Hungarian health care in transition; studies on the improvement of the effectiveness of health care in Hungary by implementing quality assurance
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Chapter 2

DESCRIPTION OF THE HUNGARIAN HEALTH CARE SYSTEM;
1948-1998

Abstract

Hungary's health care system is based on a compulsory national insurance model. Universal coverage is assured through a combination of mandatory social insurance for the working population and guaranteed coverage for the retired and the people under the poverty level.

Official per capita spending is only around one fifth of the average EU level, although high compared to some other countries of Central and Eastern Europe. Public expenditure is channelled mainly through the National Health Insurance Fund Administration.

Responsibility for primary health care rests with municipalities, which must arrange for services to be available in their area. Most primary care provision has been privatised, although 15-20% of primary care physicians remain the employees of local governments. Family doctors act as gatekeepers to specialist care and are paid on a capitation basis.

Specialist care is delivered predominantly through a network of public inpatient and outpatient facilities, staffed by salaried personnel who are remunerated mainly on a performance basis through a Hungarian version of the US originated DRG system.

The main aim of this chapter is to describe the characteristic features of the Hungarian National Health Care System with particular emphasis on the hospital sector and primary health care in terms of structure, function and financing.

In addition some relevant information is provided about the health and social insurance, public health and informal care.

The author is grateful to Dr. Koos van der Velden, Director, School of Public Health (NSPH) Utrecht, for his helpful comments on this chapter.
2.1 National Health Care System in Hungary - History

Prior to World War II, Hungary’s health care system had an European orientation, with strong academic ties to Germany and Austria. The health care system was developed on the Bismarkian model, with several employment-based insurance funds. In 1898, a National Fund of Patient Care was established to provide cost reimbursement for the poor. Health insurance system was introduced by law in 1928. Until the late 1940s, the government played a minimal role in the administration and financing of the system. Medical care was paid on a fee-for-service basis and a large proportion of the population was not adequately covered by an insurance scheme. Numerous insurance companies and funds were in operation; doctors were in private practice, and were concentrated in urban areas, while rural areas remained relatively under-served. By 1940, an attempt had been made to provide medical counselling services to rural areas; these were offered through the Green Cross Service and were largely staffed by nurses.

In the period between the end of World War II and 1950, less than half of the population was covered by compulsory health insurance, with the rest, consisting mainly of agricultural workers, remaining uncovered. In the early 1950s, a restructuring of the economy was initiated along Soviet principles while the structure and management of health care services were increasingly modelled on Soviet patterns. Insurance companies and funds, private practices, and other health care institutions were dissolved or taken over by the state, and the government progressively expanded its engagement in health care thereby removing all aspects of a market mechanism. The state became responsible for developing and equipping health care services; it obtained also the responsibility for the organisation and management of health services, and the National Health Service came into being to provide medical examinations and care. A system of service by General Practitioners was established in 1952.

Under the Public Health Act of 1972, health care coverage became a right of citizenship, and all services came to be provided free of charge, with the exception of prescription drugs, for which patients had to make a co-payment amounting from 5% to 15%. The first formal steps towards a health care reform were taken in 1987/88. In 1992, the civil right to health care was replaced by mandatory social insurance. Since 1990 there have been continuous efforts and planning to change the health care system.

2.1.1 Organisational and administrative structure

Prior to the political reforms in 1989, dominant roles in the provision and financing of health care were played by the Ministry of Health, local councils, the Ministry of Finance, and the Social Insurance Fund. The Ministry of Health was the central agency for planning, developing professional standards, and overall policy co-ordination of the health delivery system. It supervised the implementation of health policies, statistical reporting requirements, capital resource allocation, and it operated several National Institute Hospitals and University Clinics, which also set standards in the various medical specialities and in addition deliver highly specialised education and care in their respective areas. On the macro-economy level the Ministry of Finance controlled the overwhelming majority of revenues expended in the health sector, and played a dominant role in health budget alloca-
tions through negotiations with local councils and its delivery was fulfilled at the local level. State resources for health were expended by the 19 counties and the Budapest area, and more than 1,500 municipal and village councils according to their own budgets; these local government bodies provided financial accounting reports of their expenditures to the Ministry of Finance. A number of funds, dominated by the Social Insurance Fund, were operated by the Social Security Administration, Ministries, and the Council of Health Promotion. However the “Social Insurance Fund Administration” was in fact a government body responsible for collecting, employer and employee contributions that were essentially a kind of tax, which went into the state budget on behalf of the state. The share for health and pension is decided by the parliament yearly.

The Ministry of Health was reorganised in 1990 and transformed into the Ministry of Welfare. Through the Act of Local Governments (1990) the ownership of health care facilities and responsibility for health care provision were transferred exclusively to city and county governments. This contributed to the decentralisation of the previous system, with local government bodies increasingly accountable for the provision and delivery of health care. In 1990, the Social Insurance Fund Administration became quite independent from the state budget, and began to operate as a real form of social insurance, with a budget of its own, funded by employer and employee contributions. Initially, the Social insurance Fund handled funds for both health care and pensions. In 1992, through the Health Insurance Act, funds for health care were formally separated from those for pensions. As a result of these changes, since 1992 there is a state run health insurance in operation in Hungary.

In 1998 the Ministry of Welfare was divided into a Ministry of Social Affairs and the Ministry of Health. The Health Insurance Fund Administration (and the Social Insurance Fund Administration) went through dramatic changes. Earlier, both funds had been controlled by Self-governing Bodies whose members had been delegated by the trade unions. In 1998, due to the rapidly growing deficit of the health insurance budget, the self-governing bodies of the Funds were liquidated and both funds were re-nationalised and at first put under the direct control of the Prime Minister’s Office on behalf of the state, than under the Ministry of Finance.

2.1.2 Two periods of health policy and practice between 1948-1989 and 1990-1998

The post World War II. history of the Hungarian health care system can be subdivided into two characteristically different parts: a) socialist health care: 1948 - 1989; b) transition period 1990 - 1999.

a) Socialist health care 1948 - 1989

Five-year plans were the planning units of health care during socialism. Between 1957 and 1982 'classical' five-year planning could be seen, after 1982 various reforms were implemented, which influenced and modified the real five-year planning mechanisms. Planned economy and five-year planning in health care in Hungary are quite often taken as rigid, non-cost-effective tool which create health care that is reluctant to respond the needs of the public. When a state-owned health care system is described, people tend to think that what
planned state health care means is that everything was planned in detail without giving room to personal initiatives, interest, lobby or even competition. Everything was thoroughly planned and this was the problem. The reality was just the opposite. Investment and manpower was so-called ‘planned’ but in reality nothing went according to health care plans. The so-called ‘five-year health plans’ were more of a political wish list than reality. There was a 5 year cycle of the economy. Lots of investments started in the first year of the 5-year plan throughout the economy. There was a shortage in the economy in terms of capital, resources, building capacity and manpower. Health care was a stepchild of the regime, that is why there were significantly lower resources made available for the health sector in the first and second years of the five-year plan. (*)

Between 1985-1989 classical five-year plan based state economy and health care partly disappeared. Various health care reforms were initiated but never completed nor implemented. Because of the economic crisis, the GDP dropped by 25%, and health care resources became very limited. The first formal activities towards a health care reform were initiated in 1987/88.

b) Transition period, 1990 - 1999

After the political reforms (1989) both the legislation, financing and regulation of the health care system changed. Legislation was changed significantly, in 1992, the civil right to health care was replaced by mandatory social insurance. The source of funding health care was changed as well, the previously tax based state health care system turned into a premium based health insurance. The financing mechanism of hospitals turned form global budget to a modified DRG system. The formerly state owned hospitals mainly became properties of the local municipalities and county assemblies. During this period there were changes in management philosophy from general management to consensus management and again back to general management. The vast majority of the managers are physicians with some management training. Physicians, surgeons and staff are salaried in hospitals. The majority of the GPs (around 80%) became private entrepreneurs, financed through a modified German point system.

Although a series of reform proposals recommended the transparency and accountability of the financing and provision of the health care system has not improved, either in local and national government level. This creates a need to clearly identify what can be financed with existing funds. The minimum guaranteed health care benefit package is undefined. This lack of definition can serve undesirably, either to expand or contract services. For example, since the benefit package is undefined, patients might reasonably demand that purely cosmetic care be provided which was not budgeted for. More likely is the circumstance where protocols change, and relatively expensive care is substituted for previously inexpensive care for the same condition, potentially with similar outcomes in the majority of cases. (Nera, 1998; Report of Hungary, Health Care Reform Module, 1999) Responsibil-

ity of local government in health care provision and financing should be clearly defined, and primary health care should be given a larger role in the overall treatment of the population, as suggested by many reform papers. Other unfinished reform agenda items include the current pharmaceutical bill. Both the National Health Insurance Administration and the Ministry of Health believe that the current pharmaceutical bill is too high. According to the Ministry of Health, pharmaceutical expenditure accounts for about 30% of total health expenditure, the WHO estimate is 38%. According to the reform agenda an independent body should be created which is dedicated to carrying out cost-effectiveness studies. (NERA, 1998) These issues have been appearing in almost all reform proposals, but only very limited actions have been taken, real questions have not been addressed yet.

The most important elements of the changes of the transition period 1990–1999, related to social and health insurance system, inpatient care, primary health care and public health is further discussed in the following sub-chapters. Characteristic features of the transition period associated with the development of quality assurance will be further discussed in Chapter 4.

2.2 Social and health insurance system

Health expenditure per capita is estimated to be around USD300. Hungary is in the middle range of health care spending per capita among the countries of Eastern and Central Europe, representing around 20% of average health spending in the countries of the European union. (Ministry of Welfare, 1997) Since the introduction of compulsory health insurance in 1990, the National Health Insurance Fund Administration has become the primary channel for health care expenditure in Hungary. The Hungarian system of financing is a two-channel system:

- operating expenditures are covered by the National Health Insurance Fund Administration,
- capital expenditures are covered by the owner of the health care setting, which can be local governments, public bodies or private owners.

The National Health Insurance Fund Administration has three main sources of funds:

- wage contributions paid by employers and employees, which are set by general taxation law, between 1990 and 1998 the contributing population decreased by 20%, mainly due to an increase in the number of unemployed and pensioners,
- general taxation, introduced in 1996 to cover the costs of the population that do not contribute to the National Health Insurance Fund but is entitled to healthcare coverage,
- assets, both liquid and non-liquid, transferred by the Central Government when the National Health Insurance Fund was created.

The Hungarian social insurance system has a long history. The first act of statutory health insurance was passed in 1898. From the beginning of 1972, the whole population has been covered by the National Social Insurance Act. Contribution are payable up to the age of 65 years (males) and 60 years (females) respectively, and are income-related. Although called
premium, this contribution in reality was a kind of tax, with no insurance elements in it and deducted from the salary. Employers and employees share the contribution, which was 40% from the employee's income against 12% paid by the employer. The system was and still is statutory. The whole population is covered by social and health insurance, and is free at the point of consumption.

