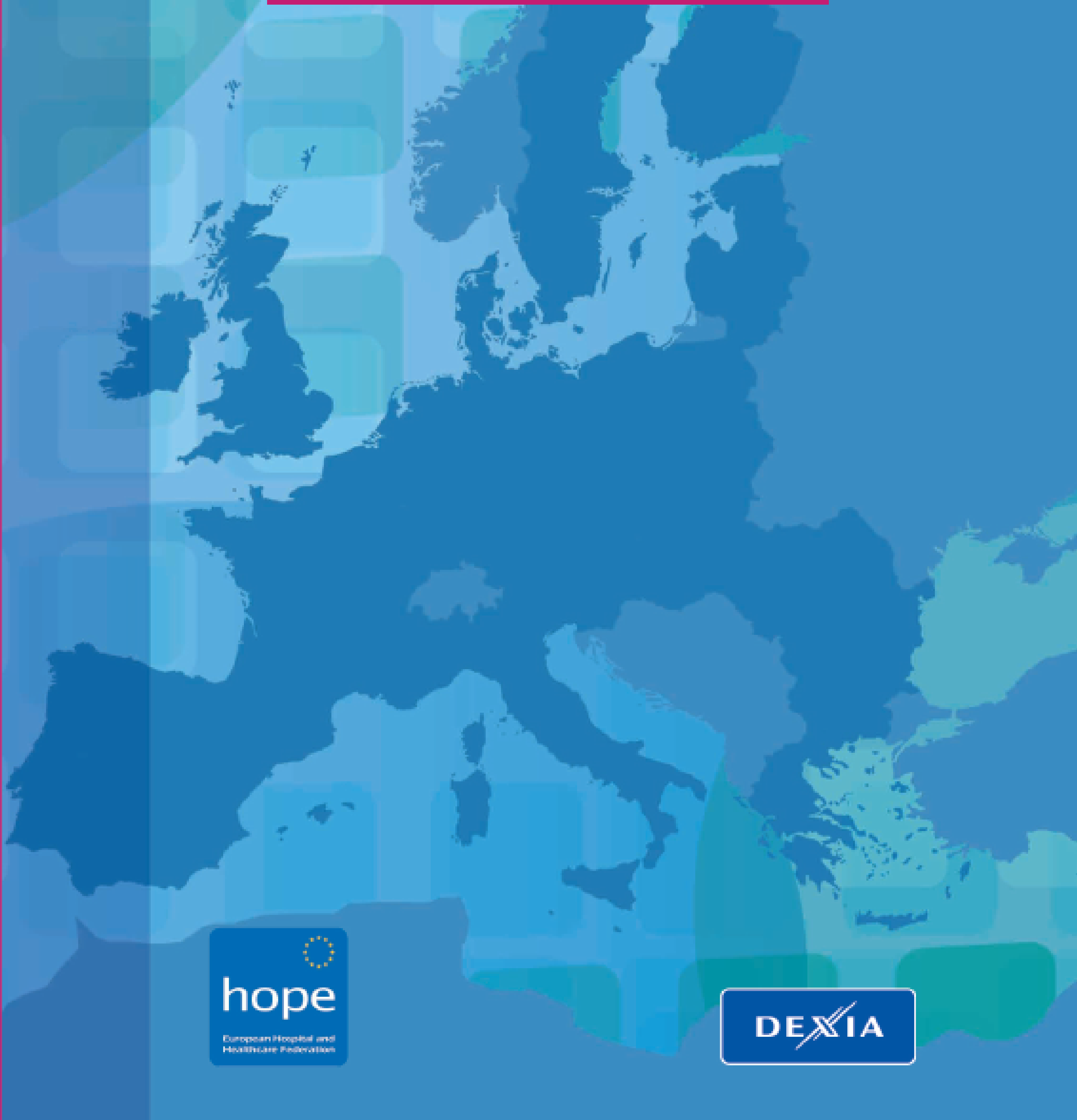
HOSPITALS

in the 27 Member States of the European Union

Executive summary



hope
European Hospital and Healthcare Federation

DEXIA

In all the Member States of the European Union, healthcare systems are currently facing similar challenges. They must adapt to demographic changes, and ageing is one of the major concerns of decision-makers in the hospital sector. Moreover, EU citizens are more demanding nowadays not only in terms of healthcare quality, but also accessibility and responsiveness. Finally, although technological and medical progress continues to raise the level of care, it nevertheless contributes to greater spending requirements.

It comes as no surprise, then, that healthcare spending has grown over the years. Today, it represents some 10% of GDP in the European Union. Meanwhile, public funds, which cover most healthcare expenditure, are strained everywhere. As a result, public authorities in many EU Member States have recently initiated reforms, some of them extensive, in their respective healthcare systems.

Given the influence of national culture and history on a country's healthcare system, responses to the problem are not the same. Nevertheless, they have common features. First, hospital reforms are geared towards placing responsibility on the different players. The introduction of funding schemes founded on activity-based payment is proof of this.

Another point of convergence is their quest for the best compromise between an advanced level of technology, which undoubtedly requires the concentration of means, and the ease of access constantly demanded by citizens. Here again, solutions may vary from place to place, for there are as many hospital settings as there are countries. Still, the debate is being conducted more and more at a local level, with a sharp trend towards the territorialisation of health policies.

It may still be too early to speak of a "European health system", but European integration seems to be spurring a certain degree of convergence. This is particularly obvious in the Union's new entrants, which are going through a genuine "hospital transition". Improved health indicators are accompanied by a streamlining of the healthcare system, in which hospitals are likely to be less dominant. The recent emergence of cross-border cooperation also contributes to the convergence of healthcare provision at a European level.

Extract from the preface by Alain Delouis,
Member of Dexia's Management Board,
Executive Vice-President in charge of Public and Project Finance,
Hospitals in the 27 Member States of the European Union,
A publication produced in partnership with HOPE, the European Hospital and Healthcare Federation
To be published in October 2008

I SIMILAR HEALTH AND ECONOMIC CHALLENGES IN THE EUROPEAN UNION MEMBER STATES

Despite discrepancies in the level of healthcare in the European Union Member States, changes in morbidity and demographics are paving the way for a convergence of health issues.

