European Observatory on Health Care Systems

Health Care Systems in Transition

Belgium

The European Observatory on Health Care Systems is a partnership between the World Health Organization Regional Office for Europe, the Government of Norway, the Government of Spain, the European Investment Bank, the World Bank, the London School of Economics and Political Science, and the London School of Hygiene & Tropical Medicine in association with the Open Society Institute.

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Foreword

The Health Care Systems in Transition (HiT) profiles are country-based reports that provide an analytical description of each health care system and of reform initiatives in progress or under development. The HiTs are a key element that underpins the work of the European Observatory on Health Care Systems.

The Observatory is a unique undertaking that brings together WHO Regional Office for Europe, the Governments of Norway and Spain, the European Investment Bank, the World Bank, the London School of Economics and Political Science, and the London School of Hygiene & Tropical Medicine in association with the Open Society Institute. This partnership supports and promotes evidence-based health policy-making through comprehensive and rigorous analysis of the dynamics of health care systems in Europe.

The aim of the HiT initiative is to provide relevant comparative information to support policy-makers and analysts in the development of health care systems and reforms in the countries of Europe and beyond. The HiT profiles are building blocks that can be used to:

- learn in detail about different approaches to the financing, organization and delivery of health care services;
- describe accurately the process and content of health care reform programmes and their implementation;
- highlight common challenges and areas that require more in-depth analysis;
- provide a tool for the dissemination of information on health systems and the exchange of experiences of reform strategies between policy-makers and analysts in the different countries of the European Region.

The HiT profiles are produced by country experts in collaboration with the research directors and staff of the European Observatory on Health Care Systems. In order to maximize comparability between countries, a standard template and questionnaire have been used. These provide detailed guidelines

and specific questions, definitions and examples to assist in the process of developing a HiT. Quantitative data on health services are based on a number of different sources in particular the WHO Regional Office for Europe health for all database, Organisation for Economic Cooperation and Development (OECD) health data and the World Bank.

Compiling the HiT profiles poses a number of methodological problems. In many countries, there is relatively little information available on the health care system and the impact of reforms. Most of the information in the HiTs is based on material submitted by individual experts in the respective countries, which is externally reviewed by experts in the field. Nonetheless, some statements and judgements may be coloured by personal interpretation. In addition, the absence of a single agreed terminology to cover the wide diversity of systems in the European Region means that variations in understanding and interpretation may occur. A set of common definitions has been developed in an attempt to overcome this, but some discrepancies may persist. These problems are inherent in any attempt to study health care systems on a comparative basis.

The HiT profiles provide a source of descriptive, up-to-date and comparative information on health care systems, which it is hoped will enable policy-makers to learn from key experiences relevant to their own national situation. They also constitute a comprehensive information source on which to base more in-depth comparative analysis of reforms. This series is an ongoing initiative. It is being extended to cover all the countries of Europe and material will be updated at regular intervals, allowing reforms to be monitored in the longer term. HiTs are also available on the Observatory's website at http://www.observatory.dk.

Acknowledgements

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The current series of Health Care Systems in Transition profiles has been prepared by the research directors and staff of the European Observatory on Health Care Systems.

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The Observatory team working on the HiT profiles is led by Josep Figueras, Head of the Secretariat and the research directors Martin McKee, Elias Mossialos and Richard Saltman. Technical coordination is by Suszy Lessof. The series editors are Reinhard Busse, Anna Dixon, Judith Healy, Elizabeth Kerr, Suszy Lessof and Ana Rico.

Administrative support, design and production of the HiTs has been undertaken by a team led by Phyllis Dahl and comprising Myriam Andersen, Anna Maresso, Caroline White and Wendy Wisbaum.

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Introduction and historical background

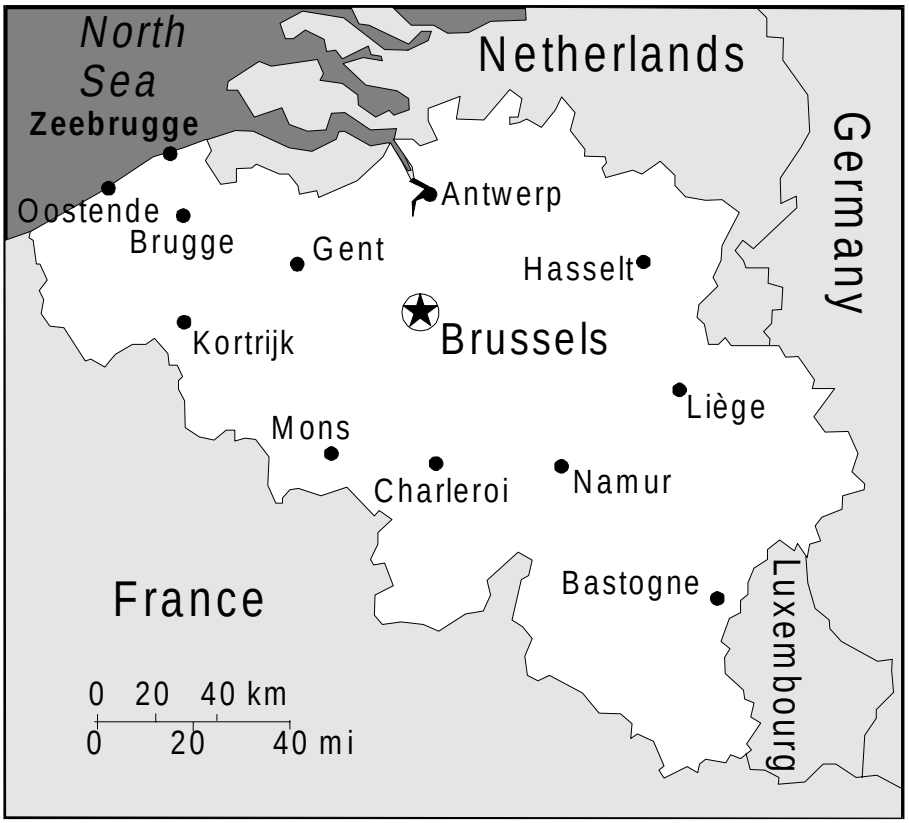
Introductory overview

The Kingdom of Belgium is a constitutional, hereditary monarchy located in north-western Europe. It covers 30 528 km² and is bordered by the Netherlands and the North Sea to the north, Germany and Luxembourg to the east and France to the south-west. Brussels is the capital and Antwerp the chief commercial centre and port. The population of Belgium in 1997 was 10 170 226.

Belgium is low-lying except for the forested hills of the Ardennes in the south, and is crossed by the Meuse and Schelde rivers and a network of canals. It is one of the most densely populated, heavily industrialized nations in Europe; the emphasis is on trade and industry (such as production of steel, chemicals and petrochemicals) but the traditional industries of lace-making and diamond-cutting continue also to flourish. Iron, zinc and other industrially important minerals are now largely imported, and coal production has declined as other fossil fuels and nuclear power have become important. Agricultural activities include cattle-raising and dairy farming; cereals are the chief crops, and food processing is a major source of income. The service sector and tourism are also important. Belgium's economy depends on its exports, and it recovered rapidly from the recession of 1993 largely as a result of a surge in exports and more recently a sharp pick-up in business investment.

Belgium has three official languages: Flemish (spoken by 59.2% of the population), French (40.2%) and German (0.6%). The country is divided into Flemish-speaking Flanders in the north and French-speaking Wallonia in the south. Brussels is bilingual, and German is spoken in areas bordering Germany. Virtually the entire population is Roman Catholic.

Fig. 1. Map of Belgium[1]



Organization of the federal state

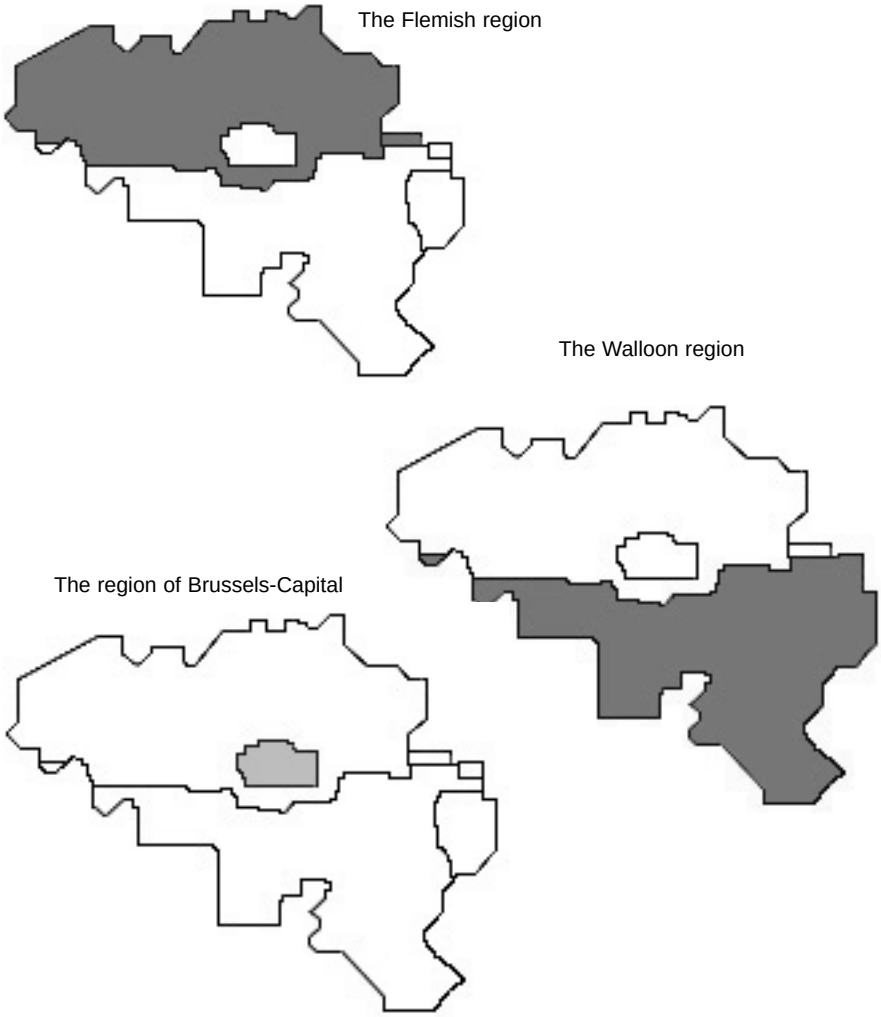
Belgium is a parliamentary, representative, constitutional monarchy. After general elections, the king appoints an "informateur" (a politician who investigates on behalf of the crown whether a proposed cabinet formation will succeed) followed by a "formateur", the person charged with forming a new government. Most often the formateur is appointed prime minister. Centrally, legislation is passed by a bicameral parliament consisting of a Senate (with 71 members) and a Chamber of Representatives (150 members); elections are held every four years and voting is compulsory for all citizens aged 18 years and over. However, the country's administration is mainly managed by the authorities of

[1] The maps presented in this document do not imply the expression of any opinion whatsoever on the part of the Secretariat of the European Observatory on Health Care Systems or its partners concerning the legal status of any country, territory, city or area or of its authorities or concerning the delimitations of its frontiers or boundaries.

different sub-national regions and communities which are based on language and culture. These authorities have a great deal of autonomous power in the areas for which they are responsible.

This devolved power structure has developed as a result of several revisions to Belgium's constitution since it was originally drafted in 1831. Drawing on reforms which started in 1970, the most recent constitutional revision in 1993 made Belgium a federal state composed of three communities with specific cultural identities and different languages, and three regions. These are explained below.

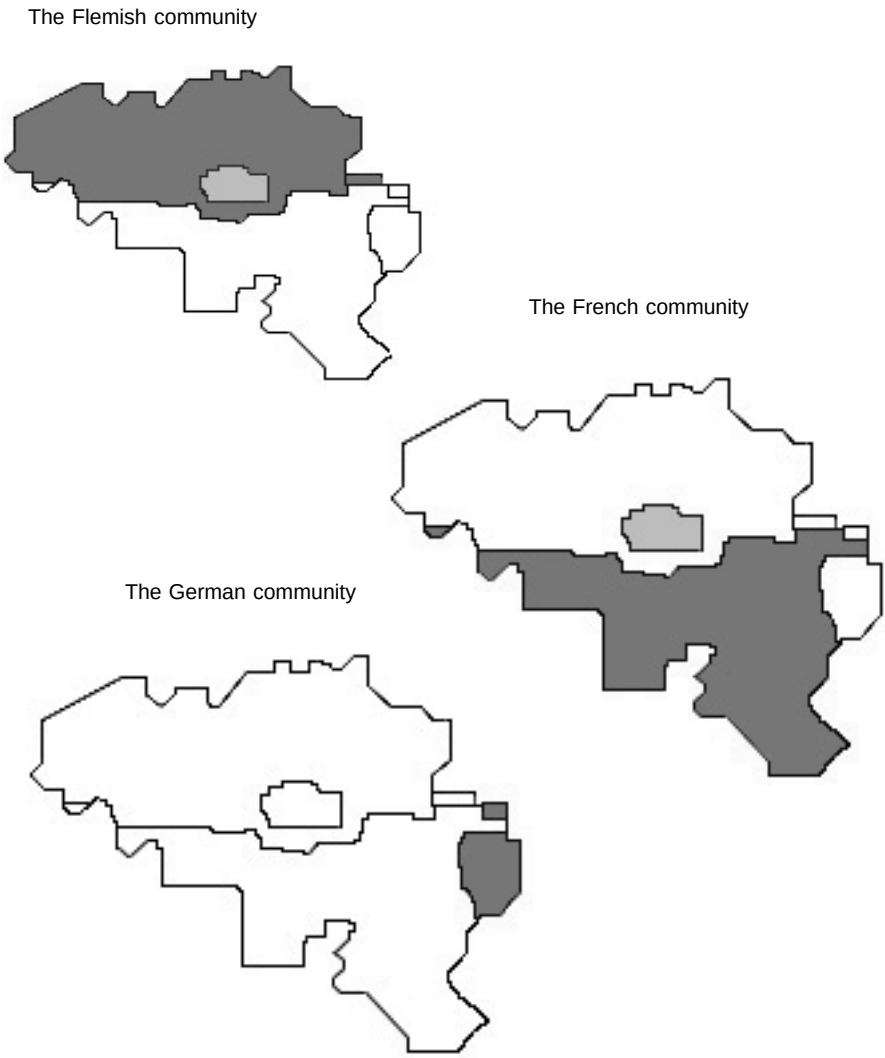
Fig. 2. Belgian regions



The three regions are the Flemish region, the Walloon region and the region of Brussels-Capital. The regions are responsible for so-called territorial matters, such as agriculture, environment, transport, energy, housing and economic development.

The three communities, based on language and culture, are the Flemish community, the French community and the German community. These are responsible for policy areas such as education, cultural affairs, health and social support which are seen as linked to people, rather than territory. The French

Fig. 3. Belgian language communities



community is responsible for the Walloon region except for the German-speaking areas; the Flemish community is responsible for the Flemish region. French and Flemish communities share responsibility for Brussels.

Each region and each community has a government and a council which is the legislative body. However, in Flanders, institutions merged in 1980 so that a single government and a single parliament are responsible both for the community and the region. In the region of Brussels-Capital in which two languages (French and Flemish) are spoken, the community missions are executed by Commissions: the French Community Commission, the Flemish Community Commission and the Joint Community Commission. Each has an Assembly and a College.

After regions and communities, the country is further subdivided into ten provinces and 589 local authorities. Each province has a capital town where the provincial authorities are located.

Basic health indicators

The chief causes of death for adults in Belgium are cardiovascular disease and cancer. Life expectancy at birth in 1997 was 81.0 years for women and 74.3 years for men (a rise from 77 and 70, respectively, in 1982) which is one of the highest amongst the OECD countries. Life expectancy continues to rise by about 3 months every year, but the population is growing extremely slowly (only +0.2 % per year foreseen until about 2020) due to a falling birth rate over the last decade. Within EU, Belgium has one of the highest proportions of population aged over 60, and the number of teenagers is declining.

In 1992 infant mortality was high in Belgium compared with other western European countries: the Belgian rate was 8.09 per 1000 live births, whilst rates in Germany, France and the United Kingdom were below the EU average of 6.9 per 1000 live births.

Historical background

The principal characteristics of Belgium's health care system result from decisions taken after the Second World War to create a public, compulsory health insurance system, based on:

- independent medical practice
- free choice of health care provider by the patient
- fee-for-service payment of providers, with reimbursement.

The origins of the health insurance system can be traced to the early nineteenth century, when workers created health insurance associations (so-called mutualities) to protect affiliated members against the risk of disease and incapacity to work. The mutualities were small-scale and were organized according to employment type – each mutuality covered a different profession.

In 1851[2] the state officially recognized the mutualities, and in 1894[3] it passed more important legislation which served as the mutualities' legal foundation for about a century.[4] This legislation extended the official scope of the mutualities' activities and provided for them to benefit from state subsidies.

At the beginning of the twentieth century, mutualities from the same political or ideological background merged into national unions, with the result that the National Alliance of Christian mutualities was founded in 1906, the National Union of Neutral mutualities in 1908, the National Union of Socialist mutualities in 1913, the National Union of Liberal mutualities in 1914 and the Union of the Free and Professional mutualities in 1920.

All insurance organized by the mutualities had originally been voluntary. However, important steps were taken during the Second World War toward a compulsory insurance system. On 7 August 1943 representatives of employers and of trade unions signed a draft Agreement on Social Solidarity, which laid the foundations for a decree of 28 December 1944 establishing social security for salaried workers. This decree advocated universal access to social security, and made health insurance compulsory for all salaried employees. It created a central institution, the National Office of Social Security, to collect contributions for all social security sectors, and a National Fund for Sickness and Invalidity to manage the health insurance in particular. It was decided that the individual mutualities should be maintained and the fund would use them to run the compulsory health insurance.

Thus Belgium's compulsory health insurance system dates from 1945. However the main turning point in its history was Leburton's Law of 9 August 1963.[5] This created the National Institute for Sickness and Invalidity Insurance (INAMI/RIZIV) which replaced the National Fund for Sickness and Invalidity and exists to this day. Since this legislation, the insurance system for the health care sector has been separate from the invalidity (incapacity-to-work) sector, both on the administrative and the financial level. Other important elements introduced by Leburton's Law were:

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[2] Law of 3 April 1851

[3] Law of 23 June 1894

[4] The Law of 23 June 1894 survived largely intact until its replacement by the Law of 6 August 1990 regarding HIAs and National Unions of HIAs.

[5] Formal title: Law establishing and organizing a scheme of compulsory insurance against disease and invalidity.

- improved access to insurance coverage for all inhabitants of Belgium;
- agreement between the mutualities and the health care providers on the regulation of their financial and administrative relationship;
- establishment of a fee schedule (nomenclature/nomenklatuur) by which different medical acts were given a price, and (if applicable) a reimbursement rate;
- definition of a new category of beneficiaries – widows, orphans, disabled and retired persons (the VIPO or WIGW category) – who were not to be charged for health care services (although now this category does pay small co-payments).

As originally formulated, Leburton's Law was unacceptable to medical professionals, and they were unwilling to associate themselves with it (for example, they refused to take their seats in INAMI/RIZIV's Management Committee). Doctors went on strike in March 1964, and this resulted in an essential dialogue between them and the government and a settlement on 25 June 1964. The doctors obtained modifications to Leburton's Law and in return their representatives agreed to sit in the Management Committee.

This fundamental reform of the compulsory health insurance also formed the basis for legislation on hospitals dated 23 December 1963 (known as Cluster's Law). Hospitals had opened in Belgium as early as the twelfth century in the case of Sint Jan's hospital in Bruges and Elisabeth's hospital in Antwerp, but until 1963 Belgium's national government had no policy on them, nor any legislation. Most of the hospital system belonged to local authorities or non-profit private institutions (mainly religious orders) and did not seem to interest the national authorities. This changed in the early 1960s when the government decided to regulate the hospital system via specific legislation rather than include them in Leburton's Law.

The 1963 Hospital Law had four objectives:

- to provide free hospital care for all insured citizens;
- to improve the quality of hospital care, via the use of norms and accreditation;
- to ensure the financial viability of public and private hospitals via a per diem financing system;
- to introduce planning in the hospital sector.

The 1960s were a period of economic growth for Belgium and during this decade health care coverage was both extended to new social categories, and improved. In 1964, health insurance coverage was extended to the self-employed for major risks only; in 1965, to public sector workers for both major and minor risks; in 1967 to those physically incapable of working; in 1968 to the

mentally handicapped and finally in 1969 to everyone not yet protected, i.e. the whole population.

