From EphMRA

This project fulfils a long standing need of international pharmaceutical researchers for better access to doctor universe statistics. There has been a high level of interest in this project and we hope it helps meet your needs.

The brief was to establish Doctor numbers/populations and bring this data together in one report. This report will help researchers to have greater confidence in the representativity of doctor samples.

The sources of the data are shown and given in as much detail as possible according to what is available in each country. Of course standardised data is not available across all countries and so the best available has been included in this report.

This project is a research project funded by EphMRA. The project was awarded after a Request for Proposals on Doctor Statistics was sent out and the resulting proposals evaluated.

The content of this report is confidential and intended for the sole use of EphMRA members. We accept no liability for any errors in the report, nor from any use of the data. Getting accurate doctor statistics can be notoriously difficult and the figures included here should be considered as ‘reasonable best estimates’ given the variety of assumptions underlying the data. Any assumptions made or points of clarification have been outlined where appropriate in the report. This report reflects the work and views of the commissioned agency and not EphMRA.

Should you have any questions or comments about this report then please feel free to contact EphMRA:

Bernadette Rogers
EphMRA General Secretary
generalsecretary@ephmra.org
www.ephmra.org

Feedback is always welcomed as we use this input to further improve other funded projects.
Contents

1.1 Introduction 1
1.2 Report Authors 2
2. Objectives 3
3. Sources of Information 4

4. HUNGARY 6
    4.1 Introduction 7
    4.2 Healthcare System 8
    4.3 Healthcare Professionals 20
    4.4 Service Delivery 27
    4.5 Healthcare Supplies and Medication 44
    4.6 Roma in Hungary 53
    4.7 Map of Hungary 55
    4.8 Appendix 56
1.1 Introduction

Following the completion of the Doctor Universe Statistics Report in 2003, the EphMRA Foundation Committee looked to update and expand its research to include new countries/regions and specialties. Subsequently, EphMRA initiated additional Doctor Statistic projects.

One of these market research projects on which EphMRA invited proposals was a Doctor Statistics Report on Eastern-European Markets, including Bulgaria, Czech Republic, Hungary, Poland, Romania, Russia and Slovakia.

This structure of this report will be as follows:

- Objectives
- Research methodology
- Main findings of the research of each country/region broken down into qualitative and quantitative reports
1.2 Report Authors

The project was undertaken by East to West Marketing Research.

Report Authors:

Anna Vagramova is the owner and Business Director of “East To West Marketing Research” company. Ms. Vagramova received her Masters Degree in Education from the University of Georgia. She has 15 years of moderating experience, which includes projects in Oncology, Endocrinology and Infectious Diseases. Mrs. Vagramova is fluent in Russian and Ukrainian languages. Besides organizing fieldwork services in Canada and Eastern Europe “East To West Marketing Research” provides clients with comprehensive reports on healthcare issues in these countries.

Doctor Hatuna Peradze is a professor of Internal Medicine. She resides in St. Peterburg, Russia, and works as a field project manager for “East to West Marketing Research.” Dr. Peradze is an author of more than fifty scientific publications and one of the leaders in medical teaching in Russia.

Elena Morrow holds Masters Degree in Linguistics from the California State University. Ms. Morrow is a CT and ATA-certified translator (English to Russian). Mrs. Morrow has over 15 years of experience in the fields of medical, legal, administrative, and educational translations. She works as a primary editor and translator for the “East to West Marketing Research.”
2. Objectives

The objectives of this research were:

- To investigate and describe the healthcare systems in Bulgaria, Czech Republic, Hungary, Poland, Romania, Russia and Slovakia, and to identify the differences between them. This report is on **Hungary**.

- To identify the number of doctors in the aforementioned regions according to their areas of expertise and specialisation; and break these figures into the following factors:
  
  o  Gender (male, female)
  o  Age group (<35, 35-44, 45-54, 55-64, 65+)
  o  Major professional activity (private, public, work-setting)

However in many markets such data is not accessible and so the best available has been included in this report.
3. Sources of Information

The following were used to gather information about Hungary:

European Observatory on Health Systems and Policies

WHO Regional Offices, Hungary


Organization for Economic Co-Operation and Development, Health Statistics, Hungary

János Kornai , http://www.colbud.hu/honesty-trust/kornai/pub01.PDF
“Hidden in an Envelope: Gratitude Payments to Medical Doctors in Hungary”