Till 1990 Social and Health Insurance was part of the tax based state budget, its organisations (directorates) had administrative and technical functions e.g. deliver pensions of various kinds. In 1990 the Social and Health Insurance Fund became quasi independent from the state budget, and started to collect social and health premiums and to manage its own budget. In 1992 the Fund was split into Social Insurance Administration and Health Insurance Administration controlled two Self-Governing Bodies whose members were delegated by the trade unions. In 1998 as because of the financial and professional accountability of these Funds were questioned by the central Government, both Fund Self-Governments were liquidated and the two Funds were put under the direct control of the Prime Minister's Office. Until December 31, 1998 premiums were collected by national and local directorates of the Funds, however from January 1, 2000 'premiums' are collected by the national and local directorates of the National Tax Authority. Currently employers pay 15% of the payroll and employees pay 4% of their salary/wages as 'premiums' to the Health Insurance Fund Administration.

In Hungary the number of those who pay contributions has been decreasing while the number of those in need of social support has been increasing steadily. The annual deficits of the Funds are usually huge and covered by the state. According to the government's expectations, the health care system will be more effective and financial accountability will be higher as a result of the strong state control. One crucial element of health care financing has to be pointed out again, namely the National Health Insurance Fund Administration does not finance depreciation in the hospital sector, primary health care and other part of the health care system. Theoretically, it is the owners responsibility to pay for depreciation, but no funds are being accumulated to offset this amortisation to meet future capital expenditure requirements. But the financial capacity of the owners e.g. municipalities and county assemblies are very limited, and they cannot afford to finance depreciation. As a result of this mechanism this element of the budget has been missing since 1990.

2.3 The structure of the present health care system

The Hungarian health care system is organised on a county basis: 19 counties typically have populations of about 250,000 - 600,000, and the 20th is Budapest (with 2 million population). To be admitted to a hospital, patients normally have to be referred by a GP GPs in principle are free to refer patients to any hospital. The health care budget is cash limited. The Hungarian National Health Care System is a compulsory, premium based single pipe financed system. (The system is so-called premium based, state run health insurance.) Employees and employers pay a premium to the National Health Insurance Administration, which is under the control of the Ministry of Finance and Ministry of Health. Pharmaceuticals are covered by the health insurance, with the insurance coverage varying between 100-0% on drugs, and the remainder of the expenses being paid by the population. Hospitals are owned by the state, as well as the city and county assemblies (self-governing bodies), and are not-for profit organisations. (Some of them are owned by various churches,
but this proportion is really marginal.) Hospital care is county based. Each county has its own county hospital, which are in most of the cases large, 1,500 - 2,000 beds public general hospitals. County hospitals provide a wide range of ‘basic level of care’, ‘medium level of care’ and some ‘top level of care’. Basic hospital care is provided by municipal (*) hospitals. Top level health care is provided by university hospitals and national institutions. There exists a referral system. Hospitals are reimbursed by a special adaptation of the US DRG system. Hospital doctors are salaried employees.

The surgeries of doctors in general practice and dental practice were mostly privatised. This is a special type of privatisation it is called ‘functional privatisation’ because the building and equipment belongs to the local municipalities. (And local municipalities are responsible for maintenance and in case of bankruptcy.) Doctors are paid according to the German point system in the primary care setting. The very high level of patient-doctor encounters is a very characteristic feature of the Hungarian health care system. Table 2.1 provides information about the Hungarian health care system.

Table 2.1 Hungarian national health care system, 1970–1998

<table>
<thead>
<tr>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Physicians</td>
<td>20,877</td>
<td>26,898</td>
<td>32,883</td>
<td>34,634</td>
<td>35,026</td>
<td>39,446</td>
<td>40,115</td>
</tr>
<tr>
<td>Number of GPs</td>
<td>3,646</td>
<td>4,050</td>
<td>4,450</td>
<td>5,011</td>
<td>5,086</td>
<td>5,157</td>
<td>5,210</td>
</tr>
<tr>
<td>Number of Nurses</td>
<td>21,597</td>
<td>28,492</td>
<td>32,597</td>
<td>32,509</td>
<td>31,998</td>
<td>31,780</td>
<td>32,140</td>
</tr>
<tr>
<td>Number of Dentists</td>
<td>2,175</td>
<td>2,640</td>
<td>2,217</td>
<td>2,414</td>
<td>2,425</td>
<td>2,292</td>
<td>2,277</td>
</tr>
<tr>
<td>Number of Midwives</td>
<td>1,975</td>
<td>2,640</td>
<td>2,217</td>
<td>2,414</td>
<td>2,425</td>
<td>2,292</td>
<td>2,277</td>
</tr>
<tr>
<td>Patient contacts in general practice (in thousands)</td>
<td>49,698</td>
<td>41,316</td>
<td>38,869</td>
<td>43,812</td>
<td>43,565</td>
<td>43,983</td>
<td>45,207 (*)</td>
</tr>
<tr>
<td>Outpatient visits (in thousands)</td>
<td>59,124</td>
<td>69,727</td>
<td>80,923</td>
<td>101,693</td>
<td>119,031</td>
<td>131,622</td>
<td>138,658 (**)</td>
</tr>
<tr>
<td>Number of Hungarian population (in thousands)</td>
<td>10,322</td>
<td>10,710</td>
<td>10,337</td>
<td>10,246</td>
<td>10,212</td>
<td>10,174</td>
<td>10,174</td>
</tr>
</tbody>
</table>

(*) In addition to patient contacts in GPs surgery there are 5,470 thousand home visits by GPs
(**) Number of performed activities: 317 million


The number of physicians, dentists and midwives seems to be higher than the average level of these professionals in the CWE. The Hungarian health care system has remained relatively uninformed by developments in recent decades in the areas of health economics, health services management, health informatics, environmental health, health promotion. The almost complete negligence of these areas might have had a greater negative impact on the development of the health care system than did financial and economic difficulties. (Gulácsi, 1991) There were some controversies in the health care system. The 1972 Public Health Act was based on three principles: health care was to be of the highest quality, free of charge, and generally accessible. However, whereas it was free of charge, it was not of the highest quality nor was it generally accessible, as the state operated according to the

(*) First referral hospital
precept of channelling resources to the most productive sectors. It therefore allocated health care funds to sectors or regions according to their relative economic importance, thus giving rise to an unequal distribution of health care facilities and inequitable access to these. (WHO, 1993)

2.4 Hospital sector

Specialist care is provided in inpatient and outpatient settings, inpatient services are hospital based; outpatient services are delivered at outpatient hospital facilities. Inpatient hospital service is the largest element of National Health Insurance Fund’s non-pharmaceutical expenditure, accounting for 60% of the total in 1997. Over 89% of the amount allocated in 1997 was for acute care services, and almost 11% was allocated for chronic provision. (Ministry of Welfare, 1997)

2.4.1 Structure

There were 167 hospitals in Hungary in 1999. Before 1991, hospitals were owned and financed directly by the state. (Andrëka, 1995) Today hospitals are owned by the state, county and city municipalities and various churches. The county and local governments own approximately 61% of the total beds, the central government owns about 16.5% and the clinics and hospitals owned by the Ministry of Health each constitutes 9%, the private sector owns about 2.5%. The Ministry of Defence, Ministry of Internal Affairs, and Ministry of Justice owns 8%. Three percent of the hospital beds owned by various churches. University hospitals, national institutes and hospitals of various ministries belong to the state. Table 2.2 shows the owners of the hospitals.

Fifty percent of the existing hospital beds were created in the past 30 years, most of them (60%-70%) in such a way that additional beds were taken to the wards without additional infrastructure, equipment and staff. In that time the function of the hospital management was to add beds to the wards. The average number of inpatient and acute hospital beds per 10,000 inhabitants in member states of the European Union fell from 88 in 1987 to 71 in 1997. (OECD, 1999) In Hungary this number was 104/10,000 in 1990 and 82/10,000 population in 1998. In Hungary this number contains acute and chronic hospital beds as well (acute beds: 65/10,000 population and 17/10,000 population chronic beds). The rate of hospitalisation in the EU countries is 15% as compared with 22% in Hungary (1993). There are three types of Hungarian inpatient settings categorised on the basis of the level of care they provide: a) top care settings: university hospitals and national institutes; b) medium level settings: county hospitals; and, c) basic level settings: municipal hospitals. (Andréka, 1995)

a) Top care: university hospitals and national institutes

The 5 university hospitals, with around 10,000 beds altogether, provide care for the local population (municipal hospital function), for the county population (county function), provide services as regional centres (regional function), and they also function as national
centres. In addition, of course they provide medical education. Specialised care is provided by national institutions, such as the National Institute for Traumatology, the National Institute for Cardiology etc. They function as national referral centres. The National Institutes are responsible for providing the highest level of medical care in their respective fields, as well as scientific training, and professional guidance. Each medical discipline has its own national institute. These institutes frequently collaborate with university hospitals, together with university hospitals they are supervised by the Ministry of Health.

b) Medium level settings: county hospitals

The backbone of the Hungarian hospital system is made up of 19 county hospitals and the big hospitals in the capital. The 1,500 - 2,000 beds county hospitals have 10-15 different departments with appropriate laboratory and diagnostic equipment (CT and MRI included) and provide services for 250,000-500,000 population in their catchment area. Big district hospitals in the capital have a similar functions. County hospitals provide care for the local population (municipal hospital function), for the county population (county function) and provide certain services in various departments as regional centres (regional hospital function). County hospitals are the leading institutions of medium level care. Some county hospitals function as regional centres. Regional centres serving populations of one to two million inhabitants provide services in for instance cardiac surgery, dialysis, and/or transplantation. These centres are attached to university hospitals and, in some cases, to departments of county hospitals.

c) Basic level settings: municipal hospitals

Having 300-600 beds on the average, municipal hospitals are made up of 4 ‘basic departments’: departments of internal medicine, surgery, paediatrics and obstetrics and gynaecology (OB/GYN). In a number of municipal hospitals there are 2-3 other, so called ‘small-manual’ departments such as ear-nose-throat, ophthalmology, dermatology. The distribution of the municipal hospitals is quite homogenous, with the average distance between them of 15-30 km, and with a catchment area of 50,000 - 100,000 population. These community hospitals provide care for the local population. The stratification of the hospitals according to the a), b) and c) levels is sometimes very unclear. One part of these problems is always caused by the exceptions: in most of the counties there was a competition between big cities (Balassagyarmat, Esztergom, Nagykanizsa) and county seats, and even more, in two counties, municipal hospitals (Gyula, Szentes) legally provide county level hospital services. In some subspecialties the situation is even more bizarre: municipal hospitals in the capital provide national level care (St. László Hospital provides infectology care and Erzsébet Hospital provides toxicology at the national level.) In some cities, hospitals (Sopron, Siófok) have national-level high technology. This phenomenon causes many efficiency problems. The distribution of hospitals by number of hospital beds is shown in the Table 2.4. Hospitals with fewer than 400 beds are called small hospitals.
Hungarian health care in transition...

