 2020, below the projected EU average {8.9}.

Overall health indicators are relatively favourable for Spain in relation to the EU average. In 1995 **life expectancy** at birth was 74.4 years for males {73.9} and 81.6 years for females {80.2}.

Standardised mortality rates in 1993 were 7.0 per 1,000 inhabitants {8.2}. The **infant mortality rate** is relatively low at 5.0 per 1,000 live births {5.4}. **Perinatal mortality** , at 6.5 of 1,000 births in 1994, was below the EU average {7.5}.

Cardiovascular diseases, cancer and accidents before the age of 35 are the main causes of death. The relatively high mortality in people under 35 is striking. Between 1981 and 1991 deaths due to traffic accidents increased by 30% for men and 20% for women. Suicide rates are below the EU

average and similar to other southern European countries. Cardiovascular disease rates are among the lowest in Europe, alongside those of other southern European countries.

Estimates of **potential years life lost** per 100,000 population in 1991 for the main pathologies were relatively low compared with the EU average except for mortality from cancer among Spanish men.

Cancer: 1707 years for males {1484.3} and 991.5 years for females {1174.6}; ischaemic heart disease: 543.2 years for males {840.2} and 92.4 years for females {183.1}; cerebrovascular diseases: 237 years for males {254.5} and 132.7 years for females {166}.

AIDS incidence despite a significant decrease since 1994, at 162.5 new cases per million population in 1996, is still the highest in the European Union {42.7}.

The indicator for **dental diseases**, at 4.1 DMF teeth, is above the EU average {3.1}.

Consumption of tobacco differs between the male and female in Spain. In 1993, 44% of all men above the age of 15 smoked at least 20 cigarettes per day {34.4}, and 21% of females {25.4}. Cigarette consumption per head is not declining, in contrast to trends in other EU Member States.

Alcohol consumption, at 13 litres per capita per annum, was above the EU average {11.6} for both sexes in 1990 in spite of a significant decline in recent decades.

FINANCE AND ORGANISATION

1. Structure of the System

The SNS is run within the social security system by the "Instituto National de la Salud" (INSALUD) in Madrid. INSALUD has managerial responsibility for public health care institutions, providing health care services to nearly 40% of the Spanish population in 10 of the 17 Spanish regions. Social security benefits and social security services are under the supervision of the National Institute for Social Insurance (INSS) and the National Institute of Social Services (INSERSO). The remaining seven regions (Catalonia since 1981, Andalusia since 1984, the Basque Country and Valencia since 1987, Navarre and Galicia since 1991, and the Canary Islands since 1994) already have their own bodies to manage health care. This implies responsibility for public health, health planning and the management and administration of health care within their territories. Each of the seven regions is governed by the health department of the regional government. The process of devolution of managerial responsibilities from the SNS to all of the 17 regions is a final objective of the 1986 reforms.

All autonomous communities have set up health plans and have divided their territories into health areas, on the basis of geography, population size, demographic, epidemiological and socio-economic factors, which serve as a baseline structure for the planning and provision of primary and secondary health care services. Health areas are furthermore sub-divided into basic health zones in which planning and management of primary health care resources take place.

The Spanish Ministry of Health and Consumer Affairs carries out public health programmes, releases national guidelines for health policy and ensures their implementation. An inter-territorial Health Council of the SNS coordinates communication between the regional health authorities and between the regional authorities and the Ministry of Health in order to ensure that the strategic health plans of the autonomous communities are in line with national objectives and priorities.

The publicly-funded insurance scheme covers 98.5% of the Spanish population of which 93% are covered by the "compulsory" insurance scheme, 1% (those with very low incomes) obtain subsidies from the state and 4.5%, mostly civil servants, are insured through a special scheme. Around 17% of Spaniards purchase some kind of additional private insurance with voluntary schemes.

Insurance companies, apart from INSALUD, represented by mutual insurance companies and private insurance funds, play a minor role in the Spanish health care system.

The benefits package provided within the SNS in all regions has been determined since 1995 by the central government, which defines the level of primary care, hospital outpatient and inpatient care, pharmaceutical benefits, and complementary benefits mainly for medical devices such as prostheses and vehicles for the disabled. Exclusions from the benefit package are based on lack of scientific evidence for any beneficial effect or for the effectiveness of procedures.

2. Finance

With the introduction of the NHS, financing of health services in Spain shifted from the Bismarck model towards the Beveridge model. To date, 80% of funding is provided by the state through the generation of taxes, 18% is funded throughout work-related contributions to insurance funds shared between the employer and the employee and the remainder is financed by other insurance schemes. Co-payments within the SNS apply to drugs and some medical devices (6.1% of all health care expenditure).

Co-payments also apply to dental services (6.3% of all health care expenditures). Annual budgets are allocated to the autonomous regions roughly on a per capita basis.

Public hospitals within the SNS are financed under a global budget which is set in prospect. Baseline unit for the calculation of the budget for INSALUD hospitals is a weighted health care unit (UPA), based on aggregate medical, namely department hospital, activity. Allowances are made for complex services. **Private hospitals** can participate in the NHI schemes on the basis of agreement or contracts or can generate their own resources.

Hospital physicians are salaried. **General practitioners** in primary health care are paid by capitation and recently some are reimbursed by a mixture of salary and capitation.

The payment system for professionals is controversial because it is deemed to cause high inefficiency in service provision in ambulatory care.

Prices for **pharmaceuticals** are strictly regulated based on the cost of raw materials. Prices of drugs in Spain are among the lowest in the EU. In 1993 a negative list of drugs was introduced, which

originally applied to around 800 products. Co-payments are substantial with 32% of the price met by patients.

3. Health Care Expenditure

Spain is among the few EU countries which sets a global national budget for health care expenses. Total health care expenditure has risen steadily from as little as 1.5% of GDP in 1960 to 7.6% of GDP in 1995 which is about the EU average {7.7%}, equivalent to 894 ECU per capita {1,413 ECU}. Public share of expenditure amounts to approximately 80%. The increase of expenditure observed particularly in the public sector is a result of increased service and insurance coverage, the extension of primary and secondary care and increased consumption of pharmaceuticals. Expenditure increase has in particular been observed in inpatient care.