“ORGANIZATIONAL PERFORMANCE IN HUNGARIAN HEALTH CARE INSTITUTIONS”
Paper for The Eighth International Research Symposium on Public Management (IRSPM VIII), Panel Health Care Management
31 March – 2 April 2004
Budapest University of Economic Sciences and Public Administration, Hungary

Körtvélyesiné Samu Gy.
“Situation of community nurses in view of nursing professional supervision”

Hungary’s Healthcare System , US Commerce Centre
By Shannon C. Ferguson and Ben Irvine (2003)

Emese Ibolya
“Improving Medical School Curricula and Roma Access to Health Care in Hungary” Policy paper
http://www.policy.hu/ibolya/policy_paper.pdf

Ungváry G, Odor A, Bényi M, Balogh S, Szakmáry E.
“Roma colonies in Hungary--medical care of children and hygienic conditions”
WEBSITES

HUNGARIAN HEALTH SYSTEMSCAN  http://www.eski.hu

Dental facts http://www.dentalworld.hu

http://www.factbook.net/countryreports/hu/HuHealthCare_mkt.htm

http://www.eolc-observatory.net/global_analysis/pdf/hungary_country_report.pdf

HIV Site  http://hivinsite.ucsf.edu/global?page=cr03-hu-00&post=19&cid=HU

Pharmaceutical Licensing https://store.pharmalicensing.com

OECD data http://www.oecd.org/infobycountry
4. Hungary
4.1. Introduction

Hungary, located in the Carpathian basin in central Europe, covers 93,000 square kilometers, of which more than half are lowlands surrounded by mountain ridges and hills. The Danube and Tisza rivers, and Lake Balaton, the biggest freshwater lake in central Europe, are the country’s main sources of water. Slovakia is the neighbour to the north, Ukraine and Romania to the east, Serbia and Montenegro, as well as Croatia, to the south, and Slovenia and Austria to the west.

The population is estimated to be 10.06 million (WHO database, 2006). Since the 1980s, the population has been decreasing mainly because the birth rate has been below the mortality rate since 1981. The 2008 estimated population growth rate is -0.3%. (WHO, 2006). Budapest, the capital city, has 1.8 million inhabitants, while almost half the country’s population lives in communities of less than 20,000 inhabitants.

The average life expectancy at birth in Hungary is 69 years for men and 78 years for females, and is below the European average. By comparison, life expectancy is 79 years for men and 83 years for females in Sweden., which tops all of Europe. Hungary faces a rapid aging of its decreasing population in the coming years.

According to WHO (2005), total health expenditure as a percentage of GDP in Hungary is 7.8 %; while the European average is about 8 %.

Since 1989, Hungary has been a multi-party democracy with a social market economy, headed by a President. Public administration has three levels: the national government, county
governments, and municipal governments.

After more than 40 years of Soviet communist rule, Hungary regained its full sovereignty and declared itself an independent republic on October 23, 1989.


The collapse of the communist system initiated a large-scale reform of the health sector at the end of the 1980s, and led to the reintroduction of social health insurance structures.

4.2. Summary of the Healthcare System

The communist regime, established in 1948, nationalised the economy, including the funding and delivery institutions of the Hungarian health care system. Private health enterprises, such as insurance companies and general practices, were dismantled, and centralised state services were set up in their place.

Throughout the communist period, the state was exclusively responsible for both the financing and delivery of health services. The Ministry of Health funded and delivered all health services, including hospitals and polyclinics, as well as district doctor services that were established in 1952. Private medical practices were not forbidden, but allowed only on a part-time basis.
The financial resource allocation was subject to political influence, which resulted in inequalities in service provision in terms of geographical locations and specialties.

Although the 1972 Act II on Health confirmed that access to health services was a right linked to citizenship, and promised comprehensive coverage free-of-charge at the point of use, an increasing gap developed between promises and reality. The system was suffering simultaneously from excess capacities, deteriorating service quality, and widespread informal payments.

The widening gap in the health status between Hungary and western European countries in the 1980s called for changes and the softening political climate opened the way for reform. The first steps were taken in 1987, when the Ministry of Social Affairs and Health established a reform secretariat to produce policy proposals. In the so-called reform communist era, the Social Insurance Fund was separated from the government budget (1988). Then, the financing of recurrent costs of health services was transferred to the Social Insurance Fund (1989). In addition, restrictions on the private provision of health care were abolished.

