



EUROPEAN PARLIAMENT

Secretariat

Directorate General for  
Research and Documentation

RESEARCH AND DOCUMENTATION PAPERS

# THE HEALTH SYSTEMS OF EUROPEAN COMMUNITY COUNTRIES

*Série 18*  
Environnement,  
Public Health and  
Consumer Protection Series No.

# 12

---

9 - 1988

DIRECTORATE GENERAL FOR RESEARCH

---

THE HEALTH SYSTEMS OF EUROPEAN COMMUNITY COUNTRIES

Division for Social  
Affairs, Environment,  
Consumer Protection and  
Public Health

## C O N T E N T

1	Foreword
2	Introduction
3	The Health Systems of European Community countries
4	Financing
5	Eligibility
5	Benefits
5	Reimbursement
9	Organisation and development of delivery system
10	Institutional expenditure
16	Ambulatory care
21	Pharmaceuticals
26	Conclusions
28	Case studies. Belgium
32	Denmark
34	France
37	Germany
40	Italy
43	Ireland
45	Luxembourg
47	Netherlands
50	United Kingdom

**F O R E W O R D**

Public health is a developing Community competence. There is, as yet, no European Community health policy. References to public health are scattered in the European Community Treaties and responsibility for public health questions in the European Community Institutions is diffuse.

Perhaps the most frequent requests for information and studies received by the Directorate General for Studies concern comparative studies in various fields of the twelve Member States of the European Community.

In the field of public health, studies exist at national level and some at the level of international organizations such as the WHO and the OECD, but not at the level of the European Community.

The following synthesis of information provides a basis of comparison of health care systems in the European Community Member States. The paper was produced by Mr Graham Chambers of the Social Affairs, Environment, Consumer Protection and Public Health Division to whom any enquiries for further information should be addressed.

Elfi SCHÖNER  
Director

## I N T R O D U C T I O N

An examination of the European Community Treaties will confirm that there is no European health policy - or is there? A number of other policies contain elements of a health policy. Euratom provides for radiation protection measures, the Coal and Steel Treaty for the health protection of workers in those industries. In addition, consumer protection, environment and research all contain elements relating to health.

Despite the above-described dispersion of health questions, there is no doubt that greater interest is being shown than ever before in health matters at the European Community level.

In practical terms health ministers of the twelve meet to discuss matters of common interest. Common action is announced to fight AIDS or cancer, and medical research programmes are funded at Community level. The imminent arrival of the Single Market with free movement of goods (including foodstuffs and plants), people (and their pets) and services (including health and insurance-related ones) concentrates European minds on health-related questions. Many non-tariff barriers to trade are based on differing national public health provisions.

Finally, movement of people (principally tourism) has given many Europeans their first experience of a health system different to their own. Reciprocal health care provisions exist between Community countries, and a broken leg on the ski slopes may have given many people the opportunity to reflect, at leisure, on their own and their neighbours health care systems.

The following research paper is a synthesis of documentation and research culled from a variety of sources: principally, the OECD and the World Health Organization (European region) as well as individual Health Ministries.

The aim is to provide a concise, comparative description of health care systems in the European Community. Individual overviews of the systems of nine of the Community countries are provided in addition.

Cries of "crisis" in some Member States with regard to the funding of health provisions may obscure the fact that all European Community countries face the same basic problem, namely a potentially infinite demand for health care from an ageing population, coupled with a shrinking tax/contribution base from which to fund it.

It will always be the case that health systems will include a strong local element to take account of differing health cultures and traditions, but much duplication and waste can be avoided at the level of research, prevention and control. No one system of health care is perfect, each has its pros and cons, and it is hoped that this document will assist objective comparison.

One important fact to emerge is that, given the differences in health care financing in EC Member States (some closed-end, some open-end) a simple comparison of Member States percentage GDP expenditure on health care is not necessarily a guide to the quality of health care provision - it may indeed indicate poor value for money and costs which are spiralling out of control.

As mentioned, it is impossible to say which system is the "better" one - all have theoretical advantages and disadvantages. Significant differences emerge, however, between demand-driven and supply-driven systems. The national health service model is an example of a demand-driven system. On the positive side it is at least as good as any other system for serious medical problems, and the filtration system of general practitioners assures adequate medical care while controlling overall costs and reducing over-medication. On the negative side there is the risk that a symptom may be missed unless regular medical examinations are carried out on patients. In addition, true cost appraisal is difficult and under-funding, misallocation of resources, top-heavy bureaucracy and inflexibility in some cases can lead to excessive long waiting lists for minor and sometimes major operations.

A supply-led system, such as the health insurance model, has the advantage of flexibility and choice. The quality of care can be very good and patients choose any specialist they please. There are no waiting lists for operations. On the negative side, however, cost control is difficult, the patients' freedom of choice may be illusory - competing doctors often refuse to pass on a patient's medical records to a rival practitioner, and where change of doctor is frequent no adequate medical record is built up for the patient. The system also encourages over-medication, over-prescription and sometimes unnecessary surgery.

European systems of health care generally avoid the complete free-for-all which exists in a totally uncontrolled health care market. The kind of defensive or law-suit-driven medicine which is found in the United States is not at all common in Europe.

During the Sung Dynasty in Imperial China doctors were paid as long as the patient remained well. The moment he or she fell ill, the doctor ceased to be remunerated. It is perhaps no accident that the tradition of preventive medicine is very strong in China. Some of today's systems approach that more closely than others, but one thing is clear: if costs are to be controlled and the quality of health care maintained and improved, prevention rather than cure must become the principal pillar of European health policy.

G R CHAMBERS

## THE HEALTH SYSTEMS OF EUROPEAN COMMUNITY COUNTRIES

The health care systems of EC countries are structurally diverse and based on different underlying philosophical principles. Despite these differences, there are important similarities, and most of the systems face similar financing and delivery problems due to structural inefficiencies and often perverse economic incentives.

The systems can be characterised in a variety of ways, none of which is mutually exhaustive or wholly satisfying. The most frequent approach uses three basic models:

- i) National Health Service (Beveridge), characterised by universal coverage national general tax financing, and national ownership and/or control of the factors of production;
- ii) Social Insurance (Bismarck model), characterised by compulsory universal coverage generally within the framework of Social Security, and financed by employer and individual contributions through non-profit insurance funds, and public and/or private ownership of factors of production; and
- iii) private insurance (consumer sovereignty model), characterised by employer-based or individual purchase of private health insurance financed by individual and/or employer contributions and private ownership of the factors of production.

Examples of these systems are: National Health Service - the United Kingdom, Italy; Social Insurance - France, Germany. Private insurance exists in parallel with the above-mentioned in some Member States.

The basic objective of all these systems is the provision of access to quality care for all citizens while achieving efficiency in the use and provision of services.

### **Financing**

Financing procedures affect the redistributive impact of the system, the allocation of resources, and overall growth. Public and private health care financing systems are designed to spread the financial consequences associated with ill-health over large population groups. The group can be the population of an entire country, an employment-related group, an individual insurance fund's membership, groups of individuals with similar characteristics, etc. In most EC countries, the individual's ability to pay relative to needs is taken into account in the establishment of individual contribution levels either implicitly (progressivity of tax systems) or explicitly (waivers of cost-sharing, income related contributions, spreading additional health care costs of pensioners across the entire population).

Health care systems can be financed through general taxes (personal income, corporate profit, VAT, sales), specific taxes (e.g. excise taxes on specific commodities, taxes of specific factors of production), premiums, user charges (co-insurance and deductions), and charitable contributions. Most countries in fact use combinations of these methods, with countries such as the United Kingdom and Italy relying heavily on general taxes, and France, Belgium and Luxembourg on payroll taxes.

## Eligibility

Eligibility criteria differ, but given the near universal coverage under public and/or private systems in EC countries, the differences are not great. Most systems cover employees, their families, pensioners, and disadvantaged groups. There are differences in eligibility for certain groups such as students, those never in the labour force, the long-term unemployed, individuals who can (or must) opt out of the system, etc. However, those not covered under public or private systems can generally receive care in publicly-operated health care facilities or through religious or other charitable institutions.

## Benefits

The benefits provided by public and private health systems also differ. Hospital and physician inpatient services, inpatient physician services, and outpatient physician and diagnostic services are covered under virtually all programmes. For drugs, eyeglasses, hearing aids, nursing homes, home health and health-related social services, there is far more diversity. In some countries, such as Belgium and Ireland, specific benefits covered depend on the income level or employment status of the individual. In other countries such as Germany, social service provision is a regional or local responsibility. In addition, due to differences in both policy choices as well as differences in medical practice, there are differences in the conditions under which certain services are covered (e.g. age restrictions for chronic renal dialysis, exclusion of chronic alcoholics from liver transplants). Fundamental differences can also be seen in benefits as a result of differences in cost-sharing, on the part of the patient. In France and Belgium, cost-sharing applies to most services under public programmes. In the United Kingdom, the Netherlands, Spain and Germany significant payer for basic services is generally perceived as inconsistent with the underlying social welfare aims of the public health programmes. However, virtually all countries impose cost-sharing on pharmaceuticals, with exemptions for the poor. Some impose limits on cumulative payments (e.g. the chronic sick). Moreover, cost-sharing levels are generally quite nominal.

All countries also provide individual and collective benefits through their public health systems. All undertake basic public health measures concerning environment, transmission of contagious diseases, approval of pharmaceutical medical research and education, immunisation programmes, pre- and post-natal care, anti-smoking, drug, and alcohol abuse programmes, etc.

## Reimbursement

The methods by which medical care providers are paid for services rendered have a major influence on access, cost and quality of care. Even in systems with closed-end financing (such as the NHS in the UK), payment methods influence the allocation of resources within the overall limits, and hence result in differing quantities and qualities of service being provided for the same level of expenditure. Furthermore, the actual flows of funds themselves contain inherent incentives for both the demand and supply of services. Thus the incentives inherent in direct reimbursement systems such as those in Germany, where the reimbursement flows from the insurance funds to medical care providers, may be very different from the indemnity approaches in Belgium and France, where the patient pays the medical care provider and is reimbursed by the insurance fund.



The scope of control over the system is of critical importance. Systems in which reimbursement methods and levels are coordinated allow incentives to affect the entire system. Fragmented systems characterised by unequal power among reimbursing entities and providers are less likely to achieve overall objectives of systems efficiency. In fact, this is the very problem facing private health insurers in Europe. Given the relatively small sizes of the funds, the large numbers of providers, the competitive marketing of policies which necessitates that insurees have broad freedom of choice of provider, and the extremely limited share of private insurance in total health spending, effective cost containment in the private sector is difficult.

In attempting both to control expenditure increases and to obtain more efficient resource use, many countries have recently modified their reimbursement procedures. Because much of the increase in spending is due to increased utilisation and intensity of services, considerable emphasis has been placed on systems that limit quantity and total expenditure as well as prices.

Because hospitals are the largest expenditure item, there has been much emphasis on hospital payment. Public systems and private insurers use a variety of methods to pay hospitals. Four different bases are generally used: annual budgets, payments per day, per case, and per unit of service. Reimbursement levels can be established under a variety of mechanisms: unilateral establishment by public authority, insurance carrier, or provider; negotiation among various relevant parties; and determination by market forces (including competitive bidding). The resulting payments can be hospital-specific or apply to groups of (or indeed all) hospitals. Different methods may be used by different payers (e.g. public vs. private), and various components of hospitals (e.g. inpatient care, outpatient care, operation costs, capital costs, medical education, physician services, etc.) may be reimbursed differently.