Table 2.2 Ownership of the Hungarian hospital sector, 1998

<table>
<thead>
<tr>
<th>Hospitals</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospitals belonging to county councils/municipalities (municipal and county hospitals) (+)</td>
<td>123</td>
</tr>
<tr>
<td>Medical University Hospitals (State owned) (o)</td>
<td>5</td>
</tr>
<tr>
<td>National Institutions (State owned) (^)</td>
<td>18</td>
</tr>
<tr>
<td>Hospitals of the Hungarian Rail (State owned) (H)</td>
<td>8</td>
</tr>
<tr>
<td>Church hospitals (B)</td>
<td>3</td>
</tr>
<tr>
<td>Hospitals of the Ministry of Defence (State owned) (&amp;)</td>
<td>7</td>
</tr>
<tr>
<td>Hospital of the Ministry of Internal Affairs (State owned) (&amp;)</td>
<td>1</td>
</tr>
<tr>
<td>Hospitals of the Ministry of Justice (State owned) (&amp;)</td>
<td>2</td>
</tr>
<tr>
<td>Total(#)</td>
<td>167(+)</td>
</tr>
</tbody>
</table>

(+): 52,083 hospital beds in the country and 12,752 in Budapest
(o): 7,977 hospital beds
(^): 6,722 hospital beds
(H): 1,600 hospital beds
(B): 882 hospital beds
(&): all together 2213 hospital beds
(#): In addition in 1993 there were 13 maternity homes, which were closed in 1996-1997.
(o): 84,232 hospital beds, 83,770 beds in use, 462 hospital beds is temporarily ‘closed’ due to renovation or other reasons


Some basic data on hospital care are shown in Table 2.3.

Table 2.3 Hospital care in the Hungarian health care system

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Number of hospital Beds ($)</td>
<td>84,994</td>
<td>97,056</td>
<td>104,686</td>
<td>93,147</td>
<td>93,024</td>
<td>83,485</td>
<td>83,770</td>
</tr>
<tr>
<td>Number of hospital admissions Million/year</td>
<td>1.8</td>
<td>2.0</td>
<td>2.3</td>
<td>2.4</td>
<td>2.5</td>
<td>2.5</td>
<td>2.5</td>
</tr>
<tr>
<td>Number of performed in-patients days (million days)</td>
<td>18.6</td>
<td>21.4</td>
<td>23.6</td>
<td>25.8</td>
<td>25.2</td>
<td>24.3</td>
<td>24.0</td>
</tr>
<tr>
<td>Average length of Stay/ days</td>
<td>14.5</td>
<td>12.4</td>
<td>11.6</td>
<td>10.8</td>
<td>10.4</td>
<td>9.8</td>
<td>9.5</td>
</tr>
<tr>
<td>Active</td>
<td>?</td>
<td>?</td>
<td>9.9</td>
<td>?</td>
<td>8.0</td>
<td>?</td>
<td>7.8</td>
</tr>
</tbody>
</table>

($) In 1998, the number of hospital beds per 1,000 population: 82.0; number of inpatient days: 24 million; total hospital reimbursement: 186,392.2 million HUF; the reimbursement of an average inpatient case: 72,700 HUF (average acute case: 75,800 HUF); reimbursement per one average hospital day 7,600 HUF (acute: 8,800 HUF, chronic 3,400 HUF)

? - data is not available

The distribution of acute and chronic beds is also a relevant characteristic of the health care system. Chronic beds are located both in the county (medium level settings) and municipal (basic level settings) hospitals. Because of financial incentives hospitals were interested to increase their acute care departments instead of chronic care departments. This unbalanced development is causing several efficiency problems. According to a survey published in 1995, 30-35% of the hospital beds were occupied by chronic patients or patients with social welfare indication. According to the same survey, 12-15% of these hospital patients could be treated on an outpatient basis. (Illés, Mersány, Goschinné Manno 1995)

Any discussion about the hospital sector will lead to the recognition of the uncertainty of fundamental information, for example what is the answer for this basic question: How many hospital beds do we really have? As Goschinné stated: “The poor quality of information supply can be attributed to two problems: expected or assumed advantages gained by the data supplier in connection with the results of providing data on the one hand, and the use of unclear concepts on the other. Good examples to this are bed numbers and data on performance in inpatient care. Bed number: no one really knows how many beds there are in the country, which are used in inpatient care. In the yearbook of the Central Statistical Office (CSO) in 1993, there were 100,400 beds, in the financing contracts with the National Health Insurance Fund Administration (OEP) 104,600 beds were contracted, and in spite of the alleged continuous closing of beds, GYÖGYINFOK, the Centre of Healthcare Information reported that on December 31, 1994 there were 105,700 beds. Performance data: the institutions themselves admit, that performance data are biased. There are two trends in deviation from reality: to get as many weight numbers as possible, and to increase the bed occupancy rate.” (Goschinné Manno, 1995)

### Table 2.4 Hospital distribution by number of hospital beds, 1995

<table>
<thead>
<tr>
<th>Number of hospital beds</th>
<th>Number of hospitals</th>
<th>Hospital beds %</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt;200 maternity centres and specialised hospitals are not included</td>
<td>31</td>
<td>3.7</td>
</tr>
<tr>
<td>200-600</td>
<td>66</td>
<td>5.8</td>
</tr>
<tr>
<td>600-1200</td>
<td>44</td>
<td>43.2</td>
</tr>
<tr>
<td>1200-2000</td>
<td>20</td>
<td>37.6</td>
</tr>
<tr>
<td>&lt;2000</td>
<td>6</td>
<td>9.7</td>
</tr>
</tbody>
</table>

### Table 2.5 Distribution of active and chronic beds, 1970-1995

<table>
<thead>
<tr>
<th>Years</th>
<th>Acute hospital beds %</th>
<th>Chronic hospital beds %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1970</td>
<td>70</td>
<td>30</td>
</tr>
<tr>
<td>1985</td>
<td>73</td>
<td>27</td>
</tr>
<tr>
<td>1993(2)</td>
<td>81</td>
<td>19</td>
</tr>
<tr>
<td>1994</td>
<td>85</td>
<td>15</td>
</tr>
<tr>
<td>1995</td>
<td>85</td>
<td>15</td>
</tr>
<tr>
<td>1998</td>
<td>79 (66,223 beds)</td>
<td>21 (17,547 beds)</td>
</tr>
</tbody>
</table>

(2) Hospital reimbursement mechanism changed from global budget to DRGs.

In the early 90s, the general management theory was replaced by consensus management in the hospitals among key players such as medical, nursing and finance directors. As the functioning of this ‘triangle’ proved to be very insufficient, management philosophy turned back to general management again. Today in the majority of the hospitals there are one general director (CEO) and three deputy directors: medical director, nursing director and finance director.

2.4.1.1 Outpatient care

Outpatient care is provided by hospital owned outpatient-clinics. In 1998, there were 261 outpatient institutions in Hungary. Out-patients are provided after a referral for a consultation is requested by a primary care physician, another specialist, or, in some cases the patient. Out-patient services include: paediatric care, gynaecology care, sports health care, venereal disease services, pulmonology, neurology and alcohol and drug care. It is difficult to count exactly how many physicians work in the outpatient services. Most often they are employed part time only the number of the working hours and of patients seen is known. According to the Statistical Yearbook (Ministry of Welfare, 1985) between 1970-1985 the capacity of the out-patient services measured in ‘physician consulting hours worked’ in the outpatient departments went up by 20.7%, at the same time the number of out-patients grew by 30.7%.

2.4.2 Functioning

Admission to all facilities is predicated on a referral from a physician unless the patient requires emergency admission due to the nature of the presenting condition. Admission to municipal and county hospitals is allowed based on family physician’s referral. Admission to regional and national institutes is to be following a specialist’s referral. Patients usually need to be referred to hospital by the general (family) practitioner. Due to the recent health policy changes less and less patients are allowed to access the ambulatory services directly, except to see an ENT specialist, and for breast cancer screening and treatment. In 1994, the hospital capacity was 104,657 beds, the average bed occupancy rate was 67.3%, and the average LOS (length of stay) was 11.05 days. The average LOS in intensive care units was 5.54 days, and in the maternity departments it stood at 5.9 days. Seen from another perspective: 94% of the hospitals beds had less than 80% occupancy rate, and what is even more interesting there were 14,000 hospital beds where this rate was less than 60%. It seem fair to say that more than 30% of the total hospital capacity was not used in this given period. (Illés, Mersány, and Goschiné Mannó, 1995) The occupancy rate was the lowest in departments of paediatrics (51%), obstetrics-gynaecology (58%), whereas the highest rates were seen in departments of pulmonology (75%) and rheumatology (84%).

In 1995 the National Health Insurance Fund published the results of its first evaluation of the hospitals’ bed capacity. According to these figures, which might well be underestimates, 35,700 beds are redundant out of the currently functioning 104,600 beds (at the end of 1994). Calculating with the current doctor/bed ratio of 13.6 doctors per 100 beds, this downsizing might result in 4,800 doctors becoming redundant at their current workplace.
The National Health Insurance Fund based its estimates on the following:
- between July 1, 1993 and June 30, 1994 the bed occupancy rate was 67.3%,
- 25-30% of the hospitalised patients was referred to the hospitals because of social indications and not medical reasons,
- 270,000 hospitalised patients could have been treated on an outpatient basis rather than inpatients. For example, DRG 369 M - menstruation complaints and disorders - was reported 47,700 times during this period, and 30% of these patients were treated in hospitals within one year, and the costs amounted 1.2 billion HUF.
- the length of stay in hospitals which is 11.05 days on the average (acute cases 9.7 days, chronic cases 26.1 days)

The redundancy rate of the hospital beds varies from county to county, but obstetrics-gynaecology capacity has to be decreased in all counties. The currently available beds should be decreased by 26.7% in departments of obstetrics-gynaecology, by 35% in departments of paediatrics and by 37% in surgery. (Élő, 1995) But downsizing is difficult, since the large amount of capital required to enter the health care system is not only a barrier to entry, but also a barrier to exit, since much of the initial investment will be unrecoverable on leaving the health care system. It is widely recognised that capacity is an inherent feature of health care provision. (Shackley and Healey, 1993) The number of hospital beds was decreased by 10% (about 10,000 beds) and the predicted savings were 3 billion HUF. Finally it became clear, and was also published later, that no savings at all were made, because hospitals were able to increase admissions by 15%.

In Hungary day-care is practically not existing probably because hospitals have very strong financial incentives to hospitalise as many patients as possible. Day surgery is in its infancy in Hungary. The Ministerial Decree 9/1993 (IV/2) provides a list of 130 treatments which can be provided in inpatient units in the form of day surgery. Day surgery provided by inpatient units is remunerated on the basis of the DRG system, but the lowest base rate have to be used. Hospitals and surgeons have a strong financial incentives against to set up and maintain day surgery services.

