BACK TO BISMARCK; EASTERN EUROPEAN HEALTH CARE SYSTEMS IN TRANSITION

Back to Bismarck: Eastern European Health Care Systems in Transition

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Preface

The late 1980s marked what historians have called the end of the 'short twentieth century'. The fall of the Berlin Wall, the 'velvet revolution' of Czechoslovakia, the dissolution of the USSR, all part of the collapse of the communist regimes of Central and Eastern Europe, profoundly changed the map of Europe. The totalitarian state-ruled communist societies were substituted by pluralistic democratic ones. As a consequence, not only the political system of these countries was transformed but also their economic and social situation was plunged into change. One of the fields of change was the health care system. And as with other aspects of society, changes in the health care sector are still going on.

The aim of this book is to describe the current state of health system change in a number of countries of Eastern and Central Europe: the former German Democratic Republic, the Czech and Slovak Republics, Poland and Hungary. Of necessity this description is a cross-section of an ongoing process. We will put the description in a broader framework by looking back at the history of the systems and by looking forward at current policy plans. To give an updated picture of the latter, we have also used policy documents in the national languages. The country descriptions are up-to-date till June 1996.

The book consists of two parts. The first part contains the general description and analysis of the transformation of the health care systems of the countries studied. This is based on the more detailed description of the developments in the individual countries in the second part of the book. To appraise what has been achieved until now in these countries, it is not enough to describe just the current structure of the health care sector. It is also necessary to describe the structure as it was right before the cessation of the communist systems. And to be able to understand the direction

developments are taking, it is also important to have some basic understanding of the past system, before the introduction of communist rule, that these countries can fall back on. Together, these elements form the building blocks of the country descriptions of the health care system; they consist of:

1 a brief statistical portrait of the country,

2 a description of the pre-communist health care system,

3 the situation shortly before the transformation of the communist systems in 1989,

4 the changes in the structure of the health care systems after 1989.

A number of experts in the countries under examination have provided us with information on the state of the health care system reform in their country and have read drafts of the country descriptions. We gratefully acknowledge their help. Any errors in facts and interpretations are our sole responsibility.

Part I

Health systems reform in the countries of Central and Eastern Europe

Health systems reform in the CCEE

1 Introduction and research question

The transformation of the communist countries of Central and Eastern Europe (CCEE) affects the whole of society, including the health care system. Right from the onset of the transformations, plans were contemplated to reorganise the health care system. Sometimes the seeds of health sector reform plans were planted even before that time, as in Hungary, which is evidenced in both the public discontent with the health service and the pragmatic approach of the last Hungarian communist government.

If we describe the health care systems of the CCEE, we are looking at a single image of an ongoing process. By now, after five to six years of post-communist government, the outlines of a new health care system are taking shape in some countries, while in others only the first steps have been taken. It is important, however, to document the situation as it is; only the series of images makes the film. In this part of the book we will try to give answers to two questions, one descriptive and one analytical. The descriptive question is:

Which changes have taken place since 1989 and what is the direction the health systems reform is taking in the CCEE?

The analytical question probes the origins of the current state and development of health care systems. It takes as its line of reasoning that the way health care systems developed after the fall of communism was influenced by two factors. The first is the history of the countries' health care system. In that history, the pre-communist system serves as a source of knowledge of other institutional arrangements than those during the era of communist rule. In shaping the current health care system, actors in that system fall back on pre-war institutions such as 'physician chambers'. The

communist period serves as a source of negative experience. It also dictates part of the contingencies for the current reforms, in the form of a legacy of facilities and health personnel, of administrative rules and practices, and so on. These contingencies can be positive or negative. The second factor influencing change is other health care systems which form a frame of reference in drafting plans and generating possible solutions. Again, this reference may be both positive and negative. Against the background of the history of the CCEE, health care systems with a high level of state involvement, such as National Health Service type systems, may be a negative reference group, while pluralistic or social insurance systems may be a positive reference group. Hence, the second, analytical question is:

How do the changes since 1989 and the development of the health care systems of the CCEE relate to the history of these countries on the one hand, and to 'reference' countries on the other?

In this part of the book, we start by describing the method used in the country files of Part II. Section three describes the basic structure of the health care systems in Europe: the Bismarck systems of social insurance, the Semashko systems of the communist countries and the Beveridge systems of national health service. Section four describes the diffusion of these basic systems in Europe before the 'velvet revolutions' of 1989. This section also contains information on the pre-1989 health care systems of the countries studied in this book and on the deviations of these systems from the typical Semashko system. The fifth section describes the changes in the countries under study after 1989. The final section discusses some important problems facing health system reform in the CCEE and some prospects for the future.

2 Design and methods of the study

In this book, information has been collected on the ongoing transformation of the health care systems of five countries: the Czech Republic, the former GDR, Hungary, Poland, and the Slovak Republic. These five particular countries have been chosen because of their relative proximity to the West, geographically as well as socially and economically.

Information has been obtained predominantly from written sources. Search systems such as Medline have been used to find published articles on the health care systems of the countries under consideration. To collect further information, experts on health care were contacted in all five countries with the double aim of providing us with documents on their health care system and of checking the country descriptions in part II of this book. In this way,

all kinds of documents were collected, among them scientific articles, statistical reports, and government reports. The documents provided by the experts were not only in English, but also in Czech, Slovak, German, Hungarian, Polish and Russian. Unauthorised[1] translations of the non-English and non-German documents were used.

The information presented in the country descriptions in part II of this book has been double-checked by the experts. When sufficient information could not be obtained from abroad, the country was visited. The experts are listed in the acknowledgements.

The book has been written by researchers from the 'West' who have not lived in Eastern Europe during the socialist era, and thus can be regarded as outsiders, but on the other hand may have a neutral view of the current transformations.

The chapters in part II of this book provide a description of the health care systems of the five selected countries. A division is made in these chapters between the eras before and after 1989. The chapters include information about the organisation of the health care plan, primary and secondary care, funding (overall financing of the health system/economic support) and financing (subfinancing in the health system), and the changes after the political revolutions of 1989. The pattern of the country descriptions is not completely uniform, because each country has different characteristic elements in its health care system.

3 Basic systems of health care in Europe

In this chapter we describe the main features of the basic health care systems of Europe; this is intended as background to the options available to health policy makers and reform planners in the CCEE. European health care systems before the collapse of communism can be grouped in three clusters: the social insurance system, called after its founder the 'Bismarck system', the centralized systems of communist countries, the 'Semashko system', and the UK national health service or 'Beveridge system'. The basic structure of each of these systems is summarised in a simple diagram. Variations on these diagrams will be found in the country descriptions in the second part of this book. These variations reflect the particularities of the health care systems studied; none of them is an exact replica of the relevant basic system. The diagrams have been used to summarise the structure of the health care systems studied before and after 1989.

The oldest model is the **Bismarck** system, the basis of Europe's social insurance systems. In the 19th century, as industry was expanding, socialist ideas spread among the German population and new social movements developed; trade unions and socialist political parties were established. The conservative German Chancellor von Bismarck wanted to improve relations with the working class and to win them back from the socialists (De Swaan, 1988). Moreover, his plans were part of an attempt to create a powerful state. He created a law requiring the state to protect low-income workers by means of compulsory social insurance. In this way, the state could take the wind out of the sails of the socialist movements. Originally, Bismarckian social insurance only covered low-income workers who were considered unable to carry the risks of illness and disability themselves, both in strict financial terms and in more general terms of lacking the ability to put money aside for future use. Below a certain income level, therefore, participation was compulsory (and still is in some social insurance systems).

The emphasis in Bismarckian social insurance was on insurance against work-related accidents and disability, and on protection against loss of income during illness (Light, 1985; De Swaan, 1988). This reflects the work-related character of its origins; this work-related character diminished when coverage was also extended to dependents. Only gradually did the health insurance part become equally important or even more important than the protection against loss of income due to illness or disability.

The system of social health insurance was introduced in Germany in 1883 (De Swaan, 1988). It was financed partly (one-third) by contributions from employers and partly (two-thirds) by premiums from employees. In Bismarckian social insurance the role of the state is minimal, compared to the other basic systems to be discussed. The state determines the conditions that govern the relations between sickness funds, providers and patients, but does not directly integrate the funding and provision of health care. Sickness funds, at arm's length from the government, were responsible for the execution of the plan. The relations between health care providers and sickness funds were governed by contracts. Only workers with an income below a certain level were insured compulsorily.

The basic structure of the financial and governance relations within social insurance-based systems is given in Figure 1 (adapted from Evans, 1981; and Hurst, 1992).

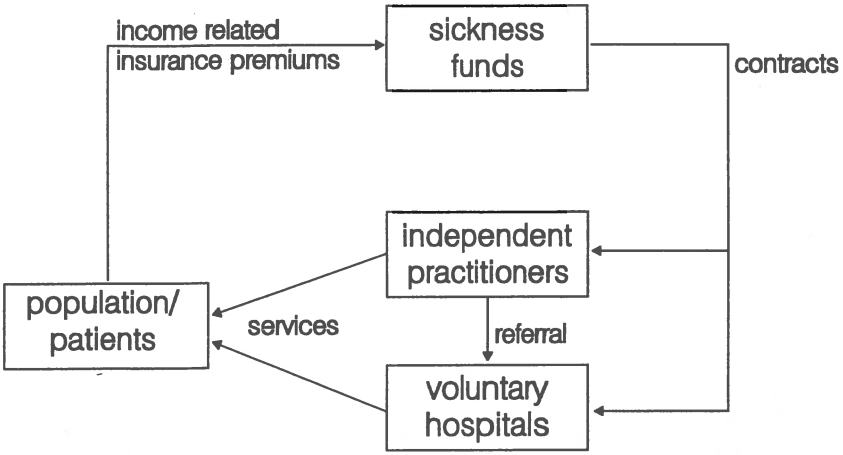

Figure 1 Basic structure of the social insurance system

The second 'family' of European health care systems originated shortly after the Russian revolution and spread with the extension of the Soviet sphere of influence. In 1918, there was a conference on medicine and public health in the Soviet Union. This conference, chaired by Dr. N. A. **Semashko**, resolved that free medical care for the entire population must be part of the Soviet health programme. Furthermore, it declared that a central organisation (a commissariat of Health Protection) should be commissioned to carry out this free medical care. The next month, the commissariat was established and the Soviet health service was initiated (Field, 1967; Ryan, 1978).

The 'Semashko model', as it came to be known, of health service is highly centralised and funded by the state budget. It intends to guarantee free access to health care for all. To ensure equal access, emphasis is put on geographical distribution of services throughout the country. Facilities are state-owned and managed by district and regional authorities, under direct control of the central government.

Primary care is provided in outpatient clinics, known as polyclinics, by specialists (predominantly internists, peadiatricians, and obstetricians). The population is allocated to the outpatient clinic in its area.

Hospitals and outpatient clinics are budgeted, and physicians are salaried. Soviet health care delivery is furthermore characterised by an extensive network of primary and secondary occupational medical facilities, mainly for industrial workers (Field, 1967). This results in parallel systems of

health care delivery for different groups of the population, often outside the sphere of influence of the ministry responsible for health care.

The basic structure of the system is given in Figure 2.

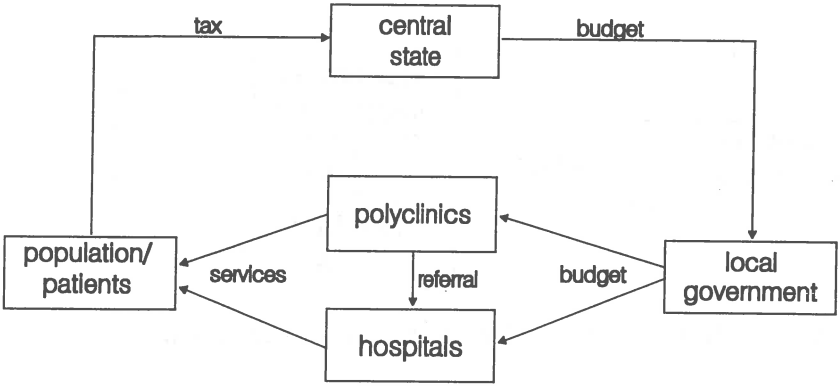

Figure 2 Basic structure of the Soviet health system

The third 'family' of European health care systems originated after the Second World War in the United Kingdom. In 1942 the **Beveridge** report proposed to fund health care from the state budget. Furthermore, it was suggested that the health care system should be governed and executed by the state. In 1948, these recommendations were implemented by the government, and the National Health Service (NHS) was established.

The NHS has many elements in common with the Semashko plan; they both are centralised and funded by the state. Facilities are predominantly state owned and budgeted, and hospital physicians are salaried. However, government regulation is less strong in the Beveridge system; there is more room for private services and private insurance. Another important difference is the point of entrance to the health care system; in the Beveridge model this is the family doctor and community services, in the Semashko model, the outpatient clinic. Furthermore, the Beveridge model, in contrast to the Semashko plan, does not contain an extensive occupational health care sector (Roemer, 1991). Figure 3 shows the basic structure of the NHS.

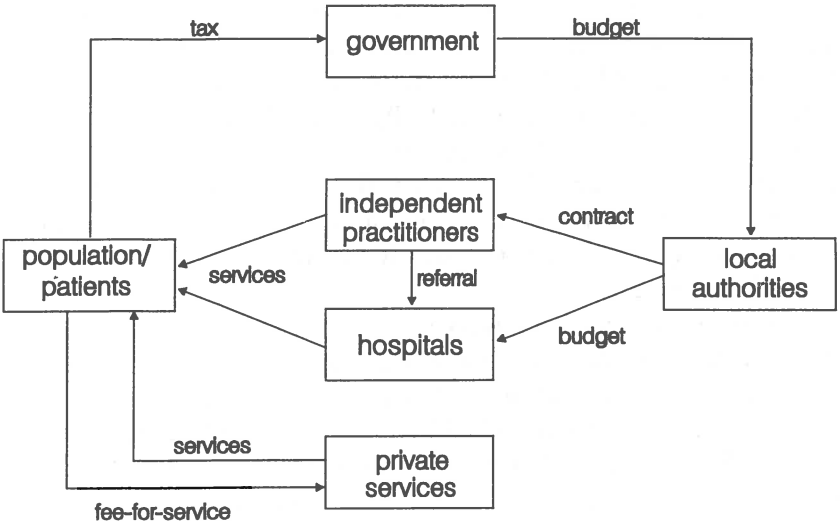

Figure 3 Basic structure of the NHS system

4 The diffusion of health care systems in Europe

Each of the basic health care systems described above originated in a particular place and time. However, each of them has spread throughout Europe through diffusion to other countries. The current pattern of health systems is not the result of independent, multiple inventions, but rather the result of a process of deliberate take-over and adaptation (Philipsen, 1980). With the transformation of health care systems in the CCEE, state-regulated health care systems lost their dominant position. At the same time (and probably also in reaction to the fall of communism), the national health services of the UK and Scandinavian countries are in a process of restructuring, introducing the idea of internal markets and other elements designed to enhance competition and responsiveness to consumers' wishes (Saltman and Von Otter, 1992).

Bismarck The Bismarck concept of social insurance has functioned as a model for social security systems in many other European nations. Around the turn of the twentieth century other western European countries, like Belgium and France, and during the Second World War the Netherlands,[2] adopted the Bismarck system as a model for their own health insurance

systems and, in so doing, also the structure of their health care systems. The development of Bismarckian health insurance systems follows two lines (Blanpain et al., 1978). First of all, the population covered by social insurance has been extended gradually since World War I. In most countries, coverage has been extended to include almost the whole population, with one notable exception, the Netherlands, where coverage was never much above 70 per cent of the population. Secondly, the insurance package was expanded after World War II, especially during the sixties and seventies.

Of the countries studied in this book, the area that was later to become the GDR used to have the social insurance system introduced by Bismarck himself. Even after the communist takeover, elements of the Bismarck system continued to exist, mixed with components of the Semashko system. In the GDR, funding of health care continued partly through insurance premiums and sickness funds. Czechoslovakia (during Austrian-Hungarian rule) and Hungary were among the first countries to introduce some form of social insurance, in 1888 and 1891 respectively, while Poland only followed in the nineteen twenties with a very modest social insurance system.

Semashko In the past, the Semashko health care system became the model for other socialist states and for developing countries (Rowland and Telyukov, 1991). In the Central-Asian Republics of the former USSR it is still in a stage of introduction, while at the same time it is being replaced in Central and Eastern Europe (Vienonen and Wlodarcyk, 1993). After the Second World War, communist regimes were installed in the countries of Central and Eastern Europe, and the previous health care systems were transformed according to the Soviet Semashko model. This did not mean that all of these health care systems were the same, however; each country created its own variation on the Soviet original.

The Czechoslovak health care system was transformed according to the Semashko Soviet model. A specific element of the socialist Czechoslovak health care sector, however, was the clustering of health activities in 'Institutes of National Health' at the district and regional level.

In Hungary the health system contained an important Beveridge element; although outpatient clinics did form an important component of the Hungarian health care plan (which is characteristic of the Semashko model), the point of entrance to health care was the district doctor (a Beveridge element).

Nor did East Germany completely adopt the Semashko model; different elements from the Beveridge (family doctors) and the Bismarck (social insurance) systems were also incorporated. Health care was not exclusively delivered by the state; a few hundred physicians (which was not more than a few per cent of all physicians) worked in private practices, and some hospitals were owned, and financially supplemented, by the church. It is remarkable that, in contrast to other East European countries, gratuities were almost non-existent in former GDR health care. Moreover, in contrast to the other countries described here, all services in East Germany were free-of-charge.

A special feature of the Polish health care sector was formed by the over 400 integrated health services (ZOZs). These ZOZs provided primary health care through rural health stations, outpatient clinics and even some hospitals. Several ministries had their own parallel health service. About 30 per cent of Polish doctors worked in private practice for a few hours a day.

A common trait of the Semashko health care systems was their focus on increasing the number of medical personnel and hospital beds (see Table 1) to compensate for the scarcity of supplies and the poor quality of facilities (Vienonen and Wlodarczyk, 1993).

Table 1
Doctors and hospital beds in the European former socialist countries (FSC) and the OECD countries (minus Turkey)

	FSC	OECD
Doctors per 1000 population	4.7	2.5
Hospital beds per 1000 population	11	8

Source: World Bank, 1993.

Beveridge The Beveridge system, or national health service system, became popular as a model for other European countries around the 1970s. At that time, social insurance systems showed an increase of expenditures due to an unbalanced growth in the hospital sector. The coverage of health insurance increased, both in terms of the population covered and in terms of the package of services offered. At the same time, the hospital sector was quickly expanding as a result of the post-war reconstruction of existing hospitals and building of new hospitals. As a consequence, health care expenditures were rising faster than GDP in most countries. A notable exception was the UK, where the number of hospital beds, as an indicator

of the expansion of the hospital sector, remained more or less stable, and health care expenditures as a percentage of GDP remained low.

This situation made the National Health Service the 'obvious' example for other countries to look at during the time that planning was seen as an adequate instrument to redirect developments. 25 years after the inception of the National Health Service, other European countries, such as Ireland and Denmark, modeled their health care sector on the British example, and in the late seventies and early eighties Italy, Portugal, Greece and Spain also introduced a NHS-type of health care system.

By the end of the 1980s, social insurance-based health care systems in Europe were a minority, including only the Netherlands, Belgium, France, the Federal Republic of Germany, Austria and Switzerland. To the south, west and north of these countries national health services of the Beveridge type prevailed, and to the east the Semashko systems (Van der Zee, 1988). The dominant policy view of the World Health Organisation, with its emphasis on the district concept of primary health care, reflected this reality (De Bakker, 1989).

5 Changes in Eastern European health care

We start this chapter by answering the first, descriptive, research question about the changes in the health care systems under examination since 1989. After that, we come to the analytical question of how these changes relate to historical circumstances and the example of health care systems as positive or negative references.