(The distinction between major and minor risks is a key in the financing of Belgian health care. Major risks are classified as hospitalization, important surgical operations, special technical services and the specific treatment of some diseases (cancer, tuberculosis, mental disorders, congenital ailments and malformations, etc.). The minor risks category covers medical consultations (with either a generalist or a specialist), pharmaceuticals, dental care, minor surgery, prostheses, orthopaedics, ambulatory physiotherapy and ambulatory nursing care. The health insurance system only reimburses physiotherapy services and ambulatory nursing services if they are prescribed by a doctor.

These advances in health care coverage, made possible by a period of economic expansion, had to be reconsidered during the economic crisis of the 1970s. This lean period highlighted the need for health care reform. Research was initiated to find more efficient ways to allocate resources within the health care system, and this process was reinforced by successive governments which tried to reduce the large public deficit during the 1980s.

Rapidly rising costs (particularly in the hospital sector) in the 1980s led the government to take a series of reforms in the early 1990s which were intended to contain costs whilst maintaining the essential structure of the system. The reforms were focused mainly on eliminating abuse and waste; they introduced a number of exceptions to the fee-for-service financing rule, and increased the co-payments borne by the patient for a number of services. Most controversially, however, they set a hard limit of 1.5% on the annual maximum growth allowed in health system costs. This limit remains in place to this day.

Organizational structure and management

Organizational structure of the health care system

Fig. 4 shows that regulation and supervision of the health insurance system takes place at federal level and the national government also transfers some funding (drawn from general taxation) to the insurance system. Thereafter the flow of services, payments and reimbursements takes place at sub-national level between independent health care providers, mutualities and patients.

The system is characterized by its heterogeneity and fragmentation. Ever since its foundation, an essential principle of the Belgian health care system has been the patient's freedom of choice between a wide range of independent providers. Health care is therefore privately managed and delivered (mainly by a range of non-profit organizations) whilst responsibility for the funding of health care and oversight of its organization are in the public sector, and are shared out between numerous public authorities.

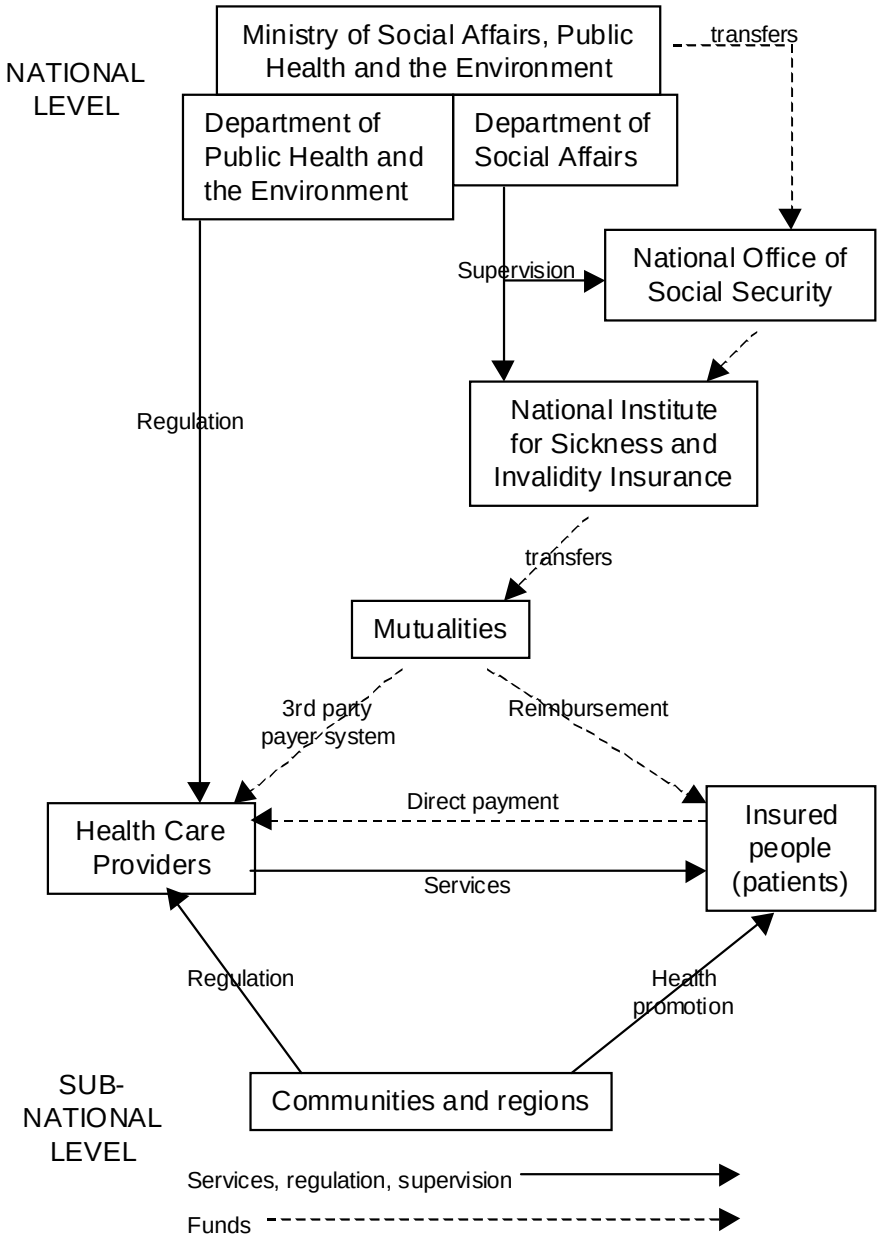
This division of responsibilities is mirrored by the fragmented structure of the Belgian state. Since the early 1980s elements of responsibility for health care have been devolved to the communities; but there are many exceptions (especially in curative medicine) for which the federal authorities remain responsible.

Federal authorities

The federal authorities determine the general legislative framework for the health care system by issuing laws and by fixing the annual budget. Their duties include:

- enacting *health and disability insurance law*: as health and disability insurance remains part of the social security system, supervision of it has remained the responsibility of the federal government;

Fig. 4. Organizational chart of health care system



Source: Ministry of Social Affairs, Public Health and the Environment

- enacting *hospital law*: dealing with the criteria for granting accreditation to hospitals and heavy medical care units (which allows them to be reimbursed by the mutualities), the planning and financing of hospitals and the granting of university hospital status;
- enacting legislation covering different professional qualifications, the national agreements on wage schedules and labour conditions and the registration of drugs and their price control;
- fixing the overall budget for health care services and dealing with the allocation of resources to different levels (regions, communities);
- health care technology control.

Ministry for Social Affairs, Public Health and the Environment

A royal decree of 13 June 1936 created a Ministry of Public Health, by merging existing departments within the Justice Ministry and the Home Ministry. A reform in 1980 delegated many elements of health care to be a responsibility of the communities, and merged the national Ministry of Public Health with that of Environment. In 1995, this enlarged ministry again expanded, merging with the Ministry of Social Provision to take on its present form as the Ministry for Social Affairs, Public Health and Environment.

Despite the merger in 1995, there remain two ministers (with separate cabinets) whose remit includes health: the Minister of Public Health and the Minister of Social Affairs. Within the ministry, the Health Department defines health care policy whilst the Social Affairs Department supervises the National Office of Social Security (which collects social security contributions) and the National Institute for Sickness and Invalidity Insurance (which manages the compulsory health insurance).

Insurance organizations

The general organization and financial management of health care insurance is performed by the National Institute for Sickness and Invalidity Insurance (INAMI/RIZIV), a nongovernmental public body which is accountable to the Minister of Social Affairs. INAMI/RIZIV is composed of four services: the Medical Care Service (which is in charge of compulsory health insurance), the Sickness Benefits Service, the Medical Control Service and the Administrative Control Service.

The Health Care Service includes representatives of employer- and employee-organizations, organizations of self-employed persons, mutualities, health care provider organizations, pharmacists, midwives and allied health professions.

Medical doctors and dentists are represented on their explicit request and only in an advisory role.

The Medical Care Service is managed by INAMI/RIZIV's General Council and an Insurance Committee. In the General Council, decision-making power is shared between contributors to the financing system (government, employers and employees) and its managers (the mutualities). The General Council fixes the annual global budget for health benefits on the basis of a proposal from the Insurance Committee, and monitors the financial balance of the health insurance. The government has a power of veto over decisions made in these fora.

The Insurance Committee, which reports to the General Council, is made up of representatives of insurers and health care providers. Its tasks include drafting the annual global budget target for the General Council and, after the global budget has been set, determining the breakdown of the budget for the different insurance sectors and acting as arbitrator for the distribution of the funds.

There are various other committees within INAMI/RIZIV's Medical Care Service, most notably the agreement committees which negotiate fees-for-services between the insurers and the different health care providers – one example is the committee between doctors and insurers which is known as Medico-Mut. These committees are assisted by technical councils (e.g. Technical Pharmaceutical Council, Technical Medical Council, Technical Dental Council) which help to define the services which should be delivered.

The law known as Pax Medica provides the framework for an annual agreement between insurers and providers of health care about fees for medical services. After sometimes lengthy negotiations, each year a compromise does eventually emerge. INAMI/RIZIV oversees the general organization of the compulsory health insurance, but the task of actually providing insurance falls to the mutualities, which are statutory sickness funds. Mutualities receive their funds from INAMI/RIZIV and are supervised by it. (INAMI/RIZIV's supervision consists of scrutinising the mutualities' administration and accounts.) Mutualities are private not-for-profit bodies, but have a public interest mission. They are active members of both the executive and the advisory committees of INAMI/RIZIV. They are also in charge of medical audit: they verify that services have really been performed and that fees charged conform with regulations. Mutualities are mainly organized according to religious or political affiliations (which tend to be obvious from their names), and are grouped according to these affiliations into five national alliances: the National Alliance of Christian mutualities, the National Union of Neutral mutualities, the National Union of Socialist mutualities, the National Union of Liberal

mutualities and the National Union of the Free and Professional mutualities. There is also the Auxiliary Fund, an additional neutral public body intended for those patients who do not want to affiliate with any of the groups mentioned above. The Christian and Socialist mutualities dominate the market, covering about 45% and 29% of the population respectively.

Sub-national authorities

The three communities (French community, Flemish community and German-speaking community) are responsible for all health education (including school health initiatives) and preventive medicine, except certain national preventive measures such as compulsory vaccinations e.g. for polio. As regards secondary care the communities are responsible for ensuring the implementation of hospital norms and standards which have been set at federal level, for accreditation and for the authorization of construction and renovation work. Community authorities are also responsible for coordinating home care, and they set the criteria which home care services must meet in order to be granted accreditation. Provinces have responsibility for environmental health within their areas and for regulating pharmacy premises; and provincial medical committees have the responsibility of checking licences and certificates issued to doctors, dentists, nurses and other health professions. Below this level the organization of social support for low-income groups, and emergency care, falls to local authorities (although the financing of staff and equipment for the latter remains a federal responsibility).

The private sector

Health care providers are predominantly private, and doctors work mostly in solo practice. About 60% of the hospitals are non-profit private institutions and the rest are public (191 private and 97 public on 1 January 1995).

Mutualities themselves are private, legally independent, non-profit organizations. They are entrusted by law with a primary role in providing the statutory health insurance programme and are (jointly with each other) given a monopoly position in the compulsory health insurance market. They are exempted from certain regulations and taxes which apply to commercial ventures.

Because of the long history of involvement of the Catholic Church in the provision of health care, it is characteristic for Belgian health care to be provided by state-subsidized, not-for-profit private initiative. The public and the private (not-for-profit) sectors are complementary, and receive more or less comparable levels of resources.

There are also some private, for-profit companies in Belgium which provide voluntary insurance for those services which fall wholly or partly outside the coverage of compulsory health insurance.

The Order of Physicians

The Order of Physicians is an organization which strongly influences the Belgian medical profession. In order to be able to practise in Belgium, a doctor has to be registered with the order and pay an annual subscription to it. The order investigates illegal and unethical practices. Unethical behaviour (as defined by the order's Code of Ethics) includes pricing below the agreed level, and advertising. The order has its own judicial system which can impose various penalties, the heaviest being to strike doctors off the register, i.e. suspend their accreditation to practise.

The Minister of Public Health and the order are discussing ministry proposals to reform the order. The draft reforms would introduce some external expertise to the disciplinary procedure; the order would remain the court of first instance but a new college, including external representatives, would be responsible for appeal procedures.

Representative organizations in the hospital sector

The National Hospital Council should also be mentioned, since this body plays an important role in the formation of Belgian health care policy by advising the Minister for Public Health on issues related to hospital planning, accreditation and financing.

Planning, regulation and management

Belgium does not have a national plan for its health policy, and policy-making is more a series of ad hoc measures than a coherent long-term strategy or vision. Part of the reason for this lies in the divided structure of policy creation in general and the health care system in particular, with its two ministers (for Public Health and Social Affairs) who have legal obligations in health care; its two administrative bodies (the Ministry of Public Health and the National Institute for Sickness and Invalidity) which have responsibilities in health care; the two levels (federal and regional) of government which are involved in health care; and the many different agencies and organizations involved in the provision of health care.

However, certain sectors of the health care system are, individually, the subject of planning processes. The government plans global hospital capacity, in the sense that hospitals must obtain accreditation from the Ministry of Public Health to operate a certain number of beds for each service category (e.g. acute care, surgery, maternity). The accreditation is granted by the Ministry of Public Health only if a proposal (for hospital opening, extension or alteration) respects national planning. Planning usually takes the form of target figures: 2.9 beds per 1000 inhabitants for general inpatient services, 32 beds per 1000 births for maternity services, and so on.

There are a variety of accreditation norms. Organizational norms relate to staff requirement and responsibilities, hygiene, ethical requirements and so on; architectural criteria concern the number, size, comfort, hygiene of hospital rooms; functional standards refer to convenience, accessibility, etc.; additional norms relate to minimum activity, e.g. they stipulate that hospitals should have no fewer than 150 beds, diagnosis/surgical units no fewer than 30 beds, intensive neonatal units no fewer than 15 beds, and they set minimum facility standards and expected staff numbers. In theory, accreditation can be granted to run a hospital facility even if accreditation criteria are not met; but in practice, a facility which did not meet the criteria would not be reimbursed. Accreditation criteria are developed at federal level, but communities are responsible for their implementation.

Hospitals' capital planning is dealt with separately. The regions and the federal government have together drafted a building programme, with the aim of controlling capital expenditure. Only the investments listed in the building programme can be paid for from daily hospital charges. The first programme was drawn up in 1989 for a seven-year period, and a second one has recently been introduced with retrospective application starting from 1996.

Some high technology medical services are also subject to planning and accreditation. The federal authorities fix the appropriate quantity of equipment for different areas of the country; it is compulsory for regional authorities to comply with this national planning. For example, in 1999, there were 32 nationally accredited sets of nuclear magnetic resonance equipment: 14 in the Flemish region, 10 in the Walloon region and 8 in Brussels. During 2000–2001, the federal accreditation procedure will add 30 further sets of this equipment: 20 more in the Flemish region, 7 in the Walloon region and 8 in Brussels.

The government has also recently introduced planning in the area of human resources. In 1996, a Belgian Committee of Medical and Dental Supply Planning was established to give advice on the numbers of doctors and dentists qualified to practise in Belgium, and in 1997 the remit of this committee was extended to cover physiotherapists as well. Resulting from the work of this committee, a

proposal was made for a *numerus clausus* mechanism and it has been decided that the maximum number of medical graduates (already holding a diploma in medicine) who will be accepted for further training to lead to practice accreditation will be only 700 in 2004, 650 in 2005 and 600 in 2006 (in comparison to around 1200 accreditations in 1999). Furthermore these numbers will be fixed at 60% Flemish-speaking and 40% French-speaking. At the other end of the medical career, certain measures designed to encourage early retirement from the profession will come into force in 2004. In addition in 1997 the first entrance examinations aimed at limiting the number of students entering medical school were organized (in Flanders only).

Regulation

The health care system in Belgium is subject to extensive regulation not only by the federal and regional authorities but also by the health care providers and the mutualities themselves.

The federal authorities have significant control over the financing and economic aspects of the health care system. They determine the levels of employers' and employees' insurance premiums and the amount of public subsidy. They can amend global budget decisions. They participate actively in hospital budget setting and play an important role in the planning and financing of hospital capital investments. They have a veto power within the process of setting fee levels. The Ministry of Economic Affairs fixes pharmaceutical prices.

The federal authorities also fix accreditation standards, both for hospital accreditation (without which hospitals cannot be opened, run or reimbursed) and for doctors' accreditation (without which they cannot practise).

Within this framework of regulation set out by the federal authorities, patients, third-party payers and health care providers have substantial freedom. Patients are free to choose their insurer as well as their health care provider. Health care providers and insurers (e.g. hospitals and mutualities) regulate the financial and administrative relationship between them through a system of agreements and contracts. These documents are drawn up by committees composed of an equal number of representatives of the health care providers and of the insurers (who, in these negotiations, see themselves as representing the patients). Each health profession and the hospital sector has its own committee in which it meets with mutualities. The essential mission of these committees is to fix fee levels. The agreed fees serve as the basis for health care reimbursement and for determining the level of coinsurance.

The agreements between mutualities and health care providers only come into force if a certain minimum proportion of health care providers support

them. In giving their support they commit themselves to respect the agreed fee levels. If no agreement has been reached on time or if too many practitioners have rejected it, the Minister has several options:

- to submit an alternative draft agreement to practitioners
- unilaterally to impose fees for some or all of the services
- to fix only the reimbursement levels, leaving practitioners to set their own fees.

1990 legislation in this area[6] strengthened state intervention in the process of forming contracts and agreements. This law introduced correction mechanisms (mainly decreases in fee levels) to be implemented if budgetary limits for each health care sector are exceeded. If committees fail to agree to implement the correction mechanisms, the Minister of Social Affairs can intervene to impose them.

Decentralization of the health care system

The process of federalization of Belgium over the last 20 years or so has not had a great effect on the health insurance system; health insurance is part of the social security system, so it has remained under the federal government's power. On the other hand some other aspects of health care (e.g. almost all preventive care and health promotion) have been transferred to the communities and the regions.

Constitutional reform in 1993 made the situation even more complicated by allowing the transfer of responsibilities between the French-speaking community and region. Indeed, most of the French-speaking community's duties relating to health have now been transferred to the Walloon region and the French-speaking community commission. A striking example of the inconsistency of policy is that no fewer than six authorities are responsible for interventions in health policy matters in the Brussels region: the federal state, the French- and Dutch-speaking communities, the Joint Community Commission and the French- and Dutch-speaking community commissions.

In order to operate within this complicated structure, different powers need to communicate and cooperate with each other. For instance, in order to balance the national budget the federal minister must be informed about all ongoing hospital construction plans and the approval of high-technology medical devices by the ministers of the different communities. To ensure consistency and complementarity between the areas for which they are responsible, all of the different ministers responsible for health care policy meet every two months.

[6] Law containing social provisions of 29 December 1990.

Health care finance and expenditure

Main system of finance and coverage

The compulsory health insurance system

Since 1945, Belgium has had a health care system based on compulsory health insurance, which is an integral part of the Belgian social security system. Since 1 January 1995, in accordance with legislation of 30 March 1994, the financial management of all social security sectors has been merged. The aim of this reform was to make the social security system self-sufficient (independent of state intervention) as part of an effort to control the deficit in the public spending budget. The reform removed the distinction between contributions for each branch of the social security, so there are now no separate health insurance contributions. All premiums, which are fixed at different levels according to social security sector, are pooled in a common kitty from which they are distributed on the basis of need (in the past each sector's share was determined on the basis of its premium rate).

The two main social security schemes are those for salaried workers and for self-employed people. Salaried workers' social insurance contributions are collected by the National Office of Social Security (ONSS/RSZ), which then distributes the funds collected among the central institutions charged with managing the diverse sectors of social security. The institution charged with managing health insurance (which is only one of the six branches of the social security) is the National Institute for Sickness and Invalidity Insurance (INAMI/RIZIV). Self-employed people (around 12% of the population in mid-1999) pay their own social insurance contributions to the social insurance funds for self-employed workers, which in turn forward the money to INAMI/RIZIV.

Belgian health insurance consists of two distinct schemes: the general scheme which covers major risks and minor risks for the whole population except for

the self-employed, and the scheme for the self-employed (and their dependants) which only covers the major risks.

In both schemes, health insurance contributions are related to income and independent of risk, with no fixed upper limit. Their rates as a percentage of income are fixed by law. In the general scheme, health insurance contributions come from both the employee (3.55 %) and the employer (3.80 %). Contribution rates for the self-employed amount to 3.20 % of their income.

The development of health insurance has largely been left to the mutualities, with the state's role remaining fairly limited. The state pays a flat rate to the National Office of Social Security and this funding is (after consultation with representatives of employers and workers) distributed among social security sectors. The state also makes grants to the public municipal welfare centres (CPAS/OCMW) which are public bodies in each local authority which are in charge of social support to vulnerable groups, and which finance the care of those people who do not have access to a mutuality; and the state also makes grants to assist hospital capital expenditure and to health promotion and prevention programmes. In fact, preventive health care is primarily financed by the state, just as curative health care is primarily financed by the health insurance system.