2.4.3 Hospital Financing

The Hungarian health care system was financed by general taxation till 1990. A health care budget was allocated to counties by capitation through the county councils. Hospitals were financed by global budgets. In 1985, according to the Yearbook of Health Statistics (1986) two thirds of the health care budget (65.7%) were spent on hospitals and 10.6% on other inpatient institutions (excluding churches, but including social care institutions). Twelve per cent of the health care budget was spent on out-patient care and 11.6% on primary health care. In reality, however, the spending on primary health care was not higher than 5-6%, because the remainder of the primary health care budget was spent on the occupational health care system. (i.e. doctors working in major workplaces and having the same rights and responsibilities as the 'real' district general practitioners. They were involved in occupational health as well, but only to a very, very slight extent.) In acute care settings hospital financing system changed from the system based on historical budgets, which was largely determined by the number of beds and the negotiation
skills of the hospital management, to a prospective payment system called DRGs. There is no DRG financing for chronic beds these are financed through different source, on per diem basis. The new system was introduced in 1992. But, in that year, the system was only used for documentation and pilot purposes rather than for financing. The amount of money the hospitals received was still based on the old system i.e. the number of beds. In September 1993, the Ministry of Welfare and the National Health Insurance Fund Administration put into operation the prospective payment system (PPS) based on diagnosis-related groups (DRGs). This new system established prospective reimbursement rates for 440 diagnosis related groups. These rates were developed from the historical global budget of the hospitals. The DRG system classifies patients according to the patient’s principal diagnosis, the principal surgical procedure if any, complications and/or co-morbidity. As a result of this radical change in payment for hospital care, 21 hospitals out of the 166 Hungarian formerly state-owned hospitals had a serious financial deficit, 3 out of these 21 were in bankruptcy. Others were struggling to remain solvent, and very few of them were able to have a surplus.

There are many reasons for which hospitals might prosper or face a financial fiasco under the prospective payment system. The principal reasons are:

- there were (and in 1999 still there are) major differences in reimbursement received from the National Health Insurance Fund Administration in the very same DRG categories among hospitals. The hospital specific rates for standard cases were set up on the basis of the total hospital expenditure subdivided by the total number of patients discharged in 1992. Hospitals with higher resource utilisation per standard case discharged receive significantly higher reimbursement under PPS.
- the ‘national adjusting factor’ discriminate rural areas, medium and small hospitals,
- lack of sound management to reduce overhead expenses and excess resource utilisation that would not be reimbursed (and in 2000 it is still lacking).

In 1993 hospitals were first reimbursed according to the new system. Deviations in budgets were compensated for according to the previous budget, to avoid hospitals having to face large deviations from their customary turnover. In 1999, these corrections are still in operation. So, in practice, the new system (i.e. DRG) has not yet been put into effect, since the financial consequences are yet to be applied rigorously. As Kroneman and Zee (1997) pointed out: “The proposed gradual adaptation in practice was yet to start; budgets were still based on historical budgets. There also appeared to be a major control problems; there was no check between patient’s actual illness and declared illness. Hospitals were therefore motivated to present the patient’s illness as seriously as possible.” Hospitals are financed through various sources:

- running cost are covered by National Health Insurance Fund Administration through DRGs, - maintenance, restoration and creation of new buildings, purchasing new equipment (X-Ray, CAT Scanner, MRI for example) or even cars are financed by the owners (municipalities and state). This budget is in general 3 to 5 per cent of the total hospital budget.
- hospitals can apply for a limited support to finance specific projects.

Because of the perverse financial incentives induced by the DRG financing mechanism, the volume of different services provided increased dramatically. In 1994, for instance, there
were 86 million laboratory tests provided, 116 million tests in 1995 this number reached 126 million in 1998. The number of births is significantly decreasing with 149,673 live births in 1980, 112,054 live births in 1995 and 97,500 live births in 1998. But in contrast, labour/delivery and related cases as well as neonatal cases are steadily increasing. Hypertension treatment volumes also increased. More and more people are involved into treatment with mild hypertension although there is no scientific evidence to show that the treatment of mild hypertension has any benefit for the patients. (SBU, 1998) Nagy (1995) pointed out that many patients were referred to hospitals who could be treated in the primary care or outpatient settings, e.g. those with essential hypertension. In 1994 there were 50,000 hospitalisations because of essential hypertension (5/1,000 adult population/year). The cost of these 50,000 cases amounted to 1.6 billion HUF; 50% was the direct cost of drugs, diagnostics and salary of staff, the other 50% covered the hotel services and nursing care. It can be seen that at least 50% of these expenses could have been saved if the patients had been treated in the primary care or outpatient settings. (Nagy, 1995) In 1994 the 20 most frequent DRG categories accounted for 30% of the hospitalised cases. The most frequent cases in rank order were: a) labour and related cases; b) neonatal cases, induced abortion; c) hypertension; d) back-pain problems; e) chronic bronchitis; f) angina pectoris; g) ischemic brain vessel diseases; h) atherosclerosis; i) addictions. These cases cost 2.5 billion HUF out of the 86 billion HUF that was spent on acute care in 1994. (Nagy, 1995)

There is a great geographical variation in various DRG categories. Hospitalisation due to hypertension for example was the highest (6.5/1,000 population/year) in Budapest and the lowest in Csongrâd county (2.9/1,000 population/year), in 1997. (Yearbook of Health Care, 1998) DRG 'creep' (tendency to put treatment in a higher-value DRG group: e.g. all births are complicated in Hungary, no simple appendectomies, etc.) is notable – some software have been introduced to enable hospitals to maximise DRG payments. The value of DRG points is going down because the total hospital budget is limited, it is very difficult for hospitals to plan ahead, as they do not know how much they will get for each treatment they administer. Incentives to increase output artificially is significant. And finally bad outcomes has no direct or indirect consequences on the level of revenues. Most often the actual level of quality is not known as well as the actual cost because of the lack of case specific cost accounting.

The vast majority of medical doctors and medical staff are salaried. The salaries of physicians, and nurses are regulated at the national level, with no significant differences between regions or hospitals. Salaries are generally based on seniority, position and qualification. Under-the-counter payments or gratitude money, are a special part of the physician's income. According to a group of experts 30%-50 per cent of the total manpower expenses go through this channel and add to the physicians monthly income (at the national level per year). Around 8 to 12% of the physicians receive additional under-the-counter payment (UCP) which might sometimes be significantly higher than their salaries. (Ádám, 1986, Ádám, 1989, Antal, 1992, Ajkay, 1994) As a result of this payment, in many fields of the health care system there is an actual out-of-pocket or co-payment system. Financial incentives created by the PPS are significantly modified by the UCP.
2.4.4 Quality management

There is no accreditation procedure in Hungary. In 1996, minimum standards were introduced on the level of equipment, the level of staffing, but no minimum standards of outcome have been set up. Many hospitals introduced quality management system on their own initiative, mainly ISO 9001 and ISO 9002 standards were implemented. Quality issues will be further discussed in Chapter 4.

2.5 Primary health care, PHC (*)

The specialisation in general practice dates back to 1974. Prior to this date, there was a distinct separation between the organisational structure of outpatient and inpatient care, with outpatient care delivered in two forms: primary health care by general practitioners and specialised outpatient clinics. From 1975, as a result of the introduction of “Integrated and Progressive Patient Care”, various health care settings in a given geographical area were integrated into one organisational unit directed by the management of local hospitals. Health care settings in the hospital’s catchment area e.g. outpatient care, general practices, were integrated into a hospital-polyclinic unit. The out-patient and primary care sector of the hospitals were headed by one of deputy directors of the hospital. In rural areas primary health care was run by the local municipality, headed by the Department of Education, Sports and Health of the municipality. As a consequence of the health care reforms (1992), primary health care became separated again and operates independently from the hospitals. There were some important legislative actions in the early 90s related to GPs. In 1992, the Government Decree related to the Primary Health Care Act reoriented the health care sector towards more cost-effective and high quality basic care. In 1992 a Ministerial Decree defined the responsibilities of family physicians, and established the National Institute for Family Practice. Emphasis is placed on prevention in the 2% role of the family physician. The change over to the term “family physician” (háziorvos) from the previous “district practitioner” (körzetiorvos) is intended to stress the notion of prevention, and the continuity of a good doctor-patient relationship (**). New educational programmes are intended to fulfil needs in undergraduate, postgraduate, and continuing education for family physicians. The fundamental philosophy underlying family practice is based on the following elements: a) the family is the most important social unit from the point of view of supporting health promotion; b) the family physician is to be the supporter of this social unit; c) the family physician is to be a provider of continuous care for all family members, d) the family physician is to be the first detector of risk and disease, based on information gathered alongside the continuum of care; e) the family physician forms the basis of the health care system and is to integrate the findings and performance of different specialities and level of care; f) the family physician is to be an integrative link between primary health care and specialist care.

(*) Definition of Primary Health Care (WHO): “Essential care based practical, scientifically sound and acceptable methods and technology made universally available to individuals and families in the community through their full participation and at a cost the community and the country can afford and maintain at every stage of their development, in the spirit of self reliance and self determination.”

(**) The terms of ‘family physician’ (háziorvos), ‘district practitioner’ (körzetiorvos) and ‘general practitioner’ are synonyms - in short: GP.
2.5.1 Structure

Primary health care (PHC) includes: primary medical care (PMC) and public health. Primary health care contains: general practitioner (named family doctor - ‘háziorvos’, after 1992), district paediatrician, district gynaecologists, occupational health physician, school physician, dentist, district visiting nurses, maternity and child nurses, and home care nurses. (Allied health professionals are not part of the primary health care services.) Physicians working in the industrial settings were formerly not part of the primary health care, but they had the same responsibilities and rights as the general practitioners. They treated the employees and their family members, in and out of the industrial settings, had the right to put them on the sick list. Between 1970-1985, the number of physicians and surgeons increased by 41.4%, and that of general practitioners by 17%. The number of district paediatricians increased by 230%, the number of physicians working in the industrial settings increased by 220%.

Altogether the development in terms of number of physicians in the primary care settings went up by 70%. (Between 1970 and 1993 the number of physicians and surgeons expanded by 77.5%, the number of general practitioners increased by 50.7%.)

Some relevant data are shown in Table 2.6.

Table 2.6 The number and distribution of physicians among primary health care settings between 1970-1998

<table>
<thead>
<tr>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>All working physician</td>
<td>20,877</td>
<td>29,524</td>
<td>34,634</td>
<td>35,026</td>
<td>39,446</td>
<td>40,115</td>
</tr>
<tr>
<td>Family physicians</td>
<td>3,646</td>
<td>467</td>
<td>5,011</td>
<td>5,086</td>
<td>5,157</td>
<td>5,210</td>
</tr>
<tr>
<td>District paediatrician (DP) +</td>
<td>589</td>
<td>127</td>
<td>1,527</td>
<td>1,340</td>
<td>1,595</td>
<td>1,601</td>
</tr>
<tr>
<td>School physician (SP)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Occupational health physician/Factory general practitioner</td>
<td>574</td>
<td>173</td>
<td>1,507 (^)</td>
<td>3,125</td>
<td>3,335</td>
<td>3,425</td>
</tr>
<tr>
<td>Total number of primary care physicians</td>
<td>4,809</td>
<td>6,908</td>
<td>7,924 FT</td>
<td>9,551</td>
<td>9,991</td>
<td>10,236</td>
</tr>
<tr>
<td>Number of population/primary care physician</td>
<td>2,153</td>
<td>1,540</td>
<td>1,520</td>
<td>1,450</td>
<td>1,350</td>
<td>1,330</td>
</tr>
<tr>
<td>Average annual consultation per family doctor (@)</td>
<td>?</td>
<td>?</td>
<td>?</td>
<td>9,300</td>
<td>9,600</td>
<td>9,700</td>
</tr>
<tr>
<td>Mother and child care nurses</td>
<td>?</td>
<td>?</td>
<td>?</td>
<td>4,873</td>
<td>4,754</td>
<td>4,745</td>
</tr>
<tr>
<td>Home care nurses (o)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>?</td>
<td>?</td>
<td>?</td>
</tr>
</tbody>
</table>