The fall of the communist regime was characterised by a marked decline in health status of the population, further widening the gap between Hungary and the countries of the European Union (EU). Nevertheless, a late recovery started in 1994, and since then a steady improvement in life expectancy has occurred, which has at least ensured that the gap between Hungary and its neighbors has not increased. Between 1960 and 2000, life expectancy at birth increased only 3.5 years in Hungary, compared to an average of nine years in OECD countries.
Cardiovascular diseases and malignant neoplasms, digestive system diseases - including liver disease - and unnatural causes, including suicide, are prominent causes of premature death in Hungary.

In 2001, Hungary had the highest mortality from cancer, and the second highest mortality from chronic liver diseases/cirrhosis, among all countries of the WHO European region.

**Reform Trends**

The dominant trends have been decentralisation and cost containment. The financing of current expenditure and purchasing functions has been delegated to a single National Health Insurance Fund. However, the fund has been placed under tight central control since the government abolished the self-governmental structures in 1998 in order to realize strict expenditure control policies. The responsibility for service provision has been devolved to local governments, along with the ownership of most health care facilities.

Service delivery by private providers, however, is still limited. In 2003, the total per capita expenditure on health care was International $1,269 (8.4% of GDP). Among the countries of Central and Eastern Europe, this figure falls within a spending range of US $327 in Bosnia-Herzegovina (9.5 % of GDP) and International $1,669 in Slovenia (8.8% of GDP). The WHO overall health system performance score places Hungary 43rd out of 191 countries.
The international dollar, also known as the Geary-Khamis dollar, is a hypothetical unit of currency that has the same purchasing power that the U.S. dollar has in the United States at a given point in time, i.e. it means the U.S. dollar converted at purchasing power parity (PPP) exchange rates. It shows how much a local currency unit is worth within the country's borders. It is used to make comparisons both between countries and over time. For example, comparing per capita gross domestic product (GDP) of various countries in international dollars, rather than based simply on exchange rates, provides a more valid measure to compare standards of living. It was proposed by Roy C. Geary in 1958 and developed by Salem Hanna Khamis in 1970 to 1972.

The term, while not in widespread use, is sometimes used by international organizations such as the World Bank and the International Monetary Fund in their published statistics.

Figures expressed in international dollars cannot be converted to another country's currency using current market exchange rates; instead they must be converted using the country's PPP exchange rate used in the study.

Organisational Structure of the Healthcare System

The Hungarian constitution guarantees virtually universal access to comprehensive health care services, the recurrent expenditure being financed by the Health Insurance Fund. The national government is the key regulator of the system and its budget covers capital expenditure. Its role in service delivery has been limited to special services or to certain sectors. For example, the Ministry of Health provides services through the National Emergency Ambulance Service, the National Blood Supply Service, and the various specialised national institutes of health.

The health care reforms of the 1990s sought answers to the crisis of the state-socialist health care system, which had suffered from inefficiencies and inequities in the provision of its services. Many structural reforms have been implemented even as the economy has suffered four years of recession and eight years of tough cost-containment policies. These have included the introduction of a purchaser-provider split in social health insurance structures, the introduction of new prospective and performance-oriented payment methods, and the geographical reallocation of in-patient capacity.
**Healthcare Financing**

The new model of “The Health Insurance Fund” is administered by the National Health Insurance Fund Administration, which is the single most important purchaser. The National Tax Office collects its income since the self-governing structures were abolished in 1998 in favor of more governmental control.

The major decisions relating to the Health Insurance Fund, such as contributions, its annual budgets, and provider payment methods, are made centrally by the National Assembly, the government, or the Ministry of Health. Since 2001, the Ministry of Health has been responsible for covering any deficit of the Health Insurance Fund from its budget and has been empowered to demand funds to be reallocated between the various sub-budgets of the Health Insurance Fund. Local governments are the main service providers in the system, owning most health care facilities, including hospitals, polyclinics and the surgery rooms of most primary care physicians.