In the United Kingdom, Germany and France (public hospitals), the payment to the hospital also generally includes reimbursement for all physician services. Separation of physician and hospital payment often depends on whether the hospital is a public or private one. Private insurance generally reimburses hospitals and physicians separately.

Annual budgets have the advantage of simplicity and overall expenditure control, but do not necessarily provide strong incentives for micro-efficiency or quality (e.g. the NHS in the UK). Per-diem payments also have the advantage of simplicity and fewer disincentives than global budgets from quantity and quality points of view; but since per diem payment systems provide incentives for increased length of stay per admission, they do not (in the absence of volume controls) limit overall expenditure. Per case (or diagnosis) payments have incentives for reduced length of stay per case, but also provide incentives for increased admissions and possible reductions in quality or service intensity per case. If the payments do not adequately reflect resource use (and implicitly case severity), such systems may also provide disincentives to treat complex cases. Fee-for-service provides strong incentives for service provision and quality but contains disincentives from an overall expenditure viewpoint unless accompanied by strong volume control. Thus, it would be expected, a priori, that prospective total budget approach inclusive of inpatient physician services such as the British National Health Service would result in lower expenditure than would a retrospective per diem cost or charge-based system with physicians being paid on a

fee-for-service basis. In fact, most EC countries have implemented, or are moving towards, either total budget approaches (the United Kingdom, France) prospective per diem (Germany) or per case systems.

Physician expenditure is generally the second largest health expenditure category, and in their role as the central decision-maker in virtually all health systems, physicians' decisions affect the great majority of health expenditure. Thus, the incentives inherent in physician payment systems are critical in determining overall systems costs.

There is considerable diversity of physician payment systems both among and within most EC countries. The methods used depend on the place of service, payer category, speciality of the physician, geographic location, type of insurance contract, physician participation status, etc. The general payment methods employed are capitation, salary, and variants of fee-for-service (e.g. fee schedules; usual, customary, and reasonable charges; actual charges), as well as combinations of these methods. Payments by case are currently under study, although not in general use. Payment levels and relative prices (or remuneration) can be established unilaterally or through negotiations among governmental entities, social insurance funds, private insurers, physicians, consumers and/or employers. Many countries have different payment systems for hospital-based as opposed to ambulatory care physicians. Some systems employ ambulatory care physicians, usually general practitioners, as "gatekeepers" for consumers to access hospitals, tests, social services, etc. Some systems allow patient freedom of choice of physician, while others require individuals to choose a single primary-care physician.

In Belgium, France, Germany and Ireland ambulatory physician services are generally reimbursed on a fee-for-service basis. In the United Kingdom, Spain, the Netherlands (public system), and Denmark patients select a G.P. as their principal physician who is reimbursed partly on a capitation basis. Both reimbursement procedures and traditional place of treatment for ambulatory care can have significant effects both on physician and on overall health system costs. In Germany virtually all ambulatory care is provided in physicians' private offices. In Ireland physicians providing ambulatory care in hospitals are salaried, while those in private offices are paid on a fee-for-service basis. In the United Kingdom, Germany, France (public hospitals) and Ireland (public patients) physician compensation is included in the hospital reimbursement, and physicians are generally salaried. In France (private hospitals), Belgium and Luxembourg physician services to hospital patients are generally reimbursed on a fee-for-service basis. In France (non-convention) physicians can charge patients in excess of the established reimbursement amounts. In several countries private insurance is prohibited from filling in these gaps (or the requisite cost-sharing amounts).

**PHYSICIAN REIMBURSEMENT SYSTEMS IN FOUR EC COUNTRIES**

	Country	Ambulatory Sector	Hospital Sector
General Practitioners	France	Fee-for-service	Salary (public hospitals)
		Salary (in health centres)	Fee-for-service (private hospitals)
	Italy	Capitation plus special allocations	Salary
	United Kingdom	Capitation plus fee-for-service for certain preventive procedures plus special allocations	Salary
	Germany	Fee-for-service	Salary (when in training)
Specialists	France	Fee-for-service	Salary (public hospitals)
		Salary (in health centres)	Fee-for-service (private hospitals)
	Italy	Salary (in health centres) Fee-for-service (private offices)	Salary
	United Kingdom	Salary plus fee-for-service for home visits	Salary Fee-for-service (private hospitals)
	Germany	Fee-for-service	Salary (the rule) Fee-for-service, for patients treated by chiefs of departments

Source : Uwe Reinhardt: The compensation of Physicians: The Experience Abroad, Report prepared for the U.S. Health Care Financing Administration, Washington D.C., 1985.

Pharmaceuticals are also a significant expenditure item. Reimbursement is generally on a fee-for-service basis. Pharmaceuticals supplied to hospitalized individuals are usually considered as part of the hospital's reimbursement. Fees are established on the basis of a number of criteria, including retail price, wholesale prices, acquisition costs, etc. Reimbursement is generally made to the pharmacist directly or to the patient. Increases in, and the level of, pharmaceutical expenditure have posed a significant budgetary problem in several EC countries. Much of the activity on pharmaceuticals has centred on increasing cost-sharing, substituting lower-cost generic equivalents, and removing certain drugs from coverage. Reimbursement measures have also been designed to reduce payments either at the wholesale or the retail level, and in a limited number of cases to promote competitive bidding and bulk purchasing.

Reimbursement practices for nursing homes, home health services, hospices, other health-related social services, and other health services and supplies differ substantially across countries, and there is a dearth of reliable

comparable information. However, in a number of countries coverage and reimbursement systems strongly favour institution-based long-term care services over home and community-based care.

### **Organisation and Development of the Delivery System**

The open- or closed-ended nature of the system fundamentally affects overall costs, reimbursement and quality. Systems which are basically closed-ended such as the National Health Service in the United Kingdom could be expected more effectively to limit overall health spending than would systems which based heavily on market principles. However, spending is only one dimension of a health care system, and it is also necessary to evaluate the effects of quality of care and health outcomes and whether costs are being shifted to other governmental units, medical care providers, or consumers.

Comparisons of quality of care are among the least developed concepts in international comparisons. The linkage between quality and outcome is neither well defined nor easily measurable. Aggregate mortality and morbidity measures are generally too gross to permit the accurate measurement of quality. Death rates, indices of morbidity, or more subtle forms of diminution in quality of life resulting from inadequate or poorly enforced licensing and/or life-safety standards in hospitals and nursing homes or from inadequately trained medical or para-medical professionals are equally important dimensions of health system performance.

Virtually all EC countries are faced with an aggregate surplus of physician and acute care hospital beds. In coping with overall surpluses of physicians most EC countries are now limiting medical school enrolments, and some are taking steps to encourage physicians to locate in underserved areas.

The criteria for evaluating and disseminating new technologies are also a critical determinant of cost, quality and access. Some countries have centralised planning, while others rely on local planning. Various formulae and procedures are used to allocate capital, and the financing and reimbursement of capital costs differ widely, from systems where all capital is allocated and financed centrally to those where authorisation is local and financing/reimbursement is predominantly private.

Legal practices can also have important effects on the delivery system. The extent of malpractice litigation can have substantial effects on health care not only through the litigation itself but through "defensive medicine" as physicians and hospitals perform extra diagnostic procedures. Anti-trust, medical practice and insurance laws affect the organisation, power and role of the relevant economic entities (i.e. government, consumers, medical care providers, insurers, employers, trade unions, etc.), determine the permissible delivery arrangements, affect who can practice medicine, and prescribe the interrelationships between public systems and private health insurance. For example, the ability of physicians to organise and negotiate; whether non-physicians can practice medicine as free-standing practitioners; the extent of malpractice suits, and the ability of private insurance companies to sell complementary policies that fill in the cost-sharing and physician "extra charges" can all have significant effects on a health system's performance.

Thus, differences in specific features of health systems can have important effects on utilisation, prices, efficiency, outcomes and quality. Unfortunately, isolating the behavioural impacts of specific systems' features on health systems' performance is quite difficult.

PER CAPITA HEALTH SPENDING AND GDP, 1970 AND 1984  
(US\$ at GDP PPPs, current prices)

Country	1970		1984		Compound Annual Rate of Growth 1970-1984	
	Total Health per capita	GDP per capita	Total Health per capita	GDP per capita	Total Health per capita	GDP per capita
Belgium	147	3 652	777	12 439	12.6	9.1
Denmark	252	4 147	841	13 310	9.0	8.7
France	223	3 685	1 145	12 642	12.4	9.2
Germany	220	3 993	1 079	13 265	12.0	9.0
Greece	70	1 756	287	6 300	10.6	9.6
Ireland	122	2 196	622	7 795	12.3	9.5
Italy	171	3 093	725	10 093	10.9	8.8
Netherlands	232	3 881	1 011	11 710	11.1	8.2
Portugal	-	-	275	5 021	-	-
Spain	102	2 473	476	8 279	11.6	9.0
United Kingdom	161	3 563	658	11 068	10.6	8.4

Sources : Measuring Health Care 1960-1983, OECD, Paris 1985

Health expenditure for 1984 is an estimate based on the same source documents and methods used in Measuring Health Care 1960-1983.

Purchasing power parities and population statistics are from National Accounts, Main Aggregates Volume I, OECD, Paris, 1986.

### Institutional Expenditure

Institutional expenditure is the largest and fastest growing component of health spending. Hospital expenditure is by far the largest component of institutional spending, which also includes expenditure on hospital-based physicians, nursing homes, and other institutional health facilities. In the early 1980's, institutional expenditure accounted for over half of all health spending in EC countries.

With respect to individual countries, public institutional expenditure in the early 1980s is the largest component in almost every country, varying from 21.0% in Belgium (where the data include only basic room and board outlays) to 73.9% in Denmark.

COMPOSITION OF PUBLIC HEALTH SPENDING, 1970 AND 1980s

Country	Institutional			Ambulatory		
	1970	1980s	1970-80s	1970	1980s	1970
Belgium	17.2	21.0 (83)	2.0	39.2	37.7 (81)	
Denmark	64.7	73.9 (84)	1.0	26.3	22.0 (84)	
France	45.9	59.5 (84)	2.1	26.3	22.9 (81)	
Germany	41.6	43.0 (83)	0.3	32.2	25.5 (83)	
Greece	40.1	49.5 (82)	2.0	17.3	13.4 (82)	
Ireland	-	73.4 (83)	-	-	11.5 (82)	
Italy	51.7	55.3 (84)	0.5	32.2	27.8 (83)	
Luxembourg	-	32.5 (82)	-	-	21.5 (82)	
Netherlands	56.1	69.3 (84)	1.7	5.0	22.2 (81)	
Portugal	46.6	46.3 (83)	-	26.5	20.7 (83)	
Spain	-	42.5 (81)	-	16.8 (72)	16.7 (80)	
United Kingdom	56.3	59.7 (79)	0.7	13.8	11.2 (82)	

Country	Pharmaceutical			Other		
	1970	1980s	1970-80s	1970	1980s	1970
Belgium	18.9	11.8 (81)	-3.4	24.7	29.5 (81)	
Denmark	4.6	4.8 (83)	0.3	-	-	
France	20.8	13.1 (84)	-2.6	-	7.9 (81)	
Germany	18.2	19.2 (83)	0.4	8.0	12.3 (83)	
Greece	19.1	14.8 (82)	-1.9	23.5	22.3 (82)	
Ireland	2.7 (72)	7.0 (82)	15.9	-	9.7 (82)	
Italy	16.0	13.0 (84)	-1.3	0.1	4.6 (83)	
Netherlands	6.6	7.2 (84)	0.6	32.3	3.7 (81)	
Portugal	15.6	20.3 (83)	2.3	11.3	12.7 (83)	
Spain	36.8 (72)	15.8 (83)	-5.2	-	25.7 (80)	
United Kingdom	9.9	10.3 (82)	0.3	20.0	20.0 (79)	

Source: Measuring Health Care 1960-1983, OECD, Paris, 1985.