5.1 Description of the changes

Table 2 gives a survey of the basic characteristics of the current health care systems of the four East European countries compared to the situation before 1989. After 1989, the Czech and Slovak Republic, the former GDR and Hungary exchanged their centralised and predominantly tax-funded Semashko health system models for a decentralised and partly privatised Bismarckian insurance system. In Poland recently, some first steps have been taken in the same direction.

Taking a broad view of history, we can state that before the Second World War the East European countries in question had a Bismarck health system; after the Second World War a Semashko system (with national variations) was introduced; and after the breakdown of the communist

regimes the countries (for the moment with the exception of Poland) have reintroduced a Bismarckian social insurance system.

Table 2
Characteristics of former and current health systems of four East European countries

Country	Funding	Financing of hospitals	Financing of outpatient clinics	Payment of specialists	Payment of GPs	Free choice of doctor
all before 1989	T GDR: S	B	B	S (priv. F)	S (priv. F)	no
Czech Republic after 1989	S	F	F	publ. S priv. F	publ. S priv. F	yes
Slovak Republic after 1989	S	'93-'94: F from '94: P	F	publ. S priv. F	publ. F+C priv. F	yes
former GDR after 1989	S	B+P	---	in hospital S ambulatory F	F	yes
Hungary after 1989	S	B+D+P	B+F	S	C	yes
Poland after 1989	T	B	B	publ. S priv. F	publ. S priv. F	yes

Funding:
T = gen. taxation
S = soc. insurance

Financing of hospitals and outp. clinics:
B = budget
D = DRGs
P = per diem
F = fee-for-service

Payment of specialists and GPs:
S = salary
C = per capita
F = fee-for-service

Health care funding With regard to funding in the three basic health care systems (Bismarck, Beveridge and Semashko), two methods can be distinguished: national taxation (Beveridge and Semashko), and insurance premiums (Bismarck). In national health systems, funded from general taxation, the budget for the health care sector is determined during the considerations of the state budget. Consequently, it is closed-end financing. The state is also responsible for the delivery of health care provided by state-owned institutions.

In social insurance systems, the level of the insurance premium, the benefits package, and coverage of the insurance are all fixed by law. The insurance is compulsory and is partly paid by employers and employees. The premium is income dependent. Execution of the insurance is by one or more non-profit organisations.

Provision of services can be in kind, or patients can pay directly. Direct payment implies that patients receive reimbursement for the entire sum or part of it, depending on the insurance system. In the situation of health care provision in kind, third parties, either health insurance organisations or the state, pay for the services or provide the budget.

Both funding models can also be combined with private health insurance. Private health insurance is characterised by less government intervention concerning the level of the premium, group of insured persons, and benefits. Insurance premiums are dependent on the individual risk of the insured person.

Before the Second World War, the five countries under consideration had social health insurance for a part of the population. In Hungary, Czechoslovakia, and Poland during the communist era, a national system was implemented, starting some years after the Second World War. In the former GDR the social health insurance system was continued, but adapted to the Semashko system.

After 1989, social insurance was reintroduced in the Czech and Slovak Republic. Employers and employees have to pay an income-dependent insurance premium to one of the sickness funds. Hungary has also reinstalled social health insurance.

When the former GDR reunited with West Germany, the decision was made to extend the West German health system to the whole country. In the former GDR, social health insurance was administrated through only two insurance funds. These have been replaced by the decentralised West German system; over 200 West German sickness funds now operate in the former GDR.

Poland has recently adopted a strategy for introducing social health insurance. An important advantage of an insurance model is that the health care sector no longer has to compete with other state responsibilities when the state budget is determined. However, this can at the same time generate a new problem, because this can easily lead to higher expenses in the health care sector.

Distribution of money to health care providers The distribution of money to health care providers can be organised in different ways, according to the

reimbursement model, the contract model, the integrated model, and the out-of-pocket model (Hurst, 1992). The first three models are third-party payment models. In the reimbursement model the patient pays directly to the provider, but will be reimbursed by the third-party payer (the private or public insurer). The contract model indicates direct remuneration of providers by the third party (usually fee-for-service or capitation), as in the Bismarck model. The integrated model means a vertical integration of the third party and the providers. Providers receive a global budget or a salary from the third-party payer (as in the Beveridge and Semashko models). Finally, the out-of-pocket model refers to a situation in which patients pay for their medical care directly out-of-pocket to the provider, without any involvement of a third party. This is the case for services which are not covered under the national plan or health insurance (for example cosmetic surgery). Out-of-pocket payments can also entail additional payments for delivered services (known as co-payments).

During the communist era, health facilities in all of the East European countries considered in this study were budgeted and physicians were salaried; health care was financed according to the integrated model, with a vertical integration of the third party and the providers. Since physicians were salaried, incentives for high production, as under fee-for-service, were (at least in theory) avoided. However, physicians asked for gratuities (except in the former GDR) to boost their relatively low incomes. As a result, physicians in general had an interest in treating as many patients as possible.

After 1989, the reported countries (except for Poland) reintroduced fee-for-service remuneration, replacing the former budget financing of facilities and salaries of physicians. Payment to the providers shifted from the integrated model (vertical integration of the third party payer and the providers) to the contract model (direct remuneration of providers by the third party).

The case of the Czech republic shows one of the negative consequences of the combination of fee-for-service remuneration and social insurance funding. It has to do with cost containment. More than 40 per cent of Czech physicians are now working in private practice; private physicians and hospitals are remunerated by a point system. Following the introduction of this system, health expenditures increased by almost 40 per cent in two years. In all probability, this is due to the absence of tight budget caps, as an econometric study conducted by the OECD showed that using global budgets for hospitals was associated with 13 per cent lower health care expenditures (Hurst, 1991).

The financing of health care provision in Slovakia developed in a comparable manner to that in the Czech Republic. However, since 1994, hospitals have been financed by a per diem remuneration. In addition, a combination of capitation and point remuneration has been introduced for primary care.

After reunification of the GDR with West Germany, the West German health system was implemented in the former GDR. As a result, the ambulatory and outpatient clinic primary care was eliminated. Primary care physicians turned into private contractors, and are paid on the basis of a fee-for-service point system. This means that expenditures on health care in the former GDR can be expected to rise to the West German level.

Hungary has also undergone a thorough reform of its health care financing; since 1990 a point system, a DRG (Diagnosis Related Group) system, per diem remunerations, and per capita payments have been introduced. Furthermore, health care sector funding has been modified into a social insurance system. The insurance funds (for health care and pensions) are faced with financial problems, however. This will probably result in cut-backs in the expenditures of the social insurance fund and a reduction of the basic package of health insurance.

In Poland, the structure of health care has remained generally the same as it was before 1989.

Organisation The organisation of health care before 1989 in all of the countries in question was governed by their respective Ministries of Health. Responsibilities were divided into regions and subdivided into districts. After the political changes, decentralisation brought about more autonomy as a rule for the regions and districts.

In Czechoslovakia, all health care activities in a region or a district before 1989 were state owned and were grouped in a 'Regional and District Institute of National Health'; this was a distinctive feature of the Czechoslovak health care system. These district and regional institutes were governed and financed by the respective district or regional authorities. This clustering of health facilities was abolished in 1991; most facilities became legally and financially independent. In the former GDR, a part of the health facilities were owned and financially supplemented by the church.

Health facilities in the former socialist countries can be classified as hospitals (in general at the national, regional and district levels), outpatient clinics, and in some cases, family physicians (former GDR) or district doctors (Hungary). Apart from that, extensive occupational health facilities were available, predominately for primary care services. These parallel

services, as they were called, were usually not under the direction of the Ministry of Health.

During the socialist era, primary care was delivered in integrated health centres and was provided by physicians working in outpatient clinics, ambulatories, family practices and occupational health facilities. Health workers were employed by the state, and in practice there was no free choice of doctor (except for 40 per cent of the Polish population since 1986). After 1989, all the countries under consideration introduced a free choice of doctor.

Because of their limited equipment, most primary care physicians were encouraged to refer patients to more specialised (and more expensive) services. Another reason for referring patients was that physicians did not earn more money for treating more patients,[3] whereas they often received gratuities for their referrals.

A common element in the reforms of the described health care systems after 1989 was the strengthening of primary care and the introduction of a real free choice of doctor. Special emphasis has been placed on the introduction or reinforcement of the family physician. This policy is meant to lessen the burden of secondary health care, which is more expensive.

In the field of hospital care, an important problem in the health systems of the former socialist countries was the poor maintenance of facilities due to inefficiency and lack of equipment. Medical technology was old-fashioned and there was a shortage of drugs. In general, the morale of health care workers was low. They received salaries which were comparable to the earnings of an average skilled blue-collar worker.

A small number of physicians in primary and secondary care also worked in private practice and were paid in cash by the patient. These private physicians were predominantly state employed and worked part-time in private practice. In Poland, 30 per cent of doctors worked for a few hours a day in private practice. Nowadays it has become much easier to start a private clinic, at least legally, although the limited financial means of the population makes it difficult for them to pay for medical services. In the Czech Republic, over 40 per cent of physicians work in private practice where they are able to earn a higher income. In the Slovak Republic, over 90 per cent of physicians have individual contracts with health insurance funds. In the former GDR, almost all primary care physicians have become private contractors. In Hungary, about half of the primary care doctors have made individual contracts with the health insurance fund.

Having described the changes after 1989, we now come to the more analytical question of the origins and background of the changes and their direction. The direction of the changes is unequivocal. The health care systems described in this book have shifted towards the modern Bismarck health care plans of Western Europe, which are in fact modernised versions of the model that operated in most of these countries before the Second World War.

The end of communist rule in the countries of Central and Eastern Europe marked the beginning of an ongoing period of transformation, affecting the whole of society including health care. Most striking have been the transformations of the economy and the political system. The economy has had to change from a socialist planned economy to a western-type regulated market economy. State enterprises are being privatised and new, private enterprises are being set up. Market economy institutions, such as share-holding and stock exchanges, have to be re-invented and reinstalled. The inefficiencies of the planned economy and the state of the economies of the CCEE proved to be worse than many western observers had expected. As one observer stated shortly after the revolution, all Eastern European countries were nearly bankrupt (Sándor, 1990). The end of the ideologically-based construct of total employment revealed a large amount of, hitherto hidden, unemployment. This necessitated the development of a basic system of social security, such as unemployment benefits. At the same time, the development of such a system proved very difficult, due to high unemployment; funding was and still is particularly troublesome. Although the transformation of the economy is aimed at reducing state control, the government finds itself constrained to intervene financially during the phase of building up social security funds (Potuček, 1994). This economic situation dictates the conditions under which health care system reform can take place.

Another set of conditions is formed by the political situation. The introduction of major, successful reforms in health care in the past has been associated with strong political leadership: 'strong governments made western health care reforms' in the words of Vienonen and Wlodarczyk (1993). The political situation in the CCEE is not very stable as yet. Although democracy seems to be established, it is sometimes described as still fragile. The electorate seesaws between liberalism, nationalism and socialism. 'Losers' in the newly regained era of freedom want to fall back

on the securities advocated by the political heirs of the communist party (Arts and Peschar, 1994).

There was widespread discontent with the health care system in the CCEE. The official ideology of the communist system clearly departed from actual reality. Far from being a socialist paradise, health status and life expectancy were declining; large differences existed in health status, and unequal distribution of services and unequal access to services were major problems (McKee, 1991). In the period from the end of the Second World War to the mid-sixties, known as the post-war reconstruction stage, age-standardised mortality rates decreased in many former socialist countries, just as they did in Western Europe, due to better nutrition and effective treatment of infectious diseases (Forster and Józan, 1990). After this period, life expectancy continued to increase in Western European countries while it stabilised or even declined in Eastern Europe. In 1990 life expectancy in the former socialist countries was 72 years; in the OECD countries, with the exception of Turkey, this figure was 76 years (World Bank, 1993). Several factors account for this contrast: differences in lifestyle are one (tobacco consumption alone might account for half of the difference), followed by environmental pollution and psychosocial factors (Feachem, 1994). It is not clear to what extent, if at all, the state of the health care systems in socialist countries contributed to the poor health status of the population.

All in all, the transformation of the health care systems of the CCEE started under difficult conditions — severe economic recession, inflation, an unstable political situation and the challenge of deteriorating general health among the population (Mckee et al. 1994).

What do policy makers in the CCEE have to fall back on in developing plans for the future of their health care systems? As we stated in the introduction, we distinguish two sources of inspiration and knowledge of alternative ways to organise the health care system — the experience of the past and the example of other health care systems. Each of them may serve as a positive or a negative source of inspiration.

First of all, there is the historical record of the countries studied. All five countries used to have social insurance-based health care systems before the communist take-over, although the Polish system clearly was the least developed. In Germany, before the communist take-over of the eastern part, the social insurance system was introduced as early as 1883 by Chancellor von Bismarck. As we mentioned in the fourth section, the health care system of the German Democratic Republic retained major elements of the social insurance system, although mixed together with the Semashko system. The situation in Germany after 1989 differs from that of other ex-

communist countries in that the unification of Germany determined the direction of change of the health care system. The system of the Federal Republic of Germany has been introduced in the new Länder.

Both Hungary and Czechoslovakia were among the first to adopt a social insurance-based system to meet the costs of illness and loss of income due to illness for low-income employees. In the late 1920s, 30 per cent of the population of Hungary was insured compulsorily through one of the regional or occupational sickness funds.

Poland used to have a less well-developed system of health care and health insurance than the other countries studied. Information on the pre-World War II situation is very scanty, but the impression is that employment-related health and social insurance was much less widespread than in the other countries and that the role of charity was much more important. Compared to other countries, Poland seems to have had less historical experience with health and social insurance institutions to fall back on. As far as the other countries are concerned, the fact that they used to have a social insurance system might have induced them to adopt a social insurance-based health care system again.

The historical record of the CCEE also contains a negative source of inspiration, the health care system as it used to function under communist rule. This has inspired an aversion to centralised and state-dominated health care systems. This may stem in part from a general political feeling which reflects attitudes about other sectors of society as well as about the organisation of health care. It may also reveal the popular opinion that free health care equals substandard health care. Finally, the experience of physicians has been that state health care means low salaries and probably not much autonomy.

The negative ideas associated with state health care under communism might also have made Western European national health services suspect in the eyes of policy makers, the general public and physicians. Although rational arguments exist for a Western European type of national health service (Groenewegen and Calnan, 1995), the general negative experience with state-run systems might have ruled out this possibility as an alternative to the prevailing trend towards social insurance-based systems. What has been adopted from the Beveridge system, however, is the emphasis on the general practitioner as the cornerstone of primary health care.

The social insurance-based systems of Western Europe, in contrast, serve as a positive point of reference. Western administrators are involved in the drafting of social insurance laws and the bylaws of social insurance institutions. However, due to the bad economic situation in the CCEE, those

countries that want to adopt a social insurance system have to cope directly with problems that have not yet been solved in Western European countries. These problems include how to restrict the insurance benefits in order to keep the system affordable, and how to develop an efficient system of hospital financing, based on output pricing. Some of the solutions proposed in the CCEE have not yet been introduced in Western European countries. Hospital financing by Diagnosis Related Groups (DRGs) is contemplated in several Western European countries (Kimberly et al., 1993), but has already been implemented in Hungary. Restriction of insurance benefits to basic or necessary services is almost unavoidable, but concrete measures have not yet been introduced, just as they have not been in Western European countries.

6 The future of health care in the CCEE: problems and prospects

The present governments of the countries in Central and Eastern Europe described in this book are all facing a difficult dilemma: they want to stimulate their economies, and at the same time build up a new system of social security including health insurance. The CCEE inherited economies in disarray from communism, with sharply rising unemployment rates. Insurance to protect against the risk of loss of income due to unemployment and ill health would put a heavy financial burden on employees as well as on employers. Communist health care systems were seen as producing poor quality and functioning inefficiently. The difficult task facing the governments in this situation is to design an affordable health care system which provides an acceptable level of health care services.

The general tendency in the reform of the health care systems of Central and Eastern Europe is a Bismarckian type of health and social insurance system, inspired both by their pre-communist health systems and by modern western plans. The affordability of such a system depends, among other things, on the size of the population covered and on the package of insured services (Blanpain et al., 1978). The Western Bismarckian systems which were initiated at the end of the nineteenth century gradually increased the size of the population covered and ended up with nearly universal coverage in some systems. In cases of partial coverage, divisions are related according to income or employment status. The second development consisted of increasing the package of services covered by social health insurance. The latter development took place primarily in situations of expanding economic activity. And by now, Western European health care

systems are contemplating how to cut back the services covered by social health insurance in order to reduce costs. As one policy analyst recently noted, however, these efforts have not moved beyond a statement of principle (Klein, 1995). The Hungarian experience, with the introduction of DRG remuneration for hospital care, may be useful for West European countries which are planning to reform their health systems and are interested in DRGs.

Although highly important, the issue of coverage is only one of many problems that the CCEE encounter in the transformation of their health care systems. The mismatch of health personnel is another. The number of physicians is high, their salaries used to be very low and they are usually highly specialized. Hospital facilities are abundant, while primary health care is relatively underdeveloped. Those Western health care systems with a strong tradition of general practice or family medicine, are looked upon as an example to strengthen primary health care and to rebalance primary and hospital care. However, this requires a large investment in medical equipment, in retraining physicians, and the reordering of existing facilities to prevent primary care from becoming only a referral agency. More important, perhaps, is that a strong position of general practice requires some limitation of freedom of choice for patients. If general practice is to serve as the gate-keeper to more specialized and often more expensive care, 'doctor-shopping' must be limited by introducing a personal doctor system and by regulating access to specialist and hospital services through obligatory referrals. Limits to freedom of choice are, understandably, not very popular in the CCEE. A possible solution lies in combining this with insurance coverage, like the situation in Denmark (Van Kemenade, 1993).

Two insurance modes can be distinguished. In the first one, insurance coverage is high, but people are tied to a particular general practitioner, have little opportunity to change (e.g. once a year) and have to be referred by the general practitioner for specialist and hospital care. In the second insurance mode, people are free to choose their general practitioner at any moment and have free access to all or certain specialist and hospital services; in this case, however, the level of insurance coverage is much lower and people have to pay more themselves. The experience in Denmark shows that only a very limited number of people opt for the second mode of insurance.

There is also another way to limit the insurance package and at the same time protect the poorest people while allowing some freedom of choice. This is done by linking the level of insurance coverage to income, as occurs in the tax-funded national health service of Ireland. People with low

incomes have a broad, almost full coverage. People with middle incomes have free or subsidised access to a large number of medical services. A small, wealthy segment of the population has to pay for the vast part of medical care themselves, or can voluntarily insure themselves (Van Kemenade, 1993). In this system, people who need most protection from high medical costs are fully protected, while wealthier people can decide about an optimal level of coverage.

An important change in the health systems of the countries under consideration concerns the financial component. On the macro level, the former closed general budget health-system funding has been, or will be, changed into open-ended social-insurance funding. On the micro level, health providers are remunerated more and more according to a fee-for-service system. As a result, health care expenditures have increased, both per capita and as a percentage of GDP. This supports the statements of Hurst (1991), Poullier (1988) and Delnoij (1994) that budget caps are an important condition for cost containment.

As a result of the transformation from a state economy to a market economy, the CCEE faced a rapid decline of their national incomes during the early nineties. In general, when the national income of a country rises, the share of the national income spent on health care rises too. However, what happens when the national income of a nation drastically declines? If the national income falls and health care expenditures remain at the same level, the share of the (decreased) national income spent on health care increases. In the former socialist countries of Eastern Europe, however, expenditures for health care have risen in the years since the breakdown of the Berlin Wall.

A higher level of the share of GDP spent on health care will necessitate increased contributions by the population either directly as co-payments or as insurance premiums. This in turn necessitates higher (gross) incomes and, consequently, higher salary costs to employers. Such a trend will raise unemployment, however, and will worsen the competitive position of these countries internationally (the current growth of these economies is almost totally dependent on exports). Economic reasons, in other words, are forcing the CCEE to control the share of GDP spent on health care. One way to do so would be to restrict the number of insured persons. However, which part of the population should be excluded from social insurance? For understandable reasons the government will not exclude the poor. Removing the wealthier part of the population will not solve the problem, because they are the ones that pay the highest (income-dependent) insurance premiums.