(^) 3,114 physicians out of the 3,707 school physicians are employed in part time
(@) 793 physicians are full time and 714 physicians are part time employed
FT - full time
PT - part time

(®) Average annual consultation per family doctor consists of three elements: 1) consultation in the family physicians' surgery (e.g. in 1998, 8677 patients at average); 2) home visits (e.g. in 1998, 390 patients at average per practitioner); and a so-called continuous care visits (in 1998, 660 patients per practitioners) - altogether 9727 patients at average per practitioners)
(o) number is not available

If we use only the number of the GPs as denominator we can see that the number of population per GP was 2,726 in 1970, 2,409 in 1985, 1,907 in 1995, 1,897 in 1997 and 1,836 at average in 1998. If we use the sum of general practitioners and district paediatricians as denominator the result will be different. But if we take all primary care physicians as denominator we can see that the number of population per physician is around 1,000 per physician, or less. (There is some difficulty because some of the part-time physicians work just some hours while others are part-time employed up to 50-70% of their working hours.) What makes the calculation even more difficult is the fact that primary health care physicians practising in the health care services of the Hungarian Rail, of the Ministry of Internal Affairs, the Ministry of Defence are not included in this statistics or these numbers were not published correctly. Although, not called primary health care physician, these doctors in fact do primary care physician’s work. Data from the Hungarian Euro-Prospet programme show that GPs surgeries are very often crowded, with long waiting times and not much time for health promotion and disease prevention. Looking at the statistics, one wonders about the reasons of all this happening. (This will be further discussed in Chapter 9)

There are two other important players can be found in the primary health care such as: the network of maternity and child nurses and home care. Maternity and child nurses operate in close relationship but independently from the family practitioners. This service is staffed by nurses; on 1998 there were almost 4,800 nurses working in this capacity. They are taking care of pregnant women and infants. The childhood immunisation rate in Hungary is (traditionally) very high, over 97% in every year, thanks for the maternity and child nurses in a large extent. Home care is financed on contract basis by Health Insurance Fund Administration. Contracts are signed for a set number of visits per financial year. Home care includes: short term specialist home care; specialist home care for chronic cases; and special therapeutic services. Home care services are available upon referral of the family doctors, and provided mainly by home health agencies. In Hungary in 1998 there were 341 home care providers and they provided 695 thousand home care visits. The number of home care nurses and the number of patients received home care services are not known.

2.5.2 Functioning

The characteristic feature of primary care are: continuous; integral; person centred; family/community orientation; all health problems oriented. Individuals are free to chose their primary care physicians, and have to be registered on a GP’s list in their neighbourhood. Solo practice is the only type of practice, with no shared or group practice. According to the study carried out by the author and collaborators in two counties in 1996, the physical conditions and the geographical location are serious limitations, among others, of the creation of group practices. (Gulácsi and Kovács, 1997) About 15% to 20% of the general practitioners could organise a three or four physician group practices. The geographical location of the practice and the distribution of the population in a rural area makes this kind of organisational change difficult. An important feature of the Hungarian heath care delivery system is that there is no sharp distinction between general practitioners and medical specialists. Typically general practitioners (family physicians) are specialists who used to work in hospitals, but then left hospitals soon after they became board-certified doctors. Over 60% of them have specialisation in internal diseases, surgery, etc. Most of
them remained surgical or medical specialists working in general practice. GPs have access to unstandardised machinery (ECG, lab. equipment) and although there is no incentive to perform tests, it probably would be undesirable if they did so. The main reason for this is the lack of validity of the data for use outside a specific practice. From the early 70’s there was a move in health policy to have an increasing number of patients treated at the primary health care level and on an ambulatory basis, with a concomitant decrease in the number of hospital admissions. However, this goal was never met. Between 1970 and 1985 the patient workload in primary health care decreased by 30%-35%, but at the same time the number of patients referred to hospitals increased from 5.7% (1970) to 6.8% (1985). Significant variations were also seen. In Budapest and in the cities the rate of patients referred to hospitals was a double the rate found in villages. In the period between 1970 and 1993 the number of patients in the ambulatory care departments increased by 11.5%, and in the same time the number of patients in primary health care decreased by 5.5%. In contrast, the number of hospital admissions increased by 31%. (Goschinné Manno, 1995)

There is no financial incentive in general practice to deliver comprehensive and complete care for the patients. As the income of the practice is not related to the numbers of patients seen and the workload, the PHC doctor has strong financial incentives to refer patients to hospital. This, by the way, constitutes the basis of a good relationship with this hospital-based peers, which the PHC doctor is in great need of. (As hospitals are reimbursed on a DRG basis, it is their best interest to deliver as much care as possible on an ambulatory basis and also to hospitalise as many patients as possible.) One relevant example: in 1993 the number of patients referred to the laboratory diagnostics of the hospitals increased by 20-25%. (The DRG financing mechanism was introduced in 1993.) The majority of GPs have some kind of laboratory, which in many cases is quite well equipped, however, the health insurance fund does not finance either the running costs or the depreciation costs of these laboratories. Furthermore, the health insurance fund does not provide finances for the purchase of single-used or other laboratory supplies, and should the GP purchase these supplies from his own pocket, cannot deduct these costs from his tax. What is more, the insurance fund does not reimburse the costs related to the use of these devices and the depreciation costs, thus doctors have a clear financial incentive to refer their patients to hospital. The health insurance fund maintains that some of the examinations that can be carried out within the PHC setting are contained in the practice money. However, there are no professional guidelines nor external audit (e.g. by the insurance fund), therefore the most spectacular development has occurred in the quality of the cars used by the GPs, which by now has attained, or at least has come close to, the level in the most developed economies.

Services provided are limited in scope to family physicians services such as basic child and adult diagnoses. Family physicians are expected to be the initial point of contact for patients. They provide assessment, initial diagnosis, treatments, and referrals as medically necessary. The content of services offered has not changed radically with the reform. They offer mainly prescriptions and referral services due to lack of equipment (or many time due to the lack of financial interest to use the available ones), over specialised medical education and low competency of primary care nurses. The current reimbursement system (capitation) does not take account of preventive and screening services. Family doctors often refer patients to higher levels of care, due to their limited training and to financial
incentives (capitation) to do so. In 1996, there were over 3,260,000 family doctor’s referrals to specialists for consultations, and over 4,345,000 referrals to specialists for services, such as EKG, X-ray and other.

2.5.3 Financing

According to the Yearbook 1995 of Health Care Statistics, 65.7% of the total health care expenditure, excluding churches, including homes for elderly people (social home) was spent on hospitals, university hospitals, 10.6% on other health care organisations. Outpatient services received 9%, while primary health care got 14.6% from the total health care budget. According to the Yearbook of the National Health Insurance Fund Administration (1997) in 1996 the total primary health care spending was equivalent to 16% of non-pharmaceutical expenditure. Primary health care financing changed dramatically in the early 90s, and contracts between providers and financing organisations became very important. The provider of the primary health care services (municipalities, entrepreneur GPs or local GP associations) contracts with the local branch of the Health Insurance Fund. The Health Insurance Fund Administration might contract with service providers if at least 200 patients are registered on the GP’s list. The average list size of GPs was 1,600 in 1997, and the optimal practice size to be attained in 3 years is 1,500 according to the plan of the Ministry of Health.

There are no patient’s co-payments in the primary health care field, but unofficial payments to doctors are widespread.

Primary health care providers (family physicians) can be grouped into two categories:
- **GPs employed by the local municipality**: General practitioners (family physicians), nurses and technicians are employed and salaried by the municipality, and the practice belongs to municipality. Maintenance and reconstruction costs fall to the municipality. The municipality is responsible for buying the equipment which is contained within the ‘Basic List of Equipment’ in primary health care settings.
- **Entrepreneur GPs**: The practice (not the capital assets) belongs to the GPs. Nurses, technicians and clerks are employed and salaried by the GPs. Maintenance and reconstruction costs fall to the municipality. The municipality is responsible for buying the equipment which is contained within the ‘Basic List of Equipment’ in primary health care settings. The practice income of the entrepreneur GP comes from five different sources: 1) variable practice income (related to points); 2) fixed practice income; 3) area supplementary income; 4) Computer bonus; and 5) Specialisation benefit.

2.5.4 Quality management

Primary health care is among the most important areas of quality improvement but the complexity and multiple dimensions of PHC require lot of attentions commitment and involvement of PHC professionals. The most important dimensions of the quality of care in PHC are: access and equity; technical skills; communication skills; practice management (administration, information up to date, consultation arrangement); cost of care (using generics, rational patient referral, etc.). Numerous projects were conducted in the 90s in primary health care in order to improve the quality of primary health care. In 1992 the
European Union Phare programme was launched. The funds from international assistance programmes were small in relation to the health sector budget but played an important catalyst role. Assistance programmes were instrumental in providing training for key practitioners of family medicine who were to form the core for the future development of this speciality. Support was provided for the establishment of the College of Family Physicians and the National Institute of Family Practice which was transformed to National Institute of Primary Health Care after a few years of existence. Various projects were financed by international assistance programme, under the leadership of van der Velden (NIVEL) such as:

- Morbidity Registration Project, 1996, Phare,
- Prevention in Primary Health Care, Phare, 1996, and
- Local Consensus on Prescribing Antibiotics, Primary Health Care Project, Phare, 1997
- Practice Management Study: assessment of workload of PHC professionals, Phare, 1997
- Home Care After Stroke, Phare, 1997 (about 20 home care nurses trained),
- Training for Primary Care researchers, 1997, Phare (about 25 professionals received 2 weeks training, and small scale research was performed).

The impact of the Phare programme lies in the fact that policymakers and professionals in Hungary may be more aware of the importance of primary care and the way it works. The most important project in the Phare programme was an automated morbidity registration system conducted in 38 practices within a year’s time. Although, data collection and processing were successful the analysis of the data was done at a very basic level. Incidence and prevalence figures were created on morbidity of various diseases, as one of the important results of the programme, but unfortunately, due to the unsolved problems around the National Institute of Family Practice, these results and figures were never made available for the public. The draft (unofficial) report on automated morbidity registration in 38 primary health care practices was completed at 1996. In addition, a small programme on guideline development in a rural area was successfully implemented and exported to other areas in Hungary. There were several training courses as well as part of the Phare programme for instance, a training for home care nurses on the advanced patient care after stroke had been a success and 20 people were trained in primary care research. The quality of PHC will be further discussed in Chapter 9 entitled Quality of primary health care; physicians’ and patients’ reports on system performance.