Figures for 1984 are estimates based on same sources and methodology

Many countries include nursing homes or long-term custodial care facilities in their hospital classification, while others have a separate classification. Other countries (e.g. the United Kingdom) provide extensive amounts of long-term care either in special long-term care hospitals or in separate wards of acute care hospitals.

Differences in expenditure per admission mask enormous differences in average lengths of stay per admission. While some of these differences can be explained by lack of comparability of hospital service definitions, substantial differences in average length of stay persist after adjustment for casemix. It would appear that a significant proportion of these differences in costs are due to differences in intensity of services per case, efficiency, and possibly outcomes. However, certain studies have shown that large differences in length of stay within given countries are not necessarily related to differences in health outcomes. This raises the question of whether substantial savings could be achieved by reducing lengths of stay. The large documented differences in medical practice, inappropriate use of certain procedures (e.g. cesarean versus normal deliveries, complete versus partial mastectomies, cardiac-by-pass surgery versus drug therapy), as well as documented savings from alternative reimbursement and delivery arrangements would suggest that significant savings could be achieved.

INPATIENT MEDICAL CARE BEDS PER 1 000 POPULATION, 1960, 1970, 1980s

Country	1960	1970	1980s
Belgium	6.0	8.3	9.5 (82)
Denmark	8.1 (61)	8.3	9.5 (82)
France	9.6 (62)	10.4 (72)	11.6 (83)
Germany	10.5	11.3	11.1 (82)
Greece	5.8	6.2	6.2 (81)
Ireland	-	12.6	9.7 (80)
Italy	7.5	8.8	7.7 (83)
Luxembourg	11.9	12.6	13.0 (83)
Netherlands	11.0	11.4	12.0 (83)
Portugal	5.3	6.0	5.1 (82)
Spain	4.3 (62)	4.7	5.4 (81)
United Kingdom	10.3 (61)	9.4	8.1 (81)

Note: Data for Ireland in this table include long-term hospitals.

Source: Measuring Health Care 1960-1983, OECD, Paris, 1985.

The low per diem and bed expenditure in the United Kingdom is in part due to significant amounts of long-term care being provided in hospitals instead of in nursing homes. Similarly, if outpatient hospital services were excluded, the cost per capita, per bed, per day, and per admission figures in a number of countries would be reduced. Differences in staffing and the ages and amounts of equipment and physical plant will also have significant effects on expenditure differences.

HOSPITAL OCCUPANCY RATES 1960, 1970, 1980s

Country	1960	1970	1980s
Belgium	68.5 (65)	75.6	81.6 (81)
Denmark	88.2 (61)	87.7	78.6 (82)
France	91.2 (62)	88.2	73.2 (83)
Germany	94.0	87.7	84.1 (82)
Greece	61.4	70.7	71.2 (81)
Ireland	-	-	80.1 (82)
Italy	80.6	81.1	78.1 (83)
Luxembourg	78.4	78.1	78.4 (83)
Netherlands	92.3 (68)	91.5	91.5 (83)
Portugal	-	-	74.5 (82)
Spain	-	76.4	66.0 (81)
United Kingdom	90.1	84.1	81.4 (81)

Note: Hospital occupancy rate =  $\frac{\text{(Days per capita x population)}}{365 \times \text{hospital beds}}$

The above table contains occupancy rates for 1960, 1970 and the early 1980s. Occupancy rates have been falling slightly over the entire period with the largest declines taking place in the past 10 years.



HOSPITAL ADMISSION RATES 1960, 1970, 1980s  
(Percent of population)

Country	1960	1970	1980s
Belgium	8.0 (65)	9.3	13.9 (81)
Denmark	12.7 (63)	14.4	19.2 (83)
France	6.7 (66)	7.4	11.8 (83)
Germany	12.5	14.6	18.1 (82)
Greece	7.0 (61)	10.6	11.9 (82)
Ireland	-	-	16.4 (82)
Italy	7.8	13.8	15.4 (83)
Luxembourg	11.6	13.4	18.1 (83)
Netherlands	8.6 (63)	10.0	11.8 (83)
Portugal	4.2	5.9	9.6 (82)
Spain	-	7.1 (72)	9.2 (81)
United Kingdom	9.2 (61)	11.3	12.7 (81)

Source: Measuring Health Care 1960-83, OECD, Paris, 1985.

AVERAGE LENGTH OF STAY, 1960, 1970, 1980s

Country	1960	1970	1980s
Belgium	14.4 (65)	15.6	13.5 (81)
Denmark	22.2 (63)	18.1	11.9 (82)
France	22.8 (61)	18.3	14.1 (83)
Germany	28.7	24.9	18.7 (82)
Greece	18.8 (61)	15.0	13.0 (82)
Ireland	-	13.3	9.0 (82)
Italy	27.9	18.8	12.0 (83)
Luxembourg	29.0	27.0	21.0 (83)
Netherlands	39.4 (68)	38.2	34.1 (83)
Portugal	19.5	18.4	14.4 (81)
Spain	-	18.0 (72)	14.6 (81)
United Kingdom	35.9	25.7	18.6 (81)

Source: Measuring Health Care 1960-83, OECD, Paris, 1985.

HOSPITAL REIMBURSEMENT AND FINANCING IN SELECTED EC COUNTRIES

	Basis of Reimbursement for:			
Country	Operating costs	Capital costs		The role of health sector planning
United Kingdom	Annual prospective global budgets controlled by the National Health Service (i.e. the central government)	Separate capital budgets controlled by the central government through the National Health Service	Regional and District Health Authorities develop health plans. Because the National Health Service owns all but the few private hospitals, the Health Authorities and central government fully determine the capacity of hospital system	
France	Prior to 1984 prospective per diems and prospectively set charges for particular services. These payments were government controlled. After 1983 prospectively set global budgets.	Capital costs are recovered in part through amortization allowances in the per diems and charges. The balance of costs are financed through subsidies from the central and local governments	The hospital sector is subject to regional and national planning. The central government, through its health plan, determines the capacity of the hospital system	
Netherlands	Until 1983 by negotiated per diems and charges; since 1984, by annual global budgets	Until 1983, the per diems included amortization of capital costs. Since 1983, hospitals are reimbursed for capital costs via separately controlled line items in the budget	Construction of facilities and acquisition of major medical equipment requires a government-issued license, which is issued on the basis of regional and national health-sector planning	

### Ambulatory Care

Ambulatory care is the second largest component of (public) health spending in most EC countries and is a critical determinant of overall health spending, because of the physician's central decision-maker/gatekeeper role, the cost-effectiveness of preventive services, and the potential substitutability of costly institutional for less costly ambulatory care services.

The prices of ambulatory care services for all countries increased at the second highest rate (after institutional prices), and slightly exceeded overall inflation. With respect to individual countries in 1970 such spending ranged from 5.0 in the Netherlands to 39.2 in Belgium.

These observed differences in ambulatory care expenditure are due to differences in definitions, differences in delivery system characteristics, and differences in the provision and use of physician services. For example, the national source statistics underlying these data often do not permit the inclusion of outpatient hospital services in the ambulatory care classification. Moreover, there is no consistent international data source on total physician expenditure, or such spending disaggregated by place of service. However, data are available on the numbers of physicians, use of outpatient physician services, fees for certain medical procedures, and physicians' incomes.

The table contains data on the number of physicians per 1000 population in 1960, 1970, and the early 1980s. There has been substantial growth in the physician-population ratios in all EC countries and Portugal experienced the largest growth, while Ireland had the lowest.

PHYSICIANS PER (1000) CAPITA, 1960, 1970, 1980s

	Physicians per 1000 population		
	1960	1970	1980s
Belgium	1.2	1.6	2.6 (81)
Denmark	1.3 (62)	1.5	2.4 (82)
France	1.0	1.3	2.2 (83)
Germany	1.4	1.6	2.4 (82)
Greece	1.3	1.6	2.5 (81)
Ireland	1.0 (61)	1.2 (71)	1.2 (75)
Italy	0.5	0.7	1.3 (83)
Luxembourg	1.0	1.1	1.7 (83)
Netherlands	1.1	1.2	2.1 (83)
Portugal	0.8	0.9	2.1 (81)
Spain	1.2	1.3	2.6 (81)
United Kingdom	-	1.0 (71)	1.3 (81)

Source: Measuring Health Care 1960-1983, OECD, Paris, 1985.

MEDICAL TRAINING : EC MEMBER STATES

1) Basic Medical Degree

	Belgium	Denmark	France	Germany	Greece	Ireland	Italy	Luxembourg	Nether-lands	Portugal	Spain	United Kingdom
Years of study	6	6	7	5	6	6	6	5	5	6	6	5
+ Internship in months	12	18		11	12	12	6	1	12	4		12

## 2) Specialisms

Total years of study including compulsory subsidiary subjects where applicable

those figures marked with an asterisk include a period of internship

	Belgium	Denmark	France	Germany	Greece	Ireland	Italy	Luxembourg	Nether-lands	Portugal	Spain	United Kingdom
Anaesthesia	4	4	2	4*	3	6	3	3	3½	4	4	6-7
Cardiology	5	4½	3	6*	4	7	3-4	4	5*	5	5	7
Neurology	6	5	3	4-5*	3	7	4	4	4	5	4	7-8
Neuropsychiatry												
Obstetrics	5	4½	4*	5*	4	7	4	4	5	5	4	6-7
Gynaecology	5	4	3	5*	3	7	4	4	4	5	4	7
Pediatrics	6	5½	5*	6*	4	7	5	6	6	5	5	6-7
General surgery	5	5½	5*	6*	7	7	5	6	6	5	5	7
Cardiothoracics	6	5½	5*	6*	5	8	5	6	6	5	5	8
Neurosurgery	6	5½	5*	5*	5	7	4	5	6	5	5	6-7
Orthopaedics	3	4	3	4*	3	6	3	4	4	4	4	6
Ear-nose-throat												
Dermatology	4	4	3	4*	3	7	3	3	4	4	4	7
Venerology												
Internal medicine	5	4½	4	6*	3	7	5	5	5	5	4	7

Much of this growth took place as a result of deliberate government policies to increase the number of physicians from levels that were perceived as inadequate in the 1950s and 1960s. But in the context of the 1970s and 1980s the expansion of medical school capacities as well as the high rates of return to individuals from medical education have resulted in overall surpluses of physicians and restrictions on medical school enrolments in most EC countries although there continue to be shortages of physicians in certain specialities and geographic areas.

In addition to these factors, there are important consequences for health systems' performance from the number, growth and mix of specialists. The extent to which specialists, as opposed to generalists, provide care, the types of care they provide, the education and credentialling processes for specialists, and referral patterns among generalists and specialists all have important consequences for access, cost, quality and outcomes. The importance of these factors must be considered in interpreting the results below.