Another, and maybe more realistic, measure could be to limit the insurance package, covering only most essential medical services. This will limit freedom of choice, although people are free to insure themselves additionally. Lowering expenditures on health care by simply cutting budgets, salaries and fees is very difficult in these countries because they are at a very low level already. Maybe a reduction of the number of facilities, beds and active physicians could yield some savings, but on the other hand it could also cause waiting lists.

This brings us back to some benefits of the former socialist health systems in these countries: provision of free access for the entire population to all kind of health services, in combination with relatively low expenditures. On the other hand, the former health systems also had their weaknesses. We already mentioned that they did not function efficiently because of an over-supply of physicians and an under-supply of equipment. Salaries of the health care personnel (including physicians) were relatively low and were not related to 'productivity', which had a negative influence on their motivation. It could be argued that, given the difficult economic situation, these problems could be solved to some extent by smaller changes. The number of physicians could be lowered, while the motivation of physicians could be raised by partly using a fee-for-service reimbursement, in addition to salary payments. In fact, gratitude payments, typical of most communist (and post-communist) health systems, produce a corresponding effect. Although the experience with communism makes it difficult to create legitimation for a publicly-funded and operated system, the existing infra-structure could possibly be used more effectively in a national health service-type system (Groenewegen and Calnan, 1995).

The former communist health systems were organized on a district basis. Although with the fall of communism WHO also abandoned the idea of organizing primary health care based on the district concept, for public health somehow a population-based, territorial organisation is necessary. In the CCEE, especially in Hungary, life expectancy has declined. Although it is questionable to what extent this is related to health system characteristics, it underlines the importance of a good system of public health that addresses (environmental) hygiene, (infectious) disease control and life-style. Probably the latter has the most important impact on the life expectancy of the population.

By changing a nation's health system from a communist Semashko type in the direction of a modern and western Bismarckian one, the responsible government has to keep in mind that this will have an important impact on national spending on the health care sector which in turn has economic

consequences. The governments of the former socialist countries are facing the classical dilemma of making a choice between investing in the wealth or investing in the health of their countries.

Notes

1 These texts were not translated by official translators, but by the mentioned experts or by other persons who are native speakers in the respective languages.

2 The Dutch government was forced to introduce the Bismarck health insurance system during German occupation, although plans to regulate the existing, voluntary sickness funds had been discussed in the Dutch government for many years.

3 According to Sheiman (1994), primary care providers in Russia, mainly physicians working in polyclinics, acted in the same way.

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Part II

Country descriptions

1 German Democratic Republic

The German Democratic Republic was founded in 1949. It eventually became the tenth economic power of the world. In 1989 the Berlin Wall was broken down and one year later Western Germany and the DDR reunited.

Statistics (1995)

Number of inhabitants:	15,531,000
GDP per capita (1992):	8,812 US$
Real GDP per capita (PPP-adjusted):	n.a.
Unemployment rate (1996):	15.4%
Inflation rate (1996):	2.8%
Percentage of GDP spent on health care (1992):	15.8
Number of physicians per 10,000 population (1992):	27.1
Number of nurses per 10,000 population (1989):	73
Number of beds per 10,000 population (1992):	88.8
Average length of stay:	n.a.
Birth rate (per 1,000 population):	5.3
Fertility rate (1994):	0.8
Death rate (per 1,000 population):	11.1
Infant mortality rate (1992):	7.0
Average life expectancy (1990-1994):	
men:	70.0
women:	77.0

n.a = not available

Sources: Beske et al., 1993; Schieber et al., 1994; Schneider et al., 1995; Steuer and Lutz-Detlinger, 1991; Winkler, 1993; Zakee, 1996.

Before the second World War In 1883, Chancellor von Bismarck initiated a social health insurance plan as part of a series of social insurance programmes for workers with an income below a certain level (see Part 1). A strong state was a Prussian tradition. Moreover, the scheme was a reaction by the state to growing sympathy among workers for socialist ideas and the influence of labour unions (Iglehart, 1991a). Associating the state with people's welfare would diminish the role of the trade unions and the Social Democratic Party (Light, 1985; De Swaan, 1988).

Part of the social insurance program was a health insurance scheme, run by health insurance funds ('Krankenkassen'), with governing boards of employers and employees. These health insurance funds had to deliver services in kind, so that the health insurance funds had direct responsibility for the delivery of services, and there was no financial transaction between insured patients and physicians. The health insurance funds received premiums partly (two-thirds) from employees and partly (one-third) from employers (Schneider et al., 1995).

During Adolf Hitler's Nazi regime, some changes took place in the health care system. The National Socialist Party stood for professional liberties and against communism. The party supported private medical practice. The Nazi regime took over the administration of the health insurance funds. According to Light (1985), many physicians who supported autonomous health insurance funds (which the Nazis regarded as socialist organisations) were deported or even killed. Nevertheless, the Bismarck model survived two world wars, National Socialism, and the foundation of the West German welfare state after the Second World War (De Swaan, 1988). However, during the foundation of the former German Democratic Republic, the Soviets imposed their Semashko model, although (Bismarck) social insurance (in a modified form) was allowed to remain.

1.1 The era of the German Democratic Republic

In 1945, after the end of the Second World War, the occupying Soviets established a centrally planned and funded health care system, according to their own (Semashko) scheme in the eastern part of Germany (see Part 1). After the foundation of the German Democratic Republic (GDR) in 1949, the country remained under the severe control of the Soviet Union, and the health care system created by the Soviets was introduced in the former GDR (Light, 1985). However, the health service model implemented in the GDR was not an exact copy of the Semashko model. In contrast with the Soviet health service, in the former GDR primary care was also provided

by family physicians (in addition to polyclinic primary care). Furthermore, the health care sector was funded, not by tax revenues, but through a social insurance scheme remaining from the pre-communist era.

The former GDR had the highest life expectancy at birth (in 1989: 70.1 for males and 76.4 for females) and lowest mortality rates among the socialist countries. However, health statistics in the last decade of the former GDR still indicated a slightly inferior health situation to that in such West European countries as Portugal and Ireland. Until the seventies, the health situation was roughly equal to that in West Germany (Forster and Józan, 1990; Light, 1985; Rowland, 1991).

In many respects the former East German health system seems to be the most 'Western' health system of the former socialist countries. Lüschen and Apelt (1992) concluded in their study of health and health care in East and West Germany that 'a strong impression prevails that the two systems because of their joint history, strong mutual identification, social as well as family exchanges, have a strong cultural identity. This may indicate that the two systems in terms of their health culture were not so far apart after all.'

Table 1.1
Selected standardised male and female death rates per 100,000 population

Cause of death		1975-1979	1980-1984	1987
Neoplasms	M	239	242	244
(ICD-9: 140-239)	F			
Cardiovascular diseases	M	741	761	716
(ICD-9: 390-459)	F			496
External injuries and poisoning	M	n.a.	n.a.	51
(ICD-9: E 800-999)	F			
Total	M	1427	1412	1342
(ICD-9: 001-999)	F	957	920	863

n.a. = not available
Sources: Forster and Jozan, 1990; Rowland and Telyukov, 1991.

Organisation of the GDR health care sector The Ministry of Public Health was responsible for the health care sector. The administration of the health system followed the general government structure of the country; the former

GDR was divided into 15 regions or counties (called 'Bezirke') and 226 districts ('Kreise') (Weiss et al., 1990). Health services were headed by a county medical officer ('Bezirkarzt') at the county level, and by a district medical officer ('Kreisarzt') at the district level. The planning of health care was part of national economic planning, by means of long and short term plans. Health care plans were carried out at different administrative levels (WHO, 1981).

Primary health care Primary care (designated as 'gesundheitliche Grundversorgung' or basic medical care) was provided by family doctors, community nurses, ambulatories, polyclinics, and occupational health facilities (see: 'occupational care'). Their planning, administration and organisation were the responsibility of district authorities (Weiss et al., 1990).

In rural areas and in small villages in particular, family doctors ('Hausärzte') took care of primary health care. They were supported by nurses and chauffeurs. Their practices were mainly owned by the state, although there were some private practices (see Table 1.1). Only those private practices which were already in existence before the Second World War, and which had been handed over from parents to children who were physicians with the same specialty, could be privately owned. Establishing a new private practice was not permitted, so the total number of these practices steadily decreased (Thiele, 1990).[1]

In rural areas, family doctors provided more services than those in the cities, who were more inclined to refer to neighbouring polyclinics or hospitals. For every 1500 citizens in rural areas, there was one community nurse. She was responsible for preventive care, the care of the elderly and children and undertook some social work (there were no other social workers). Furthermore, she provided emergency care in the case of accidents and the treatment prescribed by the family doctor (WHO, 1986). Ambulatories, which were small health centres, were available in the larger villages and smaller towns. They comprised at least one family doctor, dentist and nurse (Light, 1985).

Polyclinics were health care centres in which at least six different disciplines were united: general medicine, internal diseases, surgery, gynaecology/obstetrics, paediatrics and dentistry. They also provided preventive services such as vaccinations, diagnostics and physiotherapy (Weiss et al., 1990). They operated in larger towns. The specialties were not necessarily located in one building. The Polyclinics were either organisationally bound to a hospital or were autonomous.

For primary inpatient care, district hospitals were available in the overwhelming majority of districts. They included at least internal medicine, surgery, gynaecology/obstetrics, paediatrics and diagnostic facilities (Weiss et al., 1990). In the antenatal units (consulting clinics for pregnant women and for mother and child), pregnant women were examined and compulsory vaccinations for children administered (WHO, 1981).

Officially, the choice of a doctor was free (Weiss et al., 1990). However, as in many other countries, actual practice was different. In rural areas most people normally went to the family doctor in their area for practical reasons; family doctors did not visit patients at home outside their own service area. However, free choice of doctor was also limited in the cities. The polyclinics had their own fixed catchment area. All persons from a particular area had to go to the same doctor and were not accepted by another physician, thereby avoiding unequal patient distribution. Since these physicians were salaried, many had no incentive to treat more patients than those living in their area.

The emergency care organisation, 'Schnelle Medizinische Hilfe' (SMH), provided 24 hour emergency care. The SMH consisted of:

- Dringliche Hausbesuchsdienst (DHD); an urgent home visit from a family doctor.
- Dringliche Medizinische Hilfe (DMH); specialist emergency care for severe or life threatening situations. These specialists worked most of their time in a hospital or polyclinic, and provided emergency care as an additional service.

The SMH was managed by physicians employed by the state. However, the ambulance vehicle and its driver were from the German Red Cross causing problems of coordination (Arnold and Schirmer, 1990).

Occupational health care According to the constitution of the GDR (art. 35), every citizen had the right for protection of health and ability to work. A system of occupational health care was established. The tasks of the occupational health facilities were to:

- provide general medical care for workers;
- take care of prevention;
- safeguard safety and hygiene at the work place (Thiele, 1990).

Occupational care included 122 polyclinics, 314 ambulatories and 3000 doctor and nurse practices. More than 3000 physicians and dentists and 19,000 other health care workers, about 14 per cent of all medical personnel, were working in occupational health care (Arnold and Schirmer, 1990; Freudenstein, 1992). According to Winter (1975), in the early seventies about 70 per cent of the working population received occupational care. At the end of the eighties this percentage was increased to 90 per cent of the working population (Arnold and Schirmer, 1990). Companies with more than 200 workers were obliged to have at least one sanitary nursing post. Companies with more than 500 workers had at least one physician. Bigger companies (more than 2000 workers) had to establish ambulatories or polyclinics (Elsner, 1990).

As a consequence of the extensive occupational care existing next to community health care, working people often consulted two general practitioners: a family doctor near their home, and a doctor at their place of work (occupational care doctor). Problems arose with regard to the continuity of the care; for example a worker who became ill during his work might go first to the occupational doctor, and later visit the family doctor for the same complaint.

Although companies financed their occupational health care facilities, medical staff were subordinate to the district medical officer (Kreisarzt), and independent of the companies where they worked (Winter, 1975). In general, occupational health care was better equipped because of the company's financial support. Nevertheless, few were eager to go to their occupational doctor because many felt they would be sent back to work earlier.

Secondary care In the former GDR there were three types of general hospitals, classified according to the levels of the general administrative structure under which they operated. Classified according to the range of specialisation, they were local, district, and county (regional) hospitals. These last were the most specialised (WHO, 1981). The local, district, and county authorities owned and governed these hospitals, which were managed by a medical director in conjunction with an economic director. The medical director bore the final responsibility. A district physician was directly responsible to the hospitals in the district.

The Ministry of Higher Education was responsible for the teaching hospitals. Twenty national medical institutions provided highly specialised care for special diseases. They were organised according to medical disciplines and were under the direct control of the Ministry of Health

(Weiss et al., 1990). The continuous development of outpatient medical care led to the decline in the number of hospital beds during the seventies and eighties (Weiss et al., 1990; Institut für medizinische Statistik und Datenverarbeitung, 1988).

Care for the severely infirm elderly was provided by 1400 homes for the elderly and nursing homes, with a total of 140,000 beds. Of these beds, 100,000 were used for nursing care. More than 350 homes (with 20,000 beds) were owned by churches. The number of beds was far from sufficient so that there was a waiting list of about 100,000 people (Arnold and Schirmer, 1990). Some patients requiring nursing care stayed in general or psychiatric hospitals. The low retirement payments combined with women's high labour participation rates left many elderly people in a detrimental position, having to fend for themselves (Arnold and Schirmer, 1990). Nevertheless, the People's Solidarity Organisation ('Volkssolidarität'), organised by the state and with about two million members, provided home care by voluntary workers (WHO, 1981). It also arranged social activities for the elderly.

Prevention Preventive activities were mainly undertaken by occupational health services. The extent of the regulations the ministry imposed on physicians, requiring them to conduct check ups and other preventive examinations, was such that physicians did not take them very seriously. In general, physicians regarded most elements of the prevention programs as something they were obliged to do, but were mostly unnecessary.

Economic support In contrast with the Soviet Semashko model, East German health care was funded by social insurance, not general taxation. All employed people and their dependants, pensioners and the disabled were obligatorily insured (Beske et al., 1993). Both employers and employees paid for this system. Employees paid 10 per cent of their income for social insurance, with a maximum of sixty GDR marks per month. This insurance covered health care expenditure as well as pensions and sick leave payments (Arnold and Schirmer, 1990). In 1987-1988, total spending on health care was 5.2 per cent of GNP, which was just under the (official) East European average of 5.4 per cent (Rowland and Telyukov, 1991). In the OECD countries this figure was some 7.4 per cent (Schieber et al., 1994).

Two separate social insurance funds were established: the 'Sozialversicherung' (SV) and the 'Deutsche Versicherungsanstalt' (DVA). About 85 per cent of the population were insured with the SV. The others, the self-employed, private manual labourers and farmers in cooperatives and their

families, were insured with the DVA. The income of the social insurance funds was not sufficient, so the state had to supplement it (see Figure 1.1). Almost all medical services were provided free of charge under this social insurance. Only dental materials, for example gold, had to be paid for.

Financing In Figure 1.1, a schematic outline of the financing and funding of the former East German health care is given.

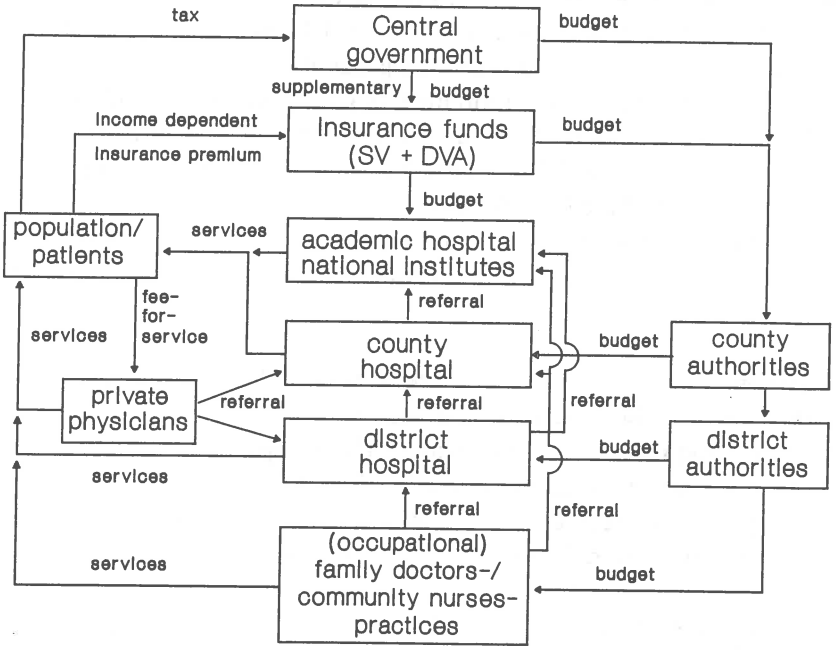

Figure 1.1 Financing of the health care of the former GDR

Health care was financed according to the 'gross financing principle'; the budget for health care was divided over the counties (regions). The counties allocated their incomes over their districts and the districts finally distributed the money over the health facilities, although some of these were financed directly at the county or central level (see also Figure 1.1). The health care facilities were mainly owned by the state and financed by budgets which increased every year by a percentage (normally 3 to 4 per cent) set by the state plan commission, irrespective of the hospital's production or costs (Arnold and Schirmer, 1990). Confessional hospitals were financed in the same way, although Western churches provided them with extra resources.

Private practice There were private practices in former East Germany; they were not forbidden (Winter, 1975). So private practices left over from the pre-communist era, the 'Niedergelassenen Arztpraxen', were not nationalised. To establish a new private practice was not allowed, so the number of private practices decreased from 3253 in 1960 to 341 in the last days of the GDR era (Deppe, 1993).

Medical staff were, in general, salaried. The few hundred independent private contractors, the 'Niedergelassene Ärzte', had a fee-for-service payment, which provided a much higher income than the salaries of the public physicians and dentists. Some highly experienced specialists provided private services in the evening hours in their own homes and were paid fee-for-service in cash, in addition to their normal salaries. According to our informant, the earnings of the salaried physicians were, in general, some 30 to 50 per cent higher than those of the average qualified blue-collar worker. The difference between the earnings of a physician and a blue-collar worker was greater than in most other socialist countries. As a result, physicians from other socialist countries were eager to work as doctors in the GDR. In contrast with other East European countries, physicians did not seek gratuities from patients. This supports the statement of Völker and Flap (1994) that corruption in the former GDR seemed to be less than in other East European countries.

The health care sector was never completely nationalised. Hospitals owned by the churches remained confessional property. Just before the fall of the Berlin Wall, some 13 per cent of hospitals, though only some 7 per cent of the beds, were in confessional hands. These facilities were sponsored by churches in the West to supplement the relatively low GDR hospital budgets (Arnold and Schirmer, 1990; Roemer, 1991). These facilities usually contained more efficient equipment and were better maintained.

Drugs Every district had several pharmacies, which were administered by a district pharmacy ('Pharmazeutisches Zentrum'). They also provided pharmacists with information. In total there were 1,600 retail pharmacies and 400 pharmacies affiliated to hospitals, polyclinics or other services (Katz, 1994). The district pharmacists were governed by county inspectorates ('Bezirksapotheken Inspektion'). These inspectorates monitored district pharmacists and provided them with information. The county inspectorates were administered by the Ministry of Health. As a rule, pharmacies were state-owned, although there were some private pharmacies. The Institute for Drugs of the GDR (IFAR) in Berlin was a national institute responsible for: the selection of drugs, instructions for quality

assurance, advising the ministry, education of quality controllers, inspection of pharmaceutical companies and foodstuffs and the coordination of pharmaceutical research (Boer, 1989). Three quarters of the 2,000 licensed drugs in the former GDR were produced within the country. The rest were imported from other COMECON and Western countries (Freudenstein, 1992). Drugs were provided without co-payments (Katz, 1994).