The basic principle for health insurance coverage is that people benefit in accordance with their actual or past professional activity in Belgium. Their dependants are also covered. Moreover, there are beneficiaries who do not pay contributions – the VIPO category which includes widows, orphans, disabled and retired persons and also (since 1 July 1997[7]) the beneficiaries of the minimum wage and certain other vulnerable groups.

This system is based on the social solidarity principle that those working pay for the unemployed or retired. However, a large number of people (about 100 000) are still not covered by insurance. (People may fall through the social security net for various reasons – they have never worked or claimed benefits, they have only worked in the informal sector, etc.). To try to address this problem, coverage was extended by Royal Decrees of 29 December 1997[8] so that since 1 January 1998, residence in Belgium has been enough to confer the right to reimbursement of health care. In addition, there used to be a waiting period for enrolment in the health insurance system of six months (between

[7] Royal Decree of 16 April 1997 containing measures to extend the right to increased intervention of the health care insurance to other categories of entitled beneficiaries.

[8] Royal Decree modifying the Royal Decree of July 3 1996 implementing the Law regarding compulsory insurance health care and indemnities, coordinated on 14 July 1994; Royal Decree containing conditions in which the implementation of the Law regarding compulsory insurance health care and indemnities, coordinated on 14 July 1994, is extended to self-employed people and members of religious communities.

being affiliated and qualifying for health insurance benefits): this has now been cancelled.

People who are not fully paid-up members of the health insurance are covered by the public municipal welfare centres (CPAS/OCMW) in each local authority. Different CPAS/OCMW intervene in different ways. They can meet the cost of affiliating low-income families to a mutuality, or they can pay directly for the medical care costs of these families. As part of the modernization of the social security system, a social identity card has been introduced and has been compulsory from January 1999. The aim of this card is to reduce administrative formalities. So far it serves only as a means of identification and a proof that people are fully paid-up members of the health insurance, but later its use will be extended.

Health insurance coverage is provided by the six mutualities and one public fund, the Auxiliary Fund. Funds are legally required to reimburse any claim from their insured members for care delivered by any accredited health care provider at the agreed fee levels. Membership of a mutuality is compulsory for all citizens, but they are free to choose which mutuality they prefer. The level of financing allocated to each mutuality for administrative costs is based on the number of members, so competition for membership between mutualities is intense. All mutualities have offices in every town, and members have the option of changing to another mutuality every three months. Since the compulsory insurance cover offered by the funds and the contribution rates which they levy are identical (set by law), the funds compete for new members on a non-price basis, offering a wide range of supplementary services (home care, savings accounts, holidays for children, etc.) and emphasizing their efficiency and geographical convenience.

Although, before 1995, mutualities were supposed in law to be financed prospectively from contributions and subsidies, in fact the budget allocation was based retrospectively on reimbursement claims. The reason for this lay in the fact that mutualities have different numbers of members with different financial and health status; and therefore they earn different amounts and face different claim levels. Because of this inequality, it was widely held to be inequitable to enforce upon mutualities the legal requirement to break even. Instead, mutualities' surpluses and deficits were pooled by the National Institute for Health Insurance (INAMI/RIZIV); deficits usually exceeded surpluses; and the shortfall was usually covered by subsidies, provided via ad hoc government decisions. This meant that mutualities had little or no incentive to contain health care costs.

Since 1995, however (in accordance with a royal decree of 12 August 1994) mutualities have had more independent financial responsibility for health ex-

penditure. After long negotiations in mid-1994, it was decided that mutualities would receive a prospective budget to finance the health care costs of their members, and that they would be responsible for a proportion of any discrepancy between this budget and their actual spending. This gradual process of financial responsabilization was started with the implementation of a risk-based capitation formula as a partial basis of funding for the sickness funds in 1995. In the years 1995–1997, 10% of the funds' total budget was allocated on a prospective basis, rising to 20% in 1998–1999 and 30% in 2000–2001. The proportion of any discrepancy between received budget and actual spending for which funds were to be held responsible was limited to 15% in 1995–1997; in 1998–1999 to 20% and from 2000 to 25%. (However, mutualities are not to be responsible for deficits caused by external factors such as wage increases granted to health care personnel.) It is hoped that as a result of this reform mutualities will pressurize health care providers to control their expenditure, so as to reduce the risk of budget deficits.

For most ambulatory care, people pay the charge and then are reimbursed. Reimbursement is usually 75% of negotiated fee levels, except for vulnerable groups in society for whom it is 100%. On the other hand, the costs of inpatient care are almost entirely met by the insurance funds – the patient's share is minimal. According to the Ministry for Social Affairs, Public Health and Environment, costs borne by patients only represented 17% of total health care costs in 1994.

Health care benefits and rationing

The services which are covered by the statutory insurance system are described in the nationally established fee schedule (nomenclature/nomenklatuur) which is extremely detailed, listing more than 8000 services. Services not covered by the fee schedule are not reimbursable. The fee schedule is negotiated every year between representatives of the insurance funds and of the medical profession.

Different benefits are available according to which insurance scheme each patient joins – i.e. in the general scheme (which covers everyone except the self-employed) people are covered for both major risks and minor risks, while the scheme for the self-employed only covers major risks. In addition certain types of health care are excluded from the reimbursement system – for example, alternative therapies such as acupuncture, homeopathy and osteopathy. Others, such as plastic surgery, spectacles and orthodontistry, are reimbursable only

under certain conditions. Some preventive health care (such as vaccination) is free to the patient, the costs being borne by the state.

There has been no major change to the benefit package in recent years - merely minor fluctuations in the fee schedule with a few medicines taken off the reimbursement list or added to it. However this is not necessarily a positive factor. Accusations have been made that the fee schedule adapts to change too slowly. Familiar pharmaceuticals or techniques are still reimbursed while new, possibly more appropriate ones are not.

Complementary sources of finance

In Belgium, since there is no global budget for health care but only a health insurance budget, it is very difficult to determine the precise breakdown of the main sources of finance and complementary sources such as direct out-of-pocket payments, voluntary insurance, etc. However, Table 1 shows an increase over the years 1987-1994 in the co-payments and co-insurance paid by patients, while the share of total costs contributed by the social security system and direct taxation have stayed fairly stable.

Table 1. Percentage of main sources of finance

Source of finance	1987	1994
Public		
• Taxes	39%	38%
• Social security	36%	36%
Private		
• Patients (out-of-pocket payments or private insurance)	12%	17%
• Other (external sources)	13%	9%

Source: Ministry for Social Affairs, Public Health and Environment, Belgium.

Out-of-pocket payments

Patients in Belgium participate in health care financing via co-payments (when the patient pays a certain fixed amount of the cost of a service with the third-party payer paying the balance of that amount) and co-insurance (when the patient pays a certain fixed proportion of the cost of a service, with the third-party paying the remaining proportion). The costs financed by patients represented 17% of total health care expenditure in 1994. Co-insurance and co-payments vary from service to service, but are equal for everyone except

the VIPO group (widows, orphans, retired and disabled people and also since 1 July 1997 beneficiaries of the minimum wage and certain other vulnerable groups) who benefit from a special reduced rate.

There are two systems of payment: a reimbursement system and a third-party payer system.

The reimbursement system covers ambulatory care. The patient first pays a fee to the doctor, and then presents the bill to the mutuality in order to be repaid (the share paid by the mutuality is 70% of the fee-for-service fixed for a general practitioner and 60% for a specialist). The total fee paid out initially by the patient depends on whether the practitioner has signed up to charge the exact fee levels agreed by the representatives of the insurance funds, the medical profession and the government in the fee schedule (thus becoming a so-called conventioned physician). If practitioners have not made this commitment they can ask for higher fees than the agreed levels. The difference will be borne by the patient. This often happens with specialist medical care.

The third-party payer system covers hospital care. The patient only pays a co-payment, the bulk of the cost of treatment being directly paid by the mutualities to the hospitals. The patient's out-of-pocket payments consist of:

- a flat rate per day for hospitalization
- co-insurance for medical treatments
- costs of certain non-reimbursable medical products or pharmaceuticals.

Moreover, there is a flat-rate charge of BF 25 per day for pharmaceuticals, a flat-rate charge of BF 300 per inpatient stay for diagnostic tests and a flat-rate charge of BF 250 per inpatient stay for radiology. The flat-rate charge only applies if patients are admitted to hospital as inpatients. If they visit a hospital to have an X-ray or blood test as outpatients, the hospital will be paid by the third-party payer (i.e. the mutuality). Patients are also charged a fee for extras over and above the normal inpatient service provision – for example for a single room.

About 2500 pharmaceutical products are reimbursable. The percentage of the cost which is reimbursable varies depending on the therapeutic value of the medicine, and ranges from 0% to 100%. The patient only pays the remaining percentage to the pharmacy. The mutualities cover the reimbursable percentage through the third-party payer system.

On 1 October 1993 co-payments and co-insurance for visits to and from generalists and specialist doctors were increased by a royal decree. For instance, co-insurance for general practitioner consultations rose from 20% to 30%, and for specialist consultations from 25% to 40%, of the agreed fee. On 1 January 1994, co-insurance and co-payments for other services, such as clinical tests and

medical imaging, were also increased. These increases aimed to reduce the expenditure of the health insurance system by making patients act more responsibly about their consumption of care.

However, to prevent these changes from adversely affecting access to health care by patients with low incomes, a social exemption and a fiscal exemption were established. The social exemption applies to the extended VIPO group (see the section on *Main system of finance and coverage* for definition of this group) and entitles people in this group to have their co-insurance and co-payments beyond a yearly total of BF 15 000 repaid. The fiscal exemption applies to all households and permits them to deduct, beyond a certain amount, their co-payments and co-insurance from their income tax bill. The threshold for the fiscal exemption depends on the household's taxable gross income. For instance, for taxable gross incomes from BF 0 to BF 537 999 per annum, the threshold would be BF 15 000.

Voluntary health insurance in addition to the statutory system

In addition to providing compulsory health insurance, the mutualities offer voluntary health insurance to the self-employed to cover minor risks which their statutory system does not cover. In mid-1999 about 85% of the self-employed in Belgium subscribed to this insurance. Mutualities also offer their affiliated members complementary insurance to cover additional services not covered by the compulsory insurance system, such as transport to receive treatment or co-payment on home nursing care. The terms and coverage of this insurance differ from one mutuality to another. This part of their service has become popular in the last few years, apparently as a reaction to reductions in the reimbursement coverage of the compulsory scheme. Because of these differences in the terms and coverage of voluntary insurance, premium rates have in the past varied greatly between funds; and because sickness funds had to balance premium revenues and expenditures, adverse selection has caused a spiral of rising premiums and a worsening risk pool. To try to address this, the government has subsidized part of each premium rate charged as a risk-equalization mechanism, although this has had little effect on the adverse selection problem.

Another form of insurance offered by the mutualities is hospitalization insurance. This would cover, for example, the extra charges for a single room during an inpatient stay or for pharmaceuticals. This part of the insurance market has grown steadily recently, from BF 8.3 billion (million millions) in 1993 to 10.7 billion in 1996. About 18% of the population are covered by hospitalization insurance.

Private insurance run by for-profit insurance companies

Risk-based private health insurance offered by private for-profit companies remains very small in terms of market volume but has also risen steadily as compulsory insurance coverage has reduced. Belgians seem to take out private insurance in particular to cover hospital costs and the statutory co-payments required of patients (which the compulsory insurance system is legally barred from covering); and companies in Belgium increasingly include private health insurance as a fringe benefit in salary packages. In 1999 about 30% of Belgians had additional private health insurance, particularly for hospital care costs. Yet apart from these market niches it is unlikely that private insurance will pose a real threat to the statutory system, because the mutualities have the advantage of benefiting from significant tax relief and economies of scale. Although the turnover of private insurance funds in Belgium rose from BF 4.3 billion in 1993 to 6.2 billion in 1996, their impact is insignificant compared to that of the public health insurance system which (including both compulsory and voluntary schemes) paid out more than BF 440 billion in 1996.

External sources of funding

Other sources of finance for the health insurance system include a contribution of 5–10% of premiums paid for motor vehicle insurance, a contribution of 10% of premiums paid for complementary health insurance, a yearly (licence) fee chargeable to pharmaceutical companies, a levy on the turnover of pharmaceutical companies on the Belgian market and a deduction of 3.55 % from pensions.

Health care expenditure

Table 2 shows that total expenditure on health care has almost tripled, in real terms, since 1970. However, total expenditure on health care at constant prices started to decrease in 1994. This was due to increases in co-payments and the exclusion of certain services from statutory insurance coverage.

Despite these service exclusions, Belgium has the lowest rate of private health expenditure in the OECD (about 12% of total health expenditure or 1% of GDP), reflecting the great extent to which the statutory system covers services demanded. Fig. 5 demonstrates the high percentage of public sector funding within Belgium's total expenditure on health care.

Table 2. Trends in health care expenditure, 1970–1997

Total expenditure on health care	1970	1975	1980	1985	1990	1993	1994	1995	1996	1997
Value in current prices (100 million BF)*	515	1 340	2 292	3 526	4 904	6 020	6 246	6 350	6 450	6 600
Value in constant prices (1990) (100 million BF)*	1 700	2 908	3 686	4 153	4 904	5 055	5 082	4 980	4 864	–
Share of GDP (%)	4.1	5.9	6.6	7.4	7.6	8.25	8.1	8.0	7.9	7.6

Source: WHO Regional Office for Europe health for all database.
*OECD health data 1999.

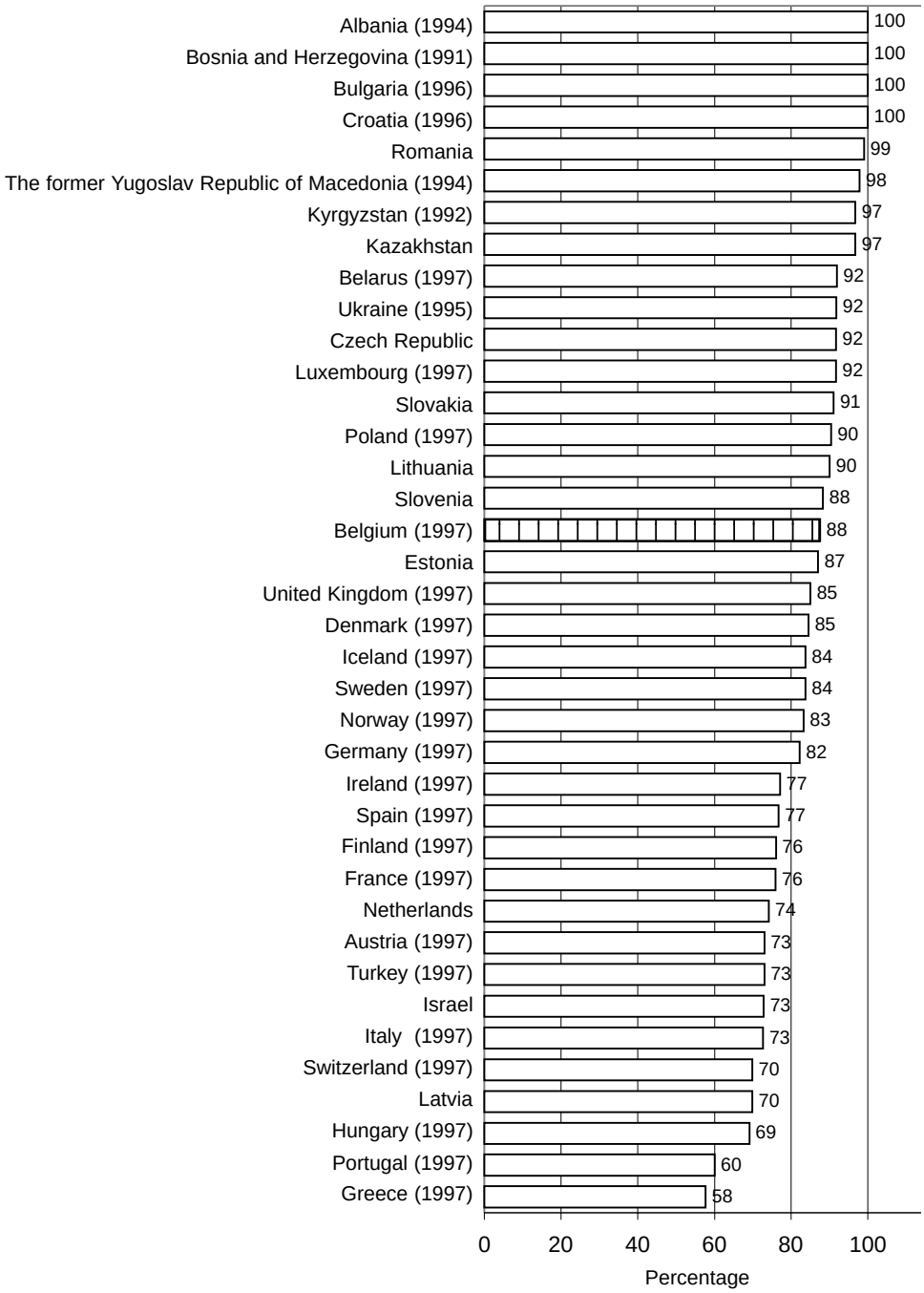
Total health care expenditure as a share of GDP rose steadily until 1993, and then started to decrease. Total expenditure on health in 1998 was 7.6% of GDP, which was exactly the average amongst OECD countries and close to the EU average (7.9%). However, as shown by Fig. 6 and Fig. 8, total expenditure on health care as a percentage of GDP is low in Belgium in comparison to neighbouring countries such as France, Germany and the Netherlands. Since 1990, the Belgian figure has even been below the EU average.

On the other hand, Fig. 7 and Fig. 8 demonstrate that Belgian expenditure on health care per capita is (just) below the western European average. Belgium's simultaneous low health care expenditure as a percentage of GDP and average health care expenditure per capita are explained by its high GDP per capita. In the EU in 1997, Belgium's GDP per capita was the highest after Luxembourg and Denmark.

In the long term, the costs of health care in Belgium are likely to go on rising. Some of the causes of cost escalation – such as ageing population, rising living standards, higher expectations of health care services, development of costly new medical technology, better-qualified and higher-paid medical personnel – are found in several European countries. Of major relevance is the overall increase of health care consumption for nearly all kinds of provisions. Others are more particular to the Belgian system. Chief amongst these is the fact that patients are not given sufficient incentive to limit their demand for health care services, nor are providers given enough incentive to limit supply.

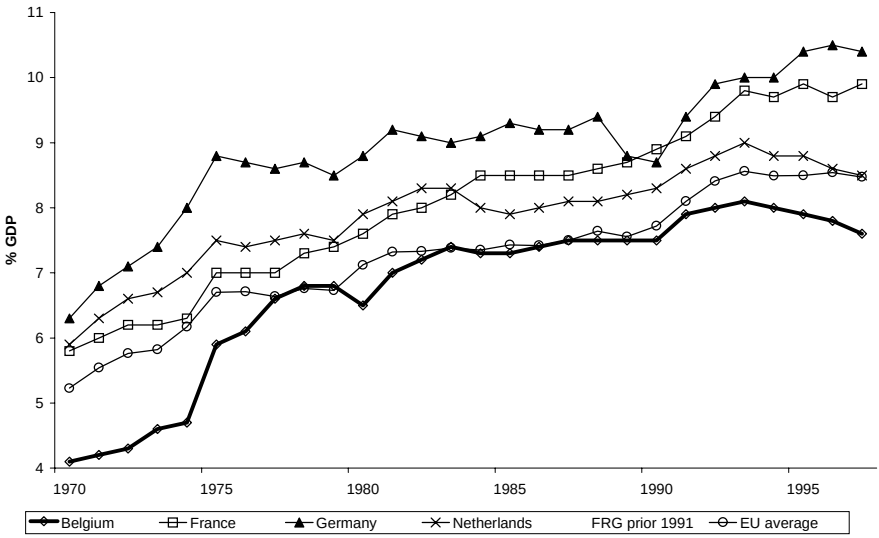
For the sake of cost containment, largely because of the deterioration of the economic situation around 1993 and Belgium's wish to satisfy the Maastricht criteria for entry into the European Single Currency, the government adopted a global plan on employment, competitiveness and the social security system. In health care the reforms mainly consisted of adopting a growth limit restricting the annual growth of expenditure to 1.5% in real terms from 1995.

Fig. 5. Health expenditure from public sources as % of total health expenditure in the WHO European Region, 1998 (or latest available year)



Source: WHO Regional Office for Europe health for all database.

Fig. 6. Trends in health care expenditure as a share of GDP (%) in Belgium and selected western European countries, 1970–1996



Source: WHO Regional Office for Europe,health for all database.