OUTPATIENT PHYSICIAN CONSULTATIONS, 1970, 1980s

Country	1970	1980s
Belgium	-	7.1 (81)
Denmark	-	8.4 (82)
France	3.2	4.7 (83)
Greece	5.2	5.3 (82)
Ireland	-	6.0 (82)
Italy	6.3	8.3 (81)
Netherlands	-	3.2 (80)
Portugal	1.5	3.8 (82)
Spain	2.6	4.7 (80)
United Kingdom	-	4.2 (83)

Source: Measuring Health Care 1960-1983, OECD, Paris.

There are no internationally comparable detailed measures of the absolute or relative price levels of physician services for the EC countries, although EC is currently in the process of collecting such information in their updating of price levels of certain medical services which are collected for a number of European countries by the Association Internationale de la Mutualité (AIM), a Geneva-based organisation of European mutual insurance organisations.

The table contains the fees in local currencies and PPP-adjusted US dollars for 18 medical, surgical, laboratory, radiology, and dental procedures for Belgium, Germany, France, Luxembourg, the Netherlands and Denmark. These figures must be interpreted with caution, since procedures may not be defined exactly the same across countries and fees may vary by speciality of the physician or place of service (e.g. lab or physician's office). Where fees vary within a country, the maximum fee levels are chosen for inclusion in the table.

MEDICAL SERVICE FEES, 1984  
(In local currency and US\$ at PPPs)

	Belgium		Germany		France		Luxem- bourg		Nether- lands		Denmark	
	BF	\$	DM	\$	FF	\$	FL	\$	Fl	\$	K	\$
1. GP home visit	430	12	29	14	81	18	680	18	-	-	89	11
2. First consulta- tion of internal medicine with major examina- tion	659	18	21	10	95	15	1135	31	52	22	337	41
3. Normal delivery by GP	5084	139	97	45	950	154	4055	109	604	258	446	54
4. Cholecystectomy	8317	227	293	136	920	149	7385	199	328	140	-	-
5. Total hysterectomy	8911	243	325	151	1150	187	8025	216	423	181	-	-
6. Appendectomy	4752	130	174	81	575	93	3805	103	188	80	-	-
7. Examination of urine	83	2	-	-	119	19	111	3	-	-	22	3
8. Prothrombin time test	131	4	-	-	26	4	111	2	-	-	44	5
9. Total cholesterol dosage	136	4	-	-	17	3	134	4	-	-	68	8
10. Thorax radiography: 1. incidence	664	18	53	25	122	20	595	16	22	9	411	50
11. Colon radiography	3318	91	95	44	446	72	1355	37	58	25	454	55
12. Radiography of lombasral column	1611	44	90	42	180	29	360	10	31	13	363	44
13. Electro- encephalogram	2043	56	69	32	805	131	1055	28	86	37	219	26
14. Electrocardiogram	530	14	30	14	92	15	525	14	-	-	88	11
15. Bronchoscopy	1792	49	70	49	345	56	2425	65	153	65	398	48
16. Rectosigmoidoscopy	754	21	106	49	115	19	850	23	117	50	398	48
17. Extraction of one lower molar	298	8	16	7	92	15	295	8	11	5	104	13
18. Filling: one face	529	14	26	12	74	12	495	13	19	8	-	-

- Notes: -- Data generally refer to 1984; however the data for the Netherlands, depending on the procedure, refer to 1981, 1982, 1983 or 1984.  
 -- Where a choice among plans or a range of fees is presented, the maximum fee is chosen (e.g. the electroencephalogram fee for France).  
 -- Additional mileage charges for (GP) home visits are paid in Luxembourg and Denmark.  
 -- Fees may refer to different specialities; procedures may not be exactly comparable; and there may be some non-comparability in terms of technical (e.g. lab) and professional/physician interpretation) components of various procedures.

Sources: Financing and Delivering Health Care: A Comparative Analysis of OECD Countries, OECD, Paris, 1987.

PHYSICIAN INCOMES, 1970, 1981

	Relative to average employee income		Absolute amount (US\$ GDP PPPs)	
	1970	1981	1970	1981
Belgium	-	1.8	-	35 500
Denmark	-	2.8 (80)	-	38 400 (80)
France	4.8	3.3 (79)	26 600	46 800 (79)
Germany	6.4 (71)	4.9 (80)	40 800 (71)	76 300 (80)
Ireland	1.5	1.2	14 200	18 200
Italy	1.4	1.1	8 600	19 600
United Kingdom	-	2.4	-	32 300

Sources: Measuring Health Care 1960-1983, OECD, Paris, 1985.

### Pharmaceuticals

Pharmaceutical expenditure is the third largest component of public health expenditure. Pharmaceutical prices increased at a 12.6% annual rate, the slowest growing health care price component.

The table displays per capita pharmaceutical expenditure and consumption for the EC countries for 1970 and the 1980s. These data must be interpreted with caution, since pharmaceuticals consumed in hospitals are generally reported as hospital expenditure, and outpatient pharmaceutical expenditure and consumption may be understated. In the early 1980s per capita expenditure varied from \$42 in Denmark to \$194 in Germany. Pharmaceutical consumption, prescriptions per person (measured in numbers of prescriptions not dosage units), has increased. The countries with the highest consumption in terms of numbers of prescriptions are France and Italy. However, there does not appear to be a strong relationship between expenditure per capita and prescriptions per capita. This result suggests that internal pricing policies vary widely. Furthermore, as far as consumption of pharmaceuticals is concerned, although it would be expected that the more physicians and pharmacists per capita, the greater the use of pharmaceuticals, the data indicate no significant relationships between expenditure/consumption and physicians/pharmacists per capita.



PHARMACEUTICAL EXPENDITURE PER CAPITA AND CONSUMPTION, 1970, 1980s

	1970		1980s	
	Expenditure per capita (US\$, GDP PPPs)	Number of prescriptions per capita	Expenditure per capita (US\$, GDP PPPs)	Number of prescriptions per capita
Belgium	53.7	-	127.8 (82)	9.9 (82)
Denmark	12.9	-	42.4 (83)	6.3 (83)
France	56.5	17.4	188.1 (84)	28.9 (81)
Germany	46.2	-	194.1 (82)	-
Greece	29.9	5.8	73.7 (82)	7.4 (82)
Ireland	27.1	-	67.4 (81)	11.9 (81)
Italy	26.5	10.9	110.1 (83)	21.5 (77)
Luxembourg	45.7	11.3	138.5 (84)	12.4 (78)
Netherlands	17.5	9.1	104.3 (84)	-
Portugal	-	14.8	61.7 (81)	15.5 (81)
Spain	-	9.2	75.7 (80)	11.9 (83)
United Kingdom	-	5.5	-	6.8 (82)

Sources: Measuring Health Care 1960-83, OECD, 1985.

Figures for 1984 are preliminary OECD Secretariat estimates.

Other Health Expenditure

This category covers all other medical services including therapeutic appliances, biomedical research, etc. Since it is calculated as a residual (e.g. institutional, ambulatory and pharmaceutical expenditure are subtracted from the total), it could also be picking up expenditure associated with classification errors or differences in service definitions.

HEALTH EXPENDITURE BY AGE AND GROWTH IN SPENDING  
BY 2010 AND 2030

Country	Ratio of per capita health spending on those age 65 and over to those under 65	1980-2010		2010-2030		1980-2030	
		Total	Per Capita	Total	Per Capita	Total	Per Capita
Belgium	1.7	-1	1	-1	3	-1	4
Denmark	4.1	-4	5	0	20	-4	17
France	2.4	11	3	5	6	16	9
Germany	2.6	-3	6	-8	7	-10	13
Ireland	4.5	22	1	16	9	41	10
Italy	2.2	1	4	-4	5	-3	9
Netherlands	4.5	17	9	13	18	32	29
United Kingdom	4.3	2	0	12	10	15	10

Notes: a) Ratio of total health spending of those aged 65 and over to those below age 65. For other countries the ratio reflects public spending only.

b) Calculations are based on the assumption that the ratios of per capita total health spending of those aged 65 and over to those below 65 in 1980 are the same as the ratios presented here.

Sources: The Social Policy Implications of Ageing Populations, OECD, Paris. Data for Italy are from G. Lojacono, Study on the Evaluation of Cost/Effectiveness of Alternative Strategies for the Health Care of the Elderly, World Health Organisation.

The burden of health expenditure falls mainly on the working population. As such, the ability of countries to finance these increased expenditure resulting from population ageing (as well as those emanating from general population growth) will depend on changes in the relative size of the productive population as reflected in dependency ratios, as well as labour force participation rates, unemployment rates and productivity. As would be expected, those countries facing potentially large increases in per capita expenditure also face large increases in their aged dependency ratios and, to a lesser extent, in their total dependency ratios. All EC countries except Ireland and Portugal face increases in their total dependency ratios, with Luxembourg facing the largest increase.

Over the past several years many countries have restrained prices for health services, affecting particularly hospitals, physicians, and pharmaceuticals. Many of the measures taken have been based solely on budgetary grounds and have not been targeted to overall reform of reimbursement systems. Such measures include freezing or indexation of hospital reimbursements, physician fee schedules, and pharmaceutical reimbursements. In the process there has been relatively little evaluation of the impacts of such policies on quality, access, outcomes or increased service provision that can offset potential savings from price controls. However, in a number of countries either major reforms or basic elements of reform have been the principal elements of price restraint policies. The prospectively-set global budget in France is an example of price restraint policy embodying incentive reforms. Limitations on hospital reimbursements in Belgium have been accompanied by strong incentives to convert excess hospital beds into nursing home beds. On the other hand, most physician price restraints embody simply the freezing of fees, with no basic incentive reforms. However, several countries such as the Netherlands and France have been attempting to adjust relative fee levels to promote incentives in the provision of physician services. Unfortunately, there is little empirical evidence of the effects of such changes on the use of specific physician and other health services or on the effects on overall spending and health.

Other countries have focused their efforts on high volume pharmaceuticals and the use of lower cost generic equivalents. Competitive bidding and bulk purchasing, as in the United Kingdom for laundry and food services for hospitals are also examples of the use of reimbursement mechanisms to induce efficiency and reduce costs.

Policies to reduce utilisation can focus on consumers through cost-sharing, providers through alternative delivery arrangements and health planning and delivery system controls, and both consumers and providers through administrative reviews. Cost-sharing is currently employed as a financing and/or resource allocation mechanism in most EC countries.

There appears to be a strong feeling in several European countries that the introduction of cost-sharing results in an initial drop in utilisation, followed by a return to the original consumption trends. Effects on expenditure and on health have been analysed. With respect to expenditure, those individuals facing cost-sharing used fewer outpatient and hospital services. In both cases, the cost per treatment between those with and those

without cost-sharing was similar, the basic reductions occurring in the number of episodes of care. Cost-sharing compared with free care substantially reduced the use of hospital emergency departments for less serious ailments. With respect to health status, of ten health measures initially analysed for adults, free care was associated only with improvements in corrected vision and high blood pressure, and did not affect the health of the average person. In other words, cost-sharing in most cases did not negatively affect outcome.

In practice virtually all EC countries require some cost-sharing, at least for prescription drugs. Nevertheless, in most European countries cost-sharing is quite nominal.

Even in countries such as France where copayment and/or coinsurance rates appear substantial (e.g. 20-25%), low limits on total out-of-pocket costs and exclusions for many categories of cases or individuals result in relatively small out-of-pocket costs and, probably, limited behavioural impacts.

Alternative delivery arrangements, such as Health Maintenance Organisations (HMOs) and Preferred Provider Organisations (PPOs), can reduce utilisation by making medical care providers financially responsible for their decisions and by limiting consumer choice of provider to those willing to abide by the rules of the organisation. Such arrangements rely on market incentives rather than insurers' controls or government regulations.