Population ageing

Life expectancy is often used as an indicator of a country's healthcare system, which it does only partially. In the European Union, almost a decade separates the Member States with the longest life expectancy (Spain, Italy, Sweden, around 80 years) and those with the shortest (Latvia, 71 years)[1]. The gap is greater for men than for women, at 12 and 8 years, respectively. Average life expectancy at birth for males varies from 66 years in Lithuania and Latvia to 78 years in Sweden. For females, it varies from 76 years in Romania to 84 years in Spain. In EU countries with the longest life expectancies, the challenge no longer lies in prolonging overall life expectancy, but rather the number of healthy years. Indeed, the last years of life involve the greatest health care spending. The Healthy Life Years (HLY) indicator[2], which measures the number of years at birth that a person can expect to live in good health, highlights large gaps between the EU countries. In 2002, this gap was 10 years between Latvia (63 years) and Sweden (73 years). Unhealthy life years range from a little under 7 years in Germany and Sweden to almost 10 years in Cyprus.

Lower fertility rates and longer life expectancies lead to population ageing. In addition to the increase in spending that this generates, such a change in the demographic structure erodes the ratio of aged to "economically active"[3] individuals, threatening the viability of health and pension systems that are founded on the solidarity between generations.

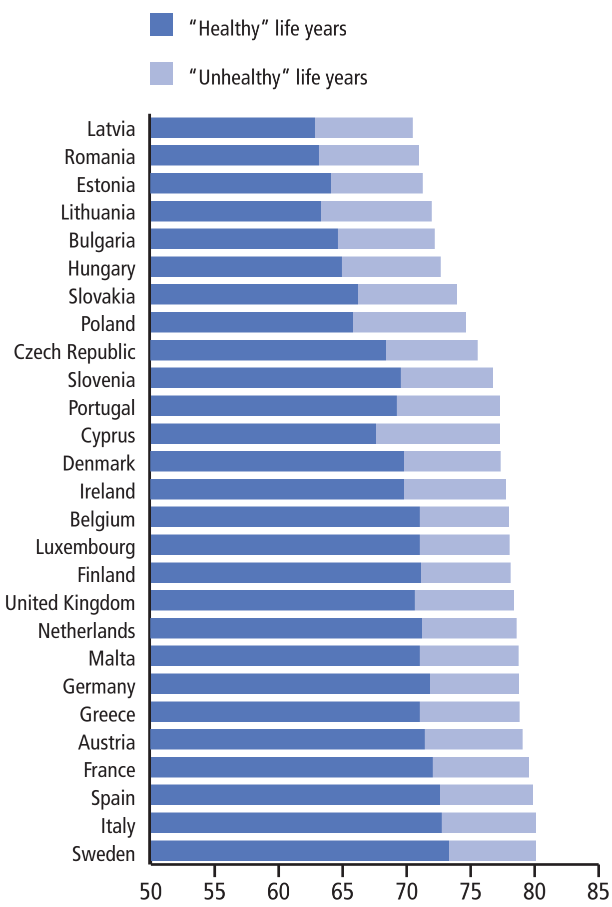
Evolution in diseases

In terms of morbidity, non-communicable diseases such as cardiovascular disease, cancer, diabetes and chronic respiratory disease are a more frequent cause of mortality in the European Union than communicable diseases. Nevertheless, the latter still represent a major health risk in the EU, owing in particular to the persistence of certain diseases like tuberculosis, in the new entrants, and to the expansion of new communicable diseases such as HIV/AIDS and SARS[4].

Economic growth and the healthcare sector

In the EU countries, the health sector contributes to economic growth mainly by improving "human capital". In economies where services account for more than 70% of GDP, added value mostly resides in individual skills. These skills are composed of know-how and training, but also of the individual's health, making it possible to exploit abilities to the fullest over time. In addition, labour and innovation account for a large share of healthcare expenditure. In France, for example, the health and social care sectors hires some two million individuals, that is, around 8% of working-age population[5].

Life expectancy in European Union Member States in 2002



Source: WHO, database for the Europe region 2007.

[1] Source: World Health Organization (WHO) - The WHO is also the main source of data for this study as a whole.
[2] The "healthy life years" indicator is also known as "disability-free life expectancy" (DFLE).
[3] That is, of working age (15 to 64 years).
[4] Severe acute respiratory syndrome.
[5] Michel Grignon and Philippe Ulmann, "Les dépenses de santé dans l'économie des pays de l'OCDE et la situation des dépenses hospitalières dans ce panorama" (Healthcare Spending in the Economy of OECD Countries and Hospital Spending in this Context), Dexia, 2006.

II Diverse healthcare systems following oft-convergent trends

A general increase in healthcare expenditure

On average, the twenty-seven EU Member States devote 8.7% of their nation's wealth to healthcare expenditure, but this varies from one country to another - from 5.5% of Gross Domestic Product (GDP) in Estonia to twice that, 10.9% of GDP, in Germany. All new Member States, with the exception of Malta, spend less than this average, with seven of them spending less than 7% of GDP. Overall, though, since the mid-1990s, countries at the bottom of the list have been catching up with countries that devote the largest share of their national wealth to healthcare expenditure. As such, although the share of healthcare expenditure grew between 1990 and 2004 in all EU countries (except Finland), increasing from 6.9% to 8.7% of GDP on average, the most remarkable growth took place in Portugal (from 6.2% to 10%), Latvia (from 2.5% to 6.3%), Romania (from 2.8% to 5.7%) and Lithuania (from 3.3% to 6%).