Structure of health care expenditures

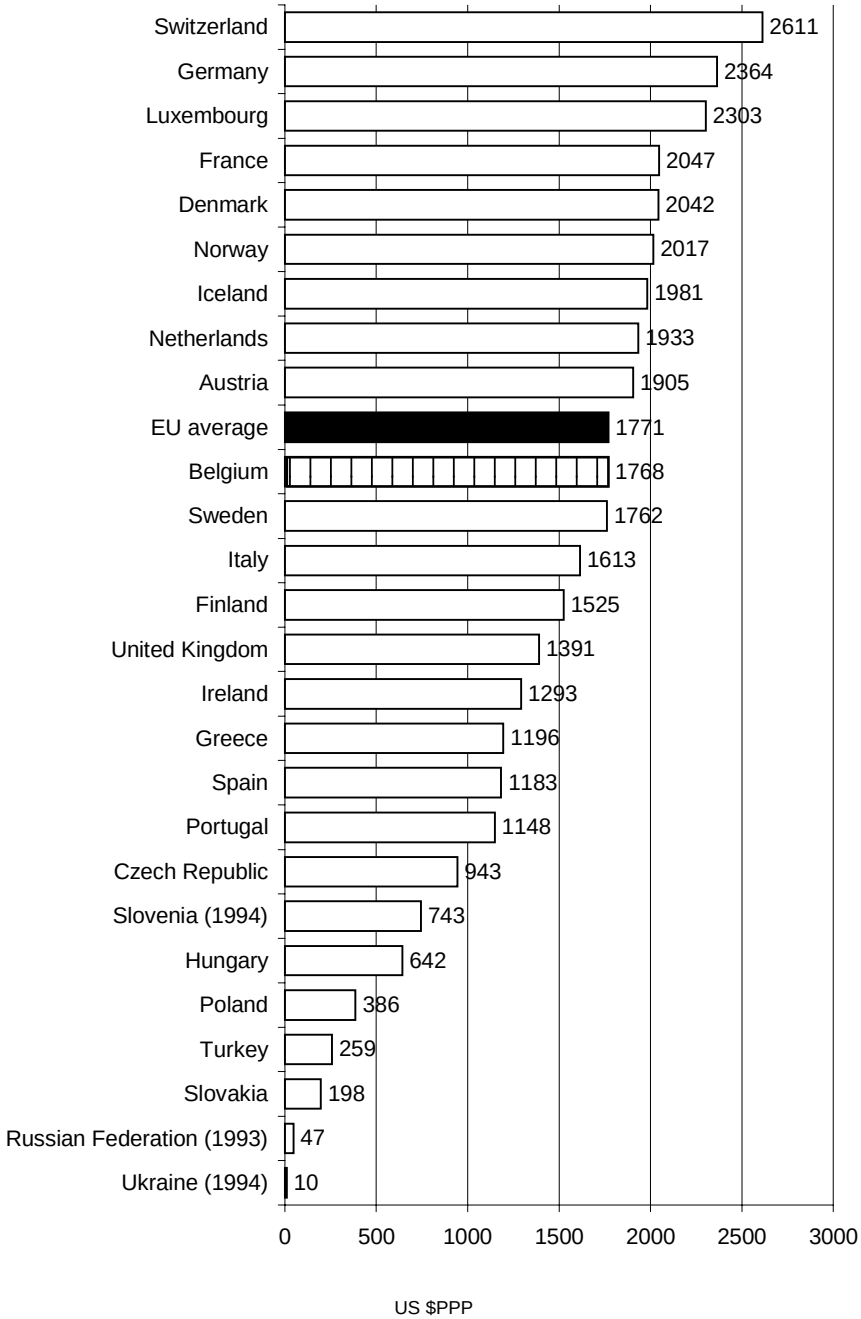
Table 3 shows health care expenditure by categories in Belgium. The share of total expenditure consumed by inpatient care has increased since 1970 to reach 39.4 % in 1997. The share accounted for by pharmaceuticals decreased from 1970 until the late 1980s but started to grow again from 1992. However since the beginning of the 1990s the proportion of total expenditure spent on inpatient care has increased more that on pharmaceuticals.

Table 3. Health care expenditure by categories (as % of total expenditure on health care), 1970–1997

Total expenditure on	1970	1975	1980	1985	1990	1992	1994	1996	1997
Inpatient care (%)	25.7	29.3	33.1	34.0	32.8	34.0	36.0	39.9	39.4
Outpatient care (%)*	42.5	37.9	39.2	40.0	39.8	38.5	36.5	39.6	38.7
Pharmaceuticals (%)	28.1	21.9	17.4	15.7	15.5	16.3	17.3	17.9	18.4
Public investment in medical facilities (%)*	3.2	1.7	2.1	0.3	–	0.8	–	–	–

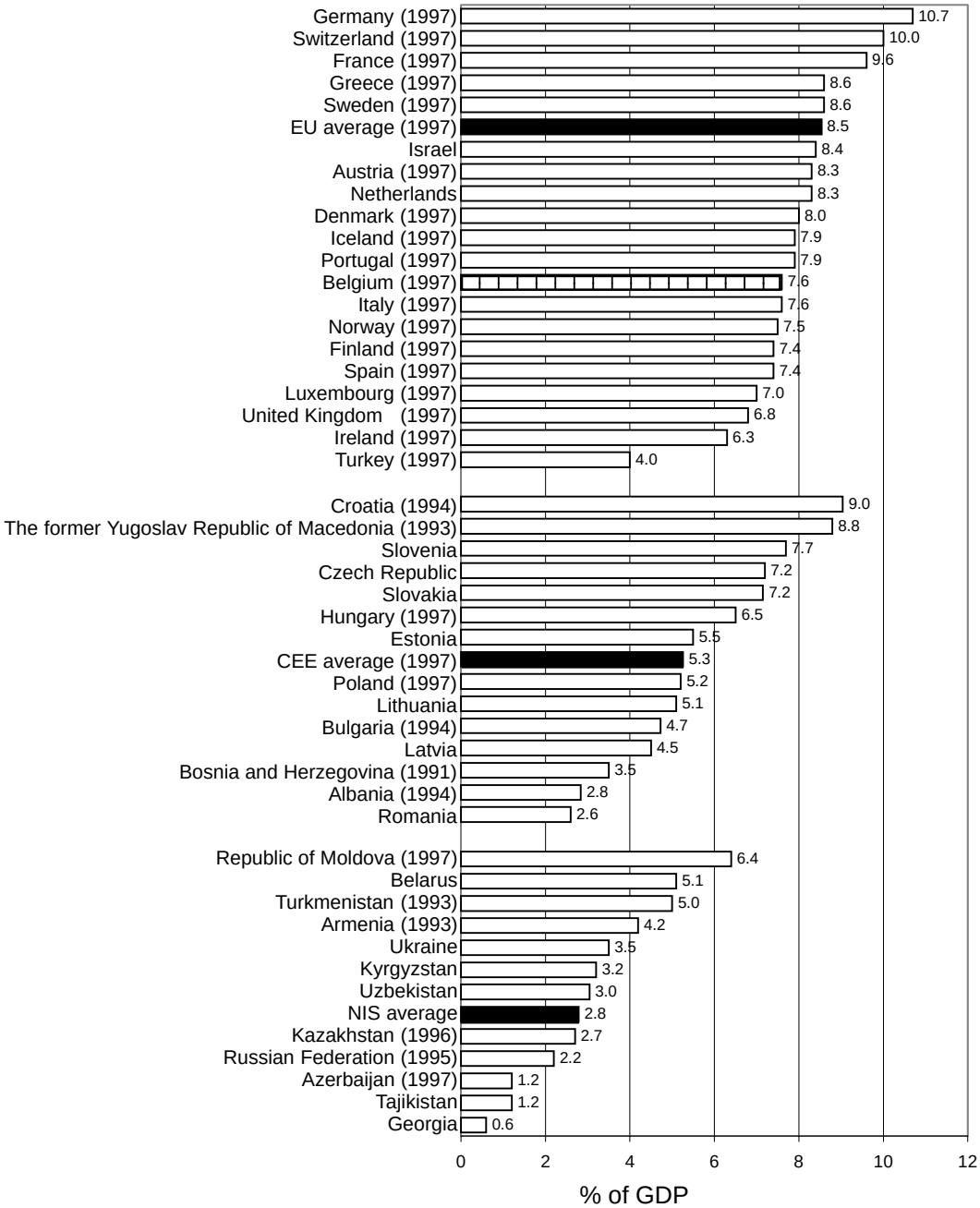
Source:WHO Regional Office for Europe health for all database.
* OECD health data 1999.

Fig. 7. Health care expenditure in US $PPP per capita in the WHO European Region, 1998 (or latest available year)



Source: WHO Regional Office for Europe health for all database.

Fig. 8. Total expenditure on health as a % of GDP in the WHO European Region, 1998 (or latest year)



Source: WHO Regional Office for Europe health for all database.

Health care delivery system

Health care providers in Belgium can be divided into:

- independent health professionals (both generalists and specialists) providing ambulatory care and services
- public health services
- hospitals
- the pharmaceutical industry
- social care facilities for the elderly and other groups with special needs.

Primary health care and public health services

Primary health care

Delivery of health care in Belgium is mainly private and based on the principles of independent medical practice, i.e. independent medical practitioners are remunerated via fee-for-service payment and there is free choice of doctor by the patient. Since there is no referral system in Belgium, specialists often form the first point of contact with the patient in the health care system. They will therefore be considered in this section along with general practitioners (GPs).

Patients in Belgium can visit general practitioners or specialists in their surgeries; they can also visit a specialist in the hospital or in a polyclinic. Patients do not usually have to wait long, if at all, for access either to general practitioners or specialists. General practitioners in Belgium make many visits to patients at their homes (not because there are formal incentives to encourage this, but because it has become part of the cultural pattern of the use of health care in the Belgian society and is unlikely to lessen as long as there is an oversupply of medical personnel). In 1997, there were 25 276 297 visits made

by patients to doctors and 21 513 465[9] by doctors to patients at home (of which 15 575 780 were standard visits, and 5 937 685 non-standard, e.g. at the weekend, at night, etc.).

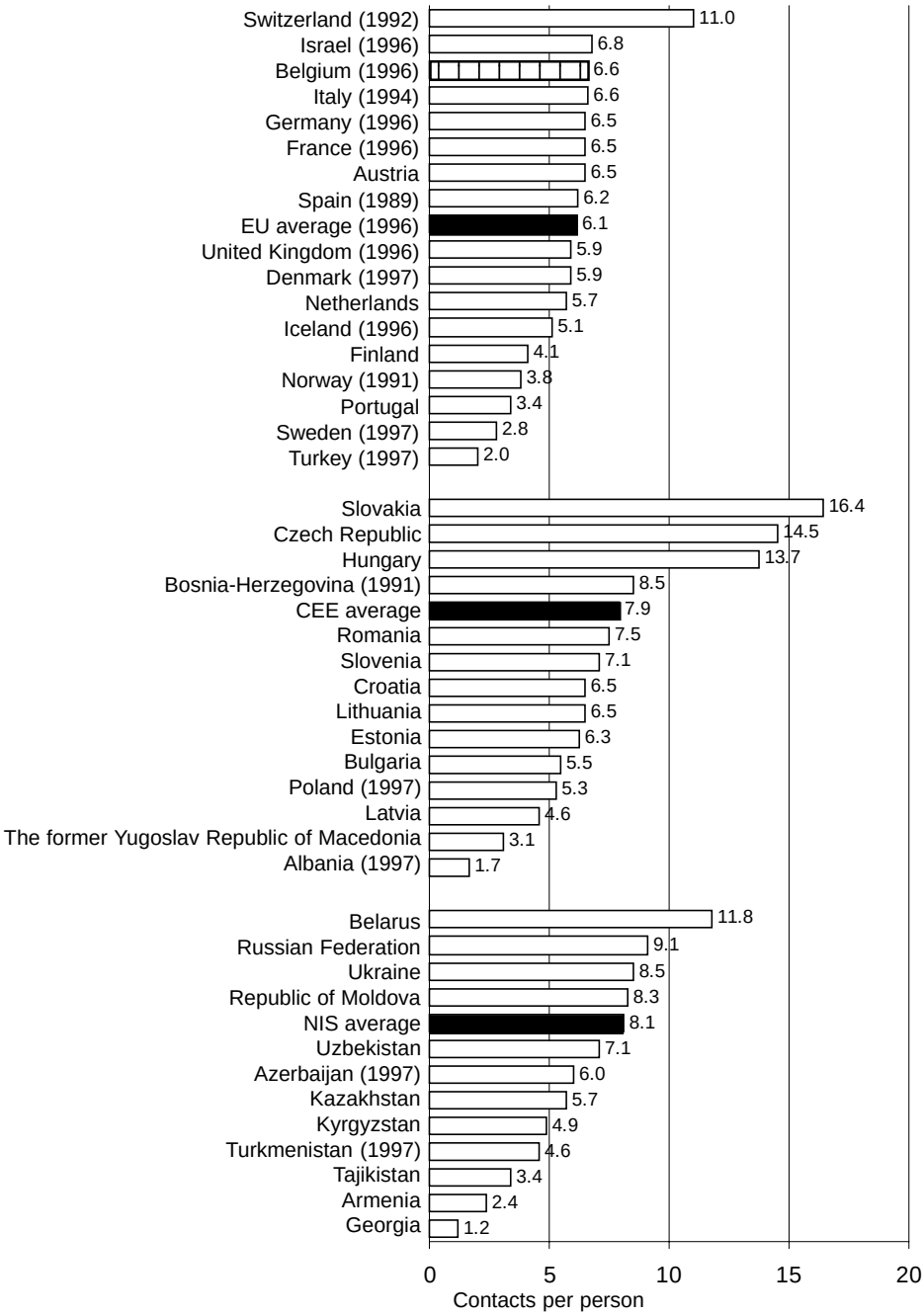
Most doctors (general practitioners and specialists) operate solo, frequently without any staff except perhaps a medical secretary. However there are centres, known as integrated health care practices, which operate a multidisciplinary team, including (at least) several general practitioners, administrative and reception staff, nurses, a physiotherapist and a psychotherapist. The number of such practices is growing (although there is still only a small minority of people affiliated to them); in late 1999 there were 61 integrated health care practices in Belgium. Most operate a fee-for-service payment system like other doctors, but a few have moved to capitation.

The provision of many other health care services (e.g. pharmacies and dental services) is also private, but there are exceptions. As women rarely give birth to their babies at home, most midwives work within hospitals; centres for family planning (which have a minimum staff of a doctor, a psychiatrist or psychologist, a lawyer and a social assistant) are state-subsidized to help pay for their equipment and running and personnel costs.

The functions and roles of many health care personnel have not been clearly defined. There is a lack of distinction between the roles of general practitioners and specialists. Patients have free choice of the first doctor to contact, can change doctor at any time and can even consult several at a time. The free choice of doctor is an important right granted to patients, but it does lead to patients shopping around for care and to over-consumption of medical care and consequent increases in health care expenditure. This explains why the average number of physician contacts per person in Belgium is relatively high (see Fig. 9).

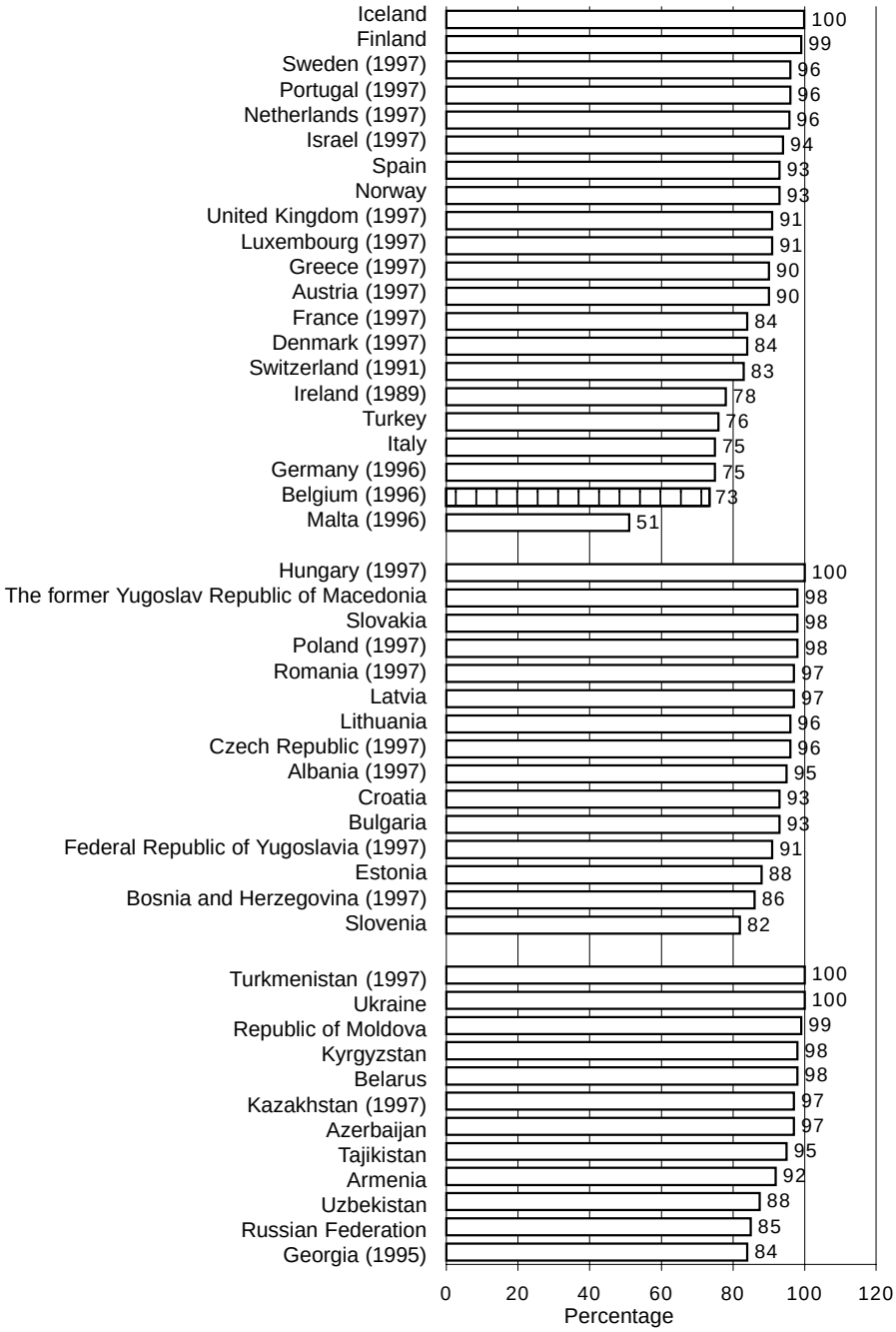
However, a new plan to introduce a general medical file for each patient should address this problem by gathering information on the patient in one place and developing patients' loyalty towards one particular general practitioner. These files will contain medical and administrative data; patients will choose which general practitioner is to hold their file, and general practitioners will only be reimbursed if each patient is registered and a general medical record maintained. Initially, due to funding limitations this system will only be introduced for the over-60s, but a commitment to the establishment in future of such files for the whole population was made in the National Agreement of Insurers and Physicians for the years 1999–2000.

Fig. 9. Outpatient contacts per person in the WHO European Region, 1998 (or latest available year)



Source: WHO Regional Office for Europe health for all database.

Fig. 10. Levels of immunization for measles in the WHO European Region, 1998 (or latest available year)



Source: WHO Regional Office for Europe health for all database.

Belgium

Public health services

The communities are responsible for health promotion and preventive services (except for national preventive measures, i.e. compulsory vaccinations). However, a number of decisions directly related to public health are taken by the federal government which keeps control over most resources devoted to health care. For instance, the level of taxes on cigarettes and alcohol, which are intended to reduce consumption, are decided by the federal authorities.

Belgium has a low percentage of immunization against measles compared to other western European countries, as shown in Fig. 10. Vaccination against measles is not compulsory in Belgium; the only compulsory vaccination organized by the federal authorities is that against poliomyelitis. However, in practice, almost all children are systematically vaccinated according to international recommendations. At the start of 1997, a draft agreement was reached between the federal government and the communities on the vaccination of babies and children against hepatitis B. This programme will be implemented by the communities and financed by the federal government, despite the fact that the vaccination is not defined as compulsory.

Different public health policies and services are provided in the French community and the Flemish community. These are described below.

The Flemish community

Public Health in the Flemish community is administered by the Health Care Administration within the Ministry for Health Care. Two sectors of the Health Care Administration deal with public health: the Royal Medical Academy of Belgium and the Preventive and Social Health Care Division.