In September 2006, the obligation to pay health contributions was extended to small-scale agricultural producers and working pensioners. Right after the parliamentary elections, the government no longer financed out-patient and in-patient treatment beyond a certain limit. Among several other smaller scale payment restrictions, the government also issued a HUF 6 500 million (EUR 26 million) fund for structural change in specialist care institutions. Other cost-containment regulations were also introduced, and as a consequence, the revenues of the HIF in real terms grew by 25.2% from 2005 to 2006.
Health Insurance

Financer – National Health Insurance Fund Administration

The National Health Insurance Fund Administration (NHIFA), which is the only health insurance provider within the social insurance system in Hungary, finances the costs of health care providers with whom it contracts. The NHIFA cannot contract with care providers due to current regulations. It has a restricted role as a service purchaser and influences the performances of service providers through financial incentives.

The HIF budget is separate from the government budget. The government cannot use any surplus of the HIF for other purposes, but is obliged to cover any deficit. The NHIFA was responsible for the collection of health insurance contributions until the end of 1998, when the revenue collection function was moved to the tax authority. Since the beginning of 2001, the Ministry of Health has been controlling the NHIFA, which has branches at the county level to administer contracting and payments to local health care providers.

Coverage is universal and provides access to all ambulatory and secondary hospital health care. All citizens are covered, regardless of employment status, with the government paying contributions for groups such as the unemployed and pensioners. Health insurance contributions are collected from employees, who pay 3% of their total income, and employers, who pay 15% of the employee’s gross salary plus a lump sum tax or ‘healthcare contribution’. The population also pays local and national income taxes, which help to finance the investment costs of health care. Patients make co-payments on certain services, including pharmaceuticals, dental care and rehabilitation. These out-of-pocket payments have increased substantially since 1990, and
currently contribute 18% to health care financing.

This next table shows the main sources of financing in Hungarian Forint. (January 2008, 1 billion HUF = Euro 3,878,415.580)

<table>
<thead>
<tr>
<th>Source</th>
<th>1991</th>
<th>1993</th>
<th>1995</th>
<th>1997</th>
<th>1998a</th>
<th>1999a</th>
<th>2000a</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public expenditure on health at current prices (billion Ft)</td>
<td>160.6</td>
<td>241.0</td>
<td>352.3</td>
<td>482.5</td>
<td>551.7</td>
<td>606.5</td>
<td>664.5</td>
</tr>
<tr>
<td>– Social health insurance⁸</td>
<td>131.6</td>
<td>189.7</td>
<td>282.0</td>
<td>399.4</td>
<td>460.2</td>
<td>508.3</td>
<td>557.3</td>
</tr>
<tr>
<td>– Taxes</td>
<td>29.0</td>
<td>51.2</td>
<td>70.3</td>
<td>83.1</td>
<td>91.4</td>
<td>98.2</td>
<td>107.2</td>
</tr>
<tr>
<td>Private expenditure on health at current prices (billion Ft)</td>
<td>19.6</td>
<td>34.7</td>
<td>67.3</td>
<td>111.1</td>
<td>142.8</td>
<td>170.2</td>
<td>215.4</td>
</tr>
<tr>
<td>– out-of-pocket (households)</td>
<td>19.6</td>
<td>34.7</td>
<td>67.3</td>
<td>111.1</td>
<td>121.3</td>
<td>146.9</td>
<td>187.3</td>
</tr>
<tr>
<td>– other private sources⁹</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>21.5</td>
<td>23.2</td>
<td>28.1</td>
</tr>
<tr>
<td>Total expenditure of health at current prices (billion Ft)</td>
<td>180.2</td>
<td>275.7</td>
<td>419.7</td>
<td>593.6</td>
<td>694.5</td>
<td>776.6</td>
<td>880.0</td>
</tr>
<tr>
<td>Public sources as % of total expenditure on health</td>
<td>89.1</td>
<td>87.4</td>
<td>83.9</td>
<td>81.3</td>
<td>79.4</td>
<td>78.1</td>
<td>75.5</td>
</tr>
<tr>
<td>– Social health insurance⁸ (%)</td>
<td>73.0</td>
<td>68.8</td>
<td>67.1</td>
<td>67.2</td>
<td>66.3</td>
<td>65.4</td>
<td>63.3</td>
</tr>
<tr>
<td>– Taxes (%)</td>
<td>16.1</td>
<td>18.6</td>
<td>16.8</td>
<td>14.0</td>
<td>13.1</td>
<td>12.7</td>
<td>12.2</td>
</tr>
<tr>
<td>Private sources as % of total expenditure on health</td>
<td>10.9</td>
<td>12.6</td>
<td>16.0</td>
<td>18.7</td>
<td>20.6</td>
<td>21.9</td>
<td>24.5</td>
</tr>
<tr>
<td>– out-of-pocket payments (%)</td>
<td>10.9</td>
<td>12.6</td>
<td>16.0</td>
<td>18.7</td>
<td>17.5</td>
<td>18.9</td>
<td>21.3</td>
</tr>
<tr>
<td>– other private sources⁹ (%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3.1</td>
<td>3.0</td>
<td>3.2</td>
</tr>
</tbody>
</table>

Source: OECD Health Data, 2003 (20); Hungarian Central Statistical Office, National Health Accounts, 2002 (19).