Mostly public funding

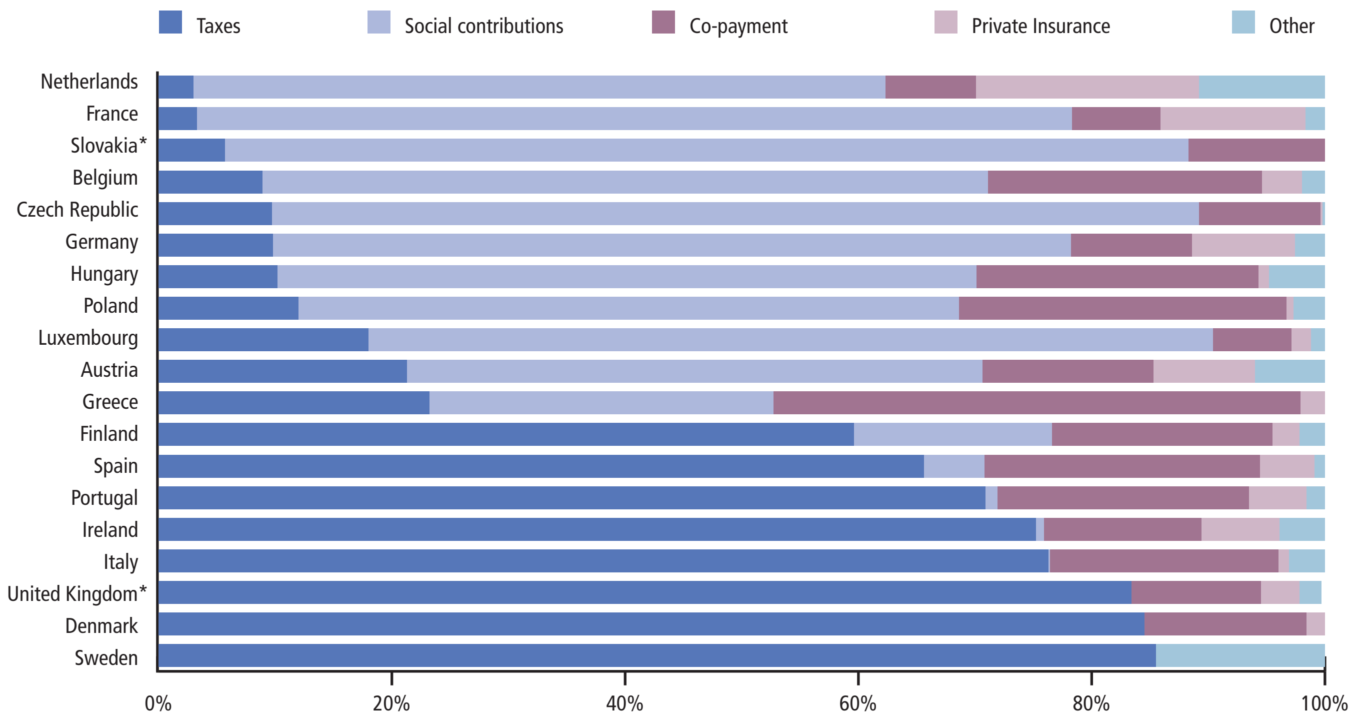
In the twenty-seven EU Member States, healthcare systems are financed for the most part by public funds. For two-thirds of these countries, the share of healthcare expenditure covered by public resources was greater than 70% in 2004. Public funds financing healthcare systems draw on taxes or work-based social contributions, depending on the prevailing logic at the time of their creation.

Eleven countries in the EU finance their health policies through fiscal means (Cyprus, Denmark, Finland, Ireland, Italy, Latvia, Portugal, Spain, Sweden and the United Kingdom). They have what is known as a Beveridge system, which often take the shape of a national health service. Taxes may be direct or indirect and collected locally or nationally. However, universal social coverage - one of the principles of the system - is not provided in all these countries (Ireland and Cyprus).

Thirteen other countries use social contributions to finance the largest part of their health expenditure (Belgium, Czech Republic, Estonia, France, Germany, Hungary, Lithuania, Luxembourg, the Netherlands, Poland, Romania, Slovakia, Slovenia). This system, often called bismarckian, relies on social security-based healthcare systems. Affiliation with the basic healthcare insurance system is mandatory in most countries, although some countries allow individuals to choose between different public (or even private) insurance (Belgium, Czech Republic, Germany, the Netherlands).

Three countries use mixed funding systems (Austria, Bulgaria and Greece).

Healthcare funding in several European Union Member States - 2004



Source: OECD Eco-health, 2007 - *: 2003 data.

[6] *As data from this graph are derived from the databases of the Organization for Economic Cooperation and Development (OECD), not all European Union Member States can be represented. Nevertheless, other sources, such as reports written by the WHO Regional Office For Europe, have made it possible to classify all the countries.*

In recent years, healthcare funding has seen a diversification of its sources. Specifically, taxes are accounting for an increasingly larger share of funding in bismarckian systems. This recourse to taxes is a consequence of difficulties encountered recently on the European labour market (unemployment, population ageing), which have direct repercussions on the level of tax revenues from social contributions. It also stems from a desire shared by many countries to extend healthcare coverage beyond salaried workers (in France and the Netherlands, for example).

Turning to private funding

To address the rise in healthcare expenditure and the growing scarcity of public funding, many European countries are turning to private funding options. For instance, direct patient participation is being used more and more in most of the EU countries. Excess fee payment mechanisms have, for instance, been introduced since the early 2000s in Germany, France, Slovakia and Hungary. Private health insurance can also position themselves alongside the public systems in four ways:

- providing primary coverage for population groups, thus replacing the coverage offered by the public system (Austria, Germany or the Netherlands);
- complementing primary coverage when the public system requires patients to pay a contribution, as is the case in France;
- supplementing the coverage provided by the public system, by financing goods and services that are excluded from it (Denmark, Italy or the Netherlands);
- offering an alternative to the public system (United Kingdom, Ireland).

Nevertheless, in all European countries except the Netherlands and France, the role of private health insurance remains marginal. In 2004 it funded less than 10% of healthcare expenditure. It accounts for 12% of spending in France and almost 20% in the Netherlands.
Although none of these four options appears to be favoured at the European level, the OECD believes that private health insurance will play a more significant role in funding healthcare systems, and penetrate countries where it still is not developed.

Heading for the decentralisation of healthcare

Since the 1970s, one of the major thrusts of European healthcare reform has been the territorialisation of healthcare jurisdiction. This can take the form of deconcentration, that is, the transfer of decisions from the central administration to its local or regional counterparts; or, more often, decentralisation, wherein the State transfers jurisdiction to local authorities (local governments).

Countries with decentralised healthcare systems

- the Scandinavian countries (Denmark, Finland, Sweden), traditionally highly decentralised;
- the Federal countries (Germany, Austria and Belgium), where a significant portion of healthcare - in particular, hospital care - is administered by the federated entities (*Länder*, Communities) which have a great degree of autonomy from the federal government;
- Spain and Italy, who recently and progressively regionalised their hospital and healthcare systems;
- some Central and Eastern European countries, where the decentralisation process was put in place since the early 1990s, giving greater autonomy to hospitals. Some reforms were not successful, probably due to lack of preparation and resources, while others are more advanced, as in the Czech Republic, Hungary, Latvia, Lithuania, Poland, and Slovakia;
- in the United Kingdom, *the National Health Service (NHS)* was decentralised in 1998 to the four countries: England, Wales, Scotland and Northern Ireland. At the local level, its organisation ranges from a high level of devolution in England and Wales, and a more limited one in Scotland and Northern Ireland.

Countries with deconcentrated healthcare systems

In Bulgaria, France, Greece and Portugal, State-supervised agencies were created to manage the healthcare system at the infra-national level.

Countries with centralised healthcare systems

The smallest EU countries did not see the need to territorialise healthcare (Luxembourg, Malta and Cyprus in particular). Slovenia, Romania and Estonia are the only countries in Central and Eastern Europe that have not initiated a policy to decentralise healthcare systems. Only eight of the twenty-seven EU Member States still have a centralised healthcare system.