By a decree of 31 July 1991 on health promotion, the Flemish community introduced coordination of public health actions and created the Flemish Institute for Health Promotion. A further decree of 19 December 1997 reformed the Flemish health promotion structure. Its objectives were to decentralize health promotion by establishing health networks called LOGOs (*Locaal Gezondheidsoverleg* or *Local Health Networking).* The idea of LOGOs resulted from a congress on preventive health in 1997, which made it clear that preventive health care activities are hard to implement if health workers from different sectors do not cooperate. LOGOs are intended to lead health promotion work at a district level (covering a territory in which 250 000–300 000 inhabitants live). They are composed of local initiatives and structures already in existence, and are meant to include all health and welfare workers such as general practitioners, pharmacists, dieticians, representatives of the local hospitals and rest homes, medical school management, health centres, etc. Each LOGO is supported and coordinated by a multidisciplinary central team and has to

implement evidence-based actions aiming to reach certain health targets set by the government. In late 1999, 25 LOGOs had already been set up.

The Flemish community has identified five health targets to be met by 2002:

- the number of smokers in the Flemish community should decrease by 10%;
- the consumption of greasy food should decrease significantly in favour of consumption of non-greasy and high-fibre food;
- breast cancer screening for women should be more efficient;
- fatal accidents in leisure time/home life and caused by road traffic should decrease by 20%;
- the prevention of infectious diseases should must be significantly improved, notably by further increasing the vaccination level for diseases such as polio, tetanus, diphtheria and rubella.

One of the missions of the LOGOs is to implement these health targets. They also organize dialogue between local and regional partners in the health promotion field and formulate health promotion plans for the area.

The French-speaking community

All responsibilities for public health are discharged by the General Department of Health within the Ministry of Culture and Social Affairs. The only exceptions are matters dealt with by the Birth and Childhood Organization, the Agency for the Prevention of AIDS and by the Royal Academy of Medicine.

As in the Flemish community, the health promotion sector in the French community was reformed in 1997. A decree of 14 July 1997 adapted existing rules to the new concept of health promotion which, following WHO recommendations (health for all policy), replaced the notion of health education.

This decree essentially foresaw the establishment of overall guidelines, within which health promotion would be decentralized. In the new structure the government draws up a five-year plan and an annual, more detailed plan of the French community health promotion policy. These plans also cover prevention policies, notably those on AIDS, tuberculosis and drug addiction. The five-year plan ensures the coherency and the continuation of actions from one annual plan to the next. A Higher Council of Health Promotion, composed of academic and scientific representatives, was also created and the old local coordination commissions were replaced by ten local centres of health promotion.

An initial five-year plan has been drawn up for the period 1998–2003. In this plan, the priority health problems are: infectious diseases (vaccinations, the fight against tuberculosis, and AIDS prevention), cardiovascular diseases, cancers, drug and alcohol addiction, mental health problems and accidents.

The plan also identifies some priority target groups: infants, pre-school and school-age children and vulnerable groups.

The main preventive services and health promotion programmes are the following:

School medical inspection is compulsory in every nursery, primary and secondary school – basically, every level of education below university. Every two years on average, pupils go to a school medical centre for a preventive medical examination which includes screening for physical and mental disorders, sight and hearing tests and verification of vaccination dates. In addition, teams composed of a doctor and a graduate nurse visit schools for prevention of communicable health problems (e.g. tuberculosis, head lice) and health education.

The Birth and Childhood Organization, which is supervised by the Ministry of Culture and Social Affairs of the French community, provides antenatal services and consultations for children up to six years. Services provided by this organization are free of charge. The Birth and Childhood Organization also oversees the regulation of day nurseries and subsidizes some of them, and plays a part in the prevention of child abuse.

Childhood immunization is also controlled by the Birth and Childhood Organization. The main immunizations are poliomyelitis (compulsory) and diphtheria/pertussis/tetanus (highly recommended). A further vaccination programme (PROVAC), carried out in collaboration with the Birth and Childhood Organization, covers vaccination for measles, rubella and mumps, hepatitis B and meningitis.

The French community subsidizes university anti-cancer centres and provincial anti-cancer centres, which undertake screening programmes. It also intervenes in the fight against tuberculosis; the community has entrusted to a Foundation for Respiratory Conditions and Health Education the task of evaluating the epidemiological situation and proposing short-, medium- and long-term prevention plans, as well as carrying out preventive interventions.

Secondary and tertiary care

The main pieces of legislation governing the hospital sector in Belgium (applying to both public and private hospitals) are the Hospitals Law of 23 December 1963 and the Royal Decree of 7 August 1987.

About 60% of Belgium's hospitals are non-profit private institutions, and the rest are public institutions. There are very few private for-profit hospitals.

Public hospitals are often owned by the public municipal welfare centres (CPAS/OCMW). The welfare centres have a range of different remits such as financial and educational guidance, financial assistance, affiliation of low-income patients to a mutuality and so on. Other public hospitals are owned by the province, the state, or inter-municipal associations (a legal form of association which groups together local authorities, welfare centres and possibly provincial government or private shareholders). Most private hospitals are owned by religious charitable orders although some 5% are owned by mutualities.

Hospitals are divided into two categories: psychiatric and general hospitals. The general category is itself divided into acute care hospitals (80%), geriatric hospitals (4%) and specialist hospitals (16%). Specialist hospitals specialize in cardiopulmonary diseases, locomotive diseases, neurological disorders, palliative care, chronic diseases and psycho-geriatric care. Some general hospitals have psychiatric departments but these can treat psychiatric cases for short stays only (except the hospital in Waterloo, which can also deal with long-term psychiatric care). The average length of stay in psychiatric hospitals is much longer.

There are nine university hospitals, which have special status due to their teaching and research functions. For instance, the per diem for these hospitals is higher than for others. The university label does not mean that the hospital is owned by a university, but that a certain proportion of beds are registered as university beds. Each university has a certain number of beds, which are distributed among different hospitals. Hospitals are recognized as university institutions when more than 50% of their beds are university beds. University hospitals differ from other hospitals in that they do medical research and are responsible for both basic and specialist training of doctors.

In Belgium there is no referral structure between types of hospital providing different levels of care. This is partly because of Belgium's small size and partly because of the financing methods which it uses.

The legislation on health care institutions is the same for the public and the private sector, as are financing mechanisms – the only differences being that the internal management rules for public hospitals are more tightly defined, and their deficits are automatically covered by local authorities or inter-municipal associations.

Hospitals' entry to the market is restricted by government regulation. To open and run a hospital, accreditation must be obtained from the Ministry for Public Health for each service. Refusal to grant (or withdrawal of) accreditation results in the non-opening (or closure) of the hospital or services in question. Accreditation, which is considered a guarantee to the patient of the safety, quality and hygiene of the hospital, allows a hospital service to operate a certain

number of beds and gives a hospital the right to be subsidized and to be reimbursed by the mutualities.

People are free to choose which hospital they attend and hospitals have to accept all patients. Thus there is no formal referral system between primary and secondary/tertiary care, but in practice it is usually the general practitioner or the private specialist who decides to send the patient to a hospital. Some patients take advantage of the lack of a formal referral system and go, for example, to an expensive teaching hospital when an acute general hospital would have been just as appropriate. Despite attempts to introduce a referral system, it has never been adopted – but the general medical file reform (see the previous section) can be seen as a first small step towards it.

A large number of patients (the occupants of around 38% of hospital beds) enter the hospital sector through the emergency services. Emergency medical care is subject to legislation of 8 July 1964, as amended by that of 22 March 1971 and of 22 December 1977. This legislation provides for the establishment of an emergency medical service for the benefit of people who require immediate care due to an accident or a sudden disease or aggravation of disease. The emergency medical services cover the emergency call system, first aid, and transport and admission to hospital. Sixteen local authorities work as centres for the emergency call system. These centres, which report mainly to the Minister of the Interior, are in charge of answering emergency calls by activating appropriate assistance. The installation and operating costs of those centres are borne by the state.

The Hospital Law of 1963 envisaged the planning of bed provision by service at the national level (see the section on *Organizational structure of the health care system*) but no hospital plan was actually formulated until 1966. In that year a royal decree of 12 December established target figures for each region. It was not compulsory for hospitals to stick to these targets but from 1966 the state only subsidised investments which did aim to fit in with the plan. Projects for bed provision which diverged from the plan could still go ahead, but did not attract state subsidy. In addition, since 1973 every projected hospital opening, extension or alteration has received accreditation only if it respects the planning targets described above. Accreditation thus became the state's means of control over the supply of hospital services. But this measure did not prevent the number of hospital beds from rising throughout the 1970s, and moreover this planning system – now over 25 years old – has not been adapted in the light of changes in hospital activity over that time.

Planners are trying to move away from considering the hospital as an overall infrastructure towards defining it in terms of its various remits. They have coined the descriptive terms programme and function. A *programme* is a

coherent intervention for a well-defined target patient group. The programme is first defined by the case treated and the type of care given; then norms describing infrastructure, number of personnel, minimum activity level and so on are allocated to this programme. A distinction is made between basic programmes for regular conditions and specialized programmes for more rare conditions, which will not be available in every hospital. A *function* describes a set of hospital services which are not aimed at a specific patient group; they are not provided in a defined unit, i.e. they are not directly linked to hospital beds; and they can be used by all the programmes and services of the hospital. The idea is that hospitals would be completely made up of a series of basic programmes and basic functions (which would have to be present in every hospital) and of some specialized functions and programmes. While one programme and several functions have been recognized, they are not as yet taken into account for the hospital financing. In the future, however, hospitals may be financed not by bed number but according to the programmes and functions they provide.

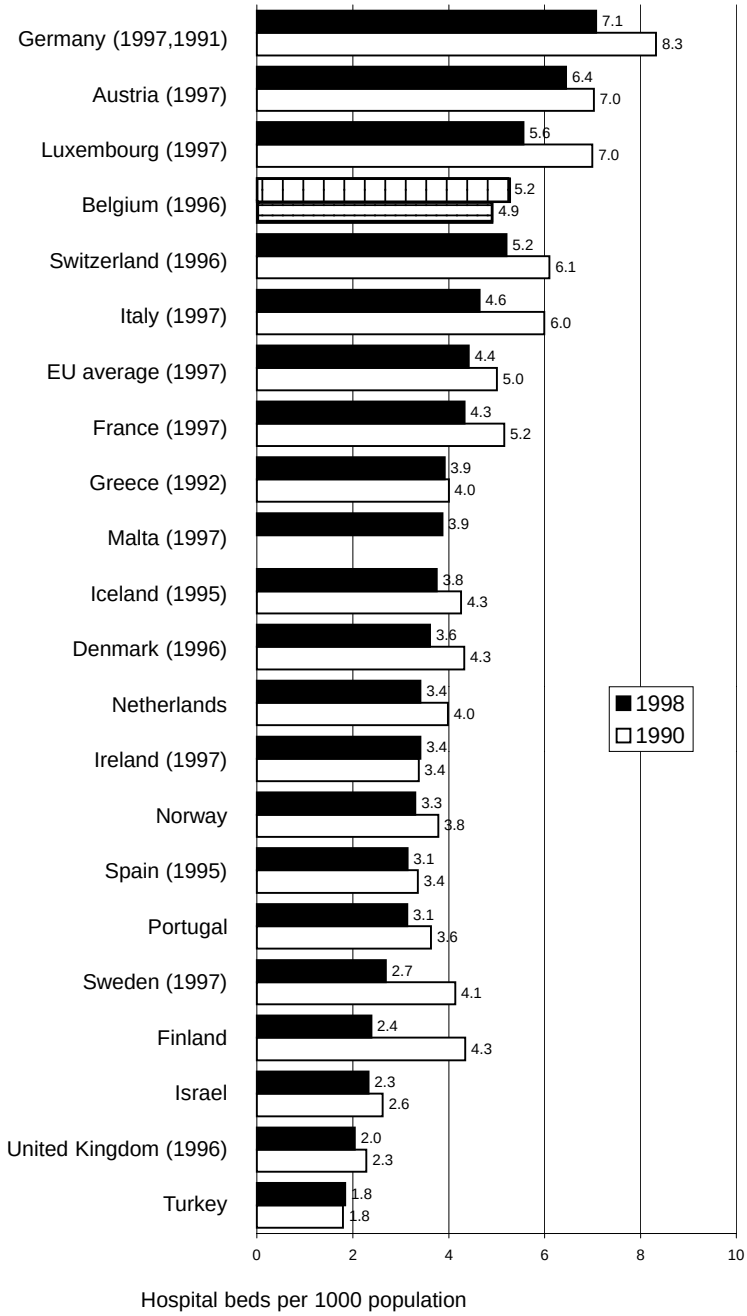
Number of beds

Until the early 1980s Belgium had a large number of small hospitals, and bed numbers were increasing year on year. However, since then the number of hospital beds available in Belgium per 1000 population has been very close to the western European average (see Fig. 11) and the number of acute beds has shown overall decline since the early 1980s (Fig. 12). This is due to various measures taken since 1982. A royal decree of 2 December 1982 allowed the health insurance system to reduce spending substantially by reclassifying nursing-home beds as different from acute and chronic hospital beds, and reimbursing the former at a lower rate than the latter. In July 1982, a moratorium on the number of general hospital beds was introduced, and this is still in force today: its effect is that the number of beds reached on 1 July 1982 cannot be exceeded. This means that the addition of any new bed must be compensated for by the closure of a bed somewhere else in the hospital system. Alongside the moratorium, a compensation scheme was introduced to recompense hospitals for closure or non-use of beds. However, the number of hospital beds decreased less than was foreseen by the Government when it introduced the above measures.

Another piece of legislation passed in this area was the royal decree of 1 January 1989 ,[9] which fixed the minimum bed capacity at 150 beds for general hospitals.

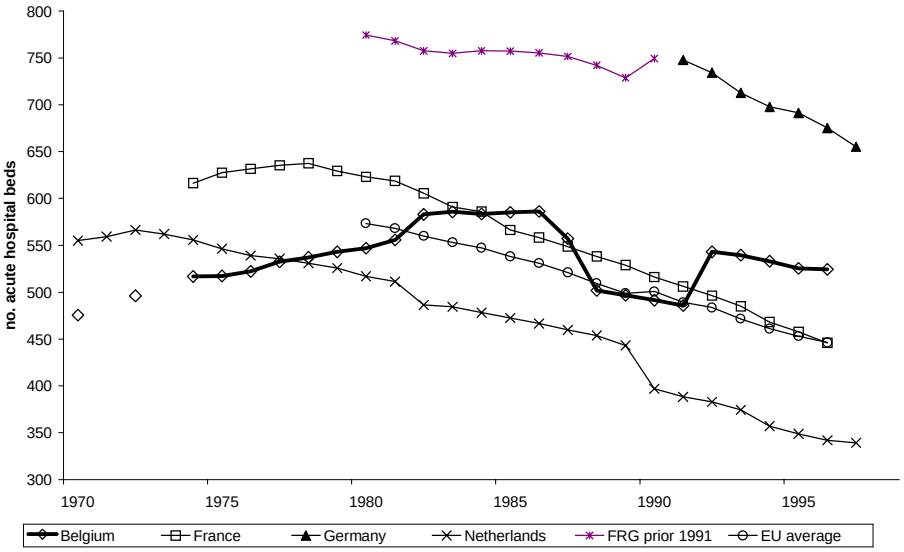
[9] Royal Decree fixing the complementary approval norms of hospitals and hospitals services and defining hospitals groupings and particular norms which they must respect

Fig. 11. Hospital beds in acute hospitals per 1000 population in western Europe, 1990 and 1998 (or latest available year)



Source: WHO Regional Office for Europe health for all database.

Fig. 12. Acute hospital beds per 100 000 population in Belgium and selected western European countries, 1970–1997



Source: WHO Regional Office for Europe health for all database.

These measures did succeed in reducing the number of hospital establishments and beds per 1000 population. Belgium had 521 hospitals in 1980 and only 287 at 1 January 1997 (although on more than 287 hospital sites/areas). Of these 287, 55% were located in the Flemish region, 30% in the Walloon region and 15% in the Brussels region. Likewise the number of beds per 1000 population fell from 9.39 in 1980 to 7.34 in 1995.

Geographical distribution

Partly as a result of the lack of referral structure between types of hospitals in Belgium (or precise distinction between primary, secondary and tertiary care) the location of hospitals and hospital services is more the result of historical evolution than the result of well-thought-out geographical planning. The overall density of beds in general hospitals is about the same in the Flemish region (5.41 beds per 1000 inhabitants at 1 January 1995) and the Walloon region (5.55 per 1000 inhabitants). However there is greater provision of psychiatric beds in the Flemish region (1.9 beds per 1000 inhabitants, as opposed to 1.4 in the Walloon region). In the Brussels region, the density of general hospital

Table 4. Acute inpatient care facilities utilization & performance, 1970–1996

Inpatient	1970	1975	1980	1985	1990	1992	1994	1996
Admissions per 100 population	–	–	–	15.3	16.9	17.7	18.4	18.0
Average length of stay in days	16	11	10	–	9	8	8	8
Occupancy rate (% available beds)	-	76.7	77.7	–	81.9	82.0	81.8	–

Source: OECD Health Data 1999

beds is very high (8.5 beds per 1000 inhabitants) because of the presence of four university hospitals (including Bordet). However, the density in Brussels of psychiatric beds is the lowest of all three regions, at 1.16 beds per 1000 inhabitants.

Although the number of hospital beds has dropped in all three regions, the psychiatric hospitals of the Flemish and the Walloon region have shown the most significant decrease. In Brussels, the high number of university hospitals (which follow different planning criteria from other hospitals) has slowed down the decrease. Also, because of its central location and the presence of four university hospitals, the Brussels region attracts many patients from the Flemish region and the Walloon region. In 1992, 18.2 % of inpatients in Brussels general hospitals had come from the Flemish region and 17.6 % from the Walloon region. Because health insurance is run at federal level, any citizen covered by the insurance can be treated in any part of the country.

Utilization of inpatient facilities

Average length of stay in acute inpatient facilities has been steadily decreasing since 1970 (see Table 4) whilst admissions per 100 population are increasing). The occupancy rate for acute general hospitals shows a slight decrease since 1991, although Table 5 demonstrates that Belgium still lay above the EU average in terms of acute bed occupancy in 1996 (EU average was 77.3%) and in terms of provision of acute hospital beds per 1000 population in 1997 (EU average was 4.4).[10]

Laboratory testing

Every hospital is required to operate a clinical laboratory, and additional laboratory facilities are also found outside the hospital structure. In 1995 there were 637 laboratories in Belgium (53% in Flanders, 32% in Wallonia and 15%

[10] *Source:* WHO health for all database

Table 5. Inpatient utilization and performance in acute hospitals in the WHO European Region, 1998 or latest available year

Country	Hospital beds per 1000 population	Admissions per 100 population	Average length of stay in days	Occupancy rate (%)
Western Europe				
Austria	6.4[a]	24.7[a]	7.1[a]	74.0[a]
Belgium	5.2[b]	18.0[b]	7.5[b]	80.6[c]
Denmark	3.6[b]	18.8[b]	5.6[b]	81.0[b]
Finland	2.4	20.5	4.7	74.0[c]
France	4.3[a]	20.3[c]	6.0[b]	75.7[a]
Germany	7.1[a]	19.6[a]	11.0[a]	76.6[a]
Greece	3.9[f]	–	–	–
Iceland	3.8[c]	18.1[c]	6.8[c]	–
Ireland	3.4[a]	14.9[b]	6.7[b]	82.3[b]
Israel	2.3	18.4	4.2	94.0
Italy	4.6[a]	16.5[a]	7.0[a]	76.0[a]
Luxembourg	5.6[a]	18.4[d]	9.8[b]	74.3[d]
Malta	3.9[a]	–	4.5	72.2[a]
Netherlands	3.4	9.2	8.3	61.3
Norway	3.3	14.7[b]	6.5[b]	81.1[b]
Portugal	3.1	11.9	7.3	75.5
Spain	3.1[c]	10.7[c]	8.5[b]	76.4[c]
Sweden	2.7[a]	16.0[b]	5.1[b]	77.5[b]
Switzerland	5.2[b]	14.2[e]	11.0[a]	84.0[a]
Turkey	1.8	7.1	5.5	57.3
United Kingdom	2.0[b]	21.4[b]	4.8[b]	–
CCEE				
Albania	2.8[a]	–	–	–
Bosnia and Herzegovina	3.4[g]	7.4[g]	9.7[g]	70.9[g]
Bulgaria	7.6[b]	14.8[b]	10.7[b]	64.1[b]
Croatia	4.0	13.4	9.6	88.2
Czech Republic	6.5	18.4	8.8	70.8
Estonia	6.0	17.9	8.8	74.6
Hungary	5.8	21.7	8.5	75.8
Latvia	–	–	–	–
Lithuania	–	–	–	–
Poland	–	–	–	–
Romania	–	–	–	–
Slovakia	7.1	19.3	10.3	77.9
Slovenia	4.6	15.9	7.9	75.4
The former Yugoslav Republic of Macedonia	3.5[a]	8.1	8.9	66.5
NIS				
Armenia	6.0	6.0	10.7	30.2
Azerbaijan	8.0	5.6	–	–
Belarus	–	–	–	88.7[d]
Georgia	4.6[b]	4.8[b]	8.3[b]	26.8[d]
Kazakhstan	6.6	14.9	13.0	91.2
Kyrgyzstan	6.7	15.8	12.9	81.7
Republic of Moldova	9.1	16.9	15.4	77.6
Russian Federation	9.0	19.9	14.0	82.5
Tajikistan	6.2	9.7	13.0	59.9[b]
Turkmenistan	6.0[a]	12.4[a]	11.1[a]	72.1[a]
Ukraine	7.4	17.9	13.4	88.1
Uzbekistan	–	–	–	–

Source: WHO Regional Office for Europe health for all database.
Note: [a] 1997, [b] 1996, [c] 1995, [d] 1994, [e] 1993, [f] 1992, [g] 1991, [h] 1990.

in Brussels). Their key organizational and technical features – e.g. management, specialist personnel, pre-analytic and analytic procedures, and quality control – are specified by law. Hospital laboratories must apply to the Minister of Public Health for approval, and independent laboratories outside the hospital system apply to the appropriate community.