Figure 17: Total expenditure on health care 1970 to 1995, and distribution of expenditure in 1992

HEALTH CARE RESOURCES AND UTILISATION

Service delivery divides into primary care and specialised services. Specialised services include secondary and tertiary care.

Primary health care is dominated by the public sector in Spain. General practitioners and paediatricians act as gatekeepers to specialised services.

Health promotion programmes are associated with promotion of a healthier lifestyle and tackling tobacco and alcohol abuse and addiction. The 1995 Health Plan fixes 14 priorities for action for specific groups of diseases, for example AIDS, cardiovascular diseases and mental disease. Primary care is provided in two settings. The traditional setting is that of a single practitioner who normally works part-time and is reimbursed by capitation. More recent is provision by a primary health care team (EAP), the role of which is increasing. EAPs are group practices, with physicians usually paid

by salary. Approximately 60% of the population was registered with an EAP in 1994. The level of primary care service provision is reported to be sufficient in Spain.

Secondary and tertiary health care

The public sector dominates the provision of hospital services. Outpatient care is provided by separate outpatient centres providing consultations, diagnostic procedures and minor surgical interventions. All autonomous regions have at least one general hospital which provides basic clinical services and 24-hour emergency services.

Access to larger specialised hospitals is by specialist referral only. Planning for hospital services follows the structure and needs within a health area.

In 1997 the number of hospitals was 886. The number of **hospital beds** was 4.0 per 1,000 population in 1994 {7.3}, the majority, 69%, being publicly owned.

The inpatient **average length of stay** in acute care, at 11.5, is above the EU average {9.8}.

The number of **practising physicians, at** 40.8 per 10,000 population in 1993, was well above the EU average {28.2}. The number of nurses is reported to be adequate to needs, despite being substantially below the EU average.

Table 21: Number of Health Professionals in Spain

Professionals	Number per 10,000 population	EU average	Year
Practising physicians	41	28	1993
General practitioners	*)	8	1994
Specialists and consultants	*)	13	1994
Practising dentists	43	74	1993
Certified nurses	3	6	1994
Practising pharmacists	10	7	1993

*) Neither OECD nor WHO has data

CURRENT ISSUES IN HEALTH CARE

The 1986 health care reform resulted in major changes in the finance and provision of health care in Spain, resulting in a notable increase of public satisfaction with the health care system.

Remaining targets of the 1986 reform are the extent of universal coverage to the entire population, and the completion of the decentralisation process to the remaining 10 regions. This implies distinct accountability for health policy issues on the regional and national level.

Thus, one of the prime foci of action is the improvement of managerial capabilities of health service providers on the regional level.

In addition, some regions, for example Catalonia, have initiated the division of provider and purchaser functions within the NHS. The model provides for contracts between the purchasers (regional health authorities and INSALUD) and providers (public and private hospitals), based on an agreed level of services in return for a lump sum. The concept is to increase efficiency by transferring responsibility to local budget-holders and to train professionals in managing health care. The model is based on experiences derived from the purchaser-provider split as introduced in the UK and Sweden. It also introduces some new elements such as the application to secondary as well as primary medical care. Contracting public health units are destined ultimately to become autonomous public enterprises.

Longer-term objectives are efficiency gains through decreased waiting times, increased consumer choice of health care providers and community participation in primary health care.

SWEDEN

OVERVIEW

Health care is seen as a central component of the extensive Swedish welfare system. The entire population has access to a comprehensive range of services and is covered by the National Insurance Scheme, financed mainly through employer contributions.

A dominant feature of the Swedish health care system is the central role played by the 23 county councils and 3 large municipalities in planning, financing and delivering health care within their territories. Inpatient care is almost completely financed through county council taxes and delivered by hospitals owned by the county councils. The strong emphasis on local democratic control of health services has evolved over the past 25 years and culminated in the 1982 Swedish Health Care Act.

The emphasis of the health care system in Sweden has long been on equity. The system has been fairly successful in containing health care costs as a stable share of GDP. However, decreasing financial resources have caused some shortcomings in health care delivery, such as waiting lists for services. The strong traditional focus on hospital care has caused some oversupply in hospital services and a weak status and integration of primary care. Patient choice is very limited and productivity and efficiency in health care delivery is a prime focus for reform, the strategy of which tends towards a higher market orientation.

The key health indicators, which seem to be strongly related to environment and lifestyle factors are somewhat above the EU average. There is an indication of a widening gap between health status as measured by social class. Health care delivery is likely to see an increasing demand owing to the large and growing proportion of the elderly in Sweden.

POPULATION AND HEALTH STATUS

The population of Sweden in 1997 was 8.8 million. 24.6% were under 20, a proportion which has remained stable during the past decade {26.6%}. The proportion over 65 has increased in the past 10 years and, at 17.1%, is above the EU average {15%}. The population over 75, at 8.2%, is the highest in the European Union {6.1%}.

Sweden is above the EU average for several key health indicators. **Life expectancy** at birth in 1995 stood at 76.2 years for males {73.6} and at 81.5 years for females {80.0}: amongst the most favourable in Europe for both sexes.

The **standardised mortality** rate : 6.9 per 1,000 inhabitants in 1993 was exceptionally low {8.2}, the same being true for the **infant mortality rate:** in 1996 4.0 per 1,000 live births {5.4}, and **perinatal mortality:** 5.5 of 1,000 births in 1994 {7.5}. Both indicators rank second lowest in European Union.

The main causes of death are as in the rest of Europe: cardiovascular diseases, cancer and accidents before the age of 35. Decrease in cardiovascular diseases has been less pronounced than in other European countries. Death due to accidental falls: 14.2 deaths per 100,000 population, was substantially below the EU average {27.3}.