Medical education Medicine and dentistry were taught at six universities and three medical academies. A year of nursing practice was required before entering medical school. Basic medical education required six years and dentistry five years. After graduating as a physician with the 'Diplom-Mediziner', specialisation in one of the 32 medical (or four dental) disciplines was compulsory. This primary specialisation was an inservice course, taking four to five years and leading to a specialist degree ('Facharzt'). The training for general practitioners took place in hospitals and polyclinics, and lasted five years. After completing this first specialisation, a voluntary second specialisation could be taken in one of 15 sub specialties. This led to the degree of 'Subspezialist'. Courses for continuing medical and dental education were organised by various hospitals, the Academy for Postgraduate Medical Training, the county and district Academies for Training of Health Personnel and the medical associations (Parkhouse, 1989). The education for nurses, physiotherapists, medical technicians and other health care personnel lasted from two to four years (WHO, 1981; Parkhouse, 1989).

1.2 Changes after German reunification

In November 1989, the population forced party leader Egon Krenz to open the Berlin Wall (Michielsen, 1990).[2] On 3 October 1990, East and West Germany were reunited. The consequences of this historical event for the health care system are described below. In general terms it can be said that in 1990 the former GDR adopted the West German health care system. As a result, former East German primary care providers have become private contractors and are remunerated on a fee-for-service system. In addition, former West German health insurance funds have started annexes in former East Germany. Some important distinctions between the two parts of the country remain. The salaries of the health care staff in the former GDR are only 70 per cent of those of the West Germans. The condition of health facilities also differs. The former hospital managements, consisting as they did of party members, have been purged.

Primary care In order to adapt the former East German health system to the West German system, the ambulatory and polyclinic care facilities were closed in the years following reunification (Schulenburg, 1994). The physicians working in these facilities were encouraged to become independent contractors as primary care physicians or ambulatory specialists. By October 1991, about half of the doctors (family doctors and physicians from the ambulatories and polyclinics) had taken this step. All doctors had to be independent by 1995. Some physicians who were old or in poor health, however, were unable to obtain the finance for the investments involved.

Secondary care The hospital buildings in East Germany were poorly maintained and in need of renovation. Since reunification, many hospitals and other facilities have been renovated. Outdated medical equipment has been replaced. There have also been some bed reductions, although the number of beds related to the number of inhabitants was higher in the West.[3]

Economic support Since January 1991, the implementation of the West German insurance system has been started in the Länder of the former GDR. The West German health insurance funds (Krankenkassen) have created funds in the GDR. In former East Germany 206 health insurance funds are operating (Schulenburg, 1994). Workers and retired people with an income below 4800 DM[4] per month are compulsorily insured by a health insurance fund. An employee who earns more may leave the public health insurance scheme and take out private insurance. It is only possible to return if income falls below the limit again (Schulenburg, 1994). Generally, these private insurance funds have the same cover as the social health insurance scheme. From 1997 onwards all people are free to choose their health insurance fund, and they are also allowed to switch. Furthermore those publicly insured can take out additional private insurance for luxury services, such as a private room. In 1992, the former GDR spent almost 16 per cent of its GDP on health care. When, however, former GDR wages, expenditures and GDP shift to values closer to those in the western part of the country, the percentage spent on health care will probably also move closer to that of former West Germany, at about 8.5 per cent of GDP.

The public health insurance premiums are income dependent and are paid equally by employers and employees. The premiums go directly to the health insurance funds. The deduction rates (12.8 per cent of income) are the same for every insured person in the eastern part of Germany.[5] The incomes of the health insurance funds in the eastern part of the country are

lower because incomes are still significantly lower and unemployment higher than in the western part of the country. However, the expenditure of these funds is lower, too, because the reimbursement of health providers is lower (70 per cent of the fees in the former West). Any deficits of the East German health insurance funds are covered by the West German funds and by 'solidarity' payments from the pharmaceutical industry (Schulenburg, 1992). Health insurance funds mutually compensate for the risk structure of their pools of insured people, according to differences in age, gender, income, disablement and co-insurance of members' dependants.

Under social insurance, the provision of health services is in kind, although co-payments have been introduced for drugs, medical appliances and dental care (Freudenstein, 1992). Furthermore, hospitalised patients have to pay 12 DM[6] per day for a maximum of 14 days a year (Schulenburg, 1994). Since April 1995, a new compulsory insurance ('Pflegeversicherung') for nursing care at home, and from July 1996, also in nursing homes (which is not under the social insurance scheme at present) has been operating (Hamilton, 1995). A per diem remuneration is determined from this budget. This per diem rate is independent of the patient's diagnosis. Costly procedures are paid for according to a previously fixed reimbursement.

Financing Hospitals still work to budgets. As in the Western part of Germany, each hospital negotiates with the regional association of health insurance funds and with a representative of the private insurers with respect to the budget for the next year. From this budget a per diem remuneration is determined. This per diem rate is independent of the patient's diagnosis. Costly procedures are paid for according to a previously fixed reimbursement.

Primary care physicians are now remunerated according to a fee-for-service point system. All reimbursable services have been expressed in fixed point values. Once a year, the maximum values of these points are calculated according to a macro-budget. The value of the points is inversely linked to the volume of services provided. Such a point system stimulates physicians to provide more services while, as a result, the fees are reduced since the global budget remains the same. The fees paid by private insurers are two to three times higher than those paid by health insurance funds.

From July 1996, ambulatory specialists have been remunerated according to the fee-for-service system, but several services are grouped and remunerated as combined service packages (Die Tageszeitung 20-7-1996). Hospital physicians are still employed since, in the western part of

Germany, physicians working in hospitals are also employed. The salaries of health care personnel have been upgraded to about 70 per cent of the West German level. In due course these salaries will be brought into line with those in the western part of the country.

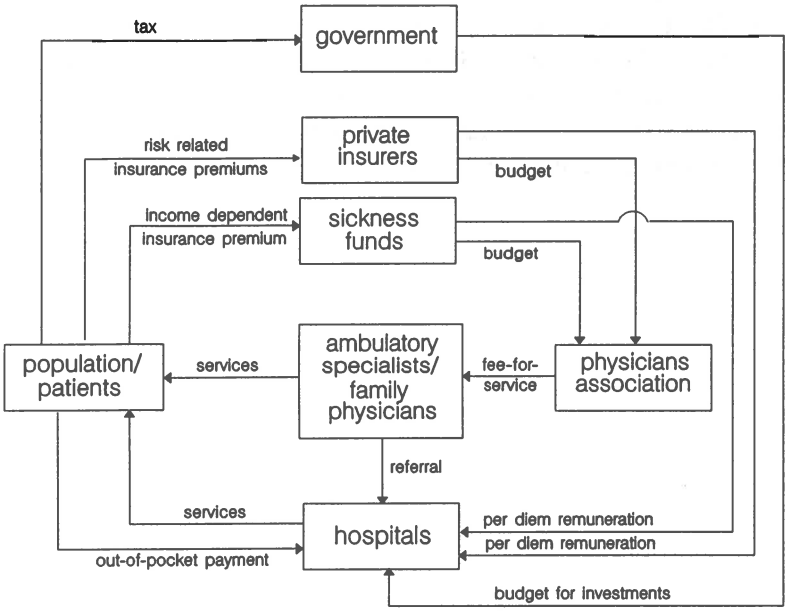

Figure 1.2 Current financing of German health care

Shortages of nursing staff have occurred in some hospitals because the salaries in West Germany are higher and because of a shortage before reunification (Freudenstein, 1992; Heerdink, 1992).

Conclusions Before the Second World War, East German health care was organised according to the Bismarck model, funded by social insurance premiums and private insurance premiums and direct (out-of-pocket) payments from people who were not socially insured. After the Second World War, aspects of the centralised Semashko model were introduced by the Soviets. However, the East Germans never adopted it completely; different elements from the Beveridge and the Bismarck systems were also incorporated. East German primary care consisted of both polyclinics (Semashko) and family practices (Beveridge). Furthermore, the former GDR health care sector, in contrast with the Semashko scheme, was a social insurance plan, not a national health system.

Health care was not completely state delivered. Private practice was not forbidden and there were some few hundred private physicians. Some hospitals were owned and financially supplemented by the church. In contrast with other East European countries, gratuities hardly existed in the former GDR health care.

After reunification with West Germany, the West German health system was implemented in the former GDR. As a result, the former ambulatory and polyclinic primary care has ended. Primary care physicians have become private contractors and are paid by a fee-for-service point system. In addition, health insurance funds have been introduced.

Notes

1 The same situation existed in private dental practices.
2 Although, in fact, prime minister Hans Modrow declared by mistake, live on television, that the Berlin Wall had been opened.
3 In 1989: 106.9 beds per 10,000 inhabitants in West Germany, while in East Germany there were 99.4 beds per 10,000 (Steuer, 1991).
4 Since January 1995. In West Germany the ceiling has been 5850 DM (Strukturdaten AOK Dresden, 1995).
5 In the western part of Germany premiums vary from 8 per cent to 16 per cent of a worker's gross salary (Van Kemenade, 1994).
6 In the western part of the country: 11 DM.

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2 Czech Republic

Introduction Between the 17th century and the First World War, the Czech lands were part of the Austrian and (after 1867) the Austro-Hungarian Empire. Czechoslovakia became an independent state in 1918, composed of the Czech and Slovak federal republics. In 1939, the Nazis occupied the country; after the Second World War, Czechoslovakia was liberated and within some years the country became a communist state. In 1986, the unitary state Czechoslovakia became a federation, made up of the Czech and Slovak Republic. In 1992, the Czech and Slovak Republic decided to separate, which they did as of January 1, 1993.

The economy of the Czech Republic is one of the best of the former communist countries; its unemployment rate is lower than in most Western countries.

Statistics (1994)

Number of inhabitants (1995):	10,333,161
GDP per capita (1992):	2,476 US$
Real GDP per capita (PPP-adjusted):	7,250 US$
Unemployment rate (1993):	3.2%
Inflation rate (beginning of 1995):	9-10%
Percentage of GDP spent on health care (1993):	7.3%
Number of physicians per 10,000 population:	36.6
Number of nurses per 10,000 population (1992):	94.3
Number of beds per 10,000 population:	121.0
Average length of stay:	10.8 days
Birth rate (per 1,000 population):	10.3
Fertility rate:	1.44
Death rate (per 1,000 population):	11.4
Infant mortality rate:	7.9
Average life expectancy:	
men:	67.6
women:	76.2

Sources: Boerma et al., 1993; Schieber et al., 1994; WHO, 1994a; WHO, 1994b; ÚZIS ČR, 1994; ÚZIS ČR, 1995; Zakee, 1996.

Before the Second World War Before World War II, Czechoslovakia was one of the most developed countries and had an excellent health care system (Raffel and Raffel, 1992; WHO, 1994a). Czechoslovakia had a long tradition of medical care. In 1135 the first hospital was built in Prague, and in 1348 the Charles University was founded, being the first in Central Europe. From the beginning it had a medical faculty. In 1888, right after the introduction of social insurance in Germany by Bismarck, a social insurance system was created for workers and their families covering illness, maternity and old age (Stephen, 1979). From the 1920s until 1948 (the beginning of the communist era), health care services were organised through outpatient private practices, public hospitals or institutes, and private hospitals (WHO, 1994a). Until the communist era, the Czech health system was among the most advanced in Europe (WHO, 1994a).

In 1948, a socialist government was installed. The country was forced to adapt itself to the Soviet system and therefore, in 1951, a Soviet type health care system was introduced (Stephen, 1979). Medical services were nationalised, and health personnel were employed (salaried) by the state. The health care system was financed by general taxation. A special feature of the Czech health care sector was the clustering of health activities in Institutes of National Health at the district and regional level. This meant that all services of health care in districts and regions were organised and provided by one of these Institutes of National Health. All health care workers were employed by one of these institutes.

As in other East European countries, the health status of the population of the republic worsened in recent decades in comparison with other industrialised countries. In the early 1960s Czechoslovakia ranked as 13th in the world for life expectancy; two decades later, it stood at 41st (Gibbons, 1993). However, in contrast with some other Central and East European countries, in absolute figures, life expectancy has increased since 1970 (Table 2.1).[1]

In accordance with the decline in mortality rates (Table 2.2), life expectancy for males has increased from 66.1 in 1970 to 69.5 in 1994. For females it has risen from 73.0 to 76.6 in 1994. Life expectancy for both sexes in the Czech Republic was second highest among the former socialist countries in 1992, behind only the former GDR. Between 1990 and 1994 life expectancy for males showed a remarkably sharp increase of 2.0 years, while female life expectancy rose 'only' 0.6 years.

Table 2.1
Life expectancy at birth

	1970	1980	1990	1991	1992	1993	1994
Male	66.1	66.8	67.5	68.2	68.5	69.3	69.5
Female	73.0	73.9	76.0	75.7	76.1	76.4	76.6

Sources: ÚZIS ČR, 1994; ÚZIS ČR, 1995; WHO, 1994b.

Mortality rates show a declining trend since 1970 (Table 2.2) and are among the lowest among the former socialist countries, but at the same time are much higher than those of other European countries. In addition, the Czech infant mortality rate, which was 7.9 in 1994, has decreased in the last

decades and is among the best of post-communist countries, at the level of such countries as Portugal and Greece (ÚZIS CR, 1994).

Table 2.2
Selected standardised male and female death rates per 100,000 population

Cause of death		1970	1980	1990	1994
Infectious and parasitic systems	M	n.a.	n.a.	5.1	4.2
(ICD-9: 001-139)	F			3.3	2.3
Neoplasms	M	n.a.	n.a.	n.a.	348.3
(ICD-9: 140-239)	F				188.4
Cardiovascular diseases	M	n.a.	n.a.	834.1	707.3
(ICD-9: 390-459)M	F			512.6	456.8
Diseases of the respiratory system	M	n.a.	n.a.	81.4	59.7
ICD-9: 460-519)	F			29.7	28.6
Diseases of the digestive system	M	n.a.	n.a.	67.6	54.5
(ICD-9: 520-579)	F			29.6	28.3
External injuries and poisoning	M	n.a.	n.a.	n.a.	106.7
(ICD-9: E 800-999)	F				50.3
Suicide and self-inflicted injury	M	n.a.	n.a.	30.7	27.4
(ICD-9: E 950-959)	F			9.5	8.8
Total	M	1,656.2	1,641.8	1,565.3	1,345.5
(ICD-9: 001-999)	F	1,037.0	1,003.4	888.3	803.4

n.a. = not available
Sources: ÚZIS ČR, 1995; WHO, 1994a.

Organisation of the health care sector Before 1968, the responsibility for the health care sector in the unitary state of Czechoslovakia rested with a single, central ministry, the Ministry of Health. In 1968, when Czechoslovakia de jure became a federal state, responsibility for the health care sector was divided between the Czech and Slovak parts of the country. The Czech and Slovak ministries of health became responsible for the health care sector in their respective parts of the country. In practice, both health systems were almost identical (Potůček, 1991). Uniformity in the

health care system was ensured by mutual cooperation between the two ministries, although the Czech ministry was dominant (WHO, 1986; Schoukens, 1992).

Until 1960, the country was divided into 19 regions covering 276 districts. After 1960, the country was divided into 11 regions, 8 in the Czech Republic and 3 in the Slovak Republic; each region consisted of 10 to 11 districts. The number of districts totalled 113, each responsible for 45,000 to 350,000 inhabitants (Ministry of Internal Affairs, 1995). In general, a district covered between 120,000 and 150,000 inhabitants (Roemer, 1991).

As stated above, all of the state-controlled health care activities in a region or a district were grouped under the Institutes of National Health. This was a distinctive feature of Czechoslovak health care.

These district and regional institutes were governed and financed by the respective local (district or regional) authorities (Jaroš, 1993). District institutes comprised local and district hospitals with 100 to 1000 beds, as well as all other kinds of health services at the district level. This included health centres, outpatient clinics (polyclinics), public health stations, a school for middle-grade health personnel and pharmaceutical services (WHO, 1986).

Regional institutes were responsible for offering more specialised services not available at the district level. These institutes had a catchment area of about 1 to 2 million inhabitants and included a large hospital, usually a highly specialised teaching hospital with some 1600 beds. In addition, the regional institutes comprised a regional outpatient clinic, a public health station, specialised treatment institutions and a health education centre (WHO, 1981).

Twelve hospitals connected to universities covered a larger area, or even the entire population.

Primary health care Primary care was provided by community health centres, rural health centres, occupational health services, polyclinics and emergency services.

Community health centres served 1,900 to 3,800 people. These constituted the basic organisational units of health care and served a geographical area or an industrial plant. They were functionally and administratively integrated with a hospital and polyclinic. Community health centres were equipped with only basic equipment for clinical examination. Medical community care was generally provided by a community doctor or a factory doctor[2] (see occupational health care), a paediatric general practitioner, a

gynaecologist and a dentist. The average number of patients per GP was about 1,500.

Primary care for children up to the age of fifteen was dispensed by a paediatric general practitioner, who usually provided care for two or three community health centres (1,000 to 1,250 children). Adults went to the community doctor. Gynaecological care was provided by a gynaecologist, who covered about five or six community health centres (about 7000 women), and was assisted by a midwife (Boerma et al., 1993). There was also a stomatologist (dentist) and some geriatric nurses at work at the community health centre (WHO, 1981; WHO, 1986; Gibbons, 1993). People were assigned to the community doctor (and also the polyclinic and hospital) in their area (Jaroš, 1993) and had no freedom to choose their own doctor.

In sparsely populated rural areas, rural medical posts were established. These rural health centres were visited on a regular basis by the community doctor or a doctor from a neighbouring polyclinic.

As in the rest of Eastern Europe, an extensive network of polyclinics was available, providing primary and specialist care. In general, patients needed a referral from the primary care doctor to see a specialist (Albert, 1992).[3] Polyclinics also provided emergency care for groups of 40,000 to 100,000 people.

Occupational health care Similar to other East European countries, factory doctors employed at industrial plants served as GPs for workers of large enterprises and clusters of smaller establishments. They took care of treating minor accidents or illnesses as well as carrying out prevention and screening programs (Gibbons, 1993). Occupational health care was provided to about 75 per cent of the working population (Boerma et al., 1993). These workers were required to visit the factory doctor instead of the district GP.[4]

Some ministries had their own institutions: the Ministry of Labour and Social Security ran homes for pensioners and institutions for the physically and mentally disabled; the Ministries of Defence and Internal Affairs had medical services for the armed forces, and the Ministry of Transport had its own parallel health service for railway employees. About 7 per cent of spending on health care came from these ministries (World Bank, 1991; WHO, 1981).

Secondary health care Czechoslovakia had three types of hospitals:

Type I: local hospitals with 100 to 500 beds, serving about 50,000 inhabitants. They had a minimum of four units: medicine, surgery, paediatrics, and gynaecology-obstetrics. Local hospitals provided basic treatment.

Type II: district level hospitals with some 500 to 1000 beds, serving a district (population of about 120,000 to 150,000 people) and sometimes a part of a neighbouring district. These had ten to twelve specialties and an emergency department. District hospitals provided special services for patients referred from the type I hospitals, and basic care for people who lived in the surrounding area.

Type III: specialised hospitals, providing highly specialised care at the regional level, with more than 1000 beds (usually 1500 to 1700 beds) and serving approximately one million inhabitants. Most regional hospitals were university hospitals. Some of their patients were referred from the type I and type II hospitals. Furthermore, these hospitals sometimes provided routine services to the population in the immediate area (WHO, 1981; Raffel and Raffel, 1992).

Direct access to hospital care was not allowed (except for emergency services). Patients needed to have a referral from their primary care doctor or from an ambulatory specialist.

Economic support In 1989, Czechoslovakia spent 5.8 per cent of its GDP on health care (World Bank, 1991), which was higher than the figure for Turkey, Greece or Portugal (3.9, 5.1 and 5.4 per cent, respectively), and comparable with the ratio of expenditure of the United Kingdom (6.0 per cent). The average health expenditure of OECD countries in 1989 was 7.4 per cent of GDP (Schieber, 1994). Czechoslovak health care was financed predominantly from the state budget and all health services were provided free of charge (in theory at least), except for dental gold, expensive eye glasses and drugs.[5] However, since industry was favoured over all service sectors, health care had a low financial priority. Figure 2.1 shows the Czechoslovak health care financing system during the socialist regime.