It should be noted that some countries were led to review their territorialisation process. In Denmark, in 2007, the counties' authority in health matters was transferred to a higher level, that of five newly-created "health regions". In Ireland, the reform of January 2005 led to the re-centralisation of the healthcare system, with the creation of the *Health Service Executive (HSE)* to replace the eight existing *health boards*.
The process of territorialising healthcare jurisdiction did not run against the continued existence of centralised healthcare regulation, deemed necessary by all of the EU Member States In each of the EU Member States, healthcare systems remain under the control of a central institution.

Territorial organisation of European healthcare systems in 2004

III EUROPE'S HOSPITAL SECTOR: MAINTAINING A FUNDAMENTAL ROLE IN THE HEALTHCARE SYSTEM

In 2004, the European Union counted almost 15 000 hospitals providing either acute care or another activity (psychiatry, medium and long-term care). Given their populations, Germany and France have the highest number of hospitals, with close to 3 500 and 3 000 respectively. Conversely, seven EU countries - among the smallest of the twenty-seven - have less than 100 (Cyprus, Denmark, Estonia, Luxembourg, Malta, Slovenia and Sweden). In terms of hospital density, gaps are narrower yet remain relatively pronounced. Denmark, the Netherlands and Sweden have the lowest density, close to 1 hospital per 100 000 inhabitants. Finland and Cyprus have the highest density, as the average size of their healthcare establishments is much smaller than in other European countries.

Number and density of hospitals and beds in the European Union in 2004

	Number of hospitals	Number of hospitals per 1 000 inhabitants	Number of hospitals beds	Number of hospitals beds per 1 000 inhabitants
Austria	270	3.2	63 200	7.7
Belgium	210	2.1	55 600	5.3
Bulgaria	260	3.9	45 500	6.1
Cyprus	95	12.9	3 100	4.2
Czech Republic	360	3.6	86 500	8.5
Denmark	70	1.2	20 600	3.8
Estonia	50	3.8	7 800	5.8
Finland	370	7.1	36 100	6.9
France	2 890	4.8	450 700	7.5
Germany	3 460	4.2	707 800	8.6
Greece	320	2.9	51 900	4.7
Hungary	180	1.8	79 100	7.8
Ireland	180	4.4	23 100	5.7
Italy	1 295	2.2	231 900	4.0
Latvia	120	5.2	17 900	7.7
Lithuania	180	5.3	29 000	8.4
Luxembourg	15	3.3	2 900	6.3
Malta	10	2.5	1 900	4.6
Netherlands	200	1.2	80 800	4.9
Poland	845	2.2	204 200	5.3
Portugal	210	2.0	39 300	3.7
Romania	415	1.9	142 000	6.6
Slovakia	145	2.7	37 700	7.0
Slovenia	30	1.5	9 600	4.8
Spain	740	1.7	144 900	3.5
Sweden	80	0.9	n.c.	n.c.
United Kingdom[7]	n.c.	n.c.	233 200	3.9

Source: WHO, database for the Europe region, 2007
(except for Austria, Bulgaria and Luxembourg - country data).

Highly diverse organisation of hospitals

In the EU Member States, the organisation of hospital care can be described with a classification of hospitals providing three levels of acute care[8]:

- primary care hospitals - generally known as local or "community" hospitals - are small establishments capable of performing basic diagnoses, minor surgical procedures and nursing care. In many countries, there is a trend to close these establishments or convert them to medium- or long-stay establishments, despite strong local resistance to such changes;
- secondary care hospitals - often known as general hospitals - provide more complex treatment that cannot be handled by local hospitals or primary-care providers, nor by specialists in community-based practice;
- tertiary care establishments have regional or national scope and often participate in the basic training of medical professionals. Their healthcare equipment is expensive, and patients are generally referred by lower-level establishments.

Such hospitals may be general hospitals or specialise in certain types of acute care (oncology, cardiology, paediatrics, maternity, orthopaedic surgery, etc.) and provide psychiatric care, medium and long-term care services. This type of hospital organisation is found in the United Kingdom, Sweden, France, and a good number of Central and Eastern European countries. Healthcare organised around two types of hospitals, instead of three, is adopted in a smaller number of countries (Austria, Denmark, Hungary, Ireland, Luxembourg, the Netherlands, Portugal and Spain).

Hospital care can be analysed using different indicators. Although some precautions must be taken due to non-uniform measurement tools, the ones that appear most commonly used are the following ones: the weight of hospital spending in total healthcare expenditure, the number of hospitals, the number of hospital beds and hospital staff.

[7] *The Health Ministry has stopped recording the number of hospitals in the United Kingdom since the introduction of a near-market model and the creation of trusts in 1991.*
[8] *McKee Martin, Healy Judith,* Hospitals in a changing Europe, *European observatory on healthcare systems series, 2002.*

Lower weight of hospital sector in healthcare expenditure

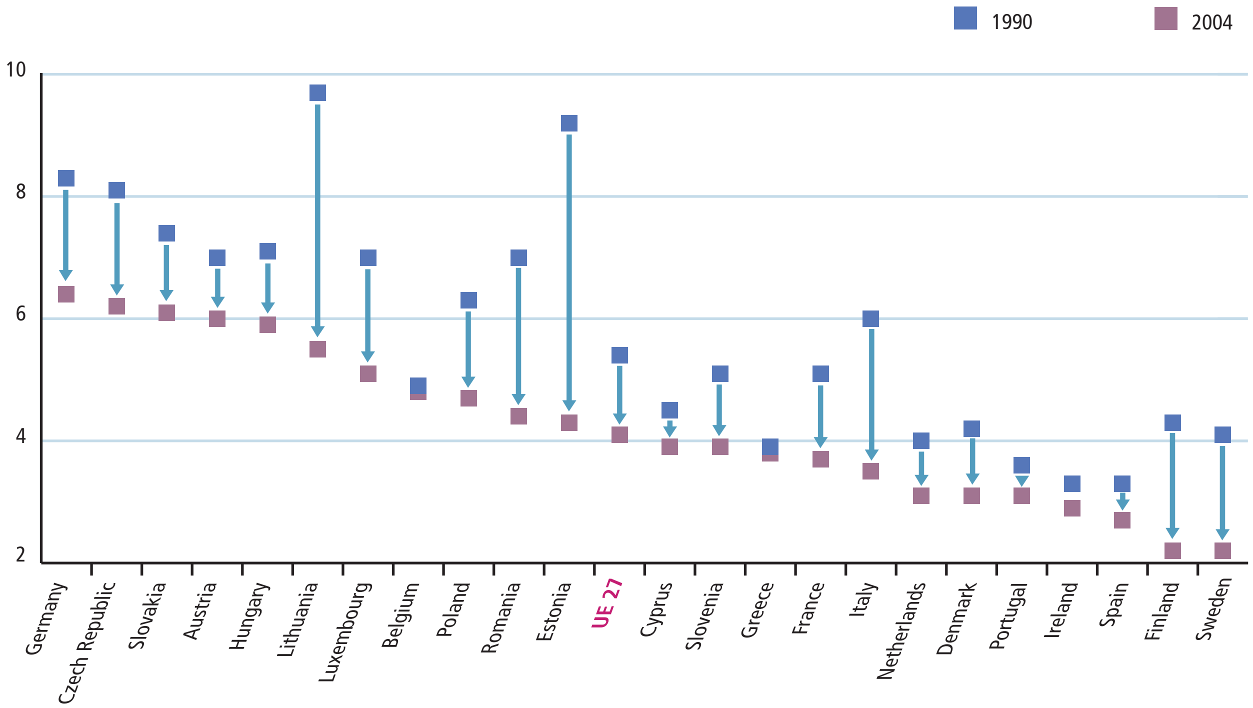
In all of the EU countries, the hospital sector is one of the most important items in healthcare expenditure. Yet its ranking varies widely between countries, ranging from 26% in Spain to 60% in Latvia in 2004. However, the data must be analysed carefully because the scope of hospital spending varies from one country to another. Aside from this divergence in scope, the weight of the hospital sector in healthcare expenditure has been decreasing in all countries for the past twenty years. This is a result of policies aimed at controlling healthcare expenditure, as well as faster growth in spending for medication owing to medical and technological advances or, sometimes, the liberalisation of the medicines market in Central and Eastern European countries.