Estimates of **potential years life lost** per 100,000 population in 1992 for the main pathologies were relatively low compared with the EU average except for mortality from cardiovascular diseases:

Cancer: 1,043 years for males {1,452} and 1,126.5 years for females {1,173}; ischaemic heart disease: 733 years for males {825} and 195 years for females {179}; cerebrovascular diseases: 174.5 years for males {247} and 115 years for females {170}.

AIDS incidence, at 16 new cases per million population in 1996, was rather low {42.7}.

The indicator for **dental diseases**, at 2.2 DMF teeth, was below the EU average {3.1}.

The Swedes are known as Europeans with healthier lifestyles. **Consumption of tobacco** has declined steadily. In 1993 25.2% of men over 15 smoked at least 20 cigarettes per day {37.1} and 23.4% of women {25.4}.

Alcohol consumption since 1970 has been stable and comparatively low at 6.3 litres per annum {11.2} for both sexes in 1991.

By international standards, health status is very high, apart from higher than average levels of cardio-vascular disease. However there seem to be increasing morbidity rates in recent years, as measured by the amount of sick leave and early retirement. Health problems seem related to environment and lifestyle problems. There is evidence that low income families, the unemployed, single people and immigrants have poorer health than other groups.

FINANCE AND ORGANISATION

1. Structure of the System

Health care delivery and finance in Sweden is seen as a mainly public responsibility. Health care is determined by the 23 county councils and the three large municipal councils (Göteborg, Malmö and Gotland) which administer health care for their territories. Health care provision is coordinated at all levels of health care. The county councils are independent democratically-elected bodies.

The role of the central government in health care provision is limited to providing a guiding framework. The Association of County Councils acts as coordinating institution between the county councils and the central government.

The central government administration of health is divided into two components: The Ministry of Health and Social Affairs (Socialdepartementet) and a number of relatively independent administrative agencies, chiefly the National Board of Health and Welfare (Socialstyrelsen).

The main tasks of the National Board include supervising of county councils, researching and evaluating developments in all areas of social and health policy and being a national centre of knowledge in this field.

The Swedish Planning and Rationalising Institute of the Health and Social Services (SPRI), jointly owned by the central government and the county councils, works on planning and efficiency measures, undertakes special evaluation tasks and supports research and development work in health care administration. Another important government body associated with the Ministry of Health and the National Board of Health is the Swedish Council on Technology Assessment in Health Care (SBU). The main objective of this body is to promote effective and cost-effective health care technologies.

The National Social Insurance Board administers the social insurance scheme which covers the entire Swedish population and all foreigners resident in Sweden. Contributions are paid by the employer, supplemented by state subsidies. The health insurance part of the social insurance scheme is mainly based on benefits in kind. Private health insurance plays a minor role. No basic benefit package is defined. National priorities for health service provision were issued in 1995: 1) the principle of human rights; 2) the principle of need or solidarity; 3) the principle of cost-effectiveness. However, it is up to each county and municipality to establish its own operational priorities.

2. Finance

County councils cover the main part (approximately 65%) of health care expenditure through income taxes. The remainder comes from a combination of state funds (10%), the insurance scheme with state subsidies (18%), private insurance (3%) and (to a limited extent - 4%) direct payments by patients.

Redistribution of funds to finance health care services between the national insurance system and the county councils takes place in two different ways. The county councils receive grants according to health care activity. The social insurance system furthermore reimburses providers of dental care and outpatient care.

Hospitals until recently received an annual budget that is calculated to include the cost of staff, drugs, supplies and equipment with savings to be reinvested. During the 1980's, budgets for clinical departments were established. In 1998 there were considerable variations in the method of finance deployed by the county and municipal authorities. A number have introduced purchasing arrangements on the basis of contracts often based on prospective per-case payments. Some services are also reimbursed by fee-for-service.

Most **physicians** are employed by the county councils either in the hospitals or in primary care centres and are paid by salary, with only a small proportion working in private practice and paid fee-for-service. Salary is according to qualification and work schedule. The 1993 Act on house physicians and private practitioners has provided for contract agreements with the social insurance scheme and the county councils aiming to provide primary care services for the whole family. The scheme is currently under review for it has not been utilised as expected and has resulted in increased referrals.

Patient expenses for prescribed **pharmaceuticals** are reimbursed in part by the national health insurance when listed on a national formula (positive list). Prices are reimbursed according to a reference-price list. Co-payments are fixed and amount to SKr 10 for each drug. Inpatient medication does not involve cost-sharing by the patient.

Small co-payment fees are also imposed for visits to public health care facilities and for visits to private doctors associated with the health insurance scheme. Co-payments for dental services have gradually been increased.

3. Health Care Expenditure

The GDP share of total health spending rose steadily from 4.7% in 1960 to a peak of 9.6% in 1982 {7.0}. The level decreased steadily thereafter to 7.2% of GDP in 1995 {7.7%}, equivalent to 1,639 ECU per capita {1,386.7}. The recent decrease in health care expenditure as a share of GDP is somewhat untypical of other EU Member States. The divide between health care expenditure per capita and health care expenditure as a share of GDP is explained by a considerable upward trend in economic growth. Because of the introduction of services for the elderly in 1992 finance of long-term care has been shifted from the counties to the municipalities and thus from the health care sector to the social sector. This is a result of the "Ädel" reforms which had the objective of devolving financing and service responsibility to the municipalities. Data on expenditure is more difficult to obtain from the strongly decentralised Swedish health care system. Available data differ substantially between different sources.

As in other EU Member States the hospital sector uses the largest share of the health care budget. Dental services, at 11.2% constituted a substantial share of total health care expenses in 1992 {11.2}.

Figure 18: Total expenditure on health care 1970 to 1995, and distribution of expenditure in 1992

HEALTH CARE DELIVERY AND UTILISATION

The autonomy of the counties in planning, administering and managing their own health care services network results in divergent health care delivery arrangements between the counties. However, there are still some parallel elements of service provision.

In recent decades there has been substantial effort to strengthen primary care in Sweden. **Primary care** is organised into primary care districts and provided mainly by about 1,000 Primary Health Care Centres (PHC), administered by the County Councils. In addition, each district disposes of at least one nursing home for long-term care. At the health centres district physicians, normally general practitioners but sometimes also specialists, provide preventive care and treatment. There is no nationally binding referral system from primary to medical care institutions. Some councils deploy a family-doctor system.