2.6 Public health

The characteristic features of public health: disease prevention/health promotion; programmatic scope; population-based; planning monitoring and evaluation. The National Public Health and Medical Officers Service (Állami Népegészségügyi és Tiszteletviső Szolgálat - ÁNTSZ) was created (enactment of XI Act of 1991 on ÁNTSZ) as a state agency to assume the responsibilities of the central government in the fields of prevention and health promotion. This was intended to provide Hungary with an up-to-date state public health service, carrying major responsibilities for epidemiology, hygiene, health promotion (such as anti smoking, drug and alcohol campaign, changing lifestyle, etc.) prevention (such as vaccination), environmental and work safetiness, and the quality of medical care. Unfortunately, the legislative intentions remain incompletely fulfilled. A consensus has since developed
among key decision makers, within and outside the Service, that a major renewal of ÁNTSZ will be required, including any necessary changes to current legislation, if the state is to be able to fulfil its responsibilities to the public for providing modern, effective and efficient public health services, equally proficient in all aspects of both 'old' and 'new' public health. The key issues which concern ÁNTSZ fall into the following main categories:

a) the poor state of health of the Hungarian population, particularly due to the huge shift which has taken place towards chronic non-communicable diseases;

b) the changing context of health in Central and Eastern Europe, for example: 1) transformation of the structures, patterns and products of manufacturing, distribution and consumption, with the shift toward a consumer society, 2) major movements of population (tourism, refugees, guest-workers etc.), continuing pollution of the physical environment, 3) recrudescence of communicable diseases, 4) increased threats resulting from the liberalisation of trade and tourism, e.g. from smuggling of alcohol and tobacco, illegal drugs, 5) unemployment and poverty for many people, overwork for others, 6) deteriorating conditions for physical recreation;

c) the slow and, in cases, inadequate overall response of Hungarian society and of many of its institutions to this situation;

d) the enormous scope of responsibilities of ÁNTSZ, and the difficulties of the service to discharge them adequately;

e) the role confusion and lack of co-ordination with one another, and with ÁNTSZ, of the other agencies with key responsibilities for public health services;

f) the unclear definition of ÁNTSZ in policy making and command, and (ii) the procedures between it and the Ministry;

g) the requirements and challenges posed by European Union accession, including the need to re-examine and modify many well used concepts and practices.

According to XI Act of 1991, ÁNTSZ has the following responsibilities under its hygienic, epidemic and health promotion and disease prevention tasks (jointly described as public health which was then introduced into the Hungarian terminology): Continuous monitoring, evaluation and publication of the health status of the population (including nutrition patterns of the population; operation of the reporting system {surveillance} of communicable and non-communicable diseases and epidemiological processing of data);

a) Continuous monitoring of the status, and effect on the health of the population, of physical, chemical, biological and psychosocial factors of natural, residential, workplace and social environment (including food hygiene, environmental health, occupational health, radiation);

b) Scientific foundation of the public health standards and criteria of the prevention of environmental hazards and health damages;

c) Inspection and enforcement of hygienic and epidemic requirements and supervision of the effectiveness of such requirements;

d) Direction, co-ordination and participation in the implementation of tasks and programmes for the prevention of diseases widely affecting the population, as well as promotion of the conscious and active attitude of the population toward health promotion and disease prevention;

e) Health administration and co-ordination tasks.
This huge range of activities is undertaken by a three tier organisational structure. It comprises:

a) First tier: 114 town and 22 district (capital) institutes. At this level the basic tasks are undertaken. These institutes are in close relations with the local governments and with the population;
b) The middle tier of 19 county and 1 capital institutes with laboratories;
c) The Office of the Chief Medical Officer.

The two National Centres, which were founded in 1997 to cluster the ÁNTSZ based national institutes, also belong to the top tier: a) National Centre of Public Health comprising: National Institute of Occupational Health, National Institute of Chemical Safety, National Research Institute of Radiobiology and Radiohygiene, National Institute of Food Hygiene and Nutrition, National Institute of Environmental Health; and b) National Centre of Epidemiology.

### 2.7 Informal care

There are various informal care activities in Hungary, the most important ones are: a) OTC market; b) journal articles, c) TV and other health related information from non-professionals; and d) internet.

a) Self-care, family care, support groups

Self-care, family care, and support group involvement are the most important part of informal care, and maybe among the most important part of all care. It would be very relevant for health policy setting purposes to know how much can be expected from families and support groups to care for their relative/related patients and it becomes a crucial issue also for planning health care services. It includes socio-economic and cultural developments. If, for instance, divorce rate will increase the possibility and willingness of caring for relatives might go down with all consequences for institutional care. In the near future significantly more attention has to be paid on planning and improving the capacity of this part of care, because it is the largest and growing part of health care which, in many instances, proved to be the most effective and cost-effective.

b) Market of OTCs

The over-the-counter (OTC) market has grown rapidly, in both volume and value, due to the price increases of prescription medicines and the introduction of new OTC drugs on market. OTC accounted for around 15% of drug sales in 1997. (NERA, 1997) This cost-sharing hardly reduces drug consumption but mainly shifts the financial burden to the patients.

c) Journal articles

Almost all leading journals have periodical health and healthy lifestyles related supplements and they publish a large number of articles on this topic on a daily/weekly basis. The reliability and validity of these articles vary to a great extent.
d) TV and other health related information from non-professionals

Health and healthy lifestyles related programmes of the various TV channels are surprisingly low, almost non-existing. A large number of drug advertisements is shown on TV. The state does not finance prevention and promotion TV programmes.

e) Internet

There are two major internet providers in this fields: Házipatika, egészségről interneten (Home chemistry in Internet): http://www.hazipatika.com and Telemedicina: http://www.futuris.hu. In 1999, some ten thousand people visited these web sites, but the tendency is rapidly growing. Information what is available via Internet is a special mix of health promotion, useful information about drugs and promotion activities from pharmaceutical companies. Greater public education would be needed in many areas, for instance, education about the effects of antibiotics, hormone replacement therapy, screening, prevention of various diseases and healthy lifestyles.

2.8 The most important problem areas of the Hungarian health care system

Improving effectiveness and efficiency is among the main targets in Hungary today. In order to set the target to be achieved one should have to have a clear understanding of what is the real problem of the Hungarian health care system. Targets are becoming increasingly important in Hungary for the government, the financing organisations, providers, and for the population alike. Targets must be meaningful and achievable. Choosing an unworkable target no matter how well-intentioned, will not achieve the desired results.

The crucial problems relate to the little knowledge available on the outcome and cost of the health care and little monitoring on behalf of the public. The health care system might not be responding to the needs of the population, partly because these needs have not been assessed yet. Very little attention has been paid on outcomes in health care, therefore the consequences of financial investments in terms of the population’s health status are most frequently not known. The health care system does not operate under the framework of rational health policy, which means that scarce health care resources might be mis-allocated. Clinical decision making is very often not based on scientific evidence and not assisted by guidelines. The quality of medical and nursing documentation does provide a good basis for management, both in organisation and at the departmental level, to assist its operation. On top of all things, the current financial system creates perverse incentives to report non-reliable data. There is no consensus among the key players (providers, financing organisations, purchasers, regulators and customers), acting as very weak interest groups, about what should be done in order to address these problems. Also, the shortage of resources seems to be stabilised for the coming years, while at the same time it seems fair to foresee a growing demand for more and improved health care provision. In this situation not only the problem solving is difficult but even to recognise the existence and extension burden of the problems. (Examples to show these are given in the ‘Quality Assurance Studies’ part of the thesis.) At the same time, partly as consequence of these problems, the capacity for change of the rigid health care system is limited, and its development is heavily hampered by the existence of the under the counter payment.
2.8.1 Low quality and efficiency

There have been very few experiments in the Hungarian health care system, except in the field of communicable diseases and mother and child health care, to show positive examples of effective good quality services since the 60's and 70's. Ineffective, inefficient and low quality care accompanied with poor equity was not recognised till the early 90's in Hungary and in many instances has not been realised even today. The health care system mainly achieved the results that it was designed to achieve in the past decades. Now effectiveness and efficiency of care have to be proved and improved through the implementation of quality assurance among others. This improvement requires clear goals, changes and knowledge.

An expert group of World Bank (1991) Health Project Mission summarised the main problems of the Hungarian health care system in the following way: "Short life expectancy, high infant mortality rates and other indicators of poor health status compared with western countries is a serious indictment of the low performance of the existing Hungarian health system. There is a considerable disillusionment with the curative services. Entitlement to universal and free health care is meaningless in the face of widespread informal gratitude. The rigid centrally organised National Health Service creates many barriers to access and continuity of care. Health services in Hungary are administered inefficiently without any management in the western sense of the word and central bureaucratic dictates still leave little latitude for responding local needs. Despite the extensive network of clinical facilities, which has more beds and doctors per capita than many western countries, shortages in some critical drugs, equipment and supplies led to ineffective and low quality services. At the same time, imbalance between different levels of care and among different groups of health care providers often lead to inappropriate care. Although it is generally recognised that scarce financial resources are wasted by excessive utilisation of services, there are few deterrents to such practices other that waiting lists and gratitude."

"Controlling expenditure on drugs and imported equipment will be especially important during the liberalisation prices and the present period of high inflation. The cost of failing to achieve these gains will be extremely high. The experience of other Eastern European countries has already demonstrated that a deterioration of the quality of overall health care due to excessive expenditure on drugs can trigger a serious political hurdles against Government's policies. At the same time, uncontrolled increases in health care sector expenditure would threaten the Government's economic reforms."

Since the World Bank mission's report, no major action has been made to address and solve the problems, in 2000 most of the above statements are still valid. (*) There was no change in widespread informal gratitude. The whole health care is financed by one single agency, and financing decisions are more centralised than before. The National Health Service is

even more rigid and more centrally organised and creates even more barriers to access and continuity of care. Although, decentralisation and regionalisation were emphasised in the government’s 1994 programme, their implementation never began. Central bureaucratic dictates still leave little latitude for responding to local needs. Management in the western sense of the word is still inefficient and there is a shortage of management knowledge and skills. Clinicians with some management training make up the main body of senior managers in hospitals and in all other health care settings, often very large organisations operate without strong management. At different stages of the transition of the Hungarian health care system various elements and mechanisms of health care were imported from abroad and implemented in the system with or without adaptation. These elements might work well in the given countries under certain conditions from where they come from, but might not work properly under totally different conditions after a different implementation process in Hungary. DRG financing mechanism (475 DRG categories in the beginning) were implemented, for example, to reimburse all hospitals and a rather complicated German point system was introduced for primary health care in Hungary. However, the implementation of these techniques have been fraught with several contradictions; also implementation of the different methods have stopped at different levels of completeness. For example, the DRGs system has never been introduced in its completeness. (Kroneman and Zee, 1997) Market, competition, free patients choice, privatisation, liberalisation of drug import, various and often changing insurance ideas and licensing were implemented at least partly without coherent health policy and clearly defined goals. Market forces, for instance, can be effective in improving technical efficiency, this does not appear to be true in the case of allocative efficiency. (Abel-Smith, 1992)

2.8.2 Reluctance to define and rank goals as well as to evaluate results

Decision makers in the health care system are reluctant to define and rank their goals and have refused to evaluate either the costs or the outcome of the reforms. The benefit from various health care projects and programmes financed by the government, the Health Insurance Fund, the World Bank, Phare as well as other funds (USAID) were rarely evaluated and published. Effectiveness, cost-effectiveness and impact on quality and care or even the impact on the population’s health status is unknown. In the rapidly growing literature of health reform, it is difficult to find any mention of health outcomes. Perhaps this is not surprising. Very little can be said about the impact of reform on health outcomes, in part for the reasons stated above, other important reason is the lack of data. As a consequence of this it is very difficult to describe ‘where we are now’. In Hungary the assumption is that market forces will solve the problems of health care; and the type of care to be implemented has received little attention. Creating market and competition in the health care system was the central goal of the most influential Hungarian health care development programme financed from a World Bank loan. However, very little evidence can be found that demonstrates the positive benefit of competition for quality of health care. (Thompson, 1998; Maynard, 1998)

The removal of centralised state control over the health sector, and the rapid introduction of unregulated competition have already led to a significant market failure. The govern-
ment budget for health care has been reduced and hospitals are in direct (non-price) competition. The controls of import of new drugs, devices and procedures have been removed and there is no proper evaluation or training for use. Many health care providers, such as general practitioners, pharmacists, diagnostic centres, and surgical departments now see themselves as entrepreneurs in private practice. Patients have come to see themselves as customers of health care demanding services in return for their taxes or contribution. The result is an extremely irrational pattern of investment in technology, with much obvious waste while basic needs cannot be met.