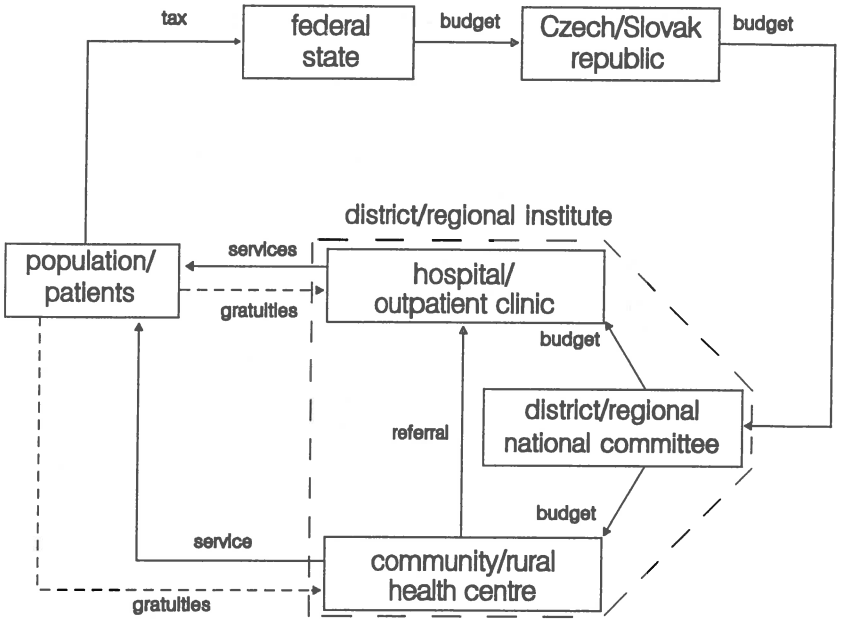

Figure 2.1 Financing of health care in the former Czechoslovak Republic before 1989

Financing As can be seen in Figure 2.1, the Ministry of Internal Affairs distributed the funds from the central budget via the regions to the districts. The allocation of funds was according to the number of inhabitants and the budget of the region and district from the previous year. Health care workers were employed by a regional or district institute.

Hospital budgets were dependent on occupancy rates. As a result, hospitals tried to keep this rate as high as possible. What was left of a budget after a financial year had to be returned to the state, and the next year's budget was lowered according to the amount returned. Consequently, hospitals had no motivation to work cost effectively and did their best to spend their full budget (Raffel and Raffel, 1992).

Physicians had fixed salaries. Since these salaries were low, morale was often poor. A custom of asking for and accepting gratuities developed, which provided physicians with a significant supplement to their incomes. Furthermore, some physicians treated patients privately, even though it was illegal (Raffel and Raffel, 1992).

Medical education All Czechoslovak medical students took an initial six years general programme. After this period they took a compulsory postgraduate specialisation in one of twenty basic specialties which lasted at least 2.5 years. There was also a second optional stage of specialisation of three to five years, which was used for directors, team leaders and heads of departments (Raffel and Raffel, 1992; Parkhouse, 1989).

2.2 Changes in the health care sector after the velvet revolution

After the 'velvet revolution', as it is called, at the end of 1989, Czechoslovakia instituted a non-communist government. Alexander Dubcek became chairman of the parliament, and the former dissident Václav Havel was elected president of the Czechoslovak Republic (Michielsen, 1990). In 1992, growing tension between the leaders of the national governments led to the decision to divide the Czech and Slovak Republic. On the first of January 1993, the division became a fact.

At the end of 1990, plans were made to reform the health care sector. According to the Ministry of Health at the time, and in line with the liberal view of the current Klaus[6] government, it was important to introduce the following principles into the health care sector: decentralisation, privatisation, autonomy for providers, freedom of choice for patients and compulsory social health insurance for essential services.

As of now, the regional and district health care structure has been abolished and facilities are autonomous. In addition, 29 health insurance funds have been established and obligatory social health insurance has been introduced.

Organisation of the health care sector In 1991, the Czechoslovak system of grouping health facilities into regional and district Institutes of National Health was abolished. The control over specialised facilities and teaching hospitals with catchment areas above district level was transferred to the national level (the ministry). Other facilities became legally and financially independent (Jaroš, 1993).

Moreover, to introduce some competition into health care, a free choice of doctor (and of hospital) was implemented in 1991; those insured can nowadays change their primary care providers (Albert, 1992). The general practitioner is no longer a gatekeeper; people now have direct access to specialist care.

Three medical chambers were instituted by law: a Chamber of Physicians,[7] a Chamber of Dentists and a Chamber of Pharmacists. These are

independent professional organisations which register practising physicians, dentists and pharmacists, and establish ethical standards. Membership of the Chamber is obligatory (Jaroš, 1993; Raffel and Raffel, 1992).

During the communist regime, anyone who wanted to become a hospital director had to have some political (communist) background; given the public sentiment about this arrangement, almost all hospital directors were replaced after 1989. Furthermore, since 1990 a hospital director no longer has to be a physician. New directors are elected by the hospital personnel and generally have little management experience.

Privatisation At the end of 1993, 14,000 physicians (over 40 per cent of all physicians) were registered as private practitioners (having private contracts with one or more health insurance funds). More than two-thirds of primary care practitioners and more than half of the dentists were working in private practice at the beginning of 1995. The motivation for physicians to privatise is mainly financial; private physicians earn, on average, more than twice as much as state-employed physicians (Massaro et al., 1994).

According to Albert et al. (1992), in 1992 more than 500 health facilities (diagnostic centres, polyclinics and hospitals) had already become legally and financially autonomous. However, according to Massaro et al. (1994), only one hospital was private as of May 1994.

The Ministry of Health aimed to have 83 per cent of all state-owned health facilities decentralised or privatised in 1996. Of these facilities 66 per cent were to be turned over exclusively to private owners, 16 per cent were to be run by both local government and private owners, and 18 per cent were to be transferred to local government (Výborná, 1994; Rubáš, 1994). However, only 29 of all 199 hospitals were privatised as of December 1995.

A privatisation plan of the new Minister, J. Strásky, has not yet been published (as of September 1996).

Economic support Between 1991 and 1993, the share of GDP spent on health care increased from 5.3 to 7.3 per cent (Massaro et al., 1994). According to Stiphout (1994), this is a result of the introduction of a new financing method for health care (fee-for-service; see financing in the health care sector). Furthermore, according to Massaro (1994), the rise in health care expenditures is also caused by increased charges for auxiliary services, increased pharmacy costs and higher supply charges.[8] These charges also rose in the following years.

In January 1992, an independent 'General Health Insurance Company' (GHIC) was created in accordance with Acts 550 & 551/1991 of the Czech Parliament. At first, the GHIC received over 66 per cent of the state health care budget to finance a part of the health care sector from the Ministry of Finance. The rest was still funded by the state (Jaroš, 1993).

Since January 1993, the GHIC has become an autonomous insurance fund which collects premiums directly from the insured, without state intervention. Also since January 1993, other health insurance companies have been founded, which resulted in the initiation of 28 new health insurance funds, including company health insurance funds (Skoda-Volkswagen for example), health insurance funds for occupational groups, and regional health insurance funds. According to one of our contacts in the Czech republic, 90 per cent of the entire population was covered by the GHIC at the end of 1993. The GHIC lost a vast share of its customers during 1994, however, and at the end of the year 34 per cent of the population was insured by these new 28 funds. The GHIC covered the remaining 66 per cent of the population. However, 11 private insurance funds ran into financial difficulties and went bankrupt, and it is expected that others will follow suit in the future. As a result, a vast group of people switched back to the GHIC; about 75 per cent of the entire population was covered by the GHIC as of September 1996.

The level of the insurance premiums of the GHIC and the 17 other funds is the same, but supplemental benefits[9] and the amount of reimbursement to providers varies from fund to fund. People have the freedom to change health insurance funds. At the same time, the GHIC must accept any and all applicants (Stiphout, 1994).

Since January 1993, employees and employers have to pay their premiums directly to the funds. Employees pay 4.5 per cent of their salary, employers pay the equivalent of 9 per cent of their workers' salaries. The self-employed pay 13.5 per cent of their net profit up to a limit (Výborná, 1994). The state takes care of the premium payment for children, students, the unemployed, the military, pensioners, and recipients of social security.[10]

The average per capita premium payments by employed people are considerably higher than the average per capita premium paid by the state for those who are under the responsibility of the government. A redistribution formula partially compensates the insurance funds with a high share of government-sponsored insured. Furthermore, compensation for differences in risks (and therefore, differences in anticipated expenditures) between the health insurance funds is made in the case of the elderly. For

example, each pensioner is counted three times in the capitation calculations.

In spite of that, differences between insurance funds, in terms of per capita premium incomes and risk structures, remain. Insurance funds with a relatively high share of well-paid employees will have a high average income from (income-related) premiums per insured. These funds do not necessarily have a higher spending level.

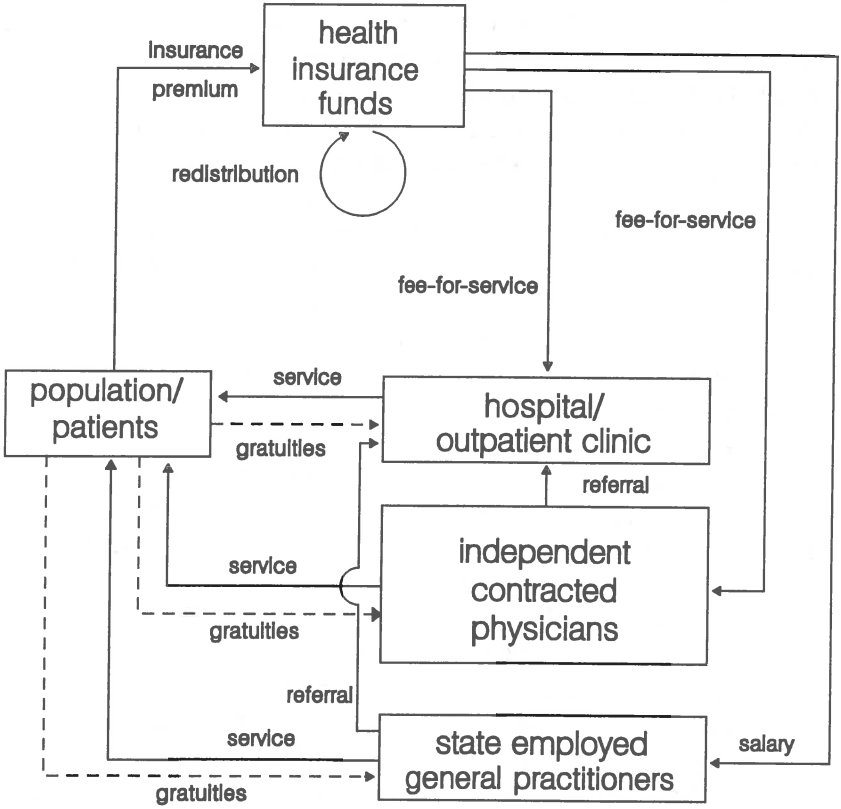

Figure 2.2 Current financing of Czech health care

Financing of the health care sector Starting in January 1992, the GHIC has received over 66 per cent of the health care budget from the Ministry of Finance to finance all district facilities and a part of the regional facilities. The rest of the facilities are financed by the Ministry of Health. Every

month the facilities receive a budget which is 1/12 of its annual budget (based on the 1991 budget) (Massaro et al., 1994).

Since 1992 health facilities have been financed by a so-called point system, as is the case in Germany. This means that all reimbursable services (over 4000) have been expressed in fixed point values. Once a year, the number of points is counted and the value per point is computed by the Ministry of Finance by dividing the macro budget by the number of points. Consequently, the value of the points is inversely linked to the volume of services. Such a point system stimulates physicians to provide more services and pushes fees lower, since the global budget remains the same (Delnoij, 1994). Most charges for supplies and materials are not counted in the point remuneration, but instead are remunerated directly outside the point system. Hospitals receive, in addition to this fee-for-service remuneration, a per diem rate (in points per day) (Massaro et al., 1994; Stiphout, 1994; Jaroš, 1993). Between 1992 and 1993 supply charges increased by 100 per cent.

The relative value of services, counted in points, is determined based on physicians' estimates of the average time required for a given procedure, the specialty of the doctor, and the required medical materials. However, not surprisingly, these procedure times were overestimated by physicians by as much as a factor of two (Massaro et al., 1994).

As stated above, physicians may be state employed or private. State-employed physicians are salaried and therefore have less incentive to collect as many points as possible, unlike their private colleagues. As a result, charges to the insurance companies are about 10 per cent higher for private care than for state polyclinic services (Massaro et al., 1994). Nowadays, only 12 per cent of the ambulatory and hospital physicians are state employed.

There are also state-employed physicians who see some of their patients privately. This used to be illegal but nowadays is permitted (Raffel and Raffel, 1992).

When the shift was made to a fee-for-service system, there was an unexpected jump in the number of procedures claimed. Since the introduction of the point system, the number of declared points increased by 42 per cent. As a consequence, spending on health care has been rising sharply in the last few years (see economic support).

The health insurance funds are free to negotiate with providers about remunerating point values lower than the maximum values stated by the Ministry of Finance (Massaro et al., 1994). As a result, physicians encourage patients to insure themselves with the insurers that remunerate the highest point values.

Claimed points per physician and points per hospital day are compared against peer averages. Unusually high claims are further investigated. However, the impact of the utilisation review is rather weak, since there are no treatment protocols and quality standards, and there are few means to change provider behaviours (Massaro et al., 1994).

Delivery of services Health care deliveries are still primarily in kind. Cosmetic surgery and some dental services, however, are excluded from the basic plan, but these services (just like amenities, such as luxury wards) can be insured additionally.

Initially, the majority of the costs of drugs were remunerated by the state. Because of the relatively high share of the costs of drugs in total health care expenditures (25 per cent), co-payments for drugs were introduced in 1992 to reduce costs. Currently, some drugs are free and some are remunerated only in part; drugs are categorised according to their necessity and the price of comparable drugs. The rest has to be paid out-of-pocket (Albert et al., 1992; Massaro et al., 1994).

2.3 Conclusions

Before the Second World War, the Czech health care sector was funded by Bismarckian social insurance. After the war, during the socialist era, the health care system was transformed into a Soviet model. A specific element of the socialist Czech (and Slovak) health care sector was the clustering of health activities such as polyclinics, hospitals, pharmacies, and medical education in 'Institutes of National Health' at the district and regional level.

After 1989, some important changes were implemented by the democratic government. The health system has become a compulsory social insurance system again. Employers and employees pay an income-dependent insurance premium to the 'General Health Insurance Company' or to one of the 17 other smaller health insurance funds. Furthermore, a vast number of physicians work in private practice, due to the fact that private physicians earn on average much more than those who are state employed. People have a free choice of physician and hospital, and free access to specialist care.

Privatised physicians and hospitals are remunerated by a point system. This fee-for-service system encourages higher production (and unfortunately also overproduction, generating higher expenses than necessary), since providers are paid per delivered service. As a result, health care spending, corrected for inflation, increased by almost 40 per cent in two years.

Notes

1 After a decline in life expectancy between the early sixties and early seventies (Feachem, 1994).
2 Both are general practitioners.
3 Except opthalmology, dermatology (in case of venereal diseases) and emergency care.
4 Except for emergency cases or when the distance between work and domicile was great.
5 A small fee had to be paid for drug prescriptions.
6 Czech government since 1992; before 1992 Klaus was Minister of Finance in the Czechoslovak government.
7 A medical association.
8 Between the third quarter of 1992 and the second quarter of 1993 pharmacy costs increased 25 per cent, and supply charges increased by 100 per cent (Massaro, 1994).
9 Such as enhanced dental coverage and reduced co-payments on certain spa services.
10 66 per cent of the total budget of the GHIC comes from employees' and employers' payments and 34 per cent from state contributions (Massaro, 1994).

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3 Slovak Republic

Introduction Slovakia became part of the Kingdom of Hungary in the 11th century. In 1918, after the First World War, Slovakia was united with the Czech lands and became an independent state, named Czechoslovakia (Michielsen, 1990). The Nazis occupied the country in 1939, and Slovakia was temporarily a separate state. Within a few years after the Second World War, the country became a communist state. In 1992, the Czech and Slovak republic decided to separate, which they did as of January 1, 1993.

The economy of the Slovak Republic suffered a serious decline right after the political changes of 1990; however, the economy is rising again at the moment.

The health care systems of the Czech and Slovak Republics have similar histories (Potůček, 1991). A description of the health care sector of Czechoslovakia before 1989 was given in the chapter on the Czech Republic. Therefore, some of the information in this chapter on the Slovak Republic (about the Slovak health system before 1989) is a summary of the information presented in the chapter on the Czech Republic.

Statistics (1994)

Number of inhabitants (1995):	5,356,000
GDP per capita:	$2316
Real GDP per capita (PPP-adjusted):	n.a.
Unemployment rate:	13.5%
Inflation rate:	9%
Percentage of GDP spent on health care:	6.0%
Number of physicians per 10,000 population:	30.1
Number of nurses per 10,000 population:	70.2
Number of beds per 10,000 population:	110.2
Average length of stay:	11.2 days
Birth rate (per 1,000 population):	12.5
Fertility rate	1.66
Death rate (per 1,000 population):	9.6
Infant mortality rate:	9.5
Average life expectancy:	
men:	68.3
women:	76.5

Sources: Boerma et al., 1993; Schieber, 1994; WHO, 1994b; ÚZIŠ Slovakia, 1994; ÚZIŠ Slovakia, 1995; Zakee, 1996.
n.a. = not available

Before the Second World War In the inter-war period health care services were organised through outpatient private practices, public hospitals or institutes, and private hospitals (WHO, 1994a). There was social insurance at the time for workers and their families which covered illness, maternity and old age (Stephen, 1979).

3.1 Health care in Slovakia before 1989

Since the early 1960s, the health status of the population of the republic worsened in comparison with other industrialised countries. As is shown in Table 3.1, life expectancy rose about 1.4 years in the period 1991 to 1994.

Table 3.1
Life expectancy at birth

	1991	1992	1994
Male	66.8	67.6	68.3
Female	75.2	76.2	76.5

Sources: ÚZIŠ Slovakia, 1994; ÚZIŠ Slovakia, 1995; WHO, 1994b.

Table 3.2
Selected standardised death rates per 100,000 population

Cause of death		1970-1975	1980-1984	1987	1991
Infectious and parasitic diseases (ICD-9: 001-139)	M				
	F				
Neoplasms (ICD-9: 140-239)	M				321.1
	F				152.5
Cardiovascular diseases (ICD-9: 390-459)	M				775.7
	F				490.5
Diseases of the respiratory system ICD-9: 460-519)	M				119.5
	F				63.8
Diseases of the digestive system (ICD-9: 520-579)	M				91.6
	F				33.6
External injuries and poisoning (ICD-9: E 800-999)	M				129.5
	F				37.1
Suicide and self-inflicted injury (ICD-9: E 950-959)	M				
	F				
Total (ICD-9: 001-999)	M				1545.5
	F				861.1

Sources: ÚZIS CR, 1994.

Czechoslovak health system before 1989 After the Second World War when the communist regime was installed, the Czechoslovak health care sector was modelled on the Soviet system. This meant that medical services

were nationalised and health care personnel were employed (salaried) by the state. The health care system was financed by general taxation, and medical services were provided (in theory at least) free of charge.

However, a special feature of the Czechoslovak health care sector was the clustering of health activities in Institutes of National Health at the district and regional level. This means that all services of health care in districts and regions were organised and provided by one of these organisations. All health care workers were employed by one of these institutes.