A plethora of new delivery arrangements has the potential to reduce expenditure through the more efficient provision of services. Among these new arrangements are: diagnostic imaging centres, pain clinics, freestanding cancer centres, birth centres, hospices, home health care, fitness programmes, rehabilitation centres, ambulatory care centres, physician group practices, HMOs, PPOs, freestanding ambulatory and surgery centres, alcohol and drug abuse centres, mental health facilities, nursing homes, and independent clinical laboratories. Expenditure can be reduced through incentives for efficient provision (HMOs), reduced reimbursements for volume guarantees (PPOs), through the substitution of less medically intensive levels of institutional care (nursing homes for hospitals), outpatient for inpatient care (freestanding clinics of various types, home health care) or through preventive medicine.

The savings potential of many of these new delivery arrangements depend on whether they are substitutes or add-ons to existing services, and on methods of reimbursement and coverage rules. HMOs and ambulatory surgery centres have been shown to lead to significant reductions in hospital expenditure. There has been considerable interest in HMOs because for a fixed expenditure per year per enrollee, the HMO is responsible for all care. Hence, HMOs have incentives not only to limit spending but to keep enrollees healthy. Research on HMOs has shown that the main reason they are 10-40% cheaper than fee-for-service medicine, is that hospitalisation costs, largely because of fewer admissions, are reduced. Questions have also been raised in terms of whether HMOs enroll healthier individuals and the technical capacity of governments to establish capitation rates for high-risk groups.

Virtually all EC countries are restricting medical school enrolments, and in some countries new physicians are able to receive insurance billing numbers only for underserved areas. Countries are trying to reduce excess hospital beds in a variety of ways, including conversion to long-term care beds and some cases (e.g. Belgium, Germany, the Netherlands) by limiting costly intensive-care beds. Several countries are developing more effective planning systems and technology assessment is receiving increased attention. Countries

are putting more effort into prevention, lifestyles, and measuring outcomes. Increased attention is also being devoted to utilisation review, both from cost and quality perspectives. Tougher reimbursement systems require monitoring to prevent fraud and abuse. Nevertheless, in many EC countries formal quality assurance systems are weak or non-existent. Truly effective cost-containment can be achieved only if quality of care and health outcomes do not suffer.

Narrowing programme boundaries through changes in eligibility standards or benefits covered can also reduce expenditure. Affluent groups can be dropped from coverage and marginal benefits eliminated or reduced. In certain countries, more affluent groups are given the option to buy public or private coverage with little or no public subsidy. Other countries have reduced benefits in areas perceived as marginal (spa treatments, certain pharmaceuticals) and/or have provided incentives for the use of cost-effective preventive services and healthy lifestyles. These activities are taking place through social insurance systems, public health programmes, and direct regulation of individual behaviour (e.g. seat belt laws, smoking restrictions in public buildings, etc.). Freedom of choice of medical care providers can also be reduced to encourage use of lower cost providers.

There have however been few, if any, major changes in hospital or physician service benefits. Marginal new benefits such as hospice care have been added in some countries and new therapies such as liver and heart transplants have been covered for certain population groups. While there do not appear to be substantial changes in benefits covered, countries are increasingly adding economic efficiency criteria to the "medically necessary" criteria that are generally employed to establish coverage of new procedures. Increased attention is also being devoted to denying coverage for medical procedures that are no longer deemed to be medically effective.

Limiting freedom of choice of physicians or hospitals is prevalent. Several countries (e.g. the United Kingdom, Denmark, Spain, Ireland) currently limit choice of either generalist or specialist physicians. Limitations of freedom of choice in terms of using physicians as gatekeepers and/or limiting coverage to only lower cost providers are features that are inherent in efficient alternative delivery systems such as HMOs.

Health care expenditure can be reduced or revenues enhanced through a variety of financing changes. Overall budget controls can be put into place by establishing a closed-ended annual appropriation. Such appropriations can be established to limit total health spending, national government spending or spending for particular types of services. The issues here are the allocation of the total in a way that promotes efficient resource use and the potential for cost-shifting. If costs are shifted to local governments or consumers, total medical costs or indeed total governmental costs may not be controlled. Similarly, expenditure can be closed-ended through health care voucher approaches, whereby individuals would be given a voucher of fixed value to purchase private health insurance. By purchasing from the most efficient entity or delivery system, the consumer gets more services and the government's financial liability is limited to the voucher amount. The key issues with vouchers, like HMOs, are establishing the capitation amounts, a series of problems of adverse selection if the government remains the insurer of last resort, the necessary regulation of the private sector, and the potential for cost-shifts to beneficiaries and local governments.

Other financing approaches that increase revenues include raising existing or introducing new taxes, raising or introducing premiums, and eliminating tax subsidies for the purchase of insurance and/or health care services.

## Conclusions

Over the last decade budget pressures in particular have led governments to become increasingly concerned with value for money. Much of the policy emphasis has shifted from access to efficiency. There is increasing evidence that the significant differences both within and across countries in spending and utilisation and intensity of services cannot be fully justified on the basis of quality and health outcomes. There is a growing body of evidence that indicates a widespread inappropriate use of hospitals and certain surgical and other diagnostic services.

Substantial savings could also be achieved through reimbursement reforms. Current reforms and future policy choices both involve governments, either directly as the principal supplier of resources and finance, or indirectly in terms of its regulatory power. There are a number of reasons for this influential role, which is likely to continue. In the first place, the highly publicised successes of modern medicine over the past 40 years have conditioned the public to expect a technical solution to each and every perceived health care problem. Over a very wide range of illnesses, this expectation has been warranted. High and increasing success rates have encouraged patients to accept nothing less than a successful outcome. In those areas where it is known that technical "cures" do not yet exist, it has become difficult to admit that, given sufficient time and resources, one cannot be found. Such an attitude has not been discouraged, whether by consumers, practitioners, researchers or financing authorities. Nevertheless, in the context of these current expectations, technological developments and changing population composition are forcing governments to make difficult decisions concerning the financing of health services and the rationing of certain technologies.

Second, pressure for government involvement persists because the provision of health care is regarded as a social good. The financing of health care services is a collective activity and its provision, in almost all countries, is assured by the State. This arises not only because of the need to provide insurance against catastrophic risk, but also because the provision of health care has become increasingly part of an inter-generational transfer from the working to the retired population whose health needs become greater as they age. Added to this task of providing general social insurance is the explicit desire on the part of all EC countries to ensure universal coverage and equality of access.

Third, and in association with the expanding technology, it is clear that strong economic forces are involved. Communities are generally willing to devote an increasing proportion of their rising income to the consumption of health care services. The public appears to be generally satisfied with their health systems and happy to see their continued expansion. But policy-makers are concerned about the extent to which either this growth, or the satisfaction with it, reflects the open-ended way in which health care is financed, the pressures exerted by supplying professionals, or a lack of cost-consciousness on the part of the consumers and providers.

Finally, in those areas of health care systems where private provision and market incentives play a significant role, governments have not been willing to leave the outcome to the completely free play of market forces. For

competition to work a certain amount of government oversight is required. The consumer is, to a considerable extent, protected from the consequences of his or her ignorance, minimum quality assurance is prescribed, and reimbursement rates for suppliers approximating some concept of efficient delivery are established.

Together these influences add up to a large and growing demand to which governments and policymakers must respond. Many of the benefits of modern medicine cannot be quantified in terms of money, life expectancy or other social, medical or economic terms. There is also a growing ethical element in the decisions which must be taken. Reductions in pain and suffering, in premature deaths and in deformities, together with an increased capacity for work, leisure and enjoyment have all contributed to a high standard of living and an improved quality of life. Modern medicine has bestowed tremendous benefits on society. But the exigencies of budgets force policymakers to interpret the value which society wishes to place on these considerable but often intangible benefits, and to weigh their priority relative to other community goals.

## BELGIUM

### **Administrative Structure**

Like France, Belgium does not have one system of social insurance for health care. The sickness funds are the administrative units which reimburse the insured and the institutions which provide care. The employees of the Belgian railway and their dependents and seamen and their dependents have separate insurance arrangements.

The administrative structure of the Belgian health care system is very complex. At the national level there are seven ministries involved in national policy making, guidance and control in the care field - Labour, Public Works, Defence, Agriculture, Education, Public Health and the Family, and Social Welfare. Of these seven ministries, the Ministry of Social Welfare is of primary importance with regard to general social insurance. Social security contributions, including health care, are paid to the National Social Security Organization, which divides the monies amongst the various benefit programmes. The health care revenues are given to the National Sickness Insurance Institution (INAMI) which divides it amongst the six groupings of sickness funds.

There are 600 local government areas (the smallest unit has 5 000 inhabitants) and these bodies have an important role in the provision of health care (e.g. public hospitals).

Two types of additional insurances are offered by the sickness funds, 'compulsory-voluntary' insurance and voluntary insurance. Compulsory-voluntary insurance is not laid down in statute law but membership of a particular sickness fund obliges the insured person to contribute towards the cost of provision. Voluntary insurance is provided by the funds to 'top up' statutory benefits. The activities of the private insurance market are small.

The effect of the various statutory schemes is that over 99% of the population have social insurance cover. However the extent of coverage varies between the various groups. In particular the self employed and their dependents are covered for heavy risks only (hospital care, the social diseases (TB, cancer, etc.)).

Those not covered, in part or in whole, by the social insurance schemes have access to the social aid programme which is means tested.

### **Contributions by the insured**

The contribution rates for health care social insurance are of two types: one for general scheme beneficiaries (who have full cover) and one for heavy risk beneficiaries (i.e. the self-employed who only have partial cover). The programme for the self-employed is financed by a contribution related to their income.

Railway workers and seamen pay different levels of contribution.

The contribution rates finance medical care only.

#### **Government contributions**

The State meets 95% of the cost of treating the social diseases (cancer, TB, poliomyelitis, mental illness and handicap). For ordinary medical care a State subsidy of 27% of the budget of the insurance institutions is paid to INAMI. The State pays contributions to sickness funds on behalf of the unemployed. Local Government also finances social aid health care benefits.

Despite this substantial involvement in the financing of care, the State exercises little control over expenditure. The sickness funds are autonomous and decentralized.

The private insurance and the additional insurance provided by the sickness funds and firms enable the insured to meet the costs of care which are not covered by social insurance. The extent of social insurance reimbursement is determined by the "ticket modérateur". Generally patients pay 25% of the cost for primary care. Old-age pensioners, orphans, widows and invalids can get a higher level of exemption from the fees. A lump sum charge is levied for pharmaceutical products, with exemptions for the pensioner and the other groups cited above. Hospitalization is free.

#### **Benefits**

The primary health care benefits of the Belgian health care insurance system consists of cash refunds of part, and, in some cases, the whole of the cost of care, as set out in the preceding section. The extent of benefits is comprehensive in the general scheme and limited in the scheme of the self-employed. There are no duration limits on benefits.

The insured person is free to choose his doctor provided the physician is qualified to practice in Belgium and registered on the Medical Council's list. The doctor's pay is the result of negotiation between the profession, the funds and the hospitals. The community doctor and the hospital doctor are paid per item of service. The full fee is paid to him by the patient who then gets a refund from his fund at the appropriate rate - generally 75%. Specialist care is available out of hospital on the same financial basis although some service provided by specialists (e.g. X-rays and other diagnostic tests) are reimbursed only if they are carried out in hospitals. Dental care is provided on the same basis although false teeth are only available on these terms after the patient has reached the age of 50.