2.8.3 The failure of the national public health policy

Inherent in the government funded system was the problem that no one was responsible for trying to ensure that the services provided were those that met the needs or demands of the patients. Since the whole structure was dedicated to the problem of arranging the supply of services the mechanisms for deciding what services should be provided and who should get them were poorly developed. While the 1972 Public Health Act placed a strong emphasis on prevention, health promotion was in fact very a very low priority. Instead health care was disease oriented, and focused on treatment and medical therapy as opposed to prevention.

The document “Principles of a long-term health promotion policy in Hungary” (hereinafter: Principles) was published in 1994. The ‘Principles’ (five national targets and ten national goals) was intended to improve the population’s health status of the by the year 2000. Major share of the ‘Principles’ are not based on scientific evidence, the: a) burden of illness; b) etiology or causation; c) community effectiveness; d) efficiency; e) synthesis and implementation; and f) monitoring and reassessment are mostly not covered or not established. Very similar situation was discussed by Warner (2000) in the UK: “... the Chief Medical Officer gives his top ten tips. If you look at them they are about not eating fatty food, not smoking, not sunning yourself in the park. It is all about not doing things. Negative approaches and blaming individuals is no way to enlist public support.” ... “The process of introducing targets can be as important as the targets themselves.”

And finally there is another cause of the failure of the Hungarian health policy, as Donaldson (1993) pointed out, traditional epidemiological approach to needs assessment measure the amount of ‘ill health’ in the community categorised by disease. These data provide no allocation rule. The implication of the epidemiological approach is simply that more resources should go to treatment and prevention of diseases which cause high mortality rate, although no indication is given as to how much should go where.

2.8.4 There is no systematic method to translate scientific evidence into clinical decision making and clinical practice

Information is still fragmentary, but systematic reviews have demonstrated that commonly used interventions in different areas are either definitely ineffective or probably ineffective. In Hungary, research findings indicate that a great deal of ineffective technol-
ogy is in use, and/or effective technologies are frequently over used and/or under used. Irrespective of health care reforms and political changes, needs and assessment programmes by population screening (cholesterol test, blood pressure, various blood and urine tests) were always awarded large funds and attracted a lot of attentions among the public, politicians, media and professionals. These programmes had a very limited effect on health status, if any, because very often the process used was not appropriate for screening purposes, nor was the target population identified. In addition, and probably most importantly, because the risk factors are simply associated with an altered probability of the disease and have not been shown to have causal relation. To understand quality, one must understand the nature of clinical decision making and the basis for most medical practice. Few people understand how little is known about the efficacy of many routine clinical processes or how much of medical practice is justified by the experience of physicians rather than objective evidence. Another problem is that technology is generally evaluated in terms of efficacy, or benefit under ideal conditions of a study. It is often observed, however, that benefits in actual use fall short of this maximum conceivable benefit. Effectiveness is used to denote the benefits achieved under actual conditions of routine clinical practice, as measured against the potential for accomplishment (Banta and Luce, 1993) The difference between efficacy and effectiveness could be said to be due to both errors of commission and errors of omission. (Williamson, 1978)

Very often scientific evidence are available but not translated into practice because of the inappropriate dissemination, interpretation, lacking or not evidence based guideline or simply because of conflicting interests. Members of the Professional College of Urology in Hungary for instance know that there is no evidence supporting PSA screening for prostate cancer, however, they supported the importance of screening the male population with no age limit once or twice a year for everybody. Exactly the same thing can be mentioned in association with osteoporosis screening which is performed in 102 centres in Hungary for women in or after menopause. Caesarean section rate in Hungarian hospitals provides a good example for the need of a systematic method to translate scientific evidence into clinical decision making and clinical practice. As Miko, Director General of the National Health Insurance Fund Administration pointed out in 1998 November: “... and there are obstetric departments where more than half of the women deliver with Caesarean section”. (Népszabadság, 1998)

2.8.5 Lack of consensus on what constitutes quality and cost containment

In Hungary similarly to other countries there seems to be no general understanding and agreement on the meaning of quality and cost containment. The US situation as described by Carpenter and Bender is relevant to Hungary as well. They stated: “Quality of health care was neither defined nor debated, the concepts and goals of cost containment were neither explored nor explained; the relation between the two was never discussed. Without any public consensus about what is meant by either quality or cost containment, it is difficult to evaluate their relation to each other fairly”. (Carpenter and Bender et al. 1996) Unfortunately the term ‘quality’ is used in many different ways and may denote characteristics including efficiency, equity, acceptability, accessibility, timeliness of care, appropriateness of care, continuity, privacy, confidentiality, family participation, safety of the care
environment and supportiveness of the care environment. In fact, quality assurance does not often focus on health outcomes. Most quality assurance activities have dealt with the structure or process of care. The latest trend in quality assurance is "total quality" which does not necessarily emphasise health outcomes, although it may do so. A review of the literature on quality assurance found little attention to either immediate or long-term outcomes. (Hedryx, 1991) In general, structure and process variables cannot be linked to desirable health outcomes. (Lohr, 1990)

The Hungarian experiment shows the same. There is no consensus about the definition of quality of care. For many managers and professionals and for a significant part of the public doing more still equals doing better. Because of the limited health care budget and the prospective payment system for hospitals, doing faster has come to be equal with doing better. There are many advocates of this emerging new slogan today. According to our multi-site hospital quality survey access is valued very high and is seen as a proxy for quality (this topic will be further discussed in Chapter 5). Others take satisfaction as the most important single measure. The impacts of quality assurance activities need to be defined and made operational more thoroughly in order to be able to show its value and create better accountability. There are many uncertainties and mist around the costs issue as well. When politicians and decision makers talk about the problem of escalating costs and the necessity to control costs in Hungary it is not clear what costs they are talking about and what they want to control. Do they mean unit costs or some aggregate measure of cost e.g. hospital cost, total national expenditures or share of GDP? Do they want to control the expenditure of the given unit of benefit?

Laparoscopic cholecystectomy is a very good example to show that decreased unit cost can be accompanied with higher global expenditures, because the provider response to this cost saving technology was to increase the number of operations. (Escarce and Chen, 1995) The Hungarian experience yielded the same conclusion. An additional problem is linked to the fact that terms are often used interchangeably, e.g. cost, payment (same as expenditure) and charges (same as prices). Cost means resources required to produce goods or services. Expenditure is what is paid for goods and services. Charges are set by provider and are not necessarily the same as payments. The Hungarian National Health Insurance Fund for instance covers 30-100% charge for various drugs. When people say health care costs are too high they usually refer to charges. The difficulty comes from the fact that the prospective payment system frequently underpays for some services and overpays for others in the various DRG categories. This is partly the reason why costs do not equal charges. Hospitals charge less than their costs for some items and services to some patients while charging more than their costs to others. This cost-shifting makes the economic analysis difficult. In many publication in Hungary, and probably in other countries, quite often charges and payment (DRG) are used for cost-effectiveness analysis because prices are not known. There is a growing attention on defining quality and costs to set up appropriate costing and evaluate other cost issues, in order to show not only effectiveness but cost-effectiveness of various quality assurance methods and programmes, as well as to strengthen accountability of quality assurance. Having crucial importance for quality assurance, these topics are in the focus of the thesis and will be further discussed in the thesis in Chapter 3 and 8.
2.8.6 Lack of reliable data on health care and the population's health status

The quality of collected data is suspect for several reasons. (Paragraph 1.5; 2.4.1; 2.8.2) Data collection had been a means of control and punishment. In order to conform to the reproductive health policies of the previous regime, health services providers, altered data on, for example, birth weight and caesarean section rates. Even though these policies have been eliminated, a lack of data responsibility remains; it is crucial that it can be demonstrated to providers how accurate information may dramatically improve the management of care and priority setting process, to support the transition from crisis management to a more stable health policy and planning strategy. There are no reliable data because of various perverse incentives to provide false data. Low level of information supply can be attributed to supposed or hoped advantages of data-supplier in consequence of the information supply’s results. Frequently, no data due to the lacking process and outcome data. Outcome data is crude and there is no accepted ‘best practice’ for the collection of a nationally agreed core data set. In the lack of agreed and implemented best practice, comparison is impossible. In this situation evaluation of the effectiveness is not possible because measurement is comparative. If this is created this will facilitate the production of ‘best practice’ advice to purchasers and clinicians. Such data will facilitate the regulation of the market to ensure that cost effective care is provided. However, its absence now means that the efficiency of market-induced changes in resource allocation is unknown.

2.8.7 Black economy blocks health care reforms

The existence and magnitude of Under the Counter Payments (UCP) might block necessary changes associated with effectiveness and efficiency of the Hungarian health care system with high probability, through a major distortion of the preferences and behaviour of health care organisations, and the doctors. Although the impact of UCP on health care was discussed in the 70s and 80s the importance of this phenomenon was not analysed in detail. It was recognised after the political changes that UCP causes major distortion of the preferences and habit of health care organisations and health care workers as well. Although some modest discussions were conducted after 1989, not intervention was made to control this crucially important distorting factor.

Published in 1991, the Health Care Reform Programme of the Ministry of Welfare declared UCP as the most serious problem of the Hungarian health care system because UCP might obstruct the health care reform. “The magnitude of the problem makes it very serious, it can block all changes.” (Health Care Reform Programme of the Ministry of Welfare, 1991) According to this programme the amount of the UCP is estimated to be close to one quarter of the national health care budget. At the same time this document declared that because the problem was huge, the health administration would not able to overcome it alone. It also stated: “If UCP is given to a physician by a patient with the expectation of receiving better services or more attention it could be turned into legal income, according to present regulations the health care sector should be given three times more financial support than now for gross wages and insurance contribution. There are not any chances for that. On the other hand, even if there were finances for that, it is hopeless to stop it in the short run. Illegal income without tax obligation is such a temptation, that only very few were able to
resist. Further UCP enters health care very unequally and unfairly (not proportional to the work done). Real beneficiaries - many times in decisive positions - could not be recompensed even by an unrealistic raising of their legal income. The success of any attempts for fast change (first of all administrative) of the present situation seems to be quite doubtful. Therefore elimination of UCP can be imagined only in a long run, gradually, and by the emerging of the new health care system. The reason of UCP (black market) is the absence of real market, the appropriate provision for legal needs of the population. These needs can be met now only by an illegal way. However, according to black market laws, people are often deceived. One would not receive, and not for that sum what he expected. Therefore the UCP issue can be solved first of all by developing a real market for health care services. A correct market, however, demands sensitive regulations, therefore legal means are to be involved. A new health care system discourages UCP in the following ways:

- The health insurance will let the population know the proportion of health care contribution, and the package of services it covers,
- Competition between providers encourages the development of correct behaviour. 