The emphasis in health care delivery has been on hospitals. Outpatient departments of hospitals can be utilised without referral. Sweden is well equipped with hospitals and beds. General hospitals divide into six highly specialised regional teaching hospitals serving 1-1.5 million Swedes, 20 district hospitals and 54 local hospitals. The number of hospital beds has decreased to 6.3 per 1,000 population in 1995 {6.9}. The inpatient **average length of stay** in acute care, at 9.4 days is below the EU average {9.8}, but kept relatively high due to longer stays by elderly patients.

The number of **practising physicians,** at 30.3 per 10,000 population in 1994, is above the EU average {28}. The number of nurses is adequate, in spite of being substantially below the EU average. The number of dentists per population is comparatively high.

Overall health employment, at 8.4%, is higher than the average in 7 EU Member States {6.5}.

Table 22: Number of Health Professionals in Sweden

Professionals	Number per 10,000 population	EU average	Year
Practising physicians	30	28	1994
General practitioners	5	9	1994
Specialists and consultants	21	13	1994
Practising dentists	102	74	1994
Certified nurses	10	6	1994
Practising pharmacists	7	7	1993

CURRENT ISSUES IN HEALTH CARE

Health care in Sweden is undergoing substantial change in structure and organisation. Policy priorities at present are moving from an earlier emphasis on decentralisation, establishment of health care planning at county level and strengthening of primary care, to a market orientation in about half of the 26 counties. An internal market, established by 13 counties in 1993, introduced more liberal health care financing and delivery arrangements. This implies

negotiations for services between the purchaser and provider of health care. These payment arrangements, alongside some elements of competition between providers, provide for increased incentives for service productivity. However, with regard to reducing hospital capacity and shifting resources to outpatients and long-term care, the county councils which remained on the traditional type of budget are thought to have greater scope for action.

In summary, the structural reconfiguration of the Swedish health care system is an aggregate of different measures taken in each of the 26 councils and municipalities and current issues also arise from individual councils, for example an internal market arrangement had been established by 14 counties by 1996.

Some of the most substantial changes have been undertaken in the county of Stockholm. Prime objectives of reform were to increase efficiency in service provision, to introduce market orientation with the strategy of 'money following the patient', to increase consumer choice and to reduce waiting lists. The Stockholm model is enforced through:

1. The introduction of a new reimbursement system for acute care (1992) and geriatric hospital services (1994) based on Diagnosis Related Groups.
2. A higher co-payment system for patients wishing to exercise their freedom of choice.
3. The introduction of a house physician system (1994) with standardised reimbursement rates.
4. The separation of service purchasers and providers, with contracts for service provision underlying some basic principles of competition.

Quality assurance is ensured by quality committees of the Health and Medical Board and by the obligatory computerisation of information since 1994.

UNITED KINGDOM

OVERVIEW

The National Health Service (NHS) has been regarded in the UK for decades as the 'jewel in the crown of the Welfare State', pioneering universal access to medical care when introduced in 1948. The NHS is a public health care service financed mainly by taxes. With over a million employees, it is Europe's largest non-military employer.

NHS coverage for services is comprehensive and mostly free at the point of use. The organisation of health care in the United Kingdom has undergone substantial changes since 1990. The main changes to the previous system are the separation of purchasers from the providers of health care and the introduction of an 'internal market' within the NHS. The market operates through General Practitioners (GP) 'fundholders' and District Health Authorities purchasing services from hospital and community 'trusts', (self-governing hospitals in the NHS), on behalf of their registered or resident patients. The new contracting system required new provider functions such as management capacities. It was introduced in 1991. The basic concept was to increase competition among the providers for health care and ideally to provide more scope for efficiency in the purchase and provision of health care services. The 1992 government document on the 'Health of the Nation' laid emphasis on improvement of health as an outcome of health care reform.

The system's focus on primary care and the GP as the strict entry point for health care have frequently been seen as strengths in comparison with other EU health care systems. Health status indicators when considered as outcome indicators of health care perform relatively well. Expenditure growth has been remarkably slow compared with the trend in other EU Member States. However, the level of health care funding, which is under tight central government budgetary control, has been the object of an ongoing political and public debate. The level of resources devoted to secondary care is seen as being particularly critical, for it appears to be one cause of long waiting lists for inpatient hospital services. Waiting lists are one reason for only moderate satisfaction with the system among a sample UK population when surveyed in 1996[27]. With few exceptions the system copes well with serious and urgent illness, but less well with minor (although no less distressing for the patient) conditions.

There is still substantial uncertainty and controversy about the effect of NHS internal market reforms. Almost seven years after their introduction, there is an increasing interest in closer evaluation of their effects to decide on a new or continuing direction of health care reform in the United Kingdom.

POPULATION AND HEALTH STATUS

The population in 1996 was 58 million, of which 25% were under 20 {24.6%} and 15.8% over 65 {15}. The proportion over 75 is second highest in the EU {6.1%} and is expected to reach 12.4%

[27] Ref.: Mossialos 1997.

in 2020 {8.9}. The progressive ageing of the UK population is expected to place growing demands on the NHS.

Overall health status increased notably in the last ten years and most health indicators in the UK population rank within the EU average.

Life expectancy at birth has shown a steady upward trend for both genders in the past two decades, increasing to 79.3 years for women {80.2} and to 74.4 years for men {73.9}.

Standardised mortality was 7.9 per 1,000 population in 1993 {8.2}. **Infant mortality** was 6.1 per 1,000 live births - higher than the EU average {5.4} in 1996 and **perinatal mortality** stood at 8.9 of 1,000 births in 1994 {7.5}.

Main causes of death are cardiovascular diseases, cancer and accidents below the age of 35 as elsewhere in the EU. **Potential years life lost** are significant for cardiovascular diseases (see table 2)

AIDS incidence increased between 1982 and 1994, and has since decreased to 24 new cases per million population in 1996 {42.7}.