Reform of the Insurance System

According to the minority governing party, the Alliance Of Free Democrats, Hungary needs a multi-insurance model with competition among insurance providers to fundamentally reform the health care system. The Minister of Health, Ágnes Horváth, has supported this idea. A reform bill will be submitted to Parliament by September 2007, and a multi-insurance system could be introduced in 2008 that is run by for-profit market-oriented companies.
With the introduction of the new insurance system, mandatory contribution payments and health care entitlements would remain in place. Contributions would be collected by the Tax Office and redistributed on the basis of capitation (adjusted for age, sex and morbidity) through the National Risk Equalisation Fund (ENKA) to the insurance companies. Patients decide whether to stay with the National Health Insurance Fund (OEP) or to enroll with a private insurer. Initially, the insured population would be eligible for the same services received under the current scheme, though later the private insurers may offer supplementary services for extra charges.

As a result of the reform, the Free Democrats expect the insurance companies would compete to recruit more members and the providers would have incentives to improve the quality of care to gain contracts. The private insurers believe that after the enactment of the law, it would take six months to start recruiting members and one year to sign contracts with the providers. They estimate that a period of four years is needed until one third of the population migrates to private insurance. The new companies would take over public insurance tasks on certain conditions only (e.g. guarantee of predictable business plans, right to have freedom to contract with hospitals).

The senior coalition partner, the Socialist Party, proposed a single health insurance system with 7 regional funds, which would function as patient path coordinators as well. The Prime Minister proposed a compromise between the Socialists and the Free Democrats. In the proposal, the majority owner of the regional funds would be the State, while private insurers could enter the market as minority owners. The health insurance market would be divided 51-49 per cent between the public sector and the private sector.
Management

The National Public Health and Medical Officer Service (NPHMOS) is one of the most important agencies of the Ministry of Health. The NPHMOS provides public health services, including traditional public hygiene and infectious disease control, disease prevention, and health promotion. It is also the central authority concerning the implementation, control and enforcement of regulations, including the registration and licensing of health care providers. The NPHMOS is responsible for monitoring the quality of health services.

Emergency Services

Blood and blood products and emergency ambulance services are provided by national organizations. The National Emergency Ambulance Service, financed by the HIF, has a long history in the Hungarian health services, providing emergency ambulance services and patient transfers throughout the country. The National Blood Supply Service was established in 1998 through the reorganization of blood supply units of hospitals. The cost of blood and blood products are covered by the HIF.

System Inequalities

Despite theoretical access to health care for all members of society, there are still gaps in the system that prevent certain socio-economic groups from attaining comparable health status. Apart from the above-mentioned out-of-pocket payments for pharmaceuticals and dental care, ‘gratitude’ payments by patients, a communist legacy, continue to play an important role in Hungary. Lower than average salaries in the healthcare sector encourage these ‘gratitude payments,’ which are subject to income tax, to guarantee quality or more speedy access to care.
They substantially supplement most physicians’ salaries, but their existence clearly puts poorer patients at a disadvantage.

In addition, there are significant variations in health status according to ethnic origin. The largely poor Roma minority living in Hungary has a life expectancy 10 years lower than the rest of the population. There are also geographical inequalities in healthcare provision, with Budapest enjoying the best health status and greatest supply of resources by quite a large margin.

Homeless people are also covered if they register with the local government as people with very low income. As a result, population coverage is virtually universal, with less than 1% of the population having no coverage.

**Out-of-pocket payments**

Out-of-pocket payments in the Hungarian health care system are discernible in three main forms. First, some products and services are not covered by social health insurance and are financed out-of-pocket. Second, patients make co-payments for services and products, which are partly covered by the HIF. Third, some patients pay medical doctors and non-medical health professionals informally for services covered by the HIF. This phenomenon, referred to as under-the-table, envelope or gratitude payments, is a legacy of the state socialist health services, but has continued to play a role in the Hungarian health care system despite 15 years of ongoing health care reforms.
Before 1990, drugs were heavily subsidised by the state and consumers paid only a symbolic amount. In contrast, patients paid one fifth of pharmaceutical expenditures of the outpatient sector in 1992 and one-third in 2000.