Restructured hospital care: decrease in the density of acute care beds

In 2004, European Union Member States counted on average 4.1 acute care beds per 1 000 inhabitants. Of all the EU countries, Germany has the highest density of acute care beds (6.4 beds per 1 000 inhabitants). The high density can be explained on one hand by the 1972 law on hospital funding, which encouraged the construction of a large number of establishments and the opening up of bed spaces, and on the other hand by the delay in developing alternatives to full hospitalisation. The Central and Eastern European countries generally have a high density of beds. In 2004, of the thirteen countries whose bed density was higher than the EU average (4.1 for 1 000 inhabitants), nine were new entrants. The situation is a heritage of their past. Conversely, Finland, along with Sweden, had the lowest density of acute care beds in 2004 (2.2 beds per 1 000 inhabitants).
Compared with 1990, the density of acute care beds has decreased in all countries, especially in Estonia, Italy, Finland, Lithuania and Sweden, where numbers were halved in about twenty years. In the 1990s, the Finnish and Swedish governments carried out significant cuts in the social and health budgets, leading to the closure of many acute care beds and transferring healthcare activity to community-based practice. In these two Nordic countries, such a development led to the appearance of waiting lists. In Italy, the decrease in the density of beds is essentially a result of the vigourous development of alternatives to full hospitalisation.

This reduction in the number of beds has rarely led to hospital closures. In the majority of European countries, the density of acute care hospitals remained more or less stable between 1990 and 2004, except in Estonia, Belgium and Luxembourg.

Evolution in number of acute care beds per 1 000 inhabitants between 1990 and 2004 in EU Member States



Source: WHO, Europe bureau, 2007

[9] For example, the cost of ambulatory care is not included for Denmark, Spain and Sweden.
[10] Acute care beds are defined as beds used for stays with a short average length of stay.

Europe's ambulatory shift

Technological advances in medicine have made it possible to change the hospital management of patients, with the development of alternatives to full hospitalisation. Day hospitalisation and hospitalisation at home belong to this category. When practised in optimal conditions, this "ambulatory shift" of the hospital sector carries advantages for the patient, who can in some cases be cared for at home or, barring that, remain confined to bed for shorter periods. It also contributes to greater efficiency in the hospital sector, as the cost of this form of patient management is generally lower than full hospitalisation. The development of these alternatives to full hospitalisation encourage a reduction in the number of hospital beds, as the admission capacities needed for these are not hospitalisation beds, but rather, day-care beds. In this way, Italy saw a 40% decrease in its hospital bed density from 1990 to 2004, because it is one of the European countries where alternatives to full hospitalisation were extensively developed.

Hospital staff: a major component of the European labour market

As with many service activities, staff plays an essential role in the health sector. In the majority of European countries, hospitals employ more than half of healthcare staff. Drawing comparisons between countries is not a straightforward task, as they do not adopt a uniform means of measurement[11]. The analysis of hospital staff in this respect was made possible for a little more than half of the EU Member States through the use of OECD data. In 2004, the hospital sector employed almost one and a half million persons in the United Kingdom and more than one million in France and Germany. As a percentage of the active population, this represents between 2.5% (Greece, Portugal and Spain) and 5% (France and the United Kingdom). For the same group of Member States, the number of hospital jobs has markedly increased since 1980: by 20% to 25% in Italy and France, by 50% in the United Kingdom, and even by 100% in Greece.

Status and remuneration of hospital-based physicians

Most hospital-based physicians in the public sector are salaried workers. They may be employed by the hospital, the local authorities, or the State. Hospital doctors can be civil servants, and their remuneration is then usually defined by the relevant administrative body, as is the case in Cyprus, the Czech Republic, France, Hungary, Malta, Portugal, Slovakia, and Spain. This does not apply in other countries, even though the autonomy granted to healthcare institutions remains monitored:

- in the United Kingdom, healthcare institutions are responsible for recruiting and managing their medical staff, and in some cases setting their remuneration. Nevertheless, hospital staff have a special status that accords them career and job security;
- in Estonia, from being state employees during the communist era, hospital doctors are now hospital employees. Their working conditions are determined by an employment contract (including salary negotiations) drawn up individually with the hospital.

In some countries where the hospital sector is essentially private (Belgium, the Netherlands and Luxembourg), hospital practitioners are paid according to services provided.

With the creation of new types of hospital establishments, such as public health foundations in Spain and "Hospitals EPE" (public enterprise) in Portugal, the status of healthcare staff may be governed by private labour laws.

Finally, in recent years, in Austria, Bulgaria, and Spain for example, the payment of hospital doctors includes a variable portion to encourage greater efficiency.