The indicator for Decayed Missed and Filled Teeth (DMF) for dental diseases among 12 years old was 3.1 - the EU average in 1990 {3.1}.

Alcohol consumption was 8.9 litres per person per year for both sexes - below the EU average in 1990 {11.6}.

Smoking tobacco was practised by 29% of males (well below the EU average {37.7}), and 28% of females (slightly above the EU average {25.1}) in 1992.

The United Kingdom despite providing health care with equal access, has drawn particular attention to the need to tackle inequalities in health and health care.

FINANCE AND ORGANISATION

1. Structure of the System

The Secretary of State for Health is responsible to Parliament for the provision of health services within the NHS. The NHS Management Executive is accountable to the Secretary of State for delivering a set of clearly-defined targets and priorities based on government policy for the NHS. The Management Executive distributes funds according to an annual budget to the 106 District Health Authorities (DHAs), the commissioning authorities within the NHS. The DHAs cover between 250,000 and 1 million people. DHA and GP fundholders hold integrated budgets for the purchase of primary and secondary health care. NHS trusts are self-governing hospital institutions which were instituted in 1991 with the purpose of increasing hospital autonomy. GPs and dentists have the status of independent contractors with the NHS, but increasing numbers of dentists are only accepting private patients.

There were 463 Trusts in 1997, covering more than 1,600 hospitals, and representing the vast majority of hospitals, ambulance services and community units within the NHS. NHS trusts provide hospital and community health services as contractors to the purchasers of health care.

Despite a heavy reliance on the public sector for the delivery of health care within the NHS, the system has always been supplemented by a small but growing independent sector. It is made up of a broad spectrum of private, voluntary and charitable bodies that complement the NHS not only in areas where NHS coverage is universal such as elective surgery but also in areas where NHS coverage is limited such as nursing home provision and convalescent homes.

2. Finance

The NHS is mainly funded from the general tax system (95%) and other payments (5%) under an overall budget which is set by the Ministry and subject to approval by Parliament. Insurance-based schemes are associated with a small private sector which grew rapidly during the 80's and early 90's. In 1996 about 9% of the population took out supplementary private insurance to secure consultant inpatient services and to avoid long waiting times for non-emergency treatment, since NHS waiting-lists are perceived to be fairly long. Nonetheless, finance is predominately focused on services delivered within or for the NHS and only 3.5% of expenditure is covered by private insurance. In addition, the new Labour Government abolished tax relief on private health insurance in 1997. Direct payments have increased annually for a number of drugs, dental care and eye testing, but many patients are exempted, including children, senior citizens, pregnant mothers, the unemployed and those receiving social security payments.

In 1995 public hospitals became **NHS hospital trusts** (approximately 400 by 1998) which are now more independent, especially in employing their own medical staff and in providing services to a wider range of providers. They are able to acquire and dispose of property and land and generate funds in new ways. Hospital trusts contract with the purchasers an agreement for prices and the extension of provided health services. Prior to reform, payment rates for clinical and non-clinical staff were determined at the central level.

In 1997, 60% of staff worked under contracts agreed with local trusts. Hospital employees are salaried, and many doctors additionally work in private practice.

The remuneration system for **GPs** is a complex mixture of fees and allowances specified in their contracts. The major payment is a capitation fee for each patient on the doctor s list. The level of payment depends on the age of the patient. A few services, such as contraception and vaccination are paid fee-for-service. There are also incentive payments for achieving, for example, an immunisation target. GP fundholders, which accounted for approximately half of all GP practices in 1998, receive a budget to provide primary care in their practice and to purchase all secondary and tertiary care for their registered patients. Fundholders cannot increase their income but can reinvest their savings. For **dentists**, the predominant type of payment is fee-for-service.

For **Pharmaceuticals** there is a negative list of non-reimbursable drugs. Prices are set by the industry, but profits are under control of the central government. Over-the-counter drugs are covered in total by the patient, co-payments to prescribed drugs are levied by a flat rate, with on average 24% of the price met by the patient. Exemptions are frequent as mentioned on page 121.

Contraceptives are free of charge. The use of generics is strongly promoted in the United Kingdom. The fees of pharmacists are negotiated by the central government and the profession.

3. Health Care Expenditure

Health care expenditure in the United Kingdom as a share of GDP, although it has increased, is low in comparison with other European countries, since it has been under tight central budgetary control. Between 1965 and 1995 national health care expenditure grew from 4.1% to 6.9% of GDP which is amongst the lowest in the European Union {7.7%}, equivalent to 1,005 ECU per capita {1,413} in 1995. Expenditure in primary and secondary care is mainly controlled by budgets given to each general practitioner and hospital trust.

Figure 19: Total expenditure on health care as a share of GDP 1960 to 1995, and distribution of expenditure in 1995

HEALTH CARE DELIVERY AND UTILISATION

Primary and secondary care are very much separated in the United Kingdom. GPs act as "gatekeepers" to secondary care. Virtually the whole population is registered with a GP, who provides primary care and controls access to hospital services. Utilisation differs significantly between social classes and different urban and rural regions.

The 1992 government publication 'The Health of the Nation' defined priorities **for health promotion** against cardiovascular diseases, cancers, mental illness, HIV-infection and AIDS, and accidents. **Health promotion** is largely the responsibility of the DHAs. **Preventive programmes** such as immunisation and screening for cancer are provided by school health services, community physicians and GPs.

Most of the hospital beds are NHS-public beds. Approximately 6% of acute care beds belong to the private sector. The shift from hospital to community for care of patients with chronic conditions

explains the decline in the number of acute care **hospital beds** in the UK per 1,000 population from 2.7 in 1985 to 2.1 in 1994 {4.7}. The inpatient **average length of stay** in acute care at 4.8 days in 1994 is amongst the lowest in Europe {7.6}. **Admission rates** have increased from 13.6 in 1985 to 19.9 in 1994 {16.7}.