(Health Care Reform Programme of the Ministry of Welfare, 1991)

“Our aim is the elimination of the “gratuities”, this disgrace to the health care system. This can be realised through the free choice of doctors, the introduction of the insurance system, and the formation of a system of salaries proportional to the work done justified by the case and providing all necessary care. (Surján, 1993)

UCP has a major impact and distortion on priority setting and health care planning as well as on access at all levels of the health care system. Where health services are provided on a pay-as-you-go basis, with user fees paid by patients, there is little or no role for priority setting and health care planning. With private insurance, social insurance or government funding, there is a need to set rules of access, entitlements or limits. The existence of UCP makes it very difficult if not impossible. The extent of the under the counter payment (UCP) or in another word under the table payment is really significant. A survey which was conducted in 1993/94 throughout Hungary involved 3,200 hospitalised patients after discharge in 22 hospitals; the survey related that, 25.3% of the respondents paid UCP and 49.7% reported that UCP payments caused major difficulties for them. (Gulácsi, 1997) A very similar study was conducted almost at the same time in Bulgaria where they found that 42.9% of the patients paid UCP (Delcheva et al. 1997) The Bulgarian author reported that UCP had been common before the political changes caused economic collapse as well. The function of the officially ignored but de facto tolerated system (e.g. UCP) served several purposes as Delcheva et al. discussed (1997) including as: “... to act as control of the medical profession that provided them with additional resources as long as they did not oppose government policies but, as the payments were illegal, it offered an opportunity to attack anyone who did step out of line.” According to Delcheva and her collaborators' opinion UCP has an important function o provide extra funds for health care during the transition period in Bulgaria. “... To solve the problem the World Bank emphasised that such payments should be incorporated into a system of regulated cost sharing.” According to the estimate of the World Bank before 1989 the UCP percentage was 10% in Czechoslovakia, 25% in Romania, 20% in Hungary and in 1992, 34% in Bulgaria. (NAPOC 1992; The World Bank World Development Report 1993; WHO 1994; Hálapéntz Bizottság, 2000)
2.8.8 Weak incentive structure to improve effectiveness and efficiency

In Hungary many changes can be found at the first glance in the health care system, but these are superficial, rather than profound changes performed in relation to structure, financing mechanisms and regulation. Because of this fact there are very few incentives to improve effectiveness and efficiency in the health care system. The health care system is still a typical one-player game. There are no separate and independent providers, financing organisations and customers at the vertexes of what is often called the ‘health care triangle’ surrounded and managed by the regulator. The government is still the major provider, and it directly owns ‘top care’ i.e. the national institutes of health and university hospitals, and through municipalities, it indirectly owns all other hospitals except the church hospitals, that have just a very marginal role. Although county councils and municipalities entered into the possession of formerly state owned county and municipal/community hospitals, these bodies are in direct relationship with the Ministry of Internal Affairs. Hospitals are the property of state bodies on one side and all professional and financing decisions are made by the Ministry of Welfare (and of course by the Ministry of Finance). The government is still the major financing organisation. County councils and municipalities are only responsible for depreciation and renovation expenses, but because of their limited budget they have never met these requirements. Practically these bodies cover one or two percent of the hospital budget. The major part comes from the premium based National Health Insurance Fund which has some formally declared independence but in reality it is under the total control of the government. The Fund has no right to chose what it is going to finance and to what extent, and as it was presented and published several times the Fund even unaware of the accurate number of inhabitants it should provide coverage for. And finally the government is still the major customer. All professional and financial decisions are made by the government on behalf of the public. The public cannot be taken as customer, neither do they feel themselves as customers. The incentive structure can be deducted partly from the unchanged power centre situation.

Medical malpractice claims might have a quite notable role and might be a real incentive to keep quality high to avoid mistakes. Although, a growing trend was predicted in the early 90s in Hungary malpractice claims remained marginal and unimportant.

2.8.9 Vulnerable professional, patient and financing organisations

In the late 1980s and the early 1990s large number of professional organisations were created or reorganised in Hungary. (*) Memberships are voluntary. These organisations do not play important role in the post-graduate training structure and not really involved in debates on health policy and medical ethics, they have mainly trade union functions. Klazinga (1996) argued that: ‘They can provide the backbone of further professional development if they know how to find an acceptable equilibrium between the scientific/

(*) Some of the most important professional organisations are: Hungarian Medical Association; Hungarian Medical Chamber; Hungarian Hospital Association; Hungarian Scientific Society of Nursing; Hungarian Nursing Association; Hungarian Association of Hospital Financial Directors; Hungarian Association of Nursing Directors; Hungarian Association of the Mother and Child Nurses.
clinical, economic and political interest of the professional groups." Professional organisations in the Hungarian health care system are under-organised and rather weak. They are often fragmented, sometimes three-four professional organisations are dealing with the same topic, for instance, breast cancer screening and treatment, with somewhat different aims, policy and suggestions. Communication and information flow among members and with other organisations are rather poor, significant number of the associations are functioning without sufficient financing, clear mission and strategy. From the point of view of quality assurance, the inability to reach consensus on quality improvement and ‘best practice’ in the absence of tight professional co-operation and strong organisations is a major concern. Guidelines developed this way, for instance, would not reach members of the specific profession, and their implementation would depend on the individual physician. In other words this means that for a quality assurance programme to be launched, each physician needs to be convinced individually on the advantages of the programme, and then it is up to the individual doctor whether or not he chooses to get involved and to what extent he wishes to adhere to the guideline. This in turn leads to minor, quick and short-term quality assurance programmes having absolute priority. Associated with the research projects the results of which will be discussed later, the most important difficulties faced included the need to discuss and negotiate with every single hospital physicians and surgeons and general practitioners about the given quality assurance programmes into which they were to be involved. Although, professional organisations exist for hospitals, physicians, general practitioners, nurse and hospital managers they are much more of a trade union nature than safeguarding professional organisations. Quality assurance programmes spanning over from problem identification through data collection, guideline setting and consensus conferences to intervention cannot be done without well functioning professional organisations.

2.8.10 Increasing demand for health care is predicted

It is expected that the demand for more resources and/or higher level of effectiveness and efficiency will be growing in the near future (in the following 10 years) because of two reasons: a) growing health problems of the population; b) the health care system is likely to become more resource demanding.

a) Health problems of the population

The Hungarian population’s health status is far below the level of the developed countries, standardised death rates (SDR) growing in almost all diagnosis groups. Life expectancy at birth is stabilised at a very low level.

Death rates in Hungary in the mid to late 1980s were as high as those in the Western European countries in the early 1950s. The 30 year time delay in achieving equivalent mortality rate standards might worsen if Hungary fails to implement policies for health that are as successful as those that have produced a decrease in mortality rates in the Western European countries. (Forster and Jozan, 1990)
b) Health care system is likely to become more resource demanding.

The health care system is expected to become resource demanding in the next decade. Much of resources are needed to finance the ‘old’ big rigid health care system, and to redesign and reorganise the system needs substantial investments during the transition period. The workload of the health care system has also dramatically increased. Between 1980 and 1995 the number of hospitalised patients went up by 19.2%, in primary health care by 7.4% and in the outpatient sector by 51.3%.

2.8.11 Conclusion

The major causes (and eventually cures) of low quality care may be divided into three categories, which are termed here: a) information; b) incentive, and c) change agency. Inadequate information, conflicting incentives and the lack of effective change agents all combine to create an environment where quality improvement continues. Attending to each of those elements is necessary in order to improve quality-care providers must be informed about whether or not their services are inefficient, they must be motivated to change their practices to a higher standard of care, and there must be agents capable of facilitating that change. In present-day Hungary, all three categories are problematic.

a) Information

The health information situation in Hungary might be characterised as too sparse. Major health information collection efforts, such as the Hungarian contribution to the WHO database initiatives, are focussed more on descriptive epidemiology instead of clinical practice. Although information on evidence-based medicine and assessments of health technology are not unknown in Hungary, dissemination has not been as extensive as would be desired; it is difficult to access information for use in resource allocation. Finally, what information that is disseminated is largely presented in an undirected format-programmes to present information in terms of care provider behaviours are absent. Thus, it is hardly surprising that information dissemination has not helped.

b) Incentives

Although the nominal incentive system in Hungary, including capitated payment for primary care providers and a Diagnosis Related Group (DRG) system for hospital reimbursement, might be thought to encourage the avoidance of overuse, the de facto system contains few controls for quality of services of services. Formally, physicians are paid salaries on a capitation basis for primary care and on a salaried basis for the hospital-based secondary care providers. However, in parallel to official payments, there is a well-established system of "tips," or under-the-table payments to physicians for the provision of services. Although the tips are technically illegal and not reported as taxable income, they are a major economic force driving the personal side of physician decision-making. The percentage of physician income that comes from these tips is unknown and probably unknowable; estimates range from ten percent to ninety percent of income. Precisely because the
informal driving system is outside the boundaries of law, the de jure payment system is dominated by the actual perverse economic incentives encouraging overuse of physician services. Institutional services are similarly not driven towards efficient use of services because of the opportunities for “gaming the system.” Beyond the expected “DRG creep” of diagnosing patients to receive the highest reimbursement possible, there are other means used to increase institutional incomes. Thus, it is said that in obstetric units, “there is no labour without complications.” Many procedures take place “after working hours” therefore generate extra payments. Hospitals and sanatoria are happy to fill beds to capacity by admitting referrals that might be of dubious origin.

c) Change agents

The third piece of the triangle are the agents to facilitate change. Any health care reform programme needs identified and capable change agents in order to succeed, but various characteristics of the Hungarian situation shackle the potential ability of any of any potential agent. Because so much of the incentive system is informal, formal levers for change from above is not possible. As was discussed earlier, the continuing reinvention of the national health care system has been ineffective for the past decade and nobody is optimistic that the next round will be any more successful. Absent the ability of the national government to intervene, one might turn to more local levels, but the counties and regions of Hungary are not empowered to act. Finally, one might turn to self-policing of care providers through the legitimacy and peer influence of speciality societies, but in Hungary, these societies function more as protectionist trade unions rather than centres for the sharing of knowledge and experience. (Klazinga, 1996)

The role of quality assurance and its capacity to assess and improve quality, effectiveness included, in the Hungarian health care system in general and in relation to the ten main problem areas in particular vary. The role of quality assurance in this context is to provide necessary measures (structure, process and outcome), tools for monitoring and to show the value of the resources to be spent on health care.

As shown above, the health care reform and the development of health policy requires that sensible and achievable targets are formulated which has to meet both the structure, process and outcome requirements. Quality assurance can be used as powerful tool attaining this goal. The content area and the key concept of the quality assurance will be further discussed in the Chapter 3, and results of various quality assurance studies were conducted in Hungary will be presented in Chapter 5-9.
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