[11] *Some countries measure hospital staff by the number of persons employed, while others use "full-time equivalents". This is but one of the divergences in the assessment of hospital staff. The development of public-private partnerships, which generaly lead to the outsourcing of peripheral services (maintenance, catering), does not make comparisons any easier.*

The public sector's fading dominance

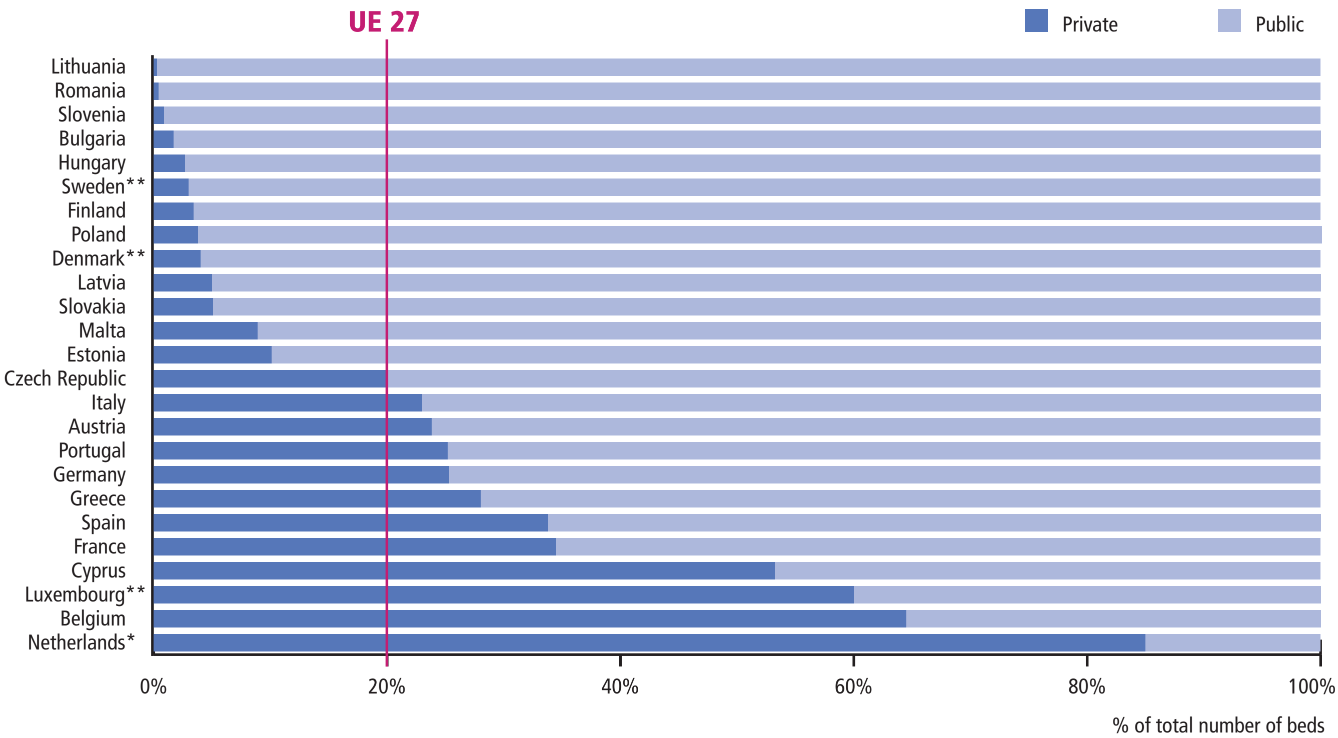
The great majority of hospitals are public. In 2004, the private sector represented less than 20% of hospital beds at the European level, but its weight has been growing since the 1980s.

Public hospitals are either owned by the State or, more and more frequently, local authorities. Nevertheless, they are becoming increasingly autonomous, albeit to varying degrees according to the country. In France, public hospitals have a degree of financial freedom but the state remains closely involved in their management. In Sweden, public hospitals belong to the counties and are placed under their authority, but they are managed independently and have had their own budget since the 1980s. Since 2002 in Estonia, public hospitals have considerable autonomy in making decisions relating to employment, staff salaries, renovation works and obtaining loans from financial institutions. In England, public hospitals probably have the greatest degree of autonomy in Europe, with the spread in the 1980s of the *new public management*[12] model. Since 2000, public hospitals, converted to trusts, draw up contracts governing the nature and volume of hospital and specialised care with the *Primary Care Trusts (PCTs)*[13]. They have leeway in setting remuneration for their staff and in healthcare delivery. Moreover, since 2004, the local population have replaced public authorities as owners of about a hundred public hospitals, converted to *Foundation Trusts*.

There is no real definition of "private" hospital status in Europe, but several "private" classifications according to, and even within, a given Member States. Indeed, such establishments can be not-for-profit (belonging for instance to an association or foundation) or for-profit (belonging to private individuals, or natural or legal persons). Public healthcare systems may or may not offer coverage of healthcare costs incurred in private establishments. Such coverage may be governed by certain conditions, and the private hospital sector may be invited to participate in public hospital services.

The Member States of the European Union may be classified according to the accommodation capacity of each type of public and private healthcare establishment. In twelve countries, less than 10% of beds are private. Generally, hospital care in countries where healthcare is organised around a national health service, such as the three Scandinavian countries, the United Kingdom, Ireland and Malta, is public to a very large extent. The healthcare privatisation set in motion by the Central and Eastern European countries during their political transition has, to date, mainly involved ambulatory care and pharmacies, rather than the hospital sector. These Member States have consequently kept a mostly-public hospital care structure.

Share of public and private sector, in number of beds, in 2004[14]



Source: WHO regional office for Europe, 2007 - *: estimates - **: country data.

[12] "New public management" consists of introducing public authorities to management methods used in the private sector.
[13] PCT can be thought of as regional version of the NHS, bringing together general practitioners, nurses, representative from the social service and patients.
[14] Excluding the United Kingdom and Ireland, for which there is no available data. The latest available statistics for the UK date back to 1999 and indicate that private beds account for 4.3% of the total number of beds. Data for Austria and Spain are from 2003.

In four Member States (Belgium, Cyprus, Luxembourg and the Netherlands), hospital care is mainly provided by the private sector, both in terms of hospitals and beds. The private hospital sector in these Member States is primarily not-for-profit. In two other countries (Spain and France), there are more private than public hospitals, but they are smaller in size. In these Member States, the private hospital sector is dominated by for-profit establishments and account for around a third of hospital beds.

The role of the private sector in hospital care appears to have been increasing in most EU countries since the 1980s, in a few exceptions it has remained more or less stable (in Spain and France, in particular). This trend is explained by the construction of new private healthcare facilities, for example in Romania and Bulgaria, and also by changes in the status of some hospitals. In Sweden and the Czech Republic, local authorities can decide to privatise some healthcare establishments. Such operations are nevertheless delicate and generally hotly debated, making them fairly rare as a result.