Social care

Provision of social care

Social care services in Belgium include long-term and short-term residential care, day care centres and social services for the chronically ill, elderly and other groups with special needs such as the mentally ill, mentally handicapped and physically handicapped. There is no comprehensive state home care system or community care system in Belgium, so these services are provided by a diverse network of different (both private and public sector) providers.

Policy on the elderly (except policy on pensions) is the responsibility of the three communities (although in 1993, the French community transferred this responsibility to the Walloon region and the French Community Commission of the Brussels region). Policy on the elderly has been the subject of specific decrees in each community.

In terms of residential care, people over 60 years of age may be cared for in either rest homes or combined rest and nursing homes. The difference between these two types of homes is that combined rest and nursing homes can provide far more intensive nursing care – in fact they are half way between retirement homes and hospitals. In 1997, there were 19 856 beds available in combined homes, and 105 330 beds in rest homes (although this number does not take into account the combined rest and nursing home beds located in rest homes which have a double licence). There tends to be an oversupply of rest homes and a shortage of combined rest and nursing homes, for the obvious reason that elderly people try to put off leaving their own homes until their level of dependency and need for care is high.

A draft agreement which is in the process of conclusion between the federal authorities and the regions and communities plans an increase in the number of beds available in combined homes of 25 000 beds, over a five-year period. This will attempt to address the fact that the target number of beds planned in 1993 (17 beds per 1000 people aged 65 or over) has not been reached.

Supported accommodation structures – so-called service flats for the elderly – are also developing. These are apartments with extra support facilities meant for older people who are relatively independent and are run both by public and private sector operators (although both are equally regulated and controlled by the state). These apartments have been recognized by the Joint Community Commission in 1992, the German community in 1994 and by the Walloon region in 1997. The French community commission has not introduced any legislation on this issue, but the Flemish region has granted accreditation to more than 7000 such apartments. Each service flat is usually designed for two persons, so these apartments can house more than 14 000 people. Similarly a decree of the Brussels Capital Joint Community Commission of 17 January 1992 introduced homes for older people which are houses or apartments especially built or converted into housing particularly for older people.

In addition, there are various non-residential resources for older people: day centres, night centres and short-stay units. Day centres (of which there were 47 in Belgium in 1996) provide day nursing care to elderly people but without any overnight facilities. Night centres offer occasional overnight accommodation, but without nursing care. Short-stay units are accommodation and care institutions dedicated to elderly people suffering a sudden health crisis.

Belgium also has a well-developed system of home nursing care. The most important organization providing community nursing is the White and Yellow Cross which provides 50% of the home nursing care in Belgium. At the end of 1997 almost 5800 salaried nurses were working for this organization. Some nursing care is also provided by independent nurses, and there are also various accredited support services for vulnerable families and older persons which can provide cleaning and housework, social work services and administrative help.

Psychiatric institutions were the focus of a policy reform in 1990. The objective of this legislation was to create facilities better adapted to care for stable patients outside psychiatric hospitals. The reform therefore set up small psychiatric care homes and protected houses which offer accommodation (in single rooms) and treatment for small numbers of mentally handicapped and ill patients in the community. The reform also set a target that 6000 psychiatric hospital beds were to be converted into places in these institutions (which objective has not been met) and aimed to improve quality of care by increasing the number of personnel in psychiatric hospitals.

An innovative form of accommodation in Belgium for the mentally ill is care within a host family. Patients participate in family life and sleep in the family house, but are still considered the responsibility of the hospital; they spend part of the day or all day in hospital doing various activities and can go

back to the hospital for observation or in case of crisis. In 1994, there were 800 family accommodation places available in the Flemish region and 167 in the Walloon region.

Financing of social care

Long-term care is financed by the health insurance, with a contribution from beneficiaries. A daily per diem is allocated to rest homes and combined homes by INAMI/RIZIV for each patient residing within these institutions. There are five categories of per diem depending on the patient's degree of dependence. The remaining costs not covered by this per diem are met by the patient.

Home nursing services provided by independent nurses or the White and Yellow Cross are reimbursed by the health insurance system, either via fee-for-service (in which case the patient pays a small co-insurance) or by a per diem which is paid by the mutualities for each dependent person.

The idea of independence insurance was discussed at the federal level for a few years; its proposed aim was to cover those costs of dependence which are not covered by statutory health insurance. Since this idea was not taken forward by the federal authorities, the Flemish government decided to establish such a system in the Flemish community alone. The Flemish parliament adopted a decree establishing independence insurance (mainly for the elderly) on 17 March 1999.

For the mentally handicapped and ill, the cost from the patient's point of view of living in the community in a psychiatric care home or protected house is higher than that of living in hospital. This is because community accommodation costs are borne by the patient apart from a small state intervention (fixed at BF 320, 430 or 540 per day according to whether the patient belongs to a vulnerable group or has dependants). Treatment and care costs are covered by a per diem paid by INAMI/RIZIV.

Human resources and training

Level of provision of health care personnel

Medicine, dentistry and pharmacy can be practised only by persons in possession of an official medical doctor's, dentist's or pharmacist's licence. Doctors also have to be registered with the Order of Physicians and pharmacists with the Pharmacists' Council. The vast majority of the holders of official licences

work as independent self-employed health professionals. Medical specialists can work in institutions (mostly hospitals) and/or on an ambulatory basis, in private practice. General practitioners mostly work in private practice: they are not allowed to work in hospitals except to perform deliveries in maternity units. Because there is no referral system between these two different types of doctor, every citizen has free access to medical specialists and hospital care, even as the first point of contact with the health care system.

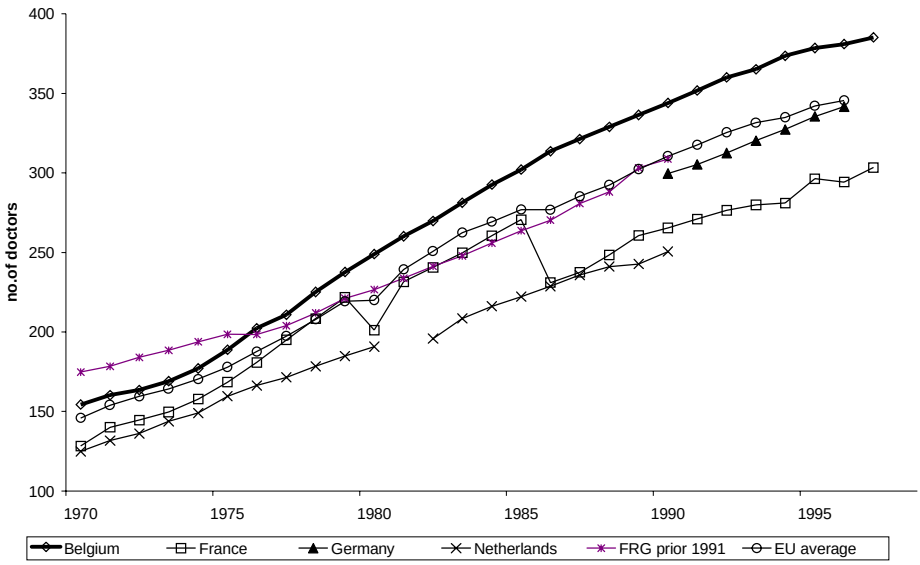
Four other main categories of health professional exist: I) midwives and other persons in possession of a university degree, e.g. those involved in laboratory testing; II) physiotherapists, who mainly work from their own private premises or in the patient's home; III) allied health professionals; IV) nurses.

Table 6. Health care personnel, 1971–1997

per 1000 population	1971	1975	1980	1985	1990	1992	1994	1996	1997
General practitioners	–	–	1.1	1.4	1.5	1.5	1.5	1.5	1.5
Dentists	0.2	0.2	0.4	0.6	0.7	0.7	0.7	0.7	0.7
Pharmacists	0.7	0.8	1.0	1.1	1.2	1.3	1.4	1.4	1.4
Nurses	–	–	8.5	7.7	–	–	10.6	10.8	–

Source: WHO Regional Office for Europe health for all database.

Fig. 13. Physicians per 100 000 population in Belgium and selected western European countries, 1970–1996



Source: WHO Regional Office for Europe health for all database.

In the last 30 years, the number of personnel in most health care professions in Belgium has doubled or even tripled (see Table 6), due mainly to a lack of control over the supply side of the market (there was until recently no limit on the entry of trainees into these professions). For example, according to the Ministry of Health the number of (all) doctors has more than tripled, from 11 730 in 190 to 38 369 in 1995. This trend is reflected in Table 6. There is currently an over-supply of doctors, physiotherapists and dentists in Belgium.

The lack of control over the number of entrants to the health care professions has resulted in a very high ratio of physicians to population in Belgium and a high doctor/population and nurse/population ratio compared with the rest of western Europe, as shown in Fig. 13 and Fig. 14. The contrast between Belgium and other western European countries in this respect is particularly marked as regards the number of general practitioners per population (there is more control over specialist doctors entering the market as their total number is limited by stringent entrance criteria and the limited number of training posts available in teaching hospitals).

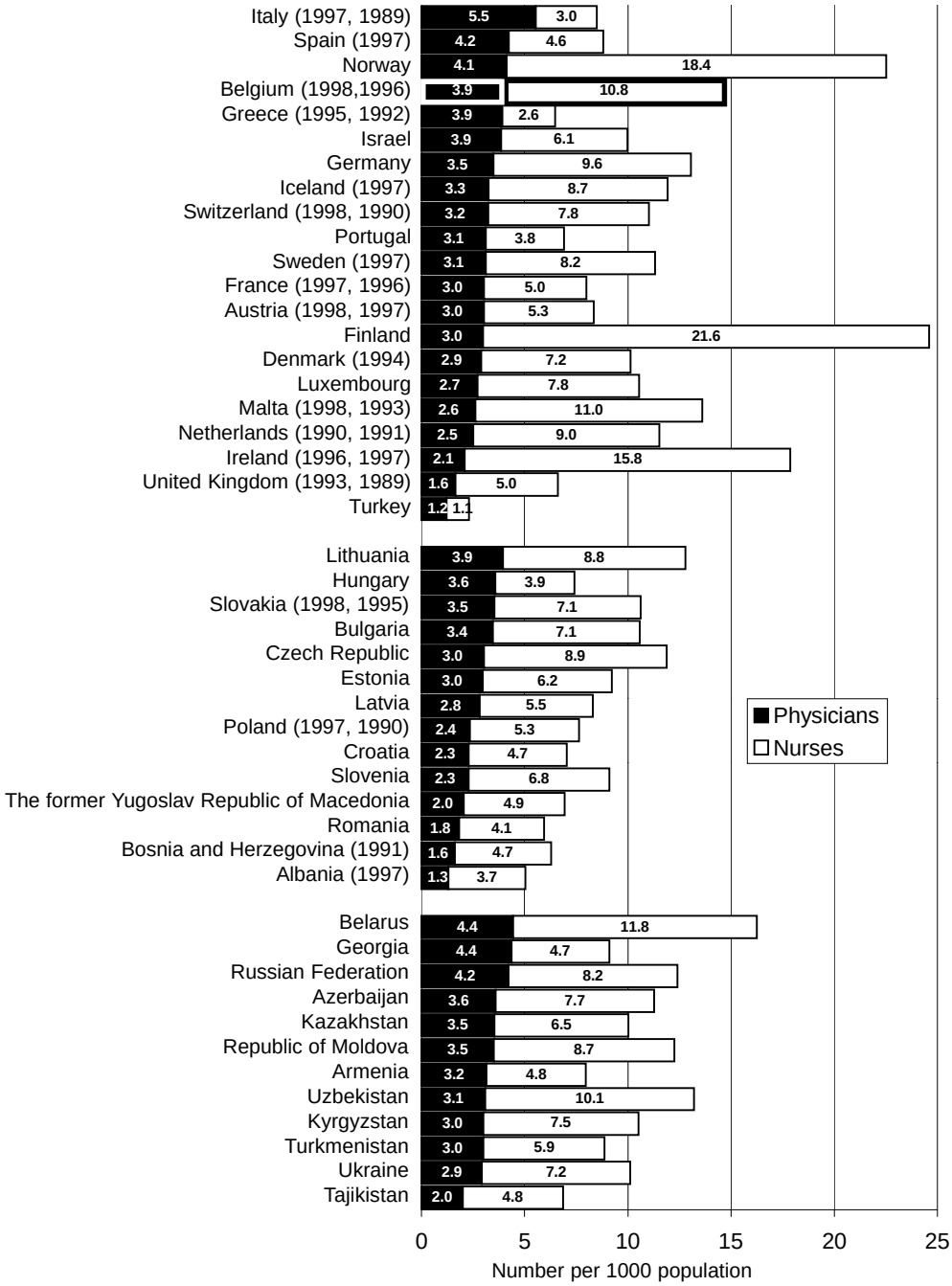
For many health professionals this excess supply has had serious consequences. Newly qualified general practitioners have been able to earn such limited incomes that the rate of return on their education is low and they have in some cases been forced out of medicine altogether. Yet although excess supply of health professionals has been an acknowledged problem since the 1970s, only in the late 1990s have attempts been made to address it.

A law of 29 April 1996 established a Belgian Committee of Medical and Dental Supply Planning and in 1997 the responsibility of this planning committee was extended to cover physiotherapists as well as doctors and dentists. On the advice of this Committee, a *numerus clausus* mechanism was proposed.

Although the Federal Minister of Public Health is responsible for accrediting medical practitioners, it was decided that measures to reduce number of medical students should be taken by the Education Ministers of the communities. The communities have dealt with the issue differently. The Flemish community has adopted an entrance examination (which was held for the first time in 1997), while the French community adopted a selection system at the end of the third year of training on the basis of the first three years' results. In addition, for the past few years the government has limited the information campaigns which it used to run to attract new medical students.

Further measures apply to doctors at the end of their careers (see below) and the government is also trying to encourage more group medical practices, which lend themselves not only to the transfer of expertise from older to younger practitioners, but also to more flexible working practices and hours.

Fig. 14. Number of physicians and nurses per 1000 population in the WHO European Region, 1998 or (latest available year)



Source: WHO Regional Office for Europe health for all database.

Belgium

As regards dentists, a royal decree of 29 August 1997 aimed to restrict the number of dental students to 140 for the years 2002 and 2003 – of which 60% will be drawn from the Flemish community and 40% from the French community. This will be almost a 50% reduction in numbers.

On 24 July 1998 a similar royal decree was passed limiting the number of physiotherapists who can be accredited by the Minister of Public Health and reimbursed by the National Institute for Sickness and Invalidity Insurance. The total cannot exceed 450 for the years 2003, 2004 and 2005. Again, these numbers break down to 60% Flemish-speaking and 40% French-speaking.

The number of pharmacies has been successfully restricted since 1973, by strictly controlling pharmacies opening in new areas. Since 1988, the number of pharmacies per 10 000 citizens has been stable at 5.2; the total number of pharmacies in the country is limited to 5269. These restrictions mean that although in theory graduate pharmacists can go straight into practice after their five-year university course, in fact they are sometimes employed in existing practices for very low wages or have to pay exorbitant prices to buy their own pharmacy.

Quality of care

For the individual patient, one of the main advantages of the Belgian health care system is its high quality, freedom of choice of general practitioner and/or specialist, responsiveness (i.e. lack of waiting times, ease of obtaining a second opinion), almost total population coverage of the insurance system, etc. Indeed for the patient, oversupply in the general practitioner market has led to advantageous non-price competition amongst providers. For example, Belgian general practitioners deliver a high proportion of their services at the home of the patient, in comparison to other western European countries.

To gain a more precise and objective picture of the quality of care than the patient's impression, however, the Belgian authorities were keen to introduce a system of accreditation. This is a recognition of quality given to doctors (generalists as well as specialists, in inpatient and outpatient practice) who meet certain criteria. Doctor accreditation was first introduced in the national agreement between the health insurance associations and the physicians of 13 December 1993 covering the period 1994–1995, and it started operating at the end of 1994. In order to obtain and retain accreditation, a doctor must fulfil certain requirements, for example:

- have a sufficiently large practice (e.g. 1250 contacts per year for a general practitioner);
- join a local peer review group and participate in at least two meetings per year;

- hold a medical file for each patient;
- follow a course of continuous training. (During each 12-month period, the doctor has to undergo at least 200 units of continuous training. Workshops, regional seminars, national and international meetings, hospital staff meetings, scientific work, etc. can be approved as continuous training and are granted a predetermined number of units.)

Since 1 September 1995, accredited doctors have received higher fees than non-accredited ones. The supplementary costs are paid by the compulsory health insurance system. About 60% of all doctors are accredited, and in 1998 an accreditation system was also introduced for dentists.

In addition, the authorities have taken the first step towards limiting the professional activity of health care providers at the end of their career. Under the Pax Medica Law, draft measures have been prepared which will change the accreditation of doctors and limit their rights as health care providers once they exceed 67 years of age. These measures will become effective by 2004.

Training

Medical training is a seven-year university course in Belgium. Medical studies are divided into two parts: the first, lasting three years, covers scientific education; the second, lasting four years, includes three years of clinical studies and one of practical training in a hospital. After these seven years, students receive their doctor's diploma. In 1995 there were 3060 medical students at various stages of this training in Belgium.

However, to be able to practise, a doctor needs accreditation granted by the Minister for Public Health. Further training is needed to obtain this accreditation. Students wishing to become specialists follow courses from four to six years depending on the specialty (and their choice can be constrained by the small number of training posts available at teaching hospitals) while even those wishing to practise general medicine undergo two years of training. In 1997, of the 39 240 doctors in Belgium (of which 35 757 were general practitioners and 3483 specialists) 28.7% were female – a significant increase from only 12% in 1977 – but women were better represented in the generalist category than the specialist.

Pharmacists and dentists follow a five-year university course. In these professions no accreditation is required; the diploma allows immediate practice.

A variety of qualifications entitle their holder to practise nursing: the diploma of graduate nurse or higher level nurse, the diploma of certified nurse or second level nurse and the certificate of hospital assistant. Graduate nurses are those

Table 7. Number of health care professionals per 100 000 inhabitants, 1 January 1998

	Flemish region	Walloon region	Brussels region
Physicians	307	363	571
Pharmacists	131	151	187
Dentists	71	63	107

Source: Ministry for Social Affairs, Public Health and the Environment, Brussels

who have followed a three-year course after secondary school. Certified nurses have undergone two years of training which lead to the certificate of hospital assistant; then a further (optional) year after which the diploma of certified nurse is awarded. Due to the influence of EU legislation and the WHO, there will shortly be a reform of this system to move instead to a single type of nurse, linking the present certified and graduate categories.

The authenticity of diplomas is verified by provincial medical committees, which register all doctors, dentists, pharmacists, nurses, midwives, etc. with an authentic diploma. Anyone who is not properly registered is not allowed to practise.

In order to practise, doctors also need to be registered with the Order of Physicians and pharmacists with the Pharmacists' Council.

Access to specialist training is restricted. Since 1978, there has been an accreditation system for those providing training. Trainers and training centres (which are in general professors and universities) are accredited for a certain number of trainees. Selection of trainees is not regulated by the state (it is up to the universities) but selection does still need to be ratified by a "specialization committee" (made up of representatives from the universities and from the Order of Physicians) to which the candidate has to submit a training plan, indicating the name of the trainer and training centre (with their agreement).

Flanders has a lower density of dentists and other health care professionals than the Walloon region, but the highest density is in the Brussels region.

Pharmaceuticals

Prescribing and coverage

Belgium has 5269 pharmacies, which have a monopoly on dispensing pharmaceuticals. The establishment of new pharmacies has been strictly

regulated since 1973, and a royal decree of 18 October 1994 imposed a moratorium to limit the number of pharmacies to their present number. This moratorium was due to end on 8 December1999, but was extended.