Community health centres provided primary care for approximately 3,000 people. These health centres generally contained a community doctor, a paediatric GP, a gynaecologist and a dentist. They were integrated in a hospital and polyclinic both functionally and administratively. People were allotted to the community health centre in their neighbourhood. Patients needed a referral from their community doctor to receive specialist care in hospitals and polyclinics.

3.2 Changes in the health care sector after the velvet revolution

After the 'velvet revolution', as it is called, at the end of 1989, Czechoslovakia installed a non-communist government. Alexander Dubcek became chairman of the parliament and the former dissident Václav Havel was elected president of the Czechoslovak Republic (Michielsen, 1990). In 1992 growing tension between the leaders of the national governments led to the decision to separate the Czech and Slovak Republics. On the first of January 1993, separation became a fact. Until 1993, the Slovak health care system in general changed in a comparable manner to the Czech health care system.

Privatisation The privatisation process in the health care sector progressed very slowly. First of all, privatisation was frustrated by a lack of proper legislation and the slowness of the Meciar government in taking the necessary steps to devise and implement the needed legislation. In 1994, the new Moravčík government made serious plans to accelerate the privatisation process (Národná obroda, 1994; Rozpracované programové, 1995). However, a year later Meciar won the elections again and his predecessor's ambitious plans were dropped.

Next to the legal obstacles, physicians lack financial means to become private entrepreneurs and to buy the needed medical equipment. Interest rates are high and banks are not eager to provide credit to doctors without collateral in the form of real estate (Pásztor, 1994). Therefore, only health

care *activities* have been privatised, whereas the privatisation of health care *facilities* is hampered; this means that health care is provided by self-employed doctors in state-owned health care facilities. Equipment usually belongs to the physician. These private doctors have a contract with a health insurance fund or can be paid directly by patients (Pásztor, 1994). More than 90 per cent of health care providers have independent contracts with health insurers. All pharmacists are independently contracted. In 1994, more than one-third of pharmacies were in private hands. These were predominantly newly established ones. The rest of the pharmacies were state-owned. Hospital pharmacies will not be privatised (Zárecký, 1994a).

Economic support In 1994, 5.96 per cent of GDP was spent on the health care sector. Since health care expenditures have not completely followed inflation, the health sector budget has decreased relatively over the last few years. By reducing the number of beds and strengthening the role of primary health care, cut-backs in expenditures have been achieved.

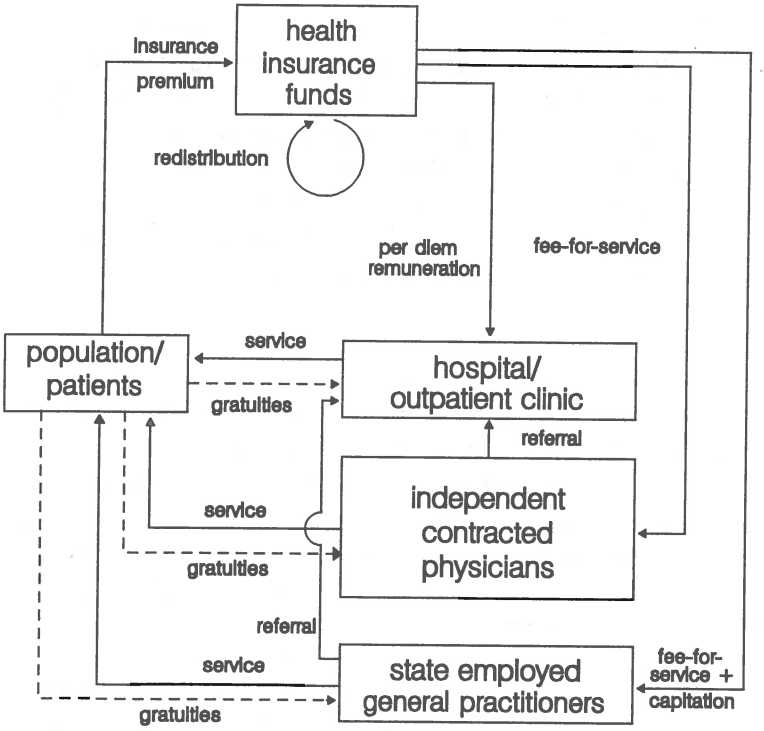

Figure 3.1 Current financing of the Slovak health care sector

In 1993 a General Health Insurance Fund (GHIF) for the entire population was established (Voleková). Employees and employers pay income-related insurance premiums to the GHIF. The state pays the contributions for unproductive segments of the population (e.g. children, pensioners and the unemployed). However, the state contributes only 80 per cent of the amount necessary to cover these groups of insured, which has resulted in financial shortages at the GHIF (Pásztor, 1994).

Since January 1, 1995 other (non-state) health insurance companies have been allowed to be established alongside the GHIF. New health insurance companies have an equal status with the GHIF and are authorised to provide basic compulsory insurance and additional voluntary insurance. These new companies must have at least 50,000 people insured and 10 million Slovak Crowns. They collect the same premiums as the GHIC. These insurance premiums are redistributed among the health insurers. Insured people are allowed to change their insurance company after six months (Jancovicová, 1995).

Financing Since 1993, health facilities have been financed by a point system. All reimbursable services are expressed in fixed point values. The values of these points are determined once a year by the Ministry of Finance. Reimbursement to the hospitals by the GHIF amounted to 60-85 per cent of real costs incurred by them; consequently, most of these health services experienced financial difficulties (Voleková, 1995). In 1994, the point system for hospitals was replaced by remuneration based on fixed amounts per bed per day.

Primary care is financed partly by capitation (40 per cent) and partly by a point-system (60 per cent). Non-state insurers use the same remuneration system for health services as the GHIF.

Delivery of services Health care deliveries are still primarily in kind. Cosmetic surgery and some dental services are excluded from the basic plan, but these services (just like amenities, such as luxury wards) can be insured additionally.

Initially, the majority of the costs of drugs were reimbursed by the state. Because of the relatively high share of the costs of drugs in total health care expenditures (25 per cent), co-payments for drugs were introduced in 1992 to reduce costs. Currently, some drugs are free and some are reimbursed only in part; drugs are categorised according to their necessity and the price of comparable drugs. The rest has to be paid out-of-pocket.

3.3 Conclusions

Before World War II, a Bismarckian social insurance system was implemented. After the war, a Soviet-type health service was introduced just as in other countries in Eastern Europe. A special feature of the Czechoslovak health care system, however, was the clustering of health facilities in District and Regional Institutes of National Health.

After 1989, a social health insurance system was reintroduced by the new democratic government in the Czechoslovak health care sector. Remuneration systems were also modified.

In general, the changes in the Czech and Slovak health care systems were comparable, especially before the splitting up of the country in 1993. Privatisation in the Slovak health care sector, however, seems to be progressing somewhat more slowly.

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4 Hungary

In 1918, Austria-Hungary was split up and Hungary became an independent state. In 1920, under the Treaty of Trianon, Hungary lost two-thirds of its territory and more than 10 million of its 18 million inhabitants.

Statistics (1993)

Number of inhabitants (1995):	10,246,000
GDP per capita (1992):	2,974 US$
Real GDP per capita (PPP-adjusted) (1990):	6,116 US$
Unemployment rate:	12,9%
Inflation rate:	22%
Percentage of GDP spent on health care (excl. gratuities):	7.1%
Number of physicians per 10,000 population:	33.2
Number of nurses per 10,000 population (1992):	47
Number of beds per 10,000 population:	97.7
Average length of stay (1994):	10.5 days
Birth rate (per 1,000 population)(1995):	10.9
Fertility rate (1994):	1.6
Death rate (per 1,000 population)(1995):	13.9
Infant mortality rate:	12.5
Average life expectancy:	
men:	64.5
women:	73.8

Sources: Boerma et al., 1993; Ministry for Public Welfare, 1995; Schieber, 1994; WHO, 1994a; WHO, 1994b; ÚZIS CR, 1994; Zakee, 1996.

After the Second World War Hungary became a communist state. In 1956, a revolt of the people against the socialist regime was bloodily suppressed. In 1989, the dismantling of the socialist system proceeded smoothly.

Before the Second World War In the sixteenth century some groups of people, such as miners, had already organised some forms of mutual benefit schemes.[1] Since 1891, Hungary has had an obligatory Health Care Fund system for people with an income below a certain level. This system was extended in 1927 so that some 30 per cent of the population was insured in this way (Kincses, 1993; Forgács, 1987). Independent health care funds, divided by region or occupation, were responsible for the functioning of the insurance. Doctors worked in private practice. Before World War II, many elements in the Hungarian health care scheme corresponded with the German system of that time; it was therefore characterised as a Bismarckian type of health care system.

4.1 Health care system of Hungary before 1989

In 1948, after the Second World War, Hungary became a socialist country. The health care system was transformed into a centralised Soviet model, although it was combined with some Beveridge elements, such as a system of district doctors. Independent health care funds were eliminated. Gradually, the financing of the health care sector was centralised and taken over by central social insurance which covered almost the entire population.[2] In 1975, social insurance was transformed into a National Health Service, providing all citizens with the right to free health care (Kincses, 1993).

The new health system was directed to improve the quantitative indicators of the health care sector (such as the number of hospital beds and physicians) and the development of a network of centres for the treatment of specific diseases (Schoukens, 1992). During the period between 1950 and 1968, political considerations were dominant and the health system conformed to political expectations (Csaszi, 1990). Founding a free and universal health care service and creating a general improvement in socioeconomic conditions were the new political values of the first communist leaders. Eventually, it was thought, sickness would disappear under communism.

Table 4.1
Life expectancy at birth

	1970	1975	1980	1985	1990	1993
Male	66.8	66.8	66.3	65.1	65.1	64.5
Female	72.1	72.9	72.7	73.1	73.7	73.8

Sources: Népjóléti Minisztérium, 1994; WHO, 1994a.

Table 4.2
Selected standardised male and female death rates per 100,000 population

Cause of death		1970-1975	1980-1984	1986	1992
Neoplasms	M	276.3	322.8	345.8	388.9
(ICD-9: 140-239)	F				201.8
Cardiovascular diseases	M	785.5	844.6	820.2	810.3
(ICD-9: 390-459)	F				514.5
Diseases of the respiratory system	M	n.a.	n.a.	n.a.	94.3
ICD-9: 460-519)	F				37.5
Diseases of the digestive system	M	n.a.	n.a.	n.a.	147.3
(ICD-9: 520-579)	F				58.8
External injuries and poisoning	M	n.a.	n.a.	156	175.9
(ICD-9: E 800-999)	F			70	68.8
Suicide and self-inflicted injury	M+F	35.1	44.4	n.a.	38.2
(ICD-9: E 950-959)					(1990)
Total	M	1495.6	1669.0	1653.2	1726.3
(ICD-9: 001-999)	F	1020.4	1008.7	985.5	952.8

n.a. = not available
Sources: Forster and Józan, 1990; Rowland, 1991; ÚZIS CR, 1994.

In medical schools, students with a working class background had priority for admission. New resources were made available for the health care sector, and life expectancy increased rapidly. After 1968, with the introduction of the government's 'new economic mechanism', economics

replaced politics in the determination of resource allocation. Classified as a non-productive branch, the health care sector received lower priority and a relatively lower budget. Consequently, shortages emerged in the health care sector. The health status of the population deteriorated (Csaszi, 1990) (see Table 4.1 and 4.2).

Organisation of the health care sector The Hungarian constitution of 1948 gave a general right to social insurance and required the state to ensure the best possible health care for all (Art. 70.1). First, industrial and mine workers were entitled to free medical care. The Public Health Act of 1972 extended this right to all Hungarian citizens and by 1975 almost everyone was covered (Forgács, 1987; Raffel and Raffel, 1992). At national level, the Ministry of Welfare was responsible for the health care sector. The country was divided into 20 regions (19 provinces plus the capital Budapest) and each was governed by a council. The region of Budapest consisted of 22 districts. The other provinces were subdivided into municipalities, with these municipalities being divided into villages. A health authority operated the professional activities at each organisational level of county, municipality or village and was supervised by the respective council at that level (Forgács, 1987; Roemer, 1991; Meyer-Lie, 1988). Public health services were administered by local councils. Their role was mainly related to environmental health and public hygiene. They also provided microbiology laboratories and gave some limited health education. The structure of the delivery of the Hungarian health care services could be roughly divided into three parts: primary care by district doctors; outpatient specialist care by polyclinics; inpatient care by hospitals.

Primary health care Primary care was provided by district doctors, district paediatricians, occupational health services, and district dental services (Boerma et al., 1993). A district doctor was responsible for a district with an average population of 2,500 people.[3] However, part of this population also received primary care from occupational doctors (workers) and district paediatricians (children) (Forgács, 1987). The doctor's practice included a nurse and an administrative assistant. In 1975, to improve the coordination between primary care, the hospital and the polyclinic, primary health care was administratively integrated into the hospital system (Szatmári, 1984; Raffel and Raffel, 1992).

In 1990 there were about 4,500 medical districts. Patients were assigned to the district doctor of the area where they lived, although officially the Hungarian population had a free choice of doctor (Roemer, 1991). Since

district doctors had no financial interest in caring for extra patients, they were less than enthusiastic in taking on patients from outside their area, and in practice the choice of a doctor was limited. According to Stephen, in 1979 there was no free choice of a doctor; only in exceptional circumstances was a switch of district doctor possible (Stephen, 1979).

Table 4.3
Primary health care personnel/services (per 100,000 population) in Hungary

	1970	1980	1990	1992
District doctors	35.2	37.8	43.0	45.7
District peadiatricians	5.7	9.7	13.7	14.2
District nurses	33.9	41.2	48.7	45.0
District dental services	n.a.	6.4	8.2	n.a.

n.a. = not available
Source: Ministry for Public Welfare, 1994.

Groups of six to eight district doctors were headed by a 'chief consultant', a *primus inter pares.* This consultant took care of the link between the district doctors and the specialists in the polyclinic and hospital, and organized continuing education for doctors and nurses (Meyer-Lie, 1988). Special curative and preventive health services were provided for children up to 15 years. Paediatricians were responsible for up to 1,000 children. In rural areas and small villages the district doctor was responsible for child care (Meyer-lie, 1988).

Every company with more than 500 employees had an occupational physician. In 1985 about 2,500 physicians (nearly one-third) were providing primary care attached either full-time or part-time to industrial enterprises. The state paid the salaries of the occupational health care personnel, although factories could supplement them (Raffel and Raffel, 1992; Roemer, 1991).

Secondary care Polyclinics provided specialist outpatient secondary care. Administratively, they formed part of a hospital. For historical reasons, polyclinics were often located separately from the hospital (Meyer-Lie, 1988). A referral from the district doctor was needed before entering the polyclinic or receiving hospital care (Forgács, 1987; Schoukens, 1992).

There were four organisational levels at which hospital services were delivered: municipality (town), county, region and nation. The central state owned all the hospitals and other institutes at the different administrative levels. Governing the institutes was partly in the hands of the central state (the national level institutes) and partly in those of the respective councils (institutes at the lower levels) (Schoukens, 1992).

Municipal hospitals were relatively small (200-400 beds) and delivered treatment in basic specialties. Each served about 115,000 inhabitants (Forgács, 1987; Forgács and Kökény, 1989). They sometimes also had to provide social care for the elderly and disabled because of a shortage of social welfare institutions and home care services (Giarchi, 1996).

County hospitals served a larger area and provided care for a population of about 500,000 persons. They had, on average, 1000 beds and more medical disciplines (covering 90 per cent of patient care needs).

The seven regional hospitals formed the third level. Four were medical university centres while three strengthened the county hospital system. These had a catchment area of one to two million people (Forgács, 1987; Meyer-Lie, 1988).

At the highest level of medical care were the national hospitals and highly specialised national institutes. National institutes also provided postgraduate education, oversaw medical research methods, and advised the Ministry of Welfare (Meyer-Lie, 1988).

Economic support and financing of the health care sector The phenomenon of 'gratitude money' can, according to Csaszi (1990, be interpreted as a tacit contract between politicians (health administration), physicians and society: the physicians accepted centralised bureaucratic management, and also a constant relative decrease in their official salary. According to Roemer (1991), many patients gained the impression that adequate treatment could only be expected in return for a handsome gratuity. Estimations of the extent of the gratuity payments vary, but they seem to have accounted for a vast part of health expenditure. The Hungarian health care sector was funded from the general state budget (see Figure 4.1). Hungary spent 3.2 per cent of its GDP on health care in 1971, and 4.6 per cent in 1989 (about 5.2 per cent when gratuity payments are included). Average OECD health expenditure was 7.4 in 1989 (Schieber et al., 1994), while the (official) East European average was 5.4 per cent (Rowland and Telyukov, 1991). Roemer (1994) reported expenditure on the Hungarian health care system at the end of the socialist regime to be 5.3 per cent of GDP (without illegal payments).

With gratuities, according to Roemer, it would be 7.5 to 8.0 per cent of GDP, the level of the OECD average.[4]

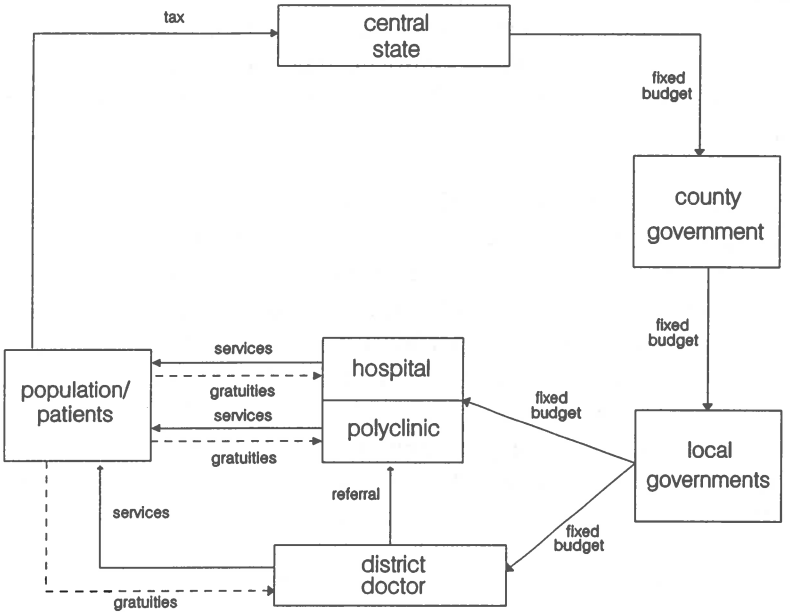

Figure 4.1 Financing of Hungarian health care before 1989

Health facilities traditionally received a fixed budget from local governments,[5] although individual lobbies from hospitals could have a positive effect on budget size (Kincses, 1994). Health care personnel were salaried. The salaries of physicians (including district doctors) depended on age, specialisation and experience (Szatmári, 1984). Since salaries were low, the system of tipping, which had existed in Hungarian health care before communist rule, was extended enormously; it is estimated that gratuities increased physicians' incomes by 30 to 40 per cent (Roemer, 1991). To reduce tipping, the government increased physicians' salaries in 1970, but with meagre results. Physicians who did not see any patients, and could not collect any gratuities, received higher salaries. Some physicians were said to avoid treating poor patients and to increase unnecessarily the length-of-stay of patients giving significant gratuities (Raffel and Raffel, 1992).

Private practice As in most other East European countries, private practice persisted. The government allowed physicians to practise privately outside

their salaried work. Private practice was paid for in cash by the patients themselves. These private services were usually delivered in the physicians' own home (Meyer-Lie, 1988; Roemer, 1991). A considerable number of dentists also worked privately (Kincses, 1993). The government set regulations concerning the consulting location and dictated the fees. A heavy tax was levied on private earnings (if reported). According to Stephen (1979), it was extremely difficult to estimate the real extent of this phenomenon.

Medical education Basic medical education (a university diploma) took six years. Completing a specialisation was normally achieved after four to five years of training in clinics, hospital wards or medical services and completing some courses. A five-year training course for primary specialisation was available in 29 specialities, including general practice (for becoming a district doctor) (Boerma et al., 1993). Secondary specialisation was available in 28 specialities; this could be achieved after a two to three years' training period following the completion of a primary specialisation (Parkhouse, 1989). Continuing education at intervals of five years was obligatory for both specialists and nonspecialists.