Another main out-of-pocket expenditure is the informal payment. Despite several official campaigns against it, the regime not only tolerated informal payments, but included them in its calculations of salaries of medical doctors, and even required that taxes be paid on them. Since 1989, providers have had to declare informal payments as part of their income tax.

Physicians, in particular specialists such as obstetricians and surgeons, receive the bulk of informal payments. The use of gratitude money as an instrument is also apparent in its uneven distribution between medical specialists involved. The majority of gratitude money goes to those who provide direct care to the patients: the obstetrician at childbirth or the surgeon performing the operation. Informal payments are more widespread in the in-patient sector than in the out-patient sector, and may differ by type of service, e.g. cardiac surgery, hip replacement or home visit.

According to a survey conducted in 1998 by the Social Research Informatics Center (TÁRKI), 5-6 patients out of 10 directly give money to their GP. It is estimated that in 1998 alone, between 24 to 42 billion forint ($12 million to $196 million USD at the 1998 average rate) were given to medical personnel as gratitude money in Hungary. From this sum, doctors received 29 billion forints, while the rest of the money was given to other medical staff. It is assumed that such donations increase doctors’ salaries by 150%. 
Gratitude money is very widespread in the Hungarian healthcare system but is very difficult to detect, so no significant measures have been taken to reduce its importance. Healthcare providers seem to depend on it because they are underpaid by the healthcare system. The sum they directly receive from their patients supplements their low income. Hungarian healthcare providers earn an average of 168,000 Forints (660 Euros) monthly, less than the average salary of full-time employees in 2005, which was 186,000 Forints (730 Euros).

Many poor or even destitute patients feel they have to give gratitude money. The gratitude “price” of child delivery averages HUF 19,000-23,000 (75-90 Euros), while the net monthly average earnings by low-income employees in the survey year was HUF 45,162 (177 Euros). This is an enormous burden on a lower-income family.

Another shortcoming of the present healthcare legislation is the lack of effective monitoring of the implementation of reform programs. Similar to other government departments, the health sector is highly influenced by politics in Hungary. In the past four years, three ministers have been nominated one after another in the hope that each would achieve visibly rapid achievements in the healthcare system.
4.3 Healthcare Professionals

Hungary developed a hospital-centered system of health care, which proved to be too great an economic burden for the country and went beyond the level of care required. Reforms now aim to move more treatment from inpatient to outpatient services, and to expand day surgery, as well as micro-level diagnostic and therapeutic procedures.

Hungary has about 160 hospitals at the national/regional, county and municipal levels. Geographic inequalities still exist despite attempts to redress these. For example, the 47 hospitals in Budapest represent almost 40% of the total facilities in Hungary, although only 20% of the population live in the capital. Tertiary care is provided by four medical universities and by 18
national institutes. National institutes provide services that require extensive equipment and specialists.

Physicians

In 2005, there were 32,563 physicians working in Hungary. In 2004, there were approximately 41,000 registered physicians in Hungary, with nearly 33,700 practicing. That was one practicing physician for every 299 persons (National Register of Physicians, 2004). The numbers were declining because of the migration of doctors abroad. Most of these physicians - approximately 88 for every 10,000 inhabitants are concentrated in Hungary’s capital, Budapest, leaving few physicians - approximately 29 for every 10,000 residents - to meet the health care needs of Hungary’s other towns and villages. There are approximately three nursing and allied health professionals for every one physician, and the ratio of nurses to physicians is 2:1 (Ministry of Health 2004). The numbers of healthcare providers in Hungary are dropping as doctors migrate to other countries in search of a better paycheck.

In 2002, there were 5,125 family physicians (general practitioners) and 1579 family pediatricians practicing in Hungary, and the average number of patients per practice was 1979 and 947, respectively.

The government introduced the so-called practice right (similar to a medical license), which has been granted to all family doctors who work in primary care districts with territorial supply obligations since 2000. According to the new system, if a municipality advertises a family doctor post, the applicant needs to have the relevant qualification and a practice right to be eligible.
However, the practice right can only be bought from family doctors who have such a right and are willing to sell it (ie when they give up practicing). The law is intended to ensure that practices are bought and sold, while local governments remain responsible for the provision of primary care.