Only doctors and (to the extent that their profession requires) dentists can prescribe drugs. About 2500 medicines are on a positive list which means that they are partly or fully reimbursable. The percentage of the cost which is reimbursable varies depending on the therapeutic importance of the medicine. The patient only pays the non-reimbursable percentage as a co-payment to the pharmacy; the mutualities reimburse the reimbursable percentage directly to the pharmacies through the third-party payer system.

An important characteristic of this system is that medicines are reimbursable only to patients covered by the main health insurance scheme. Under the insurance scheme for the self-employed (which covers 15% of the population) pharmaceutical costs are entirely borne by the patient.

Registration, price-setting and reimbursement

Rules and regulations controlling the pharmaceutical industry and the distribution of pharmaceuticals are the responsibility of the federal government. In order to be able to be placed on the market, a medicine (for human or veterinary use) must be registered with the Ministry for Public Health under the provisions of the Royal Decree of 3 July 1969 on the registration of medications. The decision that a drug can be registered is taken by the Minister of Public Health after consultation with a pharmaceuticals committee (composed of scientists and general practitioners) and a transparency committee (composed of representatives of insurance companies, universities, pharmacists, general practitioners and pharmaceutical companies). Registration must be re-obtained if there is any change to the drug (e.g. in dosage or indications) and in any case every five years.

The Ministry of Economic Affairs's Pricing Committee for Pharmaceutical Specialties then sets the maximum price at which the medicine can be sold in Belgium. This price is set on the advice of the Ministry for Public Health about the innovative nature of the medication, its place in pharmacological categories and current medical practice and therapeutic needs, dosage, packaging and economic variables, etc.[11]

After registration with the Ministry for Public Health and once the maximum price has been determined by the Ministry for Economic Affairs, a pharmaceutical company can apply to INAMI/RIZIV's Technical Council for Pharmaceutical

[11] Law of 25 March 1964

Specialties to put a medicine on the positive list of pharmaceutical products which are reimbursed by the compulsory health insurance. This positive list is actually simply a section of the nationally established fee schedule.

INAMI/RIZIV's Technical Council makes a recommendation (which often involves a reduction of the price from the maximum allowed by the Ministry of Economic Affairs, so as to make reimbursement feasible) to the Minister of Social Affairs, who grants official reimbursement status. The basis for reimbursement is classification within a grid of categories fixed by a royal decree of 2 September 1980. Every category has a given coinsurance level, and classification in the grid of categories reflects:

- the social importance of the drug: (e.g. under this criterion, the reimbursement procedure for triple therapy for AIDS was speeded up)
- pharmaco-therapeutic criteria
- price criteria.

It is worth noting that within this process verifying the efficacy, quality and safety of drugs is the priority, rather than analysing their cost-effectiveness. In Belgium, pharmaceutical companies are not obliged to submit a cost-effectiveness analysis in order to get a drug reimbursed.

Of the six categories, drugs for the most serious illnesses are 100% reimbursed and other classes are reimbursed at 75%, 50%, 40%, 20% and 0%. For extremely expensive pharmaceuticals, the consent of the relevant mutuality's medical adviser, who is approved by INAMI/RIZIV's Medical Control Service, may be required before reimbursement will be granted.

The classification process is unacceptably long. It takes an average of 579 days to register a medicine, while the legal limit, in theory, is 210 days. European Community legislation (Directive 89/105/EEC[12]) imposes a time limit of 90 days to give a medicine a price and 90 days to fix the reimbursement rate. While the limit for price-setting is usually respected in Belgium, the average timescale for setting a reimbursement rate is 410 days. Draft legislation has recently been proposed to attempt to reduce this timescale.

Consumption of pharmaceuticals

Belgians consume large and costly quantities of pharmaceuticals. Belgians expect their doctor to prescribe them medicine after a visit and moreover the drugs are often expensive ones. Adequacy of supply, therefore, is not in doubt – but cost containment is a problem.

[12] Directive of 12 December 1989 on the transparency of measures allowing regulation of the price of medicines for human use in the scope of national health insurance systems.

Pharmaceutical expenditure has doubled in real terms over the last 25 years, and is rising most sharply for the elderly which – given the demographic profile of Belgium's population – is a significant factor for the future. Pharmaceuticals account for a large proportion of the health insurance budget, and INAMI/RIZIV publishes the total annual figure for reimbursement of pharmaceuticals every year. In 1996, for example, this was BF 76.5 billion which was far higher than the budgetary objective for the pharmaceutical category (BF 67.2 billion). Moreover these figures do not include the co-payments paid by patients.

The pharmaceutical industry argues that the annual ritual of budgetary overspend is due to unrealistic budget-setting by the authorities; the government, however, hopes that changes to reimbursement rates and prescribing practices will help to contain costs.

Measures to control costs

Several price control measures have been undertaken to limit the increase of pharmaceutical expenditure, as follows. At the end of 1992, in 1993 and again from 1996 to 1999, the prices of reimbursable pharmaceuticals were frozen. A royal decree of 3 September 1992 decreased the reimbursement of some categories of medicines and moved some drugs from category to category; on 10 October of the same year co-insurance levels were increased. A law of 29 April 1996 foresaw the negotiation of price-volume contracts with the pharmaceutical industry for some medicines (but work is still ongoing on how such contracts would be implemented, so they are not yet being negotiated). In February 1997 further drugs were moved to lower-reimbursed categories, and on 1 March of that year and 1 February 1998, other reimbursement rates were cut. Yet more cuts in reimbursement rates (8% for some categories) took effect from 1 July 1999.

However, when considering measures to cut costs Belgium has not really developed a policy on generic drugs. The consumption of generics currently represents a very small proportion – less than 1% – of total drug consumption. This is partly because generics are only about 15–20% cheaper than their trademarked counterparts, and a generic alternative is only available for about 40 products. A law of 6 August 1993 gave substitution rights to pharmacists (so that they could replace a given pharmaceutical by an alternative with the same active ingredients but a lower price, i.e. a generic). But Belgian doctors oppose pharmacists taking up this responsibility. As generics develop over the next few years it will be important to encourage their use – perhaps by reimbursing them at a higher rate than their trademarked alternatives.

[13] Royal Decree of 21 February 1997

1996 saw the start of Pharmanet, a database on doctors, the pharmaceuticals which they prescribe and the reimbursable prescriptions dispensed by pharmacies. Since June 1994, bar codes have been printed on prescriptions; this allows a better record to be kept of medical prescribing practice, as prescribing doctors can be systematically identified. Pharmanet statistical data aim to recommend to doctors the most efficient prescribing patterns, and inform them about their prescribing behaviour in order to correct it. In late 1998, general practitioners received their first individual drug prescription profile from Pharmanet. These profiles are to be discussed in peer review groups, and the accreditation of doctors depends on their participation in those groups. The objective is to give general practitioners a sense of responsibility, but not to penalise them. It is foreseen that the project will be extended to specialists in future.

Pharmaceuticals in hospitals

Hospital pharmacists distribute drugs to hospital inpatients and outpatients, to the elderly in residential care, and to psychiatric patients in community care. Since 1 January 1989, the working costs of hospital pharmacies have been covered by a per diem. The co-payment for inpatient reimbursable pharmaceuticals is BF 25 per day. Non-reimbursable pharmaceuticals are entirely paid for by the patient. Others are covered by the per diem and the co-payment from the patient. Since May 1997,[13] there has been lump sum reimbursement of the preventive antibiotics used to prevent infections following surgery.

The pharmaceutical industry in Belgium

Belgium has a dynamic pharmaceutical industry. In 1997, the Belgian pharmaceutical industry recorded a total turnover of BF 88 941 billion on the domestic market whilst exports exceeded BF 170 000 billion. The balance of trade was substantially positive at a value of around BF 45 000 billion. Over the decade 1987–1997, employment in this sector increased by 23.3% against 12% overall in the private sector.

Health care technology assessment

In Belgium the installation of heavy medical equipment requires approval from a minister of the appropriate community. There are special accreditation norms and criteria for the installation and running of heavy medical hospital units (units in which expensive medical equipment is installed, or highly specialized

expensive personnel is employed). If a hospital fails to meet these criteria, INAMI/RIZIV can refuse to reimburse treatment given with the equipment in question, and the hospital can be penalised by a budget cut of up to 20%; it can also be forced to restart the whole process of gaining approval for the equipment.

The areas covered by this legislation are:

- units for medical imaging (with CT-scanners)
- centres for human genetic work
- magnetic resonance imaging units
- centres for treatment of end-stage renal disease
- radiotherapy
- cardiac treatment centres

and possibly, in future:

- emergency units
- centres for infertility treatment
- intensive care units
- centres for neurosurgery and heart surgery.

Technology assessment is performed by INAMI/RIZIV's technical councils. There are technical councils for each type of provider (doctors, dentists, pharmacists, hospitals, implants providers and physiotherapists). The councils are composed of representatives of health insurance associations, health care providers, and university experts. Each council advises a committee (composed of representatives of the relevant providers and health insurance associations) on whether old technologies should be replaced by modern ones, and at what level the fee for use and reimbursement should be set.

It is striking that the providers and financers of health care and the managers of hospitals play the major part in this system, and the input of experts such as economists, statisticians, epidemiologists or engineers is minimal. Attention to the cost-effectiveness of technologies is lacking. Belgium does not have a formal national programme or institute for healthcare technology assessment (HTA), and thus bodies (such as university research groups and mutualities) which are developing this area are producing uncoordinated research which is not comparable, using different definitions and concepts of HTA.

However, INAMI/RIZIV's increasing expenditure on health care technology has led to pressure for better control of the use of health care technology. In 1996, technical medical services such as medical imaging and laboratory testing took up 18.5% of INAMI/RIZIV's budget. This share was second only to

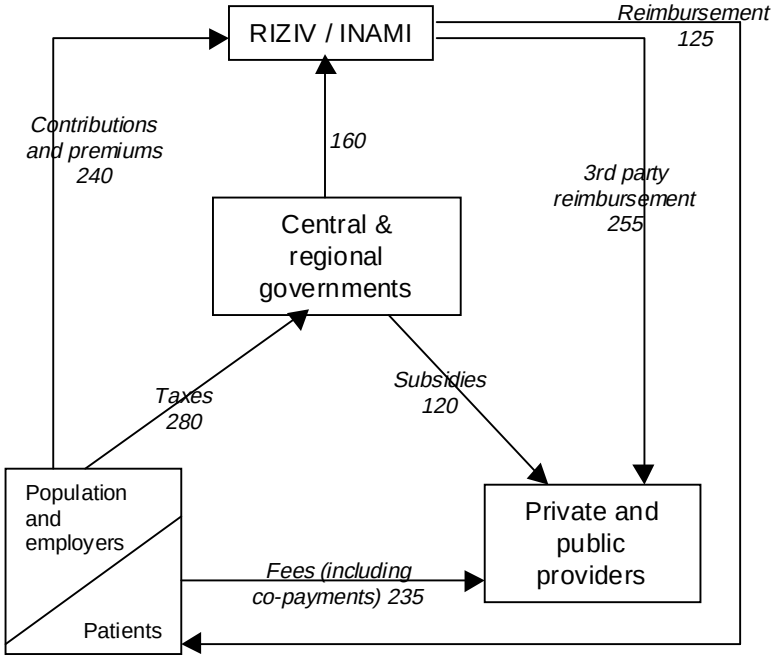
hospitalization costs (33.8%) and was a greater proportion than either pharmaceutical expenditure (16.7%) or the cost of medical consultations (15.2%).

Proposals have therefore recently been formulated to attempt to control the use of heavy medical hospital units. These controls would include minimum use limits (below which level of use a piece of equipment or unit would not be considered viable); limitations on the number of particular units allowed in the country, and regulations on cooperation between units.

Financial resource allocation

Fig. 15 shows the cycles of funding which flow from and to beneficiaries (i.e. patients). In the case of the compulsory health insurance system, it is social insurance contributions which flow from the beneficiary to the social security system and INAMI/RIZIV, and thence reimbursement to the independent health care provider. In the case of voluntary or private insurance,

Fig. 15. Key relationships in the health insurance system and financial flows in 1994 (in billion BF)



Source: Federation of Christian Mutalities.

it is lump sum contributions or premiums which flow from beneficiaries. In the case of state-funded services such as public health services, it is the general taxes of the beneficiaries which are drawn on by the federal authorities.

Third-party budget setting and resource allocation

In Belgium there is no overall budget allocated to health care. However there is a fixed annual budget for the compulsory health insurance system, and sectoral target budgets within it. Budget allocation takes place at federal and regional levels.

The federal government controls the allocation of the budget covering financing of:

- Capital investments in the health care sector. For example, in 1997 the Ministry of Social Affairs, Public Health and the Environment allocated BF 103 million to the financing of capital investments. These resources were allocated to the different communities according to a distribution mechanism established in 1988, which takes into account the needs of each (according to population structure, health status, etc.);
- Health insurance, to which the ministry allocated BF 428.3 billion in 1997.

For regions and communities, the subsidies which they receive from the federal government constitute their main source of income, as their ability to raise taxes is very limited. They allocate resources according to their own policy objectives in areas for which they have devolved responsibility.

INAMI/RIZIV budget

Social contributions (65%) and subsidies from federal government (35%) are the main sources of finance for the compulsory health insurance system. Social contributions are paid directly to the National Office of Social Security, which then distributes the money to the different government agencies responsible for different branches of social security. In the case of health insurance, this is the National Institute for Sickness and Invalidity Insurance (INAMI/RIZIV). In its turn INAMI/RIZIV then disburses these financial resources to the various mutualities for the reimbursement of health care services (both reimbursement to patients and to health care providers).

Until the early 1990s INAMI/RIZIV accepted all invoices submitted by the mutualities and reimbursed them. This meant there was little incentive for mutualities to contain costs. However since 1994 the system has started to

change. Sickness funds now receive a capitated payment per member from which they must reimburse all health care bills. To compensate for the differences in health risks of different members, the capitation payments are corrected for age, sex, unemployment, social insurance status, income, family structure, urban or rural provenance, etc. This system is being implemented gradually, and so in 1998, 80% of mutualities' financial resources were calculated on the basis of invoices, and 20% on the basis of capitation.

In addition, since 1992, an overall health insurance budget has been established for INAMI/RIZIV and target budgets have been set within this for each sub-sector of health care. The aim of this innovation was again to contain costs, which otherwise (owing to the fee-for-service nature of the system) could spiral out of control. The budgetary procedure is the following.

Each Agreements and Conventions Committee within INAMI/RIZIV determines the financial needs of its health care sector (e.g. pharmaceuticals, dental care, primary care, hospitals, etc.) and forwards this information to the Insurance Committee, which makes an overall budgetary proposal. This latter is sent to the General Council for Health Care Insurance, which (on the advice of a Budgetary Control Commission) fixes the overall annual budget objective and proposes the budgets for some health care sectors (hospitals and medical imaging). Since 1995, the overall budget objective has been limited to maximum real growth of 1.5% per year (imposed by legislation of 30 March 1994).

This limit of 1.5% applies to real growth, i.e. is independent of inflation. It was set by the Federal Planning Bureau which is under the authority of the Prime Minister and the Minister of the Economy. The rate corresponds to an assessment of the likely future development of the population's health care need. It was applied from 1995 to 1999 and should be applied also in 2000. It can be broken down into two constituent parts: the evolution of medical technology (which accounts for 1% of the growth limit) and the demands of an ageing population (which accounts for 0.5%).

The overall budget objective fixed by the General Council still has to be submitted for approval to the Minister for Social Affairs, who may amend it. It is then forwarded to INAMI/RIZIV's Insurance Committee, which fixes the sectoral annual budget targets.

After this, agreements are negotiated between the health insurance associations and the health care providers. These agreements must include fiscal correction mechanisms to prevent overspending and respect the budget targets. These mechanisms allow adjustment of fees and reimbursement rates. If expenditure looks likely to exceed the fixed budgets, these mechanisms will be activated, i.e. fees and reimbursement rates will be reduced. Thereafter, if expenditure continues to increase, the Minister for Social Affairs, as final

decision-maker, may decide unilaterally to reduce the fees and reimbursement rates to ensure that the fixed budgets are respected.

Finally, the General Council for Health Insurance decides if there is consistency between the agreements and the overall budget objective; and the Insurance Committee then approves the agreements.

Payment of hospitals

Hospital financing mechanisms in Belgium are almost the same for public and private institutions, the only differences being that the internal management rules for public hospitals are more tightly defined, and their deficits are automatically covered by local authorities or inter-municipal associations from local taxes. Hospital funding for both public and private hospitals is provided by two coexisting financing systems. Non-medical hospital activity (i.e. nursing care, accommodation (hotel costs) and infrastructure for hospitalized patients) is funded (mainly by the mutualities) via a fixed prospective budget system based on per diem and patient day quota rates. Medical services, on the other hand, are covered by a fee-for-service system. Fee revenue finances medical acts (e.g. consultations, surgical operations, diagnostic tests), and technical and paramedical acts (e.g. physiotherapy).

Hospitals thus benefit from:

- the prospective budget system, covering non-medical services such as nursing and other non-medical personnel costs, infrastructure and hotel costs, and 40% of capital investment costs;
- a share of the fees of resident doctors (based on a fee-sharing agreement); which together account for 80% of total hospital revenue;
- sales of pharmaceuticals;
- payments for specific ambulatory activities, such as day hospitalization, dialysis and functional rehabilitation, which are financed by lump sums per patient;
- co-insurance and extra charges paid by the patient.

Medical services within hospitals

Medical services within hospitals are paid for by fees paid directly to the doctor, which largely explains why Belgium never managed to integrate fees into the hospital budget system (which is under the control of the hospital manager). However, the patient does not pay the fee directly to the doctor in the case of

inpatient hospital care. Instead, the patient pays a fixed per diem personal contribution to the hospital (plus supplements for special facilities, such as a private room), and the rest of the bill is paid by the health insurance system. The main problem resulting from the fee-for-service system is that it tends towards over-supply; the two health sectors which have attracted the most criticism for this are laboratory testing and medical imaging. For this reason, these two sectors have seen their financing system changed. Laboratory testing is now based partly on lump sum payments calculated according to the case-mix of the hospital, and partly on fee-for-service. This attempt at cost containment appears to have been effective; in 1998, according to AGIM,[14] spending on diagnostic laboratory tests was at 1990 levels, and only 70% of the sum spent in 1985.

Since 1991, medical imaging has been financed by a mixed system including reduced fees-for-service, a consultancy lump sum based on the number of admissions (which tends to cover costs linked to the assessment of the clinical situation and the choice of the most appropriate medical imaging test), and a lump sum which varies according to the type of imaging service in the hospital.

Non medical services – hospital budgets

Since 1986, a hard national total budget has been fixed each year for hospitals' running costs. Legislation on hospital budgets is entirely the responsibility of the Minister for Social Affairs, and the budget is fixed by the Ministry of Social Affairs, Public Health and the Environment. However, the Ministry reimburses only 25% of the per diem: the remaining 75% is paid by the mutualities.

When the global budget has been approved, the Ministry of Social Affairs, Public Health and the Environment sets a provisional budget for each hospital institution. This budget is composed of three major sections (A, B and C) which are themselves divided into sub-sections. Part A contains non-indexed fixed costs, i.e. general investment charges, charges for short-term credits and investment charges for some medico-technical services exclusively financed via the hospital budget (and not via fees). Part B essentially contains the running costs of common services, clinical services (personal and medical equipment) and pharmacy costs. Part C relates to advance costs for new construction, readjustment (positive or negative) of budgets for past financial years and reduction of the per diem according to any extra charges which hospitals made, e.g. for a single room.

[14] Association Générale de l'Industrie du Médicament

Each part of the hospital budget is calculated according to rules set out in a ministerial decree of 2 August 1986.[15] Once the budget has been determined, a per diem rate is calculated for each hospital: factors such as historical cost, average cost of a sample of hospitals with similar size and occupancy rate, case mix and workload are used to calculate a day quota which is the number of inpatient days the hospital should provide given its capacity (number of beds licensed as at 1 January of the year in question) and occupation norms. The per diem rate is the hospital's total budget divided by the day quota, and is what the hospital invoices to the Health Insurance Association for each inpatient day. There are penalties for supplying more or fewer inpatient days than the day quota: the hospital only receives part of the per diem for these days. This system has been partially successful in that it has had the effect of keeping hospital costs from rising as much as total costs.

Budget sections break down as follows. The budget for hospital accommodation (part B1) represents about 30% of the total hospital budget; clinical services (part B2) represents 55%. A target is fixed for these two parts. In the past, hospital budgets were based only on historical budgets but by 2000, Belgian hospitals should be 100% financed on the basis of this prospective target system. The target budget for part B1 is calculated differently than the one for B2, as explained below.

The budget for accommodation/hotel costs (B1) is allocated among hospitals on the basis of cost comparison. Hospitals are grouped according to size. The performance level of the hospital is defined by the difference between its cost and the average cost for hospitals within its group. Under this system, efficient hospitals gradually have their budget increased and inefficient ones have their budget decreased. The hospital budget is thus progressively adjusted towards the average of the group.