The Patients' Charter was promulgated in 1992 to specify rights and targets for treatment to make hospitals and community services more patient-centred and to meet local needs. There is some indication that waiting lists have been reduced during the past 5 years.

The number of **practising physicians** 7.6 per 10,000 population, is very low compared to the EU average in 1994 {28.1}. There is a perceived shortage in manpower in all branches of the medical profession.

Table 23: Number of Health Professionals in the United Kingdom

Professionals	Number per 10,000 population	EU average	Year
Practising physicians	16	28	1994
General practitioners	6	8	1994
Specialists and consultants	N/A	13	1994
Practising dentists	4	6	1994
Certified nurses	N/A	87	1994
Practising pharmacists	6	7	1993

CURRENT ISSUES IN HEALTH CARE

Major reforms of the NHS were initiated in early 1991. Many of the main issues still centre on the effect of the internal market. By 1996 the reforms had been fully implemented, but it is still too early to see the full effect of the reforms since the evidence is complicated by continuing and frequent further changes, including the 1997 change of government. In theory, provider markets can be expected to yield greater efficiency savings among providers, although in practice these might be outweighed by higher transaction costs. To reduce transaction costs shortcomings in managerial and information systems both in technical infrastructure and training of the medical profession need to be tackled and input and health outcome as well as public satisfaction with the NHS closely evaluated. Unfortunately the public debate, at least in the press, concentrates on the length of "waiting lists" for non-urgent interventions. Not only is this not a good indicator of how well the system is working, it can be positively misleading in that it tends to increase as resources increase, rather than the contrary. A classic example of this is "technology push" interventions such as hip replacements for the aged. Where resources are seen to be in good supply, GPs will tend to put aged patients on the list for this operation, whereas they would not be put on it in conditions of perceived stringency. Hence the "waiting list" lengthens because the chances of having the operation are good. Thus a determination to reduce the length of "waiting lists" by investing more money and resources into the system may have precisely the opposite effect.

One prime objective of the recent NHS reform was to improve the quality of health care services experienced by the consumer, who nevertheless still has little direct control in the new system. The purchasers monitor and audit clinical practice and the Department of Health disseminates national standards. In addition, key academic institutions play an increasing role in the development of guidelines for effective and appropriate health care practice, following an international trend. For example, the Cochrane Collaboration coordinates systematic reviews of randomised controlled trials in the UK and guidelines are developed on the basis of clinical evidence (so-called Evidence Based Medicine) and a number of academic and Ministerial institutions place an increasing emphasis on the evaluation of medical technologies in the UK.

The 1997 Labour Government White Paper anticipated a new direction for the NHS. The internal market is to be replaced by a system of integrated care. The basic health service unit will be the Primary Care Group - a team basically comprising GPs and community nurses, which will replace the single GP fundholder and, as a team, will have budgetary responsibility under the supervision of the District Health Authority. A 24-hour community medical information system is being introduced in 1998. New electronic links are planned between GPs, pharmacists and hospitals. Funding and contracting arrangements will now be for a period of between 3 to 5 years - longer than under the previous government's internal-market arrangements.

A new "National Institute for Clinical Excellence" is being planned to set national service guidelines and a new "Commission for Health Improvement" will be set up to oversee the performance of clinical services.

Much controversy has been generated by plans to rationalize hospital provision, particularly in major cities such as London, which suffer from a hospital structure established during the 19th century in great need of restructuring to take account of population changes and new medical technology.

COUNTRIES AT A GLANCE

COUNTRY	GENERAL	HEALTH STATUS	EXPENDITURE	FUNDING	HOSPITALS	PRIMARY CARE	DOCTORS
AUSTRIA	Mandatory, comprehensive health insurance	Health indicators are typically close to EU norms	Expenditure is high, both in absolute terms and as a % of GDP (7.7%)	The health insurance scheme is the dominant feature, but substantial private insurance contribution	High bed capacity with most beds in public ownership and control	Provided by independent practitioners in hospitals and specialised clinics	Mostly in private practice but contra to insurance agenc
BELGIUM	Compulsory health insurance for all major risks	Most health indicators are close to EU average values	Expenditure is high, both per capita and as % of GDP (8%)	Compulsory health insurance with significant state subsidy	Mainly private or independent non-profit hospitals	GPs mostly in single practices with fee-for service payments	Mainly independer high level of suppl
DENMARK	A national health service mainly funded from general taxation	Indicators for women below EU levels	A high per capital level but low % of GDP (6.5%)	85% from general taxation with the remainder from co-payments	Almost all hospitals under close municipal (or local) control	Independent GPs in single and group practices	Some independent a high number of salaried specialists
FINLAND	A national health service with a shift of decision making from state to local level	Some health indicators unfavourable by EU standards. Cardio-vascular disease remains a problem	Expenditure is high in absolute terms, but moderate as % of GDP (7.5%)	An almost even balance of state and local taxation with some national insurance and some private payments	High level of supply of beds, a high admission rate and a relatively low length of stay	A renowned comprehensive system of local health centres with a strong emphasis on preventive health care	Although most doc are salaried public employees there is significant private practice
FRANCE	Compulsory health insurance covers almost all the population	High life expectancy especially for women. Low heart disease incidence. Possibly due to dietary factors	Expenditure high, both in absolute terms (ECU 1,999 per head) and relative to GDP (9.3%)	Mostly statutory sickness funds but some direct payments	A mix of public and private, but public dominates	Independent GPs, except for health centres in towns	Mainly independer with average suppl
GERMANY	Numerous insurance funds and a significant private sector	High proportion of elderly. Low infant and perinatal mortality	Very high - ECU 2,362 per head and 10.4% of GDP	A complex mixture of sources with only 21% from general taxation	Over 50% are private or independent non-profit hospitals	A wide range of services from independent single practitioners, strictly separated from hospital care	High levels of supp with medical unemployment
GREECE	Compulsory health insurance, national health service and a significant private sector	High infant mortality - otherwise high life expectancy	Low by EU standards at ECU 483 per capita and 5.8% of GDP	The private sector is substantial and there is a high degree of unofficial "additional payments"	Many private hospitals but only around 20% of admissions are private	State owned health centres co-exist with private GPs	A very high level o supply - salaried in public sector