The cost of pharmaceutical products is partially reimbursed. Distinction is made between drugs made up in the pharmacy and branded drugs. For the chronic sick the prices are reduced.

The cost of hospitalization is met fully by the funds for the first 40 days of treatment. Since 1964 legislation has been in force to regulate the daily maintenance charge which public and private hospitals are permitted to charge. This charge covers depreciation, administration, hotel costs, nursing and maintenance staff costs but excludes payments for drugs and physicians' services. The patient can elect to have superior (hotel) accommodation but is obliged to meet the cost of this out of his own resources.

The cost of accommodation has been raised to reduce social insurance costs, and the charges for superior hotel accommodation have been raised for each day of care.





The average length of stay for acute cases in 1962 was 12.9 days. It went up to 14.2 days in 1968 and down to 12.6 days in 1976.

## DENMARK

### **Administrative Structure**

The responsibility for financing and providing health care in Denmark is divided amongst three levels of government: central, county and municipality.

The freedom of local government units is circumscribed by central government legislation. The central government determines which services will be provided by local government and also often determines the quantity and quality of provision.

Regional and national government provides care and rehabilitation for alcoholics, epileptics, the blind and the deaf. In time central government will control only the Copenhagen University hospital (the most specialized unit in Denmark) the Finsen Institute, and the national diagnostic microbiological centre.

The relationship between the Government and doctors is governed by several bodies. Each county appoints a committee of four to six members whose objective is to facilitate cooperation and coordination between physicians, hospitals and the other health and welfare services. In addition there is a Central Negotiation Committee of seven councillors which is responsible for the conclusion of agreements with the professional bodies of doctors, dentists and other health care professions. These agreements have to be confirmed by the Ministry of Social Affairs. The supervision of the interpretation of these agreements is carried out by a committee consisting of three members of the Central Negotiation Committee and three representatives of the Danish Medical Profession. Similar machinery has been created for some of the other health professions. Where the parties fail to agree, arbitration machinery takes over and its decision is binding on both parties. Whilst general practitioners are in private practice, hospital physicians are government employees.

As the Ministry of the Interior is concerned largely with the supervision of local and regional government most of the health care system is in its domain. The Ministry of Social Affairs is involved in the regulation of professional fees and the provision of health care services which have not, as yet, devolved to local government. Neither of these ministries employs members of the health professions. All professional advice is provided by the National Health Service. This institution is directed by a doctor and offers health care advice to all the ministries and the local government authorities involved in the planning, organization and management of the health service.

### **Coverage**

Since 1973 the coverage of the Danish health care system has been 100%. There are two membership categories. Group 1 membership entitles the person to comprehensive health care at almost zero cost. Group 2 membership entitles the person to get free hospital care, limited reimbursements for primary care and a free choice of doctor in primary care. The dividing line between the two types of members used to be defined by a means test but since April 1976 there has been a complete free choice between Group 1 and Group 2 membership. In October 1977 91.4% had Group 1 membership.

There is a private health care insurance market. This is declining in importance as the size of the partially covered category declines.

Private health hospitals are regulated closely by the government which usually finances much of the care which is given.

The Danish health care system is tax financed. The counties can levy a proportional income tax at whatever rate they think necessary. The use of the other local taxation instrument, the land tax, is limited by agricultural pressure groups and the maximum tax rate that can be levied is 2% of the value of the estate.

The central government uses a system of grants to equalize and supplement local resources. The grant system is based on a notion of 'demands and needs'. A formula which incorporates population, age structure, and load variables is used to provide block grants to the local authorities. In 1976/77 approximately 40% of the counties' expenditure was met by such block grants.

Danish central government can control local government expenditure on health care in at least two ways. Firstly it can control the level of the 'block grant' to affect local spending power. Secondly it can control the entry of doctors into the health service by restricting the number of available established posts for general practitioners and hospital doctors.

Primary care is provided by general practitioners, the majority of whom are either in joint practice or a group practice. Some practices have auxiliary personnel work in them.

Pharmaceutical products are provided by a privately owned system of pharmacies and drug prices are regulated. The patient pays up to 50% of the cost of pharmaceutical products depending on the category of drug.

#### Doctors

The fees paid to general practitioners are on a capitation basis with additional fees paid for certain types of service and out-of-hours care. The hospital doctor is paid a salary. Doctor remuneration is negotiated in the administration machinery outlined above.

Hospitals are financed out of taxation.

## FRANCE

### **Administrative Structure**

At the national level the Ministry is involved in the central planning of hospitals, the subsidization of schemes, the fixing of doctors fees and pricing of pharmaceuticals. Each of the 16 regions and 95 departments, plus 4 overseas departments of France are involved to a certain extent in the finance and provision of health care.

### **Coverage**

France does not have one system of social insurance for health care. However, the affect of the general and specific schemes is such that the schemes cover 98% of the population.

### **Sickness Funds**

The majority of the population (all salaried workers in industry and trade) - over 75% - are compelled to join the National Sickness Insurance Fund.

The administrative structures of the funds vary. The National Sickness Insurance Fund is directly supervised by the Ministry of Health and the Ministry of Finance. At the regional level there are sixteen regional sickness insurance funds which carry out a variety of functions. The local or primary funds are financially autonomous. Where convenient their area coincides with that of the Department. These funds are responsible for the initial registration of members and dispense benefits. The primary funds may have local branches which serve particular areas.

Private associations, limited companies and the mutual societies provide additional health care cover. These companies provide insurance against risks which are only partly covered by the national system.

The public assistance aspects of health care administered after a means test, provide health care for a small proportion of the population (2%) who have no social insurance rights.

Theoretically the sickness funds have to balance income and expenditure by estimating costs and income in future periods. The contribution rates of the insured are fixed by the government in consultation with the sickness funds. The funds finance the payment of the hospitals and indirectly the payment of the health professions (doctors, nurses, pharmacists, midwives, dentists, physiotherapists, etc.) and the drug bills of the insured.

### **Contributions**

A contribution rate for those in the general scheme is levied on wages up to an earnings ceiling fixed annually by decree. Employers contribute approximately 12% and employees 3%. The contributions are paid to finance benefits in cash and in kind in cases of sickness, disablement and death. The contribution rate to the special schemes differ from those of the general scheme. Central government regulates investment in new hospital facilities according to criteria associated with regional disparities in hospital bed endowments. Public hospitals can borrow money on the open market and can acquire subsidies from central government. They cannot, however, make a profit.

## Benefits

The extent of the benefits is comprehensive and there is no time limit on them. Once a patient decides to visit a doctor his behaviour is regulated by a code of practice which lays down basic principles for liberal medicine in France - freedom of the patient to choose his doctor, freedom of the doctor to prescribe, medical confidentiality, direct payment of fees by the patient to the doctor. Typically a patient will choose which doctor to visit, will pay him the appropriate fee directly, and obtain reimbursement in part about a fortnight later from the office of the local insurance fund.

The insured's participation in the cost of treatment varies according to the type of treatment and the standard of benefit received. The 1987 rates are 30% of the cost of most pharmaceutical products and 25% of the cost of visits, consultations and other services provided by doctors and other medical staff outside hospitals, 20% of the costs of practitioners and tests in public and private institutions, 20% of the costs of short-term hospitalization in public and private institutions, and zero for maternity and major surgery.

Free health care is provided under certain circumstances:

- if the insured or his dependents are hospitalized for more than 30 days or if they undergo major surgery;
- when the insured person is in receipt of supplementary benefit;
- if the insured obtains an orthopaedic appliance of a specified nature;
- if the person is in receipt of a sickness benefit established list on the advice of the Medical High Committee or has a prolonged and expensive illness;
- recipients of an invalidity pension or an old-age pension paid to an invalid after his 60th birthday;
- those in receipt of industrial accident benefits who are certified at not less than 66 2/3% incapable of work.

These exemptions apply even if the recipient is in work and they extend to his dependents.

Generally the patient pays the doctor and then is reimbursed in part or in whole depending on the characteristics, by the local office or in the sickness fund of which he is a member. Hospitals are paid directly by the funds with contributions from patients as indicated above.

The level of fees paid to doctors for work outside hospital is regulated by a national agreement. At present the majority of such doctors in the community are parties to the fee conventions, i.e. they charge the agreed fees. A minority of the profession (less than 5%) are not covered by the conventions and charge higher fees. Also, highly qualified doctors who are parties to the conventions may charge higher fees. Patients receiving treatment from such doctors get 75% to 100% of the agreed convention fee and pay any excess out of their own resources.

### **Private insurance**

Private insurance cover is used to part-finance medical care provided under the social insurance scheme but not fully reimbursed under this scheme.

About 50% of those who are compelled to be members of sickness insurance funds are also registered with a private insurer.

### **Hospitals**

If the community doctor refers the patient to hospital, the patient may get treatment in either a public hospital or a recognised private hospital. Hospital treatment is provided by doctors different from those who do the initial diagnoses outside the hospital. This, and the opportunity to acquire specialist treatment outside hospitals, provides opportunities for duplication of diagnosis. Post-hospital care is provided in nursing homes and in the private home and the reimbursement conditions are the same as those for hospitals. The costs of nursing care in the community are reimbursed in the same way as the costs of primary care.

Hospital beds are provided by a variety of institutional arrangements: public institutions, private non-profit making institutions, and private profit making institutions (largely owned and operated by doctors and usually smaller than public hospitals). The public hospital system is structured and has four layers. There are about 900 public hospitals.

### **Doctors**

The fees paid to doctors who work outside the hospital are governed by the national agreement. Each treatment mode is assigned a key letter and coefficient which determines the payment level, i.e. the doctor is paid by performance or fee per item of service. Doctors in public hospitals are paid in relation to the number and nature of medical acts that they perform. This remuneration is fixed at a level between a minimum and a maximum and tends to equate payment rates. However, from the legal point of view, they cannot be regarded as salaried.

## GERMANY

### **Administrative Structure**

There is a tripartite administrative structure of the health care sector in the FR of Germany. The Federal Ministry of Youth, Family and Health Affairs and the Federal Ministry of Labour and Social Affairs concern themselves with the general supervision of the health care system. The next tier is the state Ministry of Work and Social Welfare which is responsible for the enforcement of the law and regulations of the state, which is responsible for administering the health services. The lowest administrative authorities are the local authority health boards, which are in charge of caring for specific groups (e.g. the handicapped, the chronic sick, addicts, etc.), provide specific services (school health, public health and sanitary inspection) and supervise all hospitals.

The sickness funds are grouped into 8 state and 1 national federation. They are self-governing bodies with a board of directors and an assembly of representatives who are chosen from the insured and employers. The funds provide roughly the same range of benefits. Those people who are not covered by the social insurance scheme and who are without private insurance cover or the means to buy health care, are eligible for benefits under social security, which is means tested, and can meet the full cost of care. It covers about 1% of the population and is administered by each state.

The majority of the population - some 90% - are members of a social insurance fund. All workers below an earnings ceiling are compelled to join the health care social insurance scheme.

Those not covered by social insurance and the social aid provision of the state have to depend on private insurance and private resources. This together with the fact that those covered by social insurance can 'supplement' their State benefits from private income, means that there is a substantial private insurance market for health care.

The unemployed's contributions are paid for him by the unemployment scheme. Pensioners are obliged to be registered with sickness funds. However their health care insurance is free only if they were insured with the statutory social insurance scheme for at least half the period between 1.1.1950 and their request for retirement. Those not meeting this criterion have to pay contributions if they wish to receive health care benefits. The criterion which determines contribution and membership is the level of remuneration. Workers earning in excess of the ceiling can become voluntary members of the social insurance scheme.