The national budget for clinical services (B2) is allocated among hospitals on the basis of a points system. This financing system is linked to the hospital's structure (number of beds, number of personnel per bed) and also to activity levels. Hospital activity is mainly measured by the number and the cost of the medical and surgical services supplied in the hospital and charged to INAMI/RIZIV, as well as the nursing workload assessed from the "Minimal Nursing Summary" and the treated pathologies recorded in the "Minimal Clinical Summary". (The Minimal Clinical Summary is a data report on the patient's pathology which, since 1988, hospital doctors have had to fill in for each of their patients. The Minimal Nursing Summary is a record kept since 1990 of nursing acts performed for a series of patients, whose age, sex and diagnosis

[15] Decree fixing, for hospitals and hospital services, conditions and rules for setting the per diem rate and the budget and its constituent elements, as well as the rules for comparing costs and setting the inpatient day quota.

are recorded. This provides an outline of the intensity of nursing care by care unit.)

At the end of the financial year, the hospital's budget is revised according to the level of activity which actually took place during the year. The budget actually received may vary from the calculated budget because of a difference between the quota and the number of actual treatment days provided.

Since 1994, budgets B1 and B2 have been corrected in order to encourage a decrease in length of stay. Hospitals must respect norms set for each intervention (e.g. maximum length of stay for that intervention); unjustified deviation from the norms is penalized by cutting the hospital's budget. Thus, based on the record in the Minimal Clinical Summary, the system penalizes hospitals which have long lengths of stay and rewards those which have short length of stay, taking into account not only pathologies treated in the hospital but also the hospital's efforts (if any) to develop day hospitalization. Currently, figures on pathologies and case mix are only used for this purpose but studies are being undertaken with a view to financing hospitals more on the basis of case mix and care programmes.

A great deal of data is needed for the calculation of hospital budgets. Fortunately health care in Belgium is characterized by an extremely rich system of detailed medical data, thanks to the system of fee-for-service, hospital invoices and, more recently, the Minimal Clinical Summary and the Minimal Nursing Summary.

However, information in hospitals is, at present, scattered among various financial players. For instance, the Minimal Clinical Summary and the Minimal Nursing Summary are forwarded to the Ministry of Social Affairs, Public Health and the Environment, while invoice data are submitted to INAMI/RIZIV through the mutualities. To improve the integration of the financing system and the assessment of medical activity, a consultation structure gathering all parties involved was created by a Law of 29 April 1996. In addition the creation of a central database is underway. This database would gather Minimal Clinical Summary data together with accounting data which are collected for the Ministry of Social Affairs, Public Health and the Environment and invoicing data which are collected from INAMI/RIZIV.

One of the main problems for hospital financing arises from Belgium's federal structure. Hospitals receive money at the federal level; however, they are managed by the communities. Some managerial demands placed on the hospitals are therefore not reflected in the level of funding allocated. For instance, public hospitals in the Flemish community and the French community have to implement salary scale revisions at a higher level than has been endorsed by the Minister for Social Affairs.

Another problem is that the historical budget for clinical services (part B2) was fixed in 1986. The impact of new, more expensive technologies introduced since then is still not taken into account in the budgeting process.

In the past hospital financing was provided by retrospective payments (based on real costs) but it is now moving towards some prospective payments (focused on needs, risks and performance indicators) with the aim of making hospitals more responsible and increasing efficiency. This process started with the introduction of some fixed charges per hospital admission and/or per hospitalization day for laboratory tests and for radiography. Research[16] also examined extending this system to the reimbursement of hospital pharmaceuticals, and since 1997 the government has implemented a DRG-based reimbursement system for hospital pharmaceutical expenditures.

Capital investments

Regions and communities subsidise 60% of hospitals' capital investment costs, i.e. 60% of the costs of hospital construction or renovation (although in 1993 the French community transferred these responsibilities to the Walloon region and the French community commission with regard to all hospitals except university hospitals). The remaining 40% of capital investment costs are financed directly by the federal government via hospitals' per diem payments. The part financed via the per diem is based partly on historical costs and partly on prospective elements; it is annualized over 33 years for buildings, 10 years for non-medical equipment and five years for medical equipment. Medico-technical services which are not covered by the per diem, such as catheters and thermographs, must be covered by medical fees. In 1989, in order to control capital expenditure, regional authorities and the federal government together established a seven-year building programme of approved projects; a follow-up programme has recently been approved. Only the investments listed in the calendar can be paid for from per diem revenue.

Payment of physicians

Most doctors – whether general practitioners or specialists – are paid on a fee-for-service basis. The patient pays the set fee for the consultation directly to the doctor, and patients are then directly reimbursed by their mutualities. Most services are reimbursed at a rate of 75%, so the patient shares 25% of the cost.

[16] Closon, Crott & Even-Adin, *Pharmacoeconomics* 1996 Mar: 9(3)

Fewer than 1% of doctors are salaried. Most of these salaried doctors work in medical practices of integrated health care which are owned and managed by the doctors themselves, and where usually (though not always) the doctors are paid by INAMI/RIZIV according to a capitation payment for each patient they treat. The rest of the salaried doctors provide other medical and social services such as preventive care, and may work in hospitals (mostly university hospitals).

Specialists working in hospitals are also paid on a fee-for-service basis. In theory the fees are paid (by a combination of the patient and his/her mutuality) directly to the doctors themselves. However, in practice specialists sign an agreement with the hospital in which they work, allowing the hospital to retain a significant proportion of the fees as compensation for the space, equipment, staff and overhead services provided to the doctor. The extent of fee-sharing between the hospital and the specialist is variable and depends on elements such as relative scarcity/abundance of specialists in that specialty, extent of hospital facilities, the hospital's reputation, the specialist's reputation, and so on. A system of pooled fees works in most hospitals too, i.e. all fees received by all doctors working within the hospital are pooled and redistributed monthly.

The fees are negotiated at the national level in the Committee of mutualities and doctors, within INAMI/RIZIV. The resulting agreement needs the endorsement of the Minister for Social Affairs and is normally concluded for a two-year period. The agreement is then referred to all doctors for approval. It comes into force in each region except if more than 40% of all doctors in the region have notified their refusal to adhere to it, or if more than 50% of the generalists and 50% of the specialists have refused to adhere to it. If the agreement is rejected in a region, the government has three options: unilaterally to impose fees for some or all of the services; to submit an alternative draft agreement; or to fix the reimbursement levels, leaving doctors free to set their own fees.

In a region where the agreement comes into force, each doctor who has accepted the agreement is a so-called conventioned physician and is obliged to respect the fees which it sets. Non-conventioned doctors can set their fees freely. However, the agreement will also set certain conditions under which higher fees can be charged even by conventioned physicians; these depend on the time and place of consultation of the patient and the economic situation of the patient. So doctors can limit their activity within the framework of the agreement to a certain number of hours in certain places. Physicians do not have to respect the fees set in the agreement when the annual income of the patients or their families exceed a determined upper limit (about BF 1 600 000 for a single-income household).

There is no price competition amongst doctors since fee levels are set at the national level by the Convention Committee of the mutualities and physicians, and the Order of Physicians considers charging below the set level an unethical practice. Doctors who do so can be suspended from practice. However there is no legal or ethical obstacle to charging more than the fee levels set. This is often done for specialist hospital services, especially for specialties where there is excess demand or for the services of renowned specialists. In these cases demand is affected by price.

The huge increase in supply of doctors in the 1980s and early 1990s was accompanied by a decrease in their incomes. During the period 1979–1994, general practitioners' incomes decreased by 27% and specialists' incomes by 38%, causing some doctors to leave the profession.

Payment of other health professionals

Delivery of health care in Belgium is mainly private. Not only the doctors, but most dentists, pharmacists and physiotherapists are self-employed. Dentists' fees are decided similarly to those of doctors, that is in a committee composed of representatives of mutualities and dentists, following the same procedure as that for doctors. Preventive dental care and extractions are fully reimbursed, while dental prostheses, orthodontic treatment and other dental care are reimbursed according to the predetermined fee schedule.

For other fee-paid health care providers, fees are also determined in committees within the National Institute for Sickness and Invalidity, following a similar procedure except that some formalities about their agreement and implementation differ from the dentists' and doctors' agreements.

Other health care professionals are mainly salaried. (Nurses working in hospitals are salaried, while those providing home care can be either self-employed or salaried.) The salaries of health care professionals are indexed to the cost of living, but are seen to be low relative to the importance of their work. Nurses have felt so strongly about this in the past that they have organized one-day strikes (which have sometimes proved successful, e.g. the strike in 1989 which produced a 4% pay rise in 1990).

Health care reforms

Two characteristics are key to most Belgian health care reforms. Firstly, many reforms attempt to control the supply of health care (examples would be the 1982 hospital reform whose objective was to decrease the number of hospitals beds; or the more recent decisions to limit the number of doctors and dentists who will have access to practice). Secondly, much legislation is aimed at increasing the financial responsibility of the main actors in the system (an example would be the Law of 29 December 1990 imposing an overall health insurance budget, or the 1994 reform which made the mutualities more responsible for health expenditure).

Reforms since 1980, their aims and impact

1980:
A new reimbursement system for pharmaceuticals was introduced by a royal decree of 2 September 1980. The new system established co-insurance (thus introducing a link between the type of pharmaceutical and the amount paid by the patient) the level of which depends on the therapeutic and social value of the drug – i.e. the co-insurance rate is higher for drugs which are not really essential. Originally there were three reimbursement categories (A, B and C) but to create further savings two lesser-reimbursed categories were added afterwards (Cs and Cx). The aim was cost containment and better use of pharmaceuticals, by linking drugs' reimbursement to their therapeutic value and removing reimbursement from medicines the therapeutic value of which was in doubt.

1981:
Responsibility for preventive care and health promotion and some other responsibilities were devolved from the national level to the three regions

(Brussels, Flanders and Wallonia) and the communities (Flemish-, French- and German-speaking). The aim was to make decisions impacting on the population's health at a level closer to the population, and hopefully for services to be more responsive – although the down-side was increased potential for coordination problems between different decision centres. Reform of hospital financing in this year included a freeze on per diem prices at 1981 levels (until 1986 no adjustments were made except for inflation and capital investment).

1982:
Significant hospital reform. A royal decree of 22 July 1982 (modifying the Hospital Law of 23 December 1963) tried to contain costs by improving the efficiency of hospital bed use. Firstly it introduced a moratorium on the increase of hospital beds, stating that the number of beds available at 1 July 1982 should not be exceeded. It also restructured the hospital sector by creating specialized geriatric departments and services in hospitals, and by setting up a plan (involving financial incentives) to convert acute and chronic hospital beds into geriatric beds and beds in community residential care centres. This allowed them to be reimbursed at a cheaper rate, but was not intended to have any impact on the consumption of or access to services for the elderly as beds were not closed, only altered in status. The reform also introduced a policy of concentration, whereby every hospital had to maintain a minimum of 150 beds spread across at least three departments – or else close, or merge with another hospital. Also in 1982, patient-day quotas were imposed on hospitals: they were not to supply more patient days than in 1980, and quotas would gradually be further reduced thereafter.

1985:
The Minister for Public Health introduced a national budget for diagnostic testing in both primary and secondary care establishments, and also a data management system to identify over-prescribers of diagnostic tests. This had been one of the categories most criticized for over-use, and until this point it lacked any incentives for practitioners to curb their use. This reform, however, led to a strong counter-reaction from practitioners and further increases in test costs.

1986:
A ministerial decree of 2 August introduced new criteria for the fixing of hospital budgets, aiming for better allocation of resources between hospitals by putting less emphasis on historical costs and more on elements such as the function of the hospital, its needs and its performance. Further measures in this year built on the 1982 hospital reform, again trying to rationalize hospital bed planning

by reducing the number of hospitals and reducing their size, and bringing in rules on occupancy rates and average length of stay.

1988:
Following the failure of the 1985 reform of diagnostic testing, new measures were undertaken in 1988: a fixed national budget was to be strictly enforced by abolishing the fee-for-service system for hospital testing and replacing it by a daily rate and a fee per admission.

The requirement for systematic collection of a Minimal Clinical Summary (information on hospital diagnoses and interventions) was introduced, to allow comparison between hospitals, diagnosis related groups and categories of patients and to enable the Ministry of Public Health and the communities to collect epidemiological data about the population, follow up hospitals' compliance with accreditation criteria and link hospitals' financing to the case mix they treat.

1990:
The government developed a new policy on psychiatric care. 19 royal and ministerial decrees were adopted on 10 July to implement this policy. They made a commitment to convert 6000 psychiatric hospital beds into beds in psychiatric care homes and "protected houses" in the community (which are cheaper to fund, because the patient bears a higher proportion of the cost) over a five-year period. A further measure aimed to improve the quality of care in psychiatric hospital services by increasing their personnel, for example from 10 to 12 or 14 persons per 30 beds in hospitals where the average length of stay is under one year.

A Minimal Nursing Summary was set up (along the lines of the Minimal Clinical Summary – see above) to collect information on the diversity of patients in hospital and the nursing care provided to them, which allows individual wards and hospitals to compare their performance to others in Belgium.

Several ministerial decrees in November adapted various sections of the hospital budgets paid by INAMI/RIZIV to reflect hospitals' structure and activity profile, and introduced performance criteria for hospitals (e.g. target lengths-of-stay).

The Law with social provisions of 29 December imposed a fixed budget within the health insurance system for each sub-sector of health care, as well as a global budget for the health insurance; activated correction mechanisms if these budget limits were surpassed; and increased central government powers of supervision to oversee the new system. This cost-controlling reform represented a fundamental change in government policy towards health care

from the previous funding strategy which was demand-led and based on the ex-post recording of health care expenses determined by the workload of providers (i.e. demand-led).

Further reform of diagnostic testing: an agreement between mutualities and physicians introduced a new format for outpatient laboratory tests. Its main features were sharply reduced fees and strict monitoring of individual prescribing behaviour, with explanations again demanded of doctors found to prescribe an abnormally large number of tests.

1992:
The level of reimbursement for several categories of pharmaceuticals was reduced.

1993:
Legislation of 15 February reformed the structure of the National Institute for Sickness and Invalidity Insurance.

A royal decree of 12 September introduced increases of co-insurance and copayments.

Accreditation of doctors was introduced by a national agreement between the mutualities and the physicians on 13 December. This increased the fees-for-service (and correspondingly the patient reimbursements) for accredited doctors. It aimed both to encourage improvements in the quality of care, and provide standards by which such improvements could be monitored.

Towards the end of the year the government drafted a global plan for employment, competitiveness and social security. This plan became law on 30 March 1994, and aimed to restore financial equilibrium to the social security system and reduce labour costs. (It was flawed, and required further legislation of 21 December 1994.) The plan gave the National Office of Social Security new duties, notably to oversee global financial management of the social security system. Crucially, the plan also imposed a strict maximum limit of 1.5% on the real growth of health care spending from year to year.

Also this year and in 1994, reductions of the coverage of health care services by the statutory insurance system were introduced. The aims of these reforms were to encourage more responsible behaviour by the patient and therefore control costs; the down side was impact on access to health care for the poorest patients.

1994:
Introduction of bar codes on prescriptions, which automatically identify each doctor's prescribing behaviour. This data would be used in the detection and control of pharmaceutical over-use.

By a Royal Decree of 12 August mutualities were made more responsible for health care expenditure, via a new payment system based not only on expenses but also on the risks borne by the mutualities. This aimed to contain costs by giving incentives to the mutualities to avoid unnecessary health care consumption by their members.

Introduction of payment exemptions which established a limit above which health care services were fully reimbursed. The limit varied according to patient income. This was intended to redress the inequitable effects of the 1993–1994 reductions in health care service reimbursement by increasing the accessibility of care for the poorest.

1996:

To tackle the problem of excess numbers of medical students, a Commission of Medical and Dental Planning was established by a Law of 29 April 1996.

A minimal psychiatric database was set up to collect information about clinical and nursing activities for psychiatric patients, along the lines of the Minimal Clinical Summary and Minimal Nursing Summary (see above).

1997:

As a result of the work of the Commission of Medical and Dental Planning established in 1996, royal decrees of 29 August 1997 fixed the number of doctors who would have access to accreditation for practice at 700 in 2004, 650 in 2005 and 600 in 2006 and the number of dentists at 140 in 2002 and 2003. This was intended to address excess supply in the health care market – especially of general practitioners – because of its link to supplier-induced demand, medical unemployment and other problems.

Evaluation committees were created in hospitals to assess the quality of care, which was intended to help hospitals enhance and prove the quality of the care they provide, and entrench quality indicators into the financing system.

Creation of a good practice evaluation committee for the pharmaceutical sector, to follow up earlier reforms on prescribing practices (e.g. 1994 bar codes) by organizing conferences and peer review on this subject.

The Flemish community and the French community each reformed the organization of health promotion in their territory. The decree of 19 December 1997 of the Flemish Government restructured the Flemish Institute for Health Promotion and decentralized health promotion. The Flemish Government also established five health targets to be met by 2002. On 14 July 1997 a decree of the government of the French community also decentralized health promotion, and proposed a five-year plan fixing priorities in health promotion.

Royal Decrees of 19 June and 29 December 1997 extended access to health care, so that since 1 January 1998, residence in Belgium is sufficient basis to have the right to reimbursement for health care within the insurance system.

Possible future directions of reform

Cost containment

Possible future measures for reducing health care expenditure include:

- further developing the general medical file concept;
- increasing the importance of group practices (in primary care);
- the introduction of an organized peer review system for doctors;
- more attention to preventive care and health promotion;
- the rationalization of hospital service provision (so that certain specialized services would only be available in a few hospitals);
- changes in hospital budgeting so that differences in case-mix are better taken into account and too strong links with historical costs are avoided;
- further devolution of health care financing, which some observers feel could address regional differences in health care expenditure and financing;
- integration of the fee-for-service payment system for hospital doctors with the hospital budget system – but this would be an ambitious, far-reaching reform. In the interim it is hoped that breaking hospital activities down into programmes and functions may help to improve transparency and ease the tension which has sometimes resulted from the juxtaposition within hospitals of fee-for-service payment for medical personnel and drugs, and budgets for nursing care and accommodation.

Hospital financing

As mentioned in the section on *Secondary and tertiary care*, in the future hospitals may be financed not by bed number but according to the programmes (coherent interventions for well-defined patient groups) and functions (sets of hospital services) which they provide.

Prescribing practices

It is intended in future to extend Pharmanet (the prescribing practices monitoring database) to specialist doctors as well as general practitioners.

Conclusions

For patients, the significant advantages of the Belgian health care system are near-complete health insurance cover based on social solidarity; good quality services; low co-payments; free choice of medical professional and of insurance fund; and freedom to demand any treatment they choose, as the system is remunerated via fee-for-service. Access to health care is easy and equitable, due to the low co-payments and the fact that (since 1 January 1998) any resident in Belgium has the right to health insurance coverage.

However these very aspects undermine incentives to control the system, and thus it is vulnerable to abuse, inefficiency, over-supply and over-consumption of services, wasted expenditure and cost escalation. Other weaknesses include imbalance of supply of different types of care (e.g. too many hospital beds and not enough long-term-care beds), and tension between fee-for-service payment of doctors in hospitals versus the hospital budget system. There is a need for reform to address these problems.

Containing expenditure has been a general priority across the public sector over the last few years notably with a view to Belgium's membership of the European Monetary Union. In the health sector, the government particularly needs to reform the health insurance system's budget and control cost escalation, but it also wants to reduce social security contributions. So it needs either to find extra funding from outside the social security system (for example by drawing on general taxation) or find some means to reduce the system's expenditure. Above all, health policy-makers must find a way to change the attitude amongst Belgian patients that they can demand whatever treatment they want; at present health care is regarded almost as a free service. A rise in copayment levels could achieve this, but the government is reluctant to impose it, pointing to research showing that demand for health care is inelastic and fearing that a rise in copayments will reduce access for the less well-off and thus damage equity.

The growth limit of 1.5% maximum real growth per year is a crude way to control cost escalation, and cannot be more than a temporary solution – it does not attempt to deal with making services more efficient, nor with additional cost-promoting factors such as population ageing or the introduction of new technology.

Other possibilities for reform to contain costs might focus on pharmaceutical reimbursement – as mentioned above, recent research has examined prospective payment systems for hospital pharmaceuticals, and concluded that key factors (e.g. disease severity) in hospitals' drug expenditure could indeed be used to set rational prospective hospital budgeting systems for drug expenditure. Alternatively the government could attempt reduction in the services covered by the insurance system, or a move to financing by capitation instead of fee-for-service; but these would be more difficult politically. The most difficult of all would be the introduction of a gatekeeping system. There is a strong lobby in the country which argues that gatekeeping increases the overall number of physician contacts, and thus overall cost. The powerful counter-argument that specialist care costs more (and it is therefore inefficient for specialist care to be used when generalist care would have sufficed) may take a long time to make any headway.

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