COUNTRY	GENERAL	HEALTH STATUS	EXPENDITURE	FUNDING	HOSPITALS	PRIMARY CARE	DOCTORS
IRELAND	A national health service and some co-payment insurance	A young population with relatively low life expectancy	Average percentage of GDP but only ECU 733 per head	Mainly from general taxation with a small proportion from insurance	Mainly public hospitals but with some moves to greater independence	Independent GPs in single or group practices	Salaried in public hospitals with a lo level of supply
ITALY	A national health service based on compulsory health insurance	High life expectancy and low heart disease incidence. Possibly due to dietary factors	Average levels by EU standards at 8.3% of GDP-ECU 1340 per head	A mixture of general taxation and compulsory contributions	Mainly public hospitals but a sizeable private sector especially in south	GPs are either independent or employees of local health boards	Controversial data low level of supply EU standards
LUXEMBOURG	Compulsory health insurance	Overall indicators often worse than EU norms - especially for men	High per capita expenditure and close to EU average % of GDP	Mostly from the sickness funds with 27% from state subsidies	Mainly a balance of public and independent non-profit units	Mainly single independent practitioners	Almost all doctors independent contractors
NETHERLANDS	Complex system of public and private insurance but moving to a national scheme	Relatively small proportion of elderly. Overall health generally favourable	Slightly above EU average levels - ECU 1,711 per head and 8.6% of GDP	Mostly from compulsory insurance schemes with some voluntary or private	Mostly private non-profit hospitals	Independent GPs with many working in group practices and health centres	Mainly independer
PORTUGAL	A national health service based on compulsory health insurance	High infant mortality and relatively low life expectancy	Above EU average proportion of GDP, but low in absolute terms	A small private sector - main funding from the national insurance scheme	Mainly public hospitals. Rather low bed supply	Mainly state run health centres with salaried doctors	Overall good level supply but not in s specialities
SPAIN	An embryonic national health service. A mix of general taxation and compulsory insurance	Health indicators are generally favourable especially for women. Again, diet may be a factor	Around EU average at 7.6% of GDP but this is a low ECU 894 per capita	Dominated by general taxation but some compulsory insurance	Over 50% are independent non-profit hospitals	GPs mainly work within health centres serving defined geographical areas	Salaried doctors. above average supp in most areas
SWEDEN	A comprehensive public sector health system with strong local democratic control	High life expectancy and very good health status apart from cardio-vascular disease which is nearer the EU norm: very high proportion of elderly	Recent shift of expenditure between sectors and decrease of expenditure as a share of GDP (7.2%)	Local taxation is the key element supplemented by state funds and national insurance	A relatively good supply of hospital beds with a high admission rates and low length of stay	A weaker element of the system provided mainly from health centres, but growing in recent times	Mostly salaried pu sector employees: majority are specia with Gps in short supply
U.K.	A national health service mainly funded from taxation	A high proportion of elderly. Some health indicators worse than EU norms, possibly due to dietary factors.	Below the EU average at ECU 1,005 and 6.3% of GDP	Mainly from general taxation. A small private sector	A move from public to more independent Hospital Trusts	Gps are independent contractors working mainly in group practices	Salaried doctors in hospitals. A below average level of su

HEALTH CARE GLOSSARY

Accidental fall mortality: Number of deaths caused by accidental falls, derived by the number of deaths through accidental falls divided by the total population and multiplied by 100,000 (OECD).
Alcohol consumption: annual consumption of alcohol is expressed in litres of alcohol per capita (population aged 15 and over). The numerator is an estimate of beer, wine and spirits consumption converted into litres of alcohol equivalent, divided by the population aged 15 and over. Conversion factor is typically weighted for beer at 4-5%, wine 11-16% and spirits as 40% pure alcohol equivalent. Thus an alcohol consumption of 12 litres per year would translate as about 85 litres of wine or about one glass per day. In beer terms 240 litres per year or about half a litre per day. In terms of spirits 30 litres per year or half a bottle per week. In real life of course there would be a mixture of alcoholic beverages.
Ambulatory Care Services: In this text defined as services except those delivered to inpatients during their hospital stay.
Benefits: Services or finances to which the health care system member is entitled. In health insurance this can either be a payment in cash or in kind following medical contingency covered by a scheme (OECD).
Benefit Package: Insurance coverage for a defined range of services.
Benefit Payment Schedule: List of amounts an insurance plan will pay for covered health care services.
Beveridge Model: A model system for health care organisation by a national health service system under which health care is financed mainly by general taxation and delivered under the supervision of a central public institution.
Bismarck Model: Model system for social security with compulsory health care insurance under which insurance funds may be independent from the government.
Cap: A limitation on the amount of payment.
Capitation Payment: Payment system for health care providers. A fixed amount per enrolled person is paid within a defined amount of time on the basis of a defined set of services irrespective of service utilisation.
Co-Insurance (co-payment): A set proportion of the cost of a service which has to be paid by the patient. For example, co-insurance of 10% amounts to 90% of the bill being paid by the insurance company and 10% of the bill being paid by the patient.
Competition: Rivalry between providers or purchaser of health care, either by price or performance (e.g. range of services provided or insured for).
Compulsory Health Insurance: Health insurance under an obligatory public scheme, usually borne by employers and employees. Contributions are usually income-related.
Contracting: Usually involves direct payments from a third party, the purchaser of health care, to the second party, the provider of health care under a contracted agreement. Benefits to patients are granted in kind, often free of charge.
Contracting-out: Shift of service provision and payment from being one single public entity to a contracted agreement between a central public institution for funding and a private institution for provision of health care.
Contribution: Payment method for compulsory health insurance mostly shared by employees and employers. Often set as a fixed proportion of income with a floor and ceiling level of income (OECD).
Co-payment: (see co-Insurance) A predetermined amount that the patient must pay with each service received in ambulatory care, outpatient or inpatient hospital care.