### **Finance**

The system is financed from five sources: compulsory sickness funds, (the principle source) private insurance organizations, private voluntary organizations, public funds, and private resources. The sickness funds have to try to balance income and expenditure by estimating the cost in future periods and adjusting, subject to government agreement, the contribution rates of the insured. The funds finance hospital and primary care by contracting with the providers and financing them directly.



### Contributions by the insured

Contribution rates vary between the eight groups of sickness funds from approximately 7.0 to 15% and this levy is divided equally between the employer and the employee. These contributions finance benefits in kind (health care) and in cash (sickness, maternity and deaf benefits). Contributions to the finance of health care come from the state and the central government. The latter contributes to maternity insurance and subsidizes the schemes for mine workers, pensioners special insured groups (e.g. students and the armed forces).

The Central and State governments have become increasingly involved in measures aimed at meeting the deficits of the hospital service and improving the quality and geographical distribution of hospital facilities. The flow of government resources into the health care system has risen rapidly in the recent past.

Private insurance is used to finance the expenditure of those with no social insurance cover. About 5% with compulsory social insurance cover elect to have 'superior' treatment (e.g. hospital accommodation in small wards or private rooms). Those covered by social insurance get benefits in kind (i.e. there is no third party pays system as in France) and direct contributions by patients towards treatment costs are limited. The insured pay a nominal amount per item for pharmaceutical products and spectacles (children and veterans are exempt). The insured also pays part of the cost of appliances and for some types of dental care. The latter change was introduced as part of a cost-cutting exercise in 1977 together with changes which resulted in the non-reimbursement of certain minor medicines.

In the event of illness the patient can choose his doctor freely. The patient can also seek medical advice from a specialist registered with a fund.

All doctors can conclude a contract with a sickness fund to provide care for patients covered by social insurance. This relationship, between the fund, the doctor and the patient, is regulated by federal law. There is at least one doctors' federation in each state. All doctors treating sickness fund members are obliged to meet the health care demands of fund members.

As proof of fund membership and as evidence of his right to claim free treatment, the patient must hand over a medical voucher at the first consultation. These vouchers are issued to the insured by the funds and entitle the holder to claim the services of a doctor for three months. If the patient is deemed to be in need of hospital care this usually involves in-patient treatment. Out-patient hospital facilities in Germany are unusual although efforts are being made to alter this aspect of health care provision. Hospital treatment financed by the funds can be carried out only in recognized hospitals, which have contracts with the funds. Once in hospital the patients' ailment - if necessary - may be diagnosed anew: a wasteful duplication of doctors' time and testing procedures.

### Hospitals

The hospital system is structured on a state basis and hospital care is provided in a variety of institutional settings. With regard to acute care, the state and local governments own about 50% of beds and 40% of hospitals. A further 40% of hospital beds and 40% of hospitals are owned by voluntary bodies. Other hospitals which unite TB, chronic sick, psychiatric and

handicapped cases, etc., are owned in a similar pattern. Private units tend to be numerous but small and the bulk of the care takes place in state and voluntary hospitals.

### Doctors

Doctors (specialists and GPs in the primary care sector) are paid a fee per item of service. In the case of doctors working for the sickness funds, the fees are determined by negotiations between the funds and the doctors' federations. The structure of hospital doctors' pay varies according to ownership of the hospital. Doctors working in public hospitals are generally paid a salary and senior doctors can do private work. The same payment system operates in voluntary hospitals. In private unit fees are charged by the doctor and paid by patients.

Not only is the doctor stock in the FR of Germany high by European and indeed world standards, its rate of growth is rapid. Since 1972 a numerus clausus has provided a means of controlling the supply of doctors.

## I T A L Y

### **Administrative Structure**

The old health care scheme, provided by 200 sickness funds and giving limited coverage to most of the population is being replaced by a comprehensive national health service. This process of replacement is incomplete and, as a result, the Italian health care system is complex.

Three central government ministries are involved in the running of the health service in Italy. The Ministry of Health regulates the provision of health care by the regions, provinces and municipalities and allocates finance to the regional authorities. The Ministry of Public Works controls the finance of new hospital construction except in the South where there is a special agency. Government subsidies for health care are provided by the Ministry of Health and the economic ministries.

The next layer of administration is the regions, of which there are 20, varying in population from 100 000 to 8 million, with the power to create and implement laws provided they do not contravene the Constitution or the 'fundamental' laws of central government. The regions finance (from central government subsidies) preventive health care services, a school medical service, vaccination and the training of auxiliary health personnel, and they distribute subsidies from the National Hospital Fund to local hospitals.

There are 94 provinces in Italy and few have much political power. The main health care function of the provinces is to ensure that the municipalities are able to provide health and welfare services and to provide care for psychiatric patients, to manage the public health laboratories, and to care for the unemployed with TB. In some ways their role is duplicated by the municipalities, of which there are about 8 900. They provide preventative services (e.g. vaccination, the school health services), clinics for municipal doctors and midwives.

### **Sickness funds**

Legislation passed in 1974 and 1977 will result in the abolition of the sickness funds and their replacement by a 'national health service' financed by earmarked taxation and provided by the Regional authorities and the professions. This reform is being implemented gradually and at present the funds continue to operate as agents of the State in collecting insurance contributions and, to a limited extent, as providers.

Coverage will be complete when the 1974-77 legislation is replaced by the National Health Service. This replacement is still being debated by the Italian Parliament.

Private insurance for health care is offered by four companies. Religious organizations are important in providing care (nursing services) and facilities (private hospitals).

Nominally coverage is complete but the provision of facilities is very unequal and so coverage in different parts of the country can mean radically different things with regard to access to quality and quantity of health care.

## Finance

The funds collect contributions and use part of this revenue to pay doctors and pharmacists. The rest of the revenue is paid to the Ministry of Health which allocates these funds to the regions who are responsible for the finance and provision of the hospital services.

This allocation is a matter of dispute: there is no agreed formula as yet and allocations appear to be made on an ad hoc basis with regions able to meet deficits by extensive borrowing on the capital market.

## Contributions

The insured person pays a contribution rate of approximately 0.5% of his earnings. The employers contribution rate varies from one economic sector to another.

In the three schemes for the self-employed a fixed amount is paid by the central government for each insured person. At the moment, until the National Health Service scheme is passed, there are no substantial changes in the government finance of health care.

The National Hospital fund finances hospital care for insured people. The responsibility for this task was transferred from the sickness funds to the Regional Authorities. A proportion of all sickness fund contributions paid by employers and all other subsidies from other minor institutions, municipalities and provinces, are paid to the National Hospital fund for distribution to the regions.

## Benefits

All benefits supplied under social insurance for health care are free of charge.

The benefits of the health care insurance scheme consist of benefits in kind. The benefits are comprehensive in principle and there are no time limits.

The providers, doctors, pharmacists and nurses, have agreements with the funds to provide services at given prices. The doctors working in the community are paid on a capitation fee basis whilst hospital specialists are paid generally on a part-time or salary basis.

The patient has a free choice of doctor provided the one used is contracted to the fund. The patient may visit a general practitioner or a specialist, although access to the latter is usually regulated by the general practitioner. The fees paid are regulated by a national agreement between the providers and the financiers. Doctors are usually in solo practices, although some group practices with general and specialized physicians together. The extension of group practice is favoured by the government.

## Hospitals

The reform of the health-care system has also affected hospital finance. Private hospitals are financed on a daily-rate system as they were prior to the reform. However, public hospitals are given budgets and encouraged to operate within the budget constraints.

The hospital bed stock of Italy grew from 9.75 beds per 1 000 population in 1965 to 10.58 per 1 000 population in 1975. Over 80% of the bed stock is in public hospitals. The rest is in private institutions, many of which are run by religious orders. The average occupancy rate is around 80%.

One of the primary objectives of the new Italian health-care system is to achieve a more equitable division of resources between the regions of the country.

#### Doctors

Prior to the recent reform of the Italian health-care system many doctors were paid on a fee per item of service basis. As a result of the recent reforms non-hospital doctors are paid on a capitation basis and the level of capitation fee is regulated by national conventions. Hospital doctors in public institutions are paid on a salary basis with those having part-time contracts supplementing their income with private practice fees.

The doctor stock has grown rapidly because of a policy of open entry to medical schools (all those who matriculate have the right to the higher education of their choice).

This growth of an already large doctor stock is uncontrolled and likely to create problems for Italy and other members of the EEC.

## I R E L A N D

### **Administrative Structure**

The Department of Health in Dublin supervises the operation of the Irish Health service and carries out a long term planning function.

The task of administering the day-to-day running of the Irish health service has been devolved to eight Health Boards. These bodies consist of local authority elected members, who are in the majority, and representatives of the medical and ancillary health professions. The latter are elected by the professions, although the first representatives were appointed by the Minister. The Boards coordinate their activities with the local authorities and the voluntary health bodies. The work of the Boards is divided into three broad programmes covering respectively community care services, general hospital services, and 'special' hospital services (for the mentally ill, the mentally handicapped and geriatrics).

The community care component of each Board's work covers preventive health activities, general practitioner services, social workers, dental services, and public health nursing services. These services are administered at the local government level. Various local committees of the Board keep it in touch with local opinion.

### **Finance**

Over 500 000 people are covered by private health care insurance provided by the monopoly, Voluntary Health Insurance Board.

Health care is financed by general taxation. There is a very small contribution paid by those in the limited eligibility category. There is no payment by employers. Charging is limited to pharmaceutical products.

The major type of expenditure is hospital care: over 60% of the population get no general practitioner service from the government service.

The amount of private expenditure is clearly quite substantial as the majority of the population have no primary care cover and 15% of the population (generally the most affluent) are outside the limited and full eligibility categories.

### **Benefits**

The 30% of the population who are card holding members of the General Medical Service (GMS) get a wide range of health care benefits. The card holder can apply to register with a General Practitioner. Once accepted by the physician the card holder is eligible for the same services as provided for private fee-paying patients. Most doctors in the west practice alone, but in the east group practices are more common. The card covers the cost of all prescribed pharmaceutical products made up by pharmacists who are members of the GMS. The card holder is eligible for free out-patient and in-patient care, provided the latter is in a public ward. Hospital care can be provided in any Health Board hospital or any other approved hospital. Home nursing services are available for all card holders, particularly the elderly. In theory free dental care is available, but in practice such care is often absent due to a shortage of dentists.

Those with limited eligibility status get no general practitioner benefits from the government schemes. They are eligible for free in-patient hospital treatment in a public ward and free out-patient treatment if the patient is referred by a doctor. The hospital used by this group of patients must be a Health Board approved institution. Those people who opt for private or semi-private hospital treatment get only part of the cost of such care. The balance must be paid by the patient or with benefits derived from the membership of the Voluntary Health Insurance Scheme. The costs of pharmaceutical products are covered in part for those in the Limited Eligibility Scheme and free maternity and infant welfare benefits are provided.

The Voluntary Health Insurance scheme offers two main types of policy: a policy for hospital costs and an optional policy to cover non-hospital bills.

#### **Hospital fees**

Health Board hospitals are financed out of general taxation on a budget basis. The Voluntary Hospitals are paid on a budget basis.