4.2 Changes in the health care sector after 1989

The inadequate quality of health care, the poor health of the population, and the shortage of financial means led in the eighties to an increasing desire for change in the health care system. Some first steps were taken at the end of the eighties to shift to compulsory health insurance and allow more private medical practice. In 1989, following the turbulent political changes, the time seemed right for reform. This feeling was reinforced by the temporary overreaction of the population to change everything—including good elements—which reminded them of the communist system. Of all the East European countries, Hungary has made most modifications in its health care system.

After the first free elections of 1990, the new ministers of Finance and Welfare of the Antall government proposed the reform of social security into a partly privatised, western system. The government program on the reform of the health care sector comprised the following:

- the right to health care on the basis of insurance;
- free choice of a doctor;
- extension of primary care;

- reduction of hospital care;
- increase in the proportion of long-term beds;
- promotion of privatisation in the health care sector (Lépes, 1992).

The government considered these measures necessary to control the increasing expenditure on social security and to bring public spending in line with the requirements of the International Monetary Fund.

Organisation of the health care sector The Local Governments Act (1990) changed the division of responsibilities between the central state and local governments with regard to health care services. The ownership of the hospitals was decentralised from the central state towards local government (Kincses, 1993). These local authorities now take care of the financial resources, the depreciation and maintenance of buildings, investments and the replacement and modernising of equipment. Except for some local tax revenues, local authorities are still financially dependent on central government. National institutes have remained under the direct control of the state.

Primary and secondary health care The Antall government gave priority to primary health care and started a family physician service. District doctors need to perform a broader range of diagnostic and therapeutic services and develop their gatekeeping role, guarding access to specialist and hospital services. They are now called 'family physicians'. However, many family physicians still only provide treatment for minor complaints; their main role is to refer to polyclinics and legitimise sickness absence (McKee, 1993; Orosz and Ho, 1994). Since almost every visit to a family physician led to a referral to secondary care (Koenis, 1995), the government decided to restrict family physicians' gatekeeper function by making eight medical specialities directly accessible, without referral.

People now have a more realistic free choice of doctor and, in 1992, the financing of family practices changed (see current financing of the health care sector). The local authorities now own and administer the investments of most family practices, which are under the professional responsibility of the local hospital. The financing of polyclinics and hospitals has changed dramatically. Before the political changes, their budgets were based on previous years' costs. Nowadays polyclinics are funded according to a point system and hospitals receive a combination of a per diem compensation and a DRG payment (see current financing of the health care sector).

Public health In 1991 a new public health act created three levels of public health care:

- a national public health institute (consisting of the seven preexisting national institutes)
- an intermediate level of twenty county-level institutes
- 146 municipal-level institutes (in Budapest: district-level institutes).

This new public health service has much wider responsibilities; in addition to the previous tasks (predominantly environmental hygiene and public hygiene), public health services now monitor and evaluate the health of the population. They supervise a miscellany of health services, including primary care, maternal and child health, school health and occupational health. Furthermore they provide advice on the organisation of health services, including the authorisation of new facilities.

Despite these changes, certain problems remain. For example, there is task duplication. Environmental monitoring is also performed by the Environmental Protection Agency and other organisations, including the enterprises concerned. In addition, the geographic separation of microbiology laboratories (also a public health task) and hospitals does not contribute to efficiency (McKee et al., 1993).

Economic support In 1993, total expenditure on the health care scheme was raised to 7.1 per cent of GDP, 7.7 per cent when illegal payments were included, which was relatively high for Hungary's level of income (Orosz and Ho, 1994). Gratuities thus came to some 8 per cent of total health expenditure, though other estimates run to 15 to 20 per cent (Marrée, 1994). Although the practice of paying gratuities seems to be diminishing, gratuities still account for an important part of health care expenses.

Since 1990, health care has no longer been financed out of the state budget, but by social insurance premiums. The 'Social Insurance Fund' has taken over health care financing. This self-governed fund is responsible for the receipts and spending of social insurance. As a result, the funding of health care has become independent from the state budget. Hungarian health care funding has thus changed from a National Health Service to an insurance system (see Chapter 1).

Between 1989 and 1991, when the national health service was replaced by social insurance, expenditure on health care rose from 4.6 to 6.4 per cent of GDP. This 42 per cent increase in relative expenditure on health care was brought about by increased expenditure (9 per cent in real prices)

because the health care sector was no longer budgeted, and by the 23 per cent decrease in real GDP (Orosz and Ho, 1994).

The new health insurance is an integral part of the Hungarian social security system. 10 per cent of wages are withheld for sick pay, health, pension and maternity insurances. For health insurance alone 4 per cent of wages is charged. Employers pay the equivalent of 18 per cent of their employees' income for health care.

In 1992, the Social Insurance Fund was split into two autonomous funds: for pensions and health care (Kincses, 1994). The Health Insurance Fund (HIF) has become responsible for social health insurance. Social premiums for unemployed and pensioned people are paid by special funds.[6] The state pays the premium for uninsured disabled people. Other groups of people (for example, illegal immigrants, people with private means and black market traders) can join the social insurance scheme voluntarily through an individual contract with the HIF. Otherwise, they have to pay for medical services out of their own pockets.

The HIF is supervised by the Ministry of Welfare and is accountable to parliament. From 1993, the HIF has been governed by a board consisting of employers and employees. This board determines the allocation of premium receipts and the package of insured services.

The social insurance funds have been confronted with decreasing revenues and growing financial shortages. This is caused by growing unemployment, the aging of the population, a large black economy contributing no tax or premium payments, and economic decline, so that a growing number of enterprises were not able to pay their social insurance premiums. Furthermore, a number of private enterprises simply evade paying their social premiums (Roemer, 1994; Kincses, 1993). In 1992 the social insurance fund had a 10 per cent budget deficit (Marrée, 1994).

Financing of the health care sector At first the HIF continued to pay health care institutions in the same way as the state budget had done. 75 per cent of a hospital budget was based on the costs of the preceding year, the historical base. The other 25 per cent consisted of adaptations (mainly caused by inflation).[7] After experimenting for six years, in the second half of 1993 the HIF introduced a new financing system (see Figure 4.2). Hospitals are remunerated by their number of bed days (per diem) for 'chronic' care (more than thirty days) weighted for the relevant type of long-term care (Orosz and Ho, 1994).

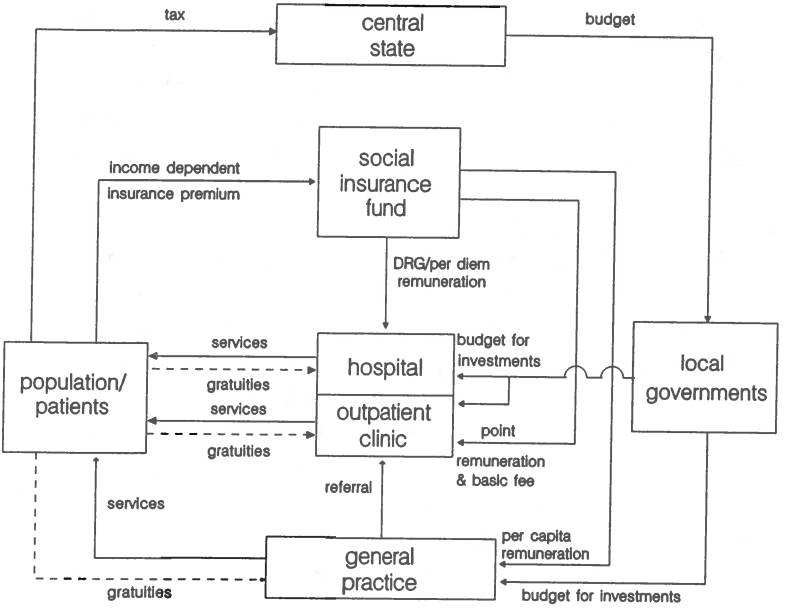

Figure 4.2 Current financing of the Hungarian health care sector

Since July 1993, remuneration for 'acute' care (an admission of less than thirty days) has been based on Diagnosis Related Groups (DRGs) as used in the USA. The remuneration to hospitals is based on a fixed amount per patient depending on the diagnostic group of the patient (Kincses, 1993). To soften the impact of the introduction of this new financing method, in the first years the DRG remunerations were corrected. Correction was based on differences between hospitals in the costs of hospital care before the introduction of the DRG system. Thus hospitals which had a higher overall budget and thus were probably inefficient in 1992 have received higher DRG remuneration. The ministry wants to remedy this unequal situation within a few years.

This new financing system forces hospitals to treat patients as cheaply as possible (in as short a period as possible), because the previously fixed remuneration is based on the diagnosis of the patient (the average costs of appriopriate treatment), irrespective of the actual costs the hospital incurs.

Physicians are still salaried. The official income of newly graduated physicians amounts to $125 a month; after ten years experience, this increases to $185 a month. The Hungarian general minimum wage is $110 (Ackerman, 1994). To boost their incomes, physicians still ask their patients

for gratitude money in exchange for better treatment. Because health care personnel are salaried and receive a guaranteed income, they have no incentive to provide patients with better treatment or work more efficiently. The gratitude money stimulates physicians to treat as many patients as possible, especially rich patients whom the medical staff can persuade to offer high under-the-table payments.

Outpatient polyclinics receive a basic budget combined with point-based remuneration, amounting on average to 61 and 39 per cent respectively of the income of the polyclinic. The budget is based on the previous year's budget (Kincses and Nagy, 1994). The point remuneration system is a German fee-for-service scheme with items of service expressed in points. The value of the points is calculated from realised total production and the available budget (Kincses, 1993; Orosz and Ho, 1994). This system stimulates higher productivity, but at the same time the total money spent on care will remain as budgeted. So the higher the production, the lower the financial value of the points will be. In the near future it is expected that the basic fee will be phased out and only point financing will remain (Kincses and Nagy, 1994).

Since July 1992, there has been a new remuneration system for family physicians. Insured people deliver their insurance card to the family doctor of their choice. The family physician receives from the HIF a 'basic payment' (a fixed allowance covering almost 60 per cent of his total budget) combined with a fixed amount per registered patient, adjusted for the age of patients, the region, the qualifications of the family physician and practice characteristics. In July 1993 this remuneration system was changed. The fixed allowance has been reduced rigorously and now depends on location (amounting on average to 16.6 per cent of the budget of a family practice). This is mixed with a regional adjustment (3.2 per cent of the budget) and a per capita remuneration (80.2 per cent of the family physicians' budget) (Nagy and Bordás, 1992; Kincses, 1994; Orosz and Ho, 1994). Thus the per capita element has been extended significantly, and now covers the major part of the family physician's funding. However, when a doctor's list exceeds 1,800 registered patients, the average amount of money per patient is reduced. Family doctors have a high degree of autonomy concerning the spending of their budget. As a result of the new financing method, family doctors nowadays earn more than specialists, in contrast with the situation before 1990 (Van Geest, 1996).

Delivery of services Social health insurance covers most of the costs of medical care in kind. Insured people have to pay for only a limited number

of services. Drugs are divided into four categories. Lifesaving drugs and drugs for maternity and child care are free of charge. The price of other drugs varies, depending on their necessity, from 5, 20, 50 to 100 per cent of their true cost (Orosz and Ho, 1994). An emergency journey in an ambulance is free of charge. However, if the family physician had no proper reason for calling the ambulance, he has to pay back the costs. Sanatoria are only free for the first two weeks. Patients have to pay for part of the costs of dentures.

Privatisation In Hungary private medical practice was not forbidden, but neither was it encouraged. The Antall government proclaimed its backing for privatisation of facilities. The Health Insurance Fund, however, does not remunerate medical care delivered in newly-founded private practices (except for family practice, for some diagnostic services such as CT and MRI, and kidney dialysis). Only medical care offered in existing facilities recognised by the state is reimbursed. This forms an important obstacle for founding new private facilities. Financiers consider investment in private medical facilities as very risky. Some physicians have started private clinics for some diagnostic services and cosmetic interventions. Patients pay out of their own pockets for this private medical care. The services are not covered by social health insurance and would not be remunerated anyway.

About half the family physicians had become 'self employed' by April 1995, which means that they made individual contracts with the health insurance fund and local government (Van Geest, 1995). The consulting room is owned by local authorities, but the doctors themselves have to invest in equipment and finance practice nurses. Remuneration comes directly from the HIF (see current financing of the health care).

By the end of 1992 some 2 per cent of family physicians had started to work as 'private' doctors, making contract only with the social health insurance fund, not with the local government. In that case they have to finance the building as well as the equipment and the practice nurse themselves. These private family practitioners also receive a capitation payment from the HIF, but in contrast with other kinds of family physicians, they are not obliged to accept all patients. Lack of capital and the risk involved in starting a private business are the main reasons for physicians' reluctance to become private doctors (Orosz, 1993). The remainder of family physicians are still employed by the local authority, which covers the financing of practice nurses, the equipment and the buildings. These doctors receive part of their remuneration from the HIF and part from local government (Orosz and Ho, 1994).

Some hospitals have created private wards with, for example, television and private showers. Patients pay an extra charge to the hospital for this kind of luxury. The use of such services is still very limited because of the low purchasing power of the population. In principle, private insurers are interested in entering the health insurance market by insuring luxury 'hotel' services and making investments in the health care sector. However, for the time being, they await better economic circumstances which would create a more substantial demand for special treatment (Marrée, 1994).

Future policy In 1993 a five-year World Bank project was started to develop health policy and reorganise social insurance. An EC Project, PHARE ('Poland and Hungary Assistance in Restructuring Economy') involving ten million ECUs, has been launched to promote primary health care and family practice. For the same purpose, in 1992 the Hungarian government established a 'National Institute of Primary Health Care', which aims to 'strengthen the primary care network in its effectiveness in improving the health status of the population' (NIPH, 1994; WHO, 1994a).

The principles for the health care sector stated by the new Socialist-Democrat government, installed in 1994, elaborated the reform ideas of the Antall administration, including decentralisation, guaranteeing health care by obligatory social insurance, putting greater emphasis on primary and outpatient health care, reducing hospital capacity (physicians and beds), and privatisation of ownership of facilities (Ministry of Welfare, 1994a). Furthermore, direct access to specialist care (to ease the burden on the family practitioner) and outpatient DRGs (similar to those utilised in inpatient care) will be introduced. However, because of the poor economic situation and the serious financial deficits of the state and social insurance funds, reducing expenditure on health care will most likely have the highest priority in the next few years. In the beginning of 1995, in fact, the government announced drastic cutbacks in the expenditure on social security, including health care.

In October 1995 the Ministry of Welfare confirmed the priority of primary health care services in further development (Ministry of Welfare, 1995). The Ministry wants to increase the number of primary medical practices by 1,000 to a total of about 7,500 to 8,000 practices. This increase will result in smaller district sizes. In addition there will be a 20 per cent decrease in the number of hospital beds within the next few years. However, morbidity and demographic developments will lead to increased demand for chronic long-term hospital care, nursing department care, and nursing home services. According to the Ministry programme, home care will be

encouraged so as to reduce expensive inpatient care, while outpatient care and the less expensive forms of inpatient care will be extended.

4.3 Conclusion

Since the Second World War, the social health insurance system has slowly been replaced by a national health system. Previously, all citizens had a right to free-at-the-point-of-need health care. However, the Semashko scheme has not been completely overridden; the Hungarian health care scheme included district doctor primary care. Gratuities accounted for a large proportion of health care expenditure.

Following the political changes the gratuities have remained, and as long as the salaries of the physicians stay relatively low, physicians will ask for this extra money. Hungarian health care funding has been modified into a social insurance system again. However, the insurance fund faces heavy financial problems. In addition, the financing methods in the health care sector have completely changed; since 1990 a point system, a DRG system, per diem remunerations and per capita payments have all been introduced.

Notes

1 Voluntary collective risk-sharing groups.
2 In 1963 about 97 per cent of the population was socially insured.
3 About 2,700 persons in 1970, 2,500 in 1980 and 2,300 in 1990 (Ministry for Public Welfare, 1994).
4 This means that illegal payments amounted to about 30 per cent of total expenditure on health care.
5 This means: based on the budget and activities of the institution during the preceding year.
6 Those receiving unemployment benefit are entitled to social insurance, but after 18 months, when unemployment benefit expires, they become uninsured.
7 In 1993 hospitals did not receive this inflation correction because of financial deficits in the Social Insurance Fund.

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5 Poland

The borders of the Polish state have changed many times in the last few hundred years. In 1945, after the Second World War, they shifted some 200 kilometres to the west.

Statistics (1992)

Number of inhabitants (1995):	38,581,000
GDP per capita (1990):	1,668 US$
Real GDP per capita (PPP-adjusted) (1990):	4,237 US$
Unemployment rate:	15.2%
Inflation rate:	43%
Percentage of GDP spent on health care (1991):	5.4%
Number of physicians per 10,000 population (1990):	24.0
Number of nurses per 10,000 population (1990):	58.5
Number of beds per 10,000 population (1990):	57.5
Average length of stay (1988):	12.6
Birth rate (per 1,000 population) (1995):	11.4
Fertility rate (1994):	1.8
Death rate (per 1,000 population) (1995):	9.9
Infant mortality rate (1993):	16.2
Average life expectancy:	
men:	66.7
women:	75.8

Sources: Boerma et al., 1993; The World Bank, 1992; WHO, 1994a; ÚZIS CR, 1994; Zakee, 1996.
n.a.: not available

The post-war communist regime was heavily criticised by the Solidarity movement. In 1989, Poland was the first East European country to hold free elections. Solidarity won and their leader, Lech Walesa, became president.

Before the Second World War Before World War II, Polish health care was managed by the Ministry of Labour and Social Welfare, as well as by the department of health care of the Ministry of Home Affairs. Local authorities financed hospitals and ambulatory care facilities (mainly centres for TB or alcoholics). Voluntary organisations played an important role in the provision of social benefits; several health institutions were run by charitable or religious organisations. According to Laczko (1994), the state used private charity to meet the gaps in its social programme.

In 1920 an act on social health insurance (Dziennik Ustaw, 1920) ruled that workers with an income beneath a certain level were to be compulsorily insured for medical aid. Employers and employees paid 60 and 40 per cent of the insurance premium respectively to the sickness fund. These funds were governed by boards consisting of representatives of employers and employees. Hospitals were obliged to deliver medical care to socially insured people at half their usual charge.

The World Health Organisation (WHO, 1994a) reported that health insurance based on employment-related sickness funds was expanding at the beginning of the twentieth century, although it did not spread at the same rate in Poland as in Germany. According to Sokolowska and Moskalewicz (1987), in 1938 about 70 per cent of the Polish population was uninsured.

5.1 Polish health care system before 1989

After the war, the new communist government founded a National Health Service based on the Semashko model of the Soviet Union. In 1952 it was proclaimed in the constitution that health care would be freely accessible and delivered free-at-the-point-of-need to the whole population, although the country was devastated and lacked the capacity to guarantee free health care. However, 'free health care for all' was considered an essential element of socialist health care. In addition, health was considered as 'beyond price' (Smoléń, 1992; Wlodarczyk, 1987).

The establishment of the socialist national health service brought about the nationalisation of health facilities; the Ministry of Health and Social Welfare became responsible for the major part of health care. Health care for officials of the communist party, the army, the police, miners and railway workers was the responsibility of the ministry in question. As the following

tables (Tables 5.1 and 5.2) show, the life expectancy of Polish males has hardly changed during the last few decades. The life expectancy of females increased by 1.6 years between 1970 and 1980. From 1980 to 1992, life expectancy at birth dropped at first, but in the nineties it reached the 1980 level again.

Table 5.1
Life expectancy at birth

	1970	1980	1985	1990	1992
Male	66.8	66.9	66.5	66.5	66.7
Female	73.8	75.4	74.8	75.6	75.8

Sources: ÚZIS CR, 1994; WHO, 1994a, WHO, 1994b.