Boundaries between public and private hospitals

The boundary between public hospitals and private healthcare establishments is more tenuous now than in the past, at times modifying the traditional divisions between the two.

For example, some hospitals may be jointly owned by public authorities and private commercial companies. This status has been developed in particular in Germany and some Central and Eastern European Member States, such as Latvia, to address difficulties in obtaining funding for investments in the healthcare sector. Such hospitals still remain under the authority of regional health insurance funds, to which they are under contract.

The collaboration between the public and private sector has thrived in recent years with the latter's participation in the funding, construction and maintenance of hospital equipment and buildings in the framework of public-private partnerships (PPP). Generally speaking, the public sector continues to provide healthcare services and manage hospitals. It also makes the decision to call for this type of financial arrangement, and launches calls for tender to private companies from which it then hires buildings, equipment, or both. Contracts are generally concluded for periods of twenty-five to thirty years. The advantage of such financial arrangements, which are encouraged by the European Commission, is that they make it possible to initiate major construction projects. However, they also raise some issues, as they are based on legal arrangements with risk-sharing provisions that can be quite complex at times.

The United Kingdom was the first EU Member States to resort to PPP arrangements for hospital investments. In ten years, almost a hundred hospitals in the UK were or are being built under PPPs. PPPs are also well-developed in Spain and Portugal. France, Germany, Greece, Italy, the Netherlands, Romania and Slovenia already use these financial arrangements or are adapting their legislation to make such arrangements possible. The rest of the EU Member States are likely to follow suit.

Introduction of pathology-oriented payment in the majority of EU Member States

In nearly half of the EU Member States (Czech Republic, Denmark, Greece, Italy, Lithuania, Malta, the Netherlands, Poland, Portugal, Romania, Spain and the United Kingdom), hospital care is totally free of charge. In the remaining countries, the share of hospital costs that remain at the patient's expense, often in the form of a daily fee that generally remains low. By and large, public health insurance compensates hospitals for healthcare services they provide. "Retrospective" payment systems in the hospital sector, which are based on *ex post* costs (usually payment according to services, per day, or both), are gradually being replaced by "prospective" payment systems, based on costs defined *ex ante* and regardless of actual costs. The two most common forms of "prospective" payment systems are as follows:

- overall budgeting established on the basis of historical precedents and/or negotiations between hospitals and their supervisory authority, a system that prevails or used to prevail in Austria, Belgium, Denmark, France, Luxembourg and Spain. Although this financing method made it possible to control hospital costs in some countries like Denmark, it has several drawbacks, such as poor productivity stimulus and the risk of the increase of waiting time;
- pathology-oriented payment (also known as "payment per case" or "activity-based payment"). This mechanism is based on the classification of patient stays according to disease groups, defined according to the similar diagnostic and treatment and financial resources needed for their management. Several classifications exist, the best-known of which are the "Diagnosis-Related Groups" (DRGs) from the United States.

Sweden, Hungary and Italy were among the first European Member States to introduce this type of hospital funding between 1992 and 1995. They have since been joined by some twenty other EU Member States, including France, Estonia, Germany and the Netherlands in 2004 and 2005. Among the EU Member States for which pathology-oriented payment has yet to be implemented, the development of this type of payment does not seem to be a concern in Luxembourg, but is in a relatively advanced stage in three other Member States (Cyprus, the Czech Republic and Greece).

Timeline of implementation of pathology-oriented payment in some European Union countries

2007	
2006	
2005	Germany, Netherlands
2004	France, Estonia
2003	United Kingdom (England), Slovenia
2002	Belgium (2nd wave), Slovakia
2001	Bulgaria
2000	Denmark, Poland
1999	
1998	Portugal, Austria, Latvia
1997	Finland
1996	Spain (Catalonia)
1995	Italy, Belgium (1st wave)
1994	
1993	Hungary
1992	Sweden (Stockholm)
1991	
1990	

Timeline inspired by the HOPE report, *DRGs as a financial tool*, 2006

Improving cost control, increasing transparency and even reducing waiting list (e.g., for Sweden) are the main reasons for introduction pathology-oriented payment in hospitals. The main objectives of this new type of payment seem to be shared across EU Member States. Nevertheless, its implementation visibly varies from one Member States to another.

In most Member States, pathology-oriented payment only applies to acute care. This may extend to other disciplines, such as psychiatry in Italy or medium-term care in Hungary. In other cases, extension of this payment type is in the works (for example, psychiatry in England).

In many countries, the State is behind the effort to introduce pathology-oriented payment, which may lead to a form of "centralised" budgetary powers in countries with decentralised health systems (Austria and Italy in particular). However, although central governments generally propel such initiatives, their application may be decentralised at an infra-national level and vary from one local authority to another within the same country, especially in Italy and Sweden.

In addition to a strict activity-based or pathology-based payment scheme, the mechanism for allocating hospital resources in the vast majority of European countries continues to include an overall budget used mainly to finance general-interest missions (typically medical training and research) that are separate from activities related to hospital stays.

Many Member States offer their hospital sectors a progressive rollout of pathology-oriented payment reforms, to ensure a smooth transition from previous means of funding.

Revival of hospital investments and diversified sources of funding

Hospital investments, which are needed to ensure the long-term viability and quality of service, need to address two complementary issues: funding and the remuneration of hospital activities. In all the EU Member States, the decision to invest is supervised by public authorities. The diversification in the sources of funding for works is increasing, as is the tendency to call on the private sector.

In the majority of European Member States, special funds are used for investments in public hospitals. Funding is usually provided by the State, local authorities, the hospital itself, or, in many cases, a combination of these. With the enlargement of the European Union in 2004, then in 2007, international players such as the European Union and the World Bank can provide additional funding in some cases with the elaboration of assistance plans.

In Cyprus, Ireland, Latvia, Luxembourg, Malta, Portugal, Romania, Slovakia and Slovenia, the State has overall responsibility for hospital investments. In the Federal States (Austria, Belgium and Germany), investments fall under the remit of the Federated States. In recently regionalised countries, such as Italy and Spain, investments in public hospital are decided upon and financed mainly by the regions. Some reforms of health systems in Central and Eastern Europe countries have transferred this responsibility to local authorities. As a general rule, investments are shared between local authorities, owners of establishments, and the State which finances the costliest investments (Czech Republic, Hungary and Poland). Finally, in some Member States, public hospitals have a greater autonomy in investment decisions and funding. In France and the Netherlands, hospital investment is financed primarily by the hospital's budget, either through self-financing or loans.

There is currently a revival in hospital investment in many European countries after a lull in the 1990s. The relevant authorities are generally behind this revival (as in Estonia and France), even in countries where they do not have overall responsibility for hospital investments.