According to the data for 2005, some 430 young doctors have left the country for better paid jobs since Hungary joined the European Union in 2004. However, Hungary is brain-draining even poorer countries. Ethnic Hungarians, who live in poor neighbouring countries, such as Romania, Ukraine or Serbia, often fill job vacancies in Hungary and up to one-third of the vacant medical positions in central Hungary are filled by doctors from these countries, as reported by MTI national news agency.

A survey by the Association of Health Care Economic Leaders (translated) to assess human resources in 114 of Hungary’s health care facilities, found that in 2002, approximately 10% of physician positions and about 4% of allied personnel (including nurses) positions were unfilled.

(Ministry of Health, 2004)

Nurses

Nursing employment trends are consistent with those of all ancillary workers; approximately 96% of the 53,000 nursing posts were filled, leaving one nurse for every 198 people compared to Germany, where there is one nurse for every 100 people, and Slovakia, where there is one nurse for every 137 people (Hasselhorn 2005). Among the 3,000 vacant posts for ancillary healthcare
workers generally, approximately half of the vacant posts were for nursing positions, specifically (Statistical Yearbook of Hungary, 2004).

Monthly income for health and social workers is slightly below the Hungarian average, with net earnings averaging $411.06 (342.00 EURO) per month. Within all industries, manual workers earn less compared to non-manual workers, and in the healthcare industry specifically, manual workers’ net earnings averaged $319.77 (266 EURO) per month, whereas non-manual workers’ net earnings averaged $448.49 (373 EURO) per month. Across all industries, women typically earn less than men. In health and social work specifically, women’s average net monthly earnings were $401.52 (334 EURO) per month and men’s were $447.20 (372 EURO) per month.

Hungary’s healthcare system historically has been, and remains, very hierarchical, with a strong, physician-centered care delivery model that allows only limited roles for nurses. This trend has changed somewhat in the last few years, but the nurse-per-patient ratio remains well below other EU and Western countries. In addition, the healthcare system’s structure provides few incentives to enter the nursing profession. For example, approximately 70% of Hungarian healthcare facilities are owned by the state, with the majority owned by local governments. Accordingly, the majority of healthcare professionals, including nurses and allied health professionals, are exclusively state employees. As public servants, their salaries are defined by law and tend to be low. Hungarian healthcare professionals can earn more than 10 to 15 times more in Western Europe than they can do at home.
In 2005, there were eight nurses per 1000 people in Hungary. This number is an improvement on the seven nurses per 1000 people in 2000.

The Hungarian Nursing Association was established in 1989 as the first independent organization to represent the professional interests of Hungarian nurses. It developed a new model for nursing education. The main points of that model have become a reality since then, except for the idea of university level nursing education.

The District Mother-And-Child Health Service, which was established in the previous regime, is staffed with highly qualified mother-and-child-health nurses, trained at a higher education (college) level. They provide preventive care and health education to families with pregnant women, women with newborns, and children under the age of 16 in geographic areas determined by the local government.

Midwives

The Hungarian Association of Midwives is a professional and interest advocacy organization. About 10 members established the association on May 28, 2002, and to date, membership, including 20 foreign hospital midwives, has grown to more than 60 midwives.

Community Nurses

Traditionally, the basic healthcare system in Hungary has been doctor-centered. The nurses still serve the doctor and carry out his/her instructions. Almost half of a nurse’s working time is spent on office work, and their profession is not taken seriously by physicians.
Because of a minimal workforce, specific legal relationships, the financing of nursing from a "common budget," and the lack of a federation, basic health care nursing cannot function as an independent profession.

In addition to basic and professional nursing, the duties of the community nurses would normally include health education and health protection services. However, the most common functions of Hungarian community nurses are office work and the completion of tasks ordered by doctors. The deteriorating health indexes of the Hungarian population has for years created a pressing need to organize a more effective community care system in which the role of nursing is indisputable.

**Dentists**

Private sector dentists supply 70% of the dental services financed by the NHIF. These dentists sign a long-term contract with the NHIF to provide certain dental services for free according to set criteria. Hungary is in sharp contrast to most European countries in that it has a hugely competitive army of highly trained dental professionals fighting for a relatively small home market. Competition has been stoked further by waves of foreign clients crossing the borders with Austria and Germany in search of a better deal.