Cost-Containment Measures: Measures to maintain health care expenditure at a desired level (constant amount, stable share of GDP etc.).
Cost-Effectiveness: To achieve the highest possible outcome, for example good health, for a given financial input.
Cost-Sharing: A provision of third-party payment under which the individual covered has to pay for part of the health care received. This is distinct from contributions to insurance and may be in the form of deductibles, co-insurance or co-payments.
Deductible: An amount that must be paid by the individual before the insurance company begins to pay.
Demographics: Population characteristics such as age and gender.
Diagnosis Related Groups: System for classifying patients into groups according to equal or similar diagnoses which are expected to use a similar amount of resources for their health care; the groups may be used for purposes of reimbursement, usually for inpatient treatment. Model system for payment of hospital services based on patient diagnosis (rather than payment per day or per service/item).
Effectiveness: Measure how well e.g. a treatment works in achieving a desired outcome.
Efficiency: To achieve the highest possible output for example cases treated, for a given input, for example financial resources devoted to health.
Efficacy: The clinical ability to cure or effectively treat a disease under model conditions (for example under the conditions of clinical trials in contrast to effectiveness).
Entitlement: Right to obtain a determined set of benefits.
Equity: Complex objective in health care delivery and health care financing. In this study equity is primarily referred to as equity in access to health care services, irrespective of income, health risks and personal characteristics such as age and gender.
Expenditure: Amount of funds spent over a period of time and measured at constant or current prices (MEMPHIS).
Fee-For-Service Payment: Payment system for health care providers under which providers are paid according to charges for each service or item rendered.
Fee-Schedule: A list of approved fees for defined services.
Fixed Budget: Fixed expenditure cap.
Flexible Budget: Expenditure cap which adjusts for changes in the volume of services.
Gatekeeper System: A system in which a general practitioner often referred to as 'family doctor', refers his registered patients to the specialist and hospitals which are otherwise not directly accessible for the patient (apart from in emergency).
General Practitioner Fundholding System: A system under which a primary physician holds a budget to manage health care for his enrolled patients usually by providing primary care and purchasing other services such as specialist and hospital services.
Global Budget: A fixed total expenditure cap on all health care services.
Health care: Any type of services provided by professionals or paraprofessionals with an impact on health status.
Health care Outcome: Changes in health status which result from the provision of health care services.
Inpatient Care: Health care services provided inside a hospital following the patient's admission.
Infant Mortality: Death rate for infants below one year of age, usually expressed per 1,000 births.
Life Expectancy: Mean age of death, calculated on the basis of a fictitious generation in consideration of mortality conditions of the period considered (OECD).
Long-term care: Health care and nursing care services provided to chronically ill or disabled patients.

Managed Competition: Governmental regulation of a competitive health care market.
Morbidity Rate: Illness or disability rate, usually expressed per 1,000 population.
Mortality Rate: Death rate per defined population, usually expressed per 1,000.
Mutuelles/Mutualités: Non-profit autonomous health insurers in France and Belgium.
National Health Service: A form of compulsory health insurance with a large share of public health care service provision and finance.
Outpatient-Services: Services provided in an ambulatory setting, for example hospital outpatient departments or physicians consulting rooms.
Out-of-Pocket Payments: Individual payments for medical care, which are not necessarily predetermined by price.
Per-diem payment: Payment for services per day usually for inpatient treatment.
Perinatal Mortality Rate: Total number of stillbirths and live-born infants dead under one week of age, usually expressed per 1,000 births (live births and still births) (WHO).
Potential Years of Life Lost: Measure of the years of life lost due to premature death.
Premium: Payment for voluntary insurance, risk-related, according to a flat rate or community-rated.
Primary Care: Basic medical care in theory being the patient s prime contact when seeking medical care. In the European Union mostly provided in ambulatory care settings.
Private Health Insurance: A form of voluntary health insurance with a private insurer.
Prospective Payment: Payment for anticipated services or number of patients treated, which is set in advance in contrast to the retrospective payment system by reimbursement of costs.
Private Health Care Sector: Refers to both private finance and provision of services.
Public Health Care Sector: Refers by definition to public ownership, but in this text also refers to finance and provision of health services, because in the EU systems are described as a mainly public health care system when services are publicly **financed**, but not necessarily publicly **provided**.
Reference Price List: A maximum amount for reimbursement by a third party payer for a group of equal or similar products (mostly pharmaceuticals): if the actual price exceeds the reference price, the difference has to be met by the patient.
Reimbursement of costs: Retrospective payment system for health care providers following service provision. Process of compensation paid to the patient by a third party after he has paid the initial bill.
Secondary Care: Specialised care in or outside a hospital following the patient's contact with primary medical care.
Social Health Insurance: Public protection for health risks in granting a defined package of services. The framework is set by the government and mandatory for the whole population (universal coverage) or part of the population e.g. with earnings below a certain income threshold or with a certain professional status (nearly universal coverage). Funding is usually pooled by income related contributions, administration is by one or several sickness funds.
Standardised Mortality: Mortality data calculated by using the European age structure weighting (WHO).
Technology Assessment in Health Care: Comprehensive evaluation and assessment of existing and emerging medical technologies including pharmaceuticals, procedures, services, devices and equipment in regard to their medical, economic, social and ethical effects.
Ticket modérateur: Co-insurance system in France and Belgium.
Third Party Payer: A public or private institution, which is responsible for the administration of the fund flow between the patient (first party) and the provider (second party). The organisation

collects contributions or premiums from the beneficiaries and in return pays for services provided at the point of use, either prospectively or retrospectively.

Uninsured Population: Population with neither compulsory nor voluntary health insurance.

Utilisation: The number of services used, which is often expressed per 1,000 inhabitants and year or month.

Voluntary Health Insurance: Health insurance which is taken up and paid for at the discretion of individuals or employers on behalf of their employees. It can be offered by private or public entities (OECD).

Supplementary insurance cover for additional services which are not covered by the insurance to which the individual belongs. Substitute insurance is bought by individuals who are not covered by compulsory insurance.

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