IV THE GROWING INFLUENCE OF THE EUROPEAN UNION

The European Union has very limited direct competences in the healthcare field and has only been able to develop a rather constrained public health policy. According to the principle of subsidiarity, the organisation and financing of healthcare remains a Member State's competence. However, the European Union has developed other policies that have been influencing hospital and health services. In addition to these interventions, European integration is taking place by cooperation activities developed within the remit of European programmes as well as outside them.

A European public health policy

European competence in the field of public health really appeared in 1992 with the Maastricht Treaty and was strengthened in 1997 by the Treaty of Amsterdam. To implement this new policy, specific tools were created: public health funds to develop projects and a Directorate General Health and Consumer Protection (DG SANCO). The funds have been revised and improved along the years. The second programme of community action in the field of health is currently running for the period 2008-2013. It has three main objectives: to improve citizens' health security; to promote health, including reducing inequalities; and to generate and disseminate health information and knowledge. However, the financial envelope for these programmes (321.5 million euros for the second programme) limits its ambitions.

To complement the work of DG SANCO, several agencies have been created. The European Centre for Disease Prevention and Control was for example set up in 2005 with the mission to coordinate the laboratories of Member States to improve the EU capacity to cope with communicable disease and bioterrorism. Its purpose is to play a defining role in the prevention of serious health threats such as avian flu and HIV/AIDS, as well as infections associated with healthcare services.

Although limited, the legal basis given by the Treaty in the field of public health allowed the adoption of several measures. The first Directive concerned blood products, with the introduction of a quality management system in laboratories, hospitals and other establishments collecting, handing, and processing blood and blood components. It was followed by a directive on human cells and tissues and there is an ongoing discussion on the topic of organ donation and transplantation.

According to the Treaty, all Community actions and activities shall contribute towards a high level of health protection. There is then a need for coordinated actions involving other policy areas. Health issues are obviously linked to other issues, such as the economy and the environment for example. The integration of health concerns in the Lisbon programme, the main EU policy for economic growth and productivity, is one example, as evidenced by the highlighting of the "Healthy Life Years" indicator. Similarly, a strategy called SCALE (Science, Children, Awareness, Legislation, Evaluated) was adopted in 2003 to reduce the impact of environmental factors on human health, specifically in children, who are most exposed to pollution. Moreover, the introduction of the Open Method of Coordination (OMC) in the field of healthcare is providing Member States with an instrument that should help them come closer to objectives defined at the European level and to exchange good practices.

An influence of the internal market

But the European Union is above all economy-oriented, founded on the principles of the free circulation of goods, services, persons and capital, as well as on the rules of competition. These rules and principles apply one way or another to almost all sectors of activity, including the hospital sector. Although they do not necessarily measure its impact on a daily basis, hospitals thus live in an environment that is governed to a great extent by community legislation.

As purchasers of goods, hospitals and healthcare services have been affected by the removal of barriers to free movement of all kind of goods. Within this framework, a special attention has been directed to pharmaceuticals and medical devices, leading to specific legislation in this field. The same goes for services, of which hospitals are also purchasers. The European Court of Justice even confirmed that medical care and hospital care were themselves services and as such falling under the scope of the free movement principles.

Mobility is also meant for workers as well as for other persons. For health professionals, European directives have harmonised the minimum conditions of training and provided for mutual recognition of professional qualifications and introduced some specificities for health professions (doctor, nurse, midwife, dentist and pharmacist). More generally other measures have been adopted in the social sphere to avoid social dumping, following in particular the coordination of social protection. All of this had an impact of the hospital and healthcare workforce.

At the same time European rules on competition are also growingly interfering with the healthcare sector and as the major part of hospital and health financing are public, the various questions of their position regarding the Community legislation on state aid is currently raised.

Blossoming cooperation activities

The development of cooperation between healthcare providers of the different EU Member States has also facilitated European integration. This takes the form of cooperation between providers in border regions or further, directly financed by European funds or not. Institutional cooperation, developed in particular by the European Hospital and Healthcare Federation (HOPE) has also boosted exchanges.

Hospital and healthcare institutions have developed cooperation activities in border regions. In some cases, it has also been the starting point of framework agreements between service providers, health funds and national and local authorities, in order to organise healthcare provision on both sides of the border. The EU financed EUREGIO project (Evaluation of Border Regions in the European Union), launched in June 2004 to take an inventory of transborder health co-operation in the European Union, has identified more than 300 collaborations, concerning mainly training projects, equipment pooling, and prevention of health threats.

Cooperation activities are not limited to border regions. Through various financial mechanisms, hospital and healthcare providers have successfully worked together. The European programmes have considerably facilitated collaborations. With the support of the European Framework Programme on Research and Technology Development, research has been widely experimented in various medical subjects, as well as in the organisational ones. *HESCULAEP* ("Health emergency national regional programmes for an improved co-ordination in pre-hospital setting") for example contributed to networking national research programmes in health emergency. *MARQuIS* (Methods of Assessing Response to Quality Improvement Strategies) assessed the value of different existing quality strategies. In the field of continuous training, the *Leonardo da Vinci* programme promoted actions such as *Europhamili*, a three-month transnational professional training programme created in 2002 for healthcare managers. Among many other projects, the Public Health programme financed *Orphanet*, an information portal on rare diseases and orphan drugs, whose purpose is to contribute to improving the diagnosis, management and treatment of rare diseases.

Conclusion

The healthcare systems of the twenty-seven Member States in the European Union are growingly faced with similar health challenges. However, considering health results as well as structures and resources, differences are striking. The diversity of healthcare systems is reinforced by the important decentralisation of responsibilities in this field. In some cases to address those issues comparable reforms have been initiated taking into account the different contexts and histories.

Hospitals are often the first ones to be affected by healthcare reforms. Here again the diversity is the main feature describing the situation. And although its share in healthcare has diminished over the past twenty years, the hospital sector remains an essential component of European healthcare systems.

Finally, at European level healthcare remains under the remit of the Member States. The development of the European Union has however impacted hospitals in many different ways. By the cooperation activities they have developed hospitals themselves are shaping a convergent European healthcare.

A publication of the Research Department of Dexia in partnership with HOPE, the European Hospital and Healthcare Federation

Hospitals in the 27 Member States of the European Union

Dexia Editions, October 2008, 20 €

ISBN: 978-2-911065-69-9

TO ORDER THIS PUBLICATION

website: www.dexia-editions.com

e-mail: dexiaeditions-france@dexia.com

Tel.: +33 1 58 58 78 78

Fax: +33 1 58 58 68 20

Création vanaura Versailles