Table 5.2
Selected standardised male and female death rates per 100,000 population

Cause of death		1970-1975	1980-1984	1987	1992
Neoplasms	M	230.2	268.3	290.3	293.3
(ICD-9: 140-239)	F				153.5
Cardiovascular diseases	M	603.0	710.9	781.0	760.8
(ICD-9: 390-459)	F				458.9
Diseases of the respiratory system	M	n.a.	n.a.	n.a.	62.9
ICD-9: 460-519)	F				21.7
Diseases of the digestive system	M	n.a.	n.a.	n.a.	47.8
(ICD-9: 520-579)	F				25.4
External injuries and poisoning	M	n.a.	n.a.	113	132.5
(ICD-9: E 800-999)	F			33	35.7
Suicide and self-inflicted injury	M+F	12.4	n.a.	n.a.	13.8
(ICD-9: E 950-959)					(1990)
Total	M	1420.6	1469.2	1533.7	1505.4
(ICD-9: 001-999)	F	892.9	853.6	868.1	827.3

n.a. = not available
Sources: Forster and Józan,.1990; Rowland, 1991; ÚZIS CR, 1994.

Organisation of health care The country was divided into ten health regions. Each region included a Medical Academy and a teaching hospital for highly specialised treatment, for medical teaching, and for continuing education. The regions consisted of some five provinces ('voivodships'). The voivodship formed an administrative level, including a Provincial Health Department with delegated authority for the implementation and management of health programmes initiated by the ministry (Roemer, 1991). The 49 voivodships were regarded as self-sufficient entities, each serving a population of about 800,000 people.

Each voivodship had between 3 and 33 Locally Integrated Health Services (Zespol opieki zdrowotnej, or ZOZ). The voivodships were established between 1973 and 1975. Each of the ZOZs (more than 400) served between 30,000 and 150,000 people, with an average of 100,000 (The World Bank, 1992). The idea behind these ZOZs was to integrate health and social services under a single management and budget, to generate better quality services, better access to medical practitioners, and improved continuity of care. The ZOZs encompassed local hospital outpatient units, emergency care facilities, diagnostic laboratories, and other services for infants and the elderly, classified together as 'basic care' (WHO, 1986).

Public health services, named 'Sanepids', were established at both local and provincial levels. They advanced health, promoted hygiene at the work-place, gave health information, controlled malnutrition, air pollution, TB, and so forth. The distribution, and also the production, of drugs was organised at the national level by the Pharmaceutical Supply Centre 'Cefarm-Polfa'. At the local level 'head-pharmacists' were responsible.

Several ministries provided a parallel health system beyond that offered by the Ministry of Health and Social Affairs. For example, the Ministry of Defence created a health system for the army, the Ministry of Transport and Communication for railway workers, and the Ministry of Industries for miners and other employees of large state enterprises. The parallel systems comprised separate facilities, including hospitals, ambulances, pharmacies and sanitary inspections. The parallel health systems were financed from the individual budgets of the Ministries concerned, although the Ministry of Health financed expenditure on drugs and the salaries of medical staff. It is estimated that at least 9 per cent of health care services were delivered within these systems, consuming about 9.7 per cent of the total budget on health care (The World Bank, 1992).

Patients valued the parallel services more highly than the services run by the Ministry of Health and Social Welfare. In general, the parallel facilities

provided better non-medical 'hotel' services and had more attentive staff. Patients entitled to use this health care plan were also allowed to enter the health care system of the Ministry of Health and Social Welfare. This ministry had no control over these parallel services. The resulting lack of coordination between the schemes led to inefficiency and overlap in the services provided (The World Bank, 1992).

Primary health care Primary care was delivered by rural health stations and polyclinics. The ZOZs were responsible for the provision of basic care, including primary care (see organisation of health care). In urban areas, primary care in polyclinics was provided by specialists in internal medicine, general practitioners, paediatricians, gynaecologists, dentists, midwives and nurses (Boerma et al., 1993). Rural health stations in general consisted of a general practitioner, a dentist and a nurse (Roemer, 1991; WHO, 1981). Some of the rural stations also employed gynaecologists and midwives.

Until 1986, the Polish population had no free choice of physician; people were assigned to the polyclinic in their region. According to Sapinski (1990), from 1986 it was possible for eight million people, about 20 per cent of the population, to consult the doctor of their choice at the local outpatient clinic they were attached to. This resulted in a better relationship between doctor and patient and higher patient satisfaction. People assigned to the remaining outpatient clinics still had no free choice of doctor.

According to the official norm, there would be a population of 2000-2500 in one primary care area; in reality, such an area consisted of about six thousand people (Boerma et al., 1993). Since primary care was under-equipped, mainly through a lack of diagnostic tools, primary care doctors were predominantly a referral agency for specialist care (Millard, 1994). Furthermore, there was a shortage of general practitioners and paediatricians and the distribution of staff between rural and urban areas was rather uneven.

Doctors were distributed unequally over the country. In 1989 the average number of consultations was 6.9 per inhabitant for the whole country. In the cities this figure was 9.5, while for the rural areas it was 2.8. Furthermore there were fewer drugs, fewer dentists and fewer nurses available in the rural areas. This unequal spread of medical services was mainly the aftermath of the fact that farmers, the only occupational group which had not been collectivised, were excluded from the health care system until 1973 (Schoukens, 1992).

At the workplace there were also general health services for company workers. These were mainly organised in ambulatory units with one general

practitioner for every 1000 to 1400 employees, a gynaecologist for every 2000 working women, and dentists and specialists according to need (The World Bank, 1992). About 12 per cent of physicians worked in occupational health care (Tymowska, 1987).

Secondary care A referral was not required for entering secondary care and, with the poor state of primary care, many patients went directly to a specialist. Regional hospitals provided the highest level of specialist care. They were mainly connected to the Medical Academies and National Health Institutes. In addition, each province had a main provincial hospital located in the provincial capital. Polyclinics providing specialist outpatient services were connected to them. The ZOZs referred patients to these hospitals, and also to those at regional and national level. In addition, smaller hospitals belonging to the ZOZs were located in small cities and rural areas. Hospital beds and the utilisation level of hospital and ambulatory care were also unevenly distributed between rural and urban areas (Wlodarczyk and Mierzewski, 1991).

Because of the relatively high number of specialists and a shortage of supportive staff, physicians conducted tasks which could have been done by paramedical personnel, nurses or administrative staff (Millard, 1994).

Economic support and financing structure In 1987 to 1988, Poland spent 5.7 per cent of its GDP on health care.[1] The central budget of tax revenues funded 85 per cent of all health expenditures, enterprises funded 5 per cent and the remaining 10 per cent came from households (The World Bank, 1992). The central budget for the health care sector (funded by general tax payments of the population) was divided into a central component for the Ministry of Health and a regional component for the 49 voivodships. These two components comprised 90 per cent of central government spending on health care. The other 10 per cent was provided by other ministries for their parallel health care systems.

The Ministry of Health financed most health care expenditures at the national level, including drugs, regional hospitals, some nationally administered sanatoria, rescue and ambulance services, prevention programs for AIDS, drug addiction and alcohol, and other minor categories. The 49 voivodship health authorities received their budgets directly from the Ministry of Finance. The 400 ZOZs were funded by the voivodships. The budgets of the ZOZs were global budgets and ZOZs were therefore largely free to set their own priorities. Furthermore, the voivodships financed

sanitary inspections (sanepids), sanatoria, blood stations, and TB services (The World Bank, 1992).

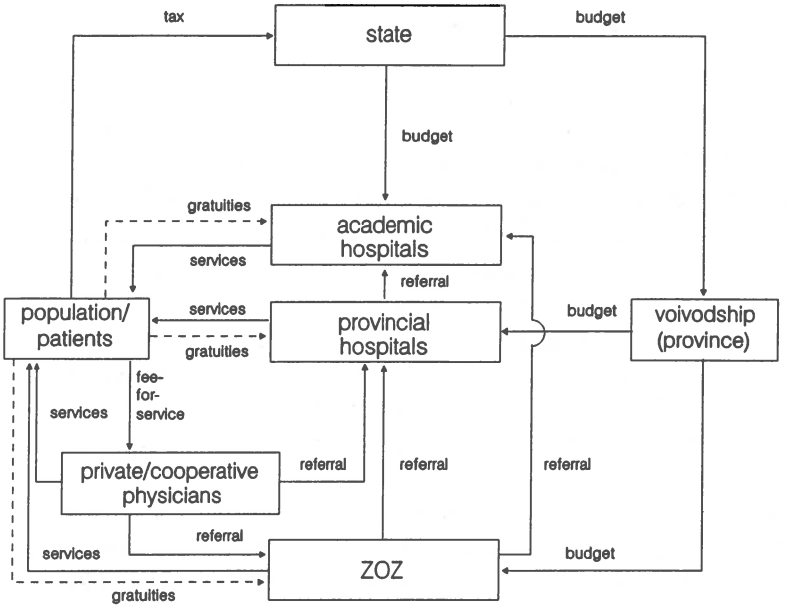

Figure 5.1 Financing of Polish health care before 1989

All health services received a budget, without any breakdown for the various component costs of services (Roemer, 1991). Figure 5.1 provides an overview of the most important financial relations in Polish health care during communist rule (before 1989).

Medical staff working in the public scheme were salaried. As shown in Figure 5.1, some physicians also provided private services and were remunerated on a fee-for-service principle. The salaries of medical professionals were relatively low, although their professional prestige remained high (Roemer, 1991).

Delivery of services Although health care was in principle free-at-the-point-of-need, direct payments were required for drugs (covering about 30 per cent of their costs), private practice, a private ward when not medically necessary, long-term residential care, medical equipment and home care (Tymowska, 1987). About 25 to 35 per cent of the population paid gratuities to physicians and other medical staff for referral to a particular hospital, for sick leave or more friendly treatment (Schoukens, 1992).

According to Ostrowska (1993) these "second economy" elements made 'real socialism' in everyday life easier to bear.

Private practice At the end of the eighties, about 30 per cent of Polish doctors worked a few hours a day on a fee-for-service basis in private practice or for medical cooperatives. Patients had to pay out-of-pocket for these services (Roemer, 1991). Medical cooperatives were polyclinics run by partnerships of doctors working seven hours a day in public health care and then spending a few hours on private patients in the cooperative. About 20 per cent of physicians worked for cooperatives, 10 per cent in private practice. Private medical services had to be paid for. The fees at cooperatives were set by the Ministry and were lower than those charged in a private practice. Cooperative physicians were allowed to receive about 50 per cent of the fees; the other 50 per cent was to be spent by the cooperative on the costs of staff, supplies, rent, taxes, and so forth. Voivodship officials inspected cooperatives periodically (Roemer, 1991). Patients were delighted by these cooperatives because of their 'free choice of doctor' and the firm belief that the physicians working there were the best qualified (Roemer, 1991). The problem with these cooperatives was the fact that cooperative physicians were creating work for their private practice in the course of their public duties. The result was that these physicians were not treating some patients in the public health care system properly (Schoukens, 1992).

Medical education Basic medical training leading to the physician's diploma lasted six years. Graduation was followed by a one-year hospital internship comprising four training programmes in the following departments: internal medicine (20 weeks), paediatrics (12 weeks), gynaecology and obstetrics (8 weeks), and surgery (8 weeks) (Parkhouse, 1989). Specialisation was possible at two levels. The first-degree specialisation lasted at least another two years, while the second-degree specialisation took at least a further three years. Both had 33 disciplines. A first-degree specialisation was needed before undertaking a second-degree specialisation. For some second-level specialisations another second-degree specialisation was essential.[2] To become a general practitioner a specialisation was not necessary (Parkhouse, 1989).

As in many other countries, the number of physicians allowed to specialise was limited and adjusted to the needs of the population. The quantity of specialist training was therefore controlled by the regional departments of health and by the Ministry of Health and Social Welfare.

However, the proportion of specialists was very high: in 1983, about 31 per cent of active physicians had no specialisation (general practitioners) and 32 and 37 (together 69) per cent of physicians were first-degree and second-degree specialists respectively. In 1989, 72 per cent of physicians were specialists (Schoukens, 1992). Several institutions at the regional and the national level, the medical academies, research institutes, major hospitals and the Medical Centre of Postgraduate Education provided continuing education.

Poland was the first European country offering nursing education at university level. This four-year educational program was implemented at five medical academies in 1969. To enter this study one first had to become a professional nurse and have two years' nursing experience (Roemer, 1991).

5.2 Changes after 1989

In 1989, Poland was the first of the socialist countries in Eastern Europe to have (semi) free elections. The new Polish government of Tadeusz Mazowiecki from the Solidarity movement was installed in September 1989 (Michielsen, 1990). This new government promised to continue publicly-financed health care and to decentralise health care organisation. The Solidarity movement has long been a proponent of decentralisation (Roemer, 1991). Nevertheless, until now, reform of the economy has prevailed over health care interests.

The Polish government had been searching for ways to make the health care sector more efficient even before the year of revolution, 1989. The Polish health care system was inefficient, faced financial shortages, and had a low level of available services (Sobczak, 1991). Since 1980 many reports of the failures of the Polish health system have been written (Smolén, 1992). Only from 1988 did reports presented to the government include suggestions for reform. The report of a team led by Indulski recommended:

- more autonomy for health care providers and patients;
- a family physician model which could serve as the linchpin of health care by referring patients to specialists (when necessary), while maintaining overall responsibility for them;
- social health insurance, to move health care from the general budget negotiations where its priority was low;
- that cover be limited to a basic package of services to reduce expenditure on health care (Smolén, 1992; Millard, 1994).

The idea of an insured basic package was strongly rejected by the government because it wanted to retain the socialist idea that everybody was entitled to free access to all kinds of health services (Smolén, 1992). Meanwhile, in 1989, two new reports were presented recommending different kinds of reorganisation, making the government's task more complicated. It was therefore decided to await the results of an international conference on health policy issues, held in Poland in 1990. From that time, cooperation with Western countries and international organisations such as the World Bank led to moves to reform Polish health care. Since then, the reform of health care has concentrated on: health promotion, primary health care, the infrastructure of health care, and regional systems of health care services, the 'consortia' (Smolén, 1992). New structures were established above voivodships to improve voluntary horizontal and vertical coordination among voivodships and to use resources more efficiently.

Primary health care The central government of Poland has designated three regions, covering nine voivodships and a population of more than six million people, as places where health reform programs must first be tested (Wlodarczyk and Sabbat, 1993). In North West Poland, the 'Pomerian Health Consortium' was founded, which is a collaboration of three provinces with a total of three million inhabitants. The consortium is involved in reforming primary health care and in health education, regionalisation of health care, and improving administration. Financial support and technical assistance are provided by the World Bank (WHO, 1994a). With respect to primary health care in the Pomerian Health Consortium region, the main task is the development of the family physician system. In practice developing family physician training, improving the organisation of primary care, and establishing and improving family physician practices are entailed (Zwart-van der Weerd, 1993). According to a survey among physicians and nurses in 1993, 96 per cent of respondents favoured the implementation of the family physician model in Poland (Putz et al., 1994).

Physicians Nowadays people have freedom of choice of doctor (Roemer, 1994). In 1989, the 'Order of Physicians' was reestablished after having been prohibited during the socialist era. Physicians are now registered by this order. The main task of this organisation is to monitor the professional behaviour of its members (Schoukens, 1989).

The physicians are supportive of the ideas put forward in the Indulski report: the introduction of an insurance system, definition of a basic

package of services and the implementation of a family physician model. They are also in favour of putting prices on medical services (fee-for-service), contractual arrangements, and the privatisation of the health care sector (Ostrowska, 1993; Putz et al., 1994; Millard, 1994).

Economic support In 1991 Poland spent 5.4 per cent of its Gross Domestic Product (GDP) on health care (The World Bank, 1992).[3] Because of budget deficits in the health service, some cutbacks have been made. In 1991, 19 medical stations, 17 maternity units, 5 local clinics, 14 small specialist clinics, 4 sanatoria and 43 occupational clinics were closed, and the number of hospital beds was reduced by 2500 (Millard, 1994).

According to Ostrowska (1993), the most notable change introduced into health care is the way it is financed. She asserts that the Polish state is too poor to finance health care via the budget, and the citizens are too poor to pay adequate insurance premiums. Nevertheless, the long-term goal of the government is to introduce social insurance as recommended in the Indulski report. However, the adverse economic situation in Poland, at a time of high inflation and growing unemployment, led the World Bank to advise postponement of a new funding system of health care (Millard, 1994). The concept of reducing the services covered to a basic package also awaits implementation.

Financing The structure of financing health care has, in general, remained the same as it was before 1989 (Figure 5.1). The ZOZs are financially autonomous (Schoukens, 1992). Facilities are still budgeted. However, a new law on health care establishments has given health institutions more financial flexibility. Funds may now be carried over to the next financial year, permitting the contract of a loan or the gathering of additional funds (Millard, 1994). Inflation is now the most serious problem for the Polish health care sector. Running costs for health facilities, especially energy costs, have risen rapidly. To reduce costs, in 1991 facilities reduced their health staff by 18,000 workers (Millard, 1994).

Since many pharmacies were operating at a loss, the Ministry of Health had already decided to privatise pharmacies in 1990. These pharmacies receive subsidies from the state, but they are not associated with the state pharmaceutical warehouse 'Cefarm-Polfa'. As a consequence, a black market in drugs and medical supplies has also developed (Millard, 1994). Since January 1992, according to the new law on health care institutions, private medical institutions may now be set up (Nesterowicz, 1992).

Delivery of services In principle, all services are still free of charge. For care in sanatoria and for protheses, small co-payments are required. Furthermore, people have to pay a nominal amount for basic drugs, and a percentage (20 to 30 per cent) of the cost of other drugs. Imported drugs have to be paid for out-of-pocket (Schoukens, 1992).

Future policy In 1994 the Ministry of Health and Social Welfare presented a new health care strategy (Ministerstwo Zdrowia i Opieki Spolecznej, 1994). The most important elements of this blueprint are:

- introduction of compulsory social insurance covering only a basic package of services;
- finance of services by the contract model instead of the integrated scheme (see chapter 1), by introducing a fee-for-service point remuneration system;
- creation of additional financial resources by allowing private insurances to operate for services not covered by social insurance;
- creation of health centres, based on the family physician model, staffed by family physicians, paediatricians, nurses and midwives. Implicitly, gynaecological and dental care will no longer form part of basic care; these health centres to be financed on a per capita basis; people to have free choice of doctor; but free access to highly specialised services will be limited to reduce costs (Zochowski, 1994; Latalski, 1994).

Thus, most of the elements proposed in the Indulski report are to be found in this ministry blueprint. The implementation of the plans started in 1994. At this moment the legislative framework of the planned social health insurance, and the consideration of what medical services should be in the basic package, are at an advanced stage.

5.3 Conclusion

During the socialist era, Polish health care was modelled on the Soviet system. A special feature of the Polish health care sector was the 400 integrated health services (ZOZs). These ZOZs provided primary health care through rural health stations and polyclinics, and they even encompassed hospitals. A number of ministries had their own health services organised parallel to the regular health sector. In addition, about 30 per cent of doctors worked for a few hours a day in private practice or for a medical cooperative. Patients paid out-of-pocket for these services.

Since the end of the eighties, the Polish government has been searching for ways to make the health care sector more efficient. However, until 1994 little was changed. Some experiments did start to develop a family doctor model. A free choice of doctor was introduced, and the ZOZs became financially more autonomous. In 1994, the ministry started to implement a new health strategy. This consists of the introduction of compulsory social health insurance, the generation of opportunities for additional private insurance, and the introduction of fee-for-service financing systems, as in the Czech Republic, the former GDR and Hungary. The family physician model is also currently being initiated.

Notes

1 The OECD average in 1988 was 7.5 per cent of GDP (Schieber et al, 1994).

2 For example, for second-degree specialisation in endocrinology or gastroenterology, a second-degree specialisation in internal medicine was required. So in fact this could be categorised as a third-degree specialisation.

3 OECD average in 1991: 7.9 per cent (Schieber et al, 1994).

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