#### **Doctors**

General practitioners in the GMS are paid by the Health Boards on a basis of a fee per patient contract. Hospital doctors employed by the Health Boards are paid a salary. Those doctors working in the Voluntary hospitals are paid on a sessional basis for out-patient clinics and under a 'pool' system for in-patients. Pool payments are payments per day for each public patient treated in the hospital. The 'pool' of these payments for each hospital is divided between the consultants on an agreed basis.

## L U X E M B O U R G

### **Administrative Structure**

The health-care system of Luxembourg is under the supervision of the Ministry of Labour and Social Security.

### **Sickness Funds**

There are five funds for salaried employees and two for wage earners. The funds are managed by elected committees consisting of representatives of the insured and the employers. The funds operate under a central committee which has the power to regulate the funds and negotiate fees with health care providers. The committees consist of the presidents and vice-presidents of all the sickness funds in Luxembourg.

All active workers, all those in receipt of a pension or an annuity, and all dependents of insured members are covered by compulsory health care insurance. This means that 99% of the population are covered by health care insurance. The small number of people who are not covered by the legislation are eligible for benefits under the means-tested Social Security programme.

### **Contributions**

Wage and salary earners have to pay equal contributions of approximately 2% of gross earnings up to four times the national minimum wage to finance in-kind benefits (cash benefits are financed by an additional contribution). The contribution rates of employers or pension funds is the same as that of employees or pensioners. Three systems for mutual financial assistance have been established. One of these is concerned with in-kind benefits and the result is that any fund with a surplus pays it to funds in deficit.

The government pays 50% of the administrative costs of the sickness funds and pays subsidies particularly in the case of congenital malformations and costly illnesses. Also the government pays the costs of confinements and meets any deficits in pensioner contributions when such contributions do not cover the costs of health care.

### **Private insurance**

The role of private health care insurance in Luxembourg is small and concerned with supplementing social insurance benefits. The expenditure of the private sector is equal to about 2% of the total cost of health care in.

### **Benefits**

The patient pays the doctor and is reimbursed by the sickness fund. For medical consultations the patient is reimbursed 95% of the cost, and for a home visit by a doctor is reimbursed 80% of the cost. Hospital care is free except for a daily contribution for accommodation of approximately 170 BF paid by the sickness fund. Drugs are reimbursed in three different categories. Certain minor drugs are non-reimbursable, most are reimbursed 80% and expensive drugs or drugs for the chronic sick 100%. Drugs for hospital in-patients are free.

Services are provided for the insured by doctors and hospitals which are covered by obligatory contracts with the funds. This care includes general and specialist care, hospitalization, laboratory services, maternity services, dental care, appliances, transport and pharmaceutical costs.



### Hospital beds

Hospitals in Luxembourg are approximately 60% publicly owned and 40% privately owned. The government controls hospital expansion and a national plan exists.

### Doctors

Doctors are paid on a fee per item of service basis and the fees are negotiated between the central committee and the doctors' association. The exceptions are hospital doctors in the central hospital in Luxembourg who are employed directly by the hospital on a salary basis.

Specialists generally work in private practices. There is no medical school in the country.

## NETHERLANDS

### **Administrative Structure**

The administration of the social insurance health care system is decentralized and in the hands of sickness funds. The government's role in health care is limited to the regulation and approval of fees for doctors and hospitals, the planning of the system and the regulation and approval of the contribution rates to the funds. The minister determines the premium for health insurance on the advice of the Sickness Funds Council. The Minister can veto agreements made by the funds and approved by the Sickness Funds Council, but this is rare.

### **Sickness Funds**

All sickness funds are supervised by the Sickness Funds Council, made up of 36 members (equal representation of the sickness funds organizations, health care providers, employees, employers and nominees of the Minister of Social Affairs and Public Health). The general scheme is administered by 71 sickness funds federated into four national organizations. The federations combine to form the Joint Association of Sickness Funds, e.g. to negotiate doctors' fees. The heavy risks social insurance programme is administered by the sickness funds, by private insurers and by public law bodies entrusted with the health care protection of civil servants. All three sets of bodies are supervised by the Sickness Funds Council.

An independent Prevention Fund is concerned largely with research and shares out resources for various preventive medicine institutions. These monies are paid to it by the bodies administering the general scheme and the heavy risks scheme.

The Cross organizations provide nursing services and are important in organizing preventive care. There are three Cross organization (Green, White-Yellow and Orange-Green). 11 out of 13 million Dutch citizens are covered by these organizations and they are funded out of subscriptions (approximately 30%) and government subsidies.

General scheme benefits can be supplemented with voluntary additional cover from the sickness funds and with private insurance. The 30% of the population who are not covered by the general scheme buy private care. As a consequence the private health care insurance market is quite large.

### **Coverage**

The general scheme offers full coverage and membership is compulsory if the employee is earning less than a specified amount. As a result of this the scheme covers 73% of the population.

The heavy risks programme offers a restricted list of benefits but covers 100% of the population.

### **Contributions**

The contributions to the general scheme finance benefits in kind. The contribution rate for compulsory members of this scheme is divided equally between the employer and the employee.

The contribution rates of the elderly in this scheme vary with the family income of the contributor.

Government contributions to the cost of health care in the Netherlands are substantial. Central government finance flows into the Cross societies and related organizations. The provinces and the municipalities also make a substantial contribution in the form of subsidies.

### Benefits

The general scheme gives its members the right to short-term medical, pharmaceutical, dental, hospital and other types of care for the insured and his/her dependents. Every insured person is required to register with a physician approved by the Fund to which he belongs. Most general practitioners work in solo practice although group practice and health centres are increasing in number and are favoured by the government. The services of the doctor are provided free of charge and the doctor is paid directly by the sickness funds on a capitation basis.

Most benefits under the general social insurance scheme are provided free of charge. Also patients admitted to nursing homes and other facilities under the heavy risk programme have to contribute.

Specialist care is provided only after authorization by the patient's general practitioner. Specialist care may be provided in hospital, in an out-patient clinic, or in the specialist's premises.

Dental care is obtained free of charge for children under four. Other persons can buy a treatment certificate at a low price, which is valid for six months and entitles the holder to free (e.g. fillings and extractions) or subsidized (e.g. the provision of false teeth) treatment. 60% of the cost of providing false teeth has to be paid by the beneficiary.

Pharmaceutical products are dispensed by chemists in urban areas and by doctors in some rural areas. All drugs and dressings are provided free of charge.

Hospital treatment for periods of up to 365 days is provided free of charge for all general scheme fund members.

Those not covered by the general scheme pay for all the health care benefits listed above out of their own resources or by private insurance. However all the population is insured against the cost of treatment in nursing homes and hospital care after the 365th day. Under the heavy risks legislation nursing home care for the elderly and the chronic sick for all the population is covered from the first day as is care in institutions for the physically and mentally handicapped.

### Hospitals

The hospitals are paid by the insurers on a daily rate system. The Central Foundation for Hospital Tariffs, under government pressure has exerted tight control on the growth of these rates. The government is seeking to acquire greater control of hospital charges for general scheme members and those who are privately insured.

Over the past 15 years expenses in the sickness insurance sector have tripled. According to the public health ministry expenses increased from 12 billion guilder in 1971 to an estimated 34 billion in 1987.

The Government's draft reform of sickness insurance includes a general 'basic insurance' to be introduced for all Dutch citizens. According to this plan each patient will have to pay 15% of the doctor's bill himself. The main question is whether and to what extent this notion of 'basic insurance' is to be implemented for dental care as well.

#### Doctors

The rate of medical school output has been regulated by the government (numerus clausus).

Doctors involved in primary and secondary care are paid on a capitation basis. The capitation fees are negotiated by the doctors and the Joint Association of Sickness Fund Organization.

## UNITED KINGDOM

### **Administrative Structure**

The Secretary of State for Social Services is responsible for the National Health System (NHS) in England. In Scotland and Wales the respective Secretaries of State are responsible, and in Northern Ireland it is the Health and Social Services Board. The Secretaries of State set general guidelines concerning the provision of health care and control the allocation of funds. The structures in England and Scotland are separate, but similar. The health service is administered at the regional level by 14 Regional Health Authorities (RHA) in England. Each RHA has at least one medical school in its area, and the RHA's role consists chiefly of NHS planning. In carrying out this role they have to coordinate their activities with and allocate finance received from the DHSS to each of the Area Health Authorities, who have the statutory responsibility for running the health services in each of the 90 English areas. There are Joint Consultative Committees with Joint-Care Planning Teams responsible at this level for the coordination of local government (who provide personal social services) and AHA activities.

The smallest administrative units are the Districts serving, on average, a population of 250 000. These units are responsible for delivering the full range of health services in the district and have a general hospital's specialist services. District boundaries are based on 'natural' catchment areas.

### **Sickness funds**

There are no sickness funds involved in the finance and provision of health-care social insurance in the United Kingdom. Since 1948 the NHS has been available for use by all residents in the UK.

### **Private funds**

Private health-care insurance covers about two million people and the market is dominated by the British United Provident Association, the Private Patients' Plan, and the Western Provident Association (non-profit making bodies). Several other bodies offer a variety of insurance policies but, although the market has become more competitive recently (as evidenced by new types of policies), the total market size is relatively static.

### **Income**

The chief source of finance for the NHS is general taxation (the Consolidated Fund). Social insurance contributions and charges to patients produce a small proportion of the total. These characteristics of the income of the NHS have changed little.

### **Expenditure**

About 90% of NHS expenditure is budget limited. A cash allocation is made out of the national budget and this includes an allowance for expected increases in costs during the year and a small allowance for real growth. These cash limits must not be exceeded. If costs rise more than expected, the real growth of the service is curtailed unless greater efficiency in the use of resources can be achieved.

## Benefits

Each patient registers with a general practitioner and most people do not change their registration unless they move to a different geographical area, although the patient has the right to choose and change general practitioner freely. Most general practitioners now operate in group practices and the number of health centres has grown rapidly in the last 10 years, as a result of government encouragement. Health centres often provide medical care (provided by doctors and nurses) and dental care. The patient's first point of contact with the health-care system is the general practitioner. The GP can refer the patient to a specialist who is hospital based. Out-patient and in-patient care in hospitals is free of charge. Access to elective care (cold surgery) is rationed by time (waiting lists), the acutely ill, in theory, gain access to care on demand. A patient's participation in the costs of care is limited. A charge is made for pharmaceutical products and there are charges also for dental care, ophthalmic care, and some appliances. All these charges are levied on the more affluent client groups with those in receipt of Supplementary Benefit, the aged, the chronic sick, expectant mothers and children being exempt from charging. No charges are made for general practitioner visits or for hospitalization.

General practitioners and pharmacists outside hospitals work under contract with the local Family Practitioner Committee of the AHA. The general practitioner is paid by a hybrid payment system: on average about 55% of the general practitioner's income is generated by capitation fees, the rest is derived from payments for items of service (e.g. vaccination and maternity care), payments related to age (seniority payments), and in some cases payments related to location (designated area allowances). The pharmacist is paid for each item made up for patients.

## Hospitals

Hospitals are financed out of NHS revenues by the AHAs who receive their monies from the RHAs and the DHSS.

## Doctors

Hospital doctors receive a salary. Junior hospital doctors often get substantial overtime payments which can result in their remuneration exceeding that of their superiors, the consultants. This outcome is the result of more militant bargaining by the junior hospital doctors. Consultants are eligible to receive distinction award supplements to their salary (about 1 in 3 receive such payments, a small number of which can double the consultant's remuneration). All salary proposals emanate from the independent Review Body on Doctors and Dentists' Remuneration. Senior consultants may augment their income in private practice outside of their NHS obligations.