The development of the dental market was given a boost last year when the National Healthcare Institute decided to subsidise it. In accordance with this decision, the state grants - as of the spring of 2002 - non-returnable subsidies amounting to several million HUF (maximum 5,000,000 HUF /20,000 Euro) to dentists who provide local dental care services and are under contract to the National Healthcare Institute. The estimated yearly turnover amounts to
approximately 10-12 billion HUF (40 million Euro). Unfortunately, exact calculations are unavailable, as the size of the ‘black market’ cannot be properly determined. However, it is assumed that it has approximately a 20% market share. A significant part of the large dental manufacturers and merchants are present in Hungary, generally represented by dealers. More and more dental offices apply for the above subsidy, and thus companies selling larger and more valuable dental equipment like dental delivery systems, X-rays, panoramic X-rays, have experienced a growth - or, according to certain estimates, even a multiplication - of their turnover.

Hungarian dentists’ and surgeons’ qualifications are acknowledged in the UK, and in fact many Hungarian dentists work internationally, especially in the UK.

Whereas the general healthcare in Hungary is in a very difficult situation due to a strong recession, dentistry is in a better market position. However, the recession also affects this field as patients are spending less and less on dental therapy. The average net income per person in Hungary is 250 - 300 Euros, while the cost of a composite filling is approximately 25-30 Euro. The replacement of one tooth with a ceramic crown costs approximately 60 Euro, and scaling amounts to 20 Euro. Consequently, a part of the population can only afford the free treatment options.

State-owned institutions employ approximately one-tenth of the dentists working today in Hungary. In addition, the provision of completely free treatments was abrogated in 1995, and now the state subsidises preventative therapy (fillings, root canals, prevention, and orthodontic practice for children). Mandatory local dental care services are subsidised by the state, and are provided by nearly 3000 dentists. The majority of their offices are private.
The number of dentists in Hungary in 2005 reached 6000, dental technicians numbered around 3500, and there were approximately 500 dental hygienists.

4.4. Service Delivery

Primary Healthcares

In 1992, the Minister of Welfare's Decree created the Family Physician Service. Previously, the system of "panel physicians" required citizens to seek medical treatment only from designated district doctors. Now individuals have the freedom to choose their own family physician. These general practitioners are the first points of contact for sick people/patients. Family doctors refer patients requiring more sophisticated interventions to hospitals, out-patient clinics and/or diagnostic centres and labs for examinations and testing.

At nearly 40 per 10,000 people, the number of physicians is relatively high. In contrast, the number of nurses is comparatively much lower than in other developed countries. Hungarian nurses are generally less trained than, for example, their counterparts in the UK. However, because of recent nursing education programs, more and more skilled nurses have similar training to registered nurses.

Low-income levels for healthcare workers significantly impede the ability of the healthcare system to attract qualified personnel and to maintain high levels of service. Physicians' salaries in Hungary are approximately 50% higher than the average Hungarian salary (compared to the 3 to 1 ratio common to most Western European nations), which amounts to HUF 70-80,000 per month.
($300-350).

In recent years, a privatisation option has been offered to primary care doctors. In 2000, Parliament passed an act intended to privatise family physician services within two years. To date, over 90% of family physicians operate as private entrepreneurs contracted to the local government and the HIF. The remaining 5-10% are salaried state employees.

Family doctors are remunerated on performance-based capitation (i.e., their incomes are determined according to the number of individuals registered with them), taking into consideration the age of the patients and the doctor's level of expertise. Higher pay is given for treating infants, young children and older people.

There are over 7,000 practices in the country with an average of 1500-1600 people registered with each doctor. Family physicians have "district nurses" on staff that assist in the clinics during business hours and provide minor follow-up in-home health services (take blood pressure, give injections, etc.).

In recent years, the focus of the system has been shifted to primary care. Patients are encouraged by the government to seek a referral from a GP of their choice to limit access to expensive healthcare measures, although in many cases they can go directly to a specialist if they wish. While GPs are meant to be involved in preventative medicine and education, their role continues to be a prescription and referral service. The intention is for a GP to be the patient’s first, and in many cases only, point of contact, but this is not often seen in practice.
Also, the NHIF now requires family doctors to participate in preventive care programs, in addition to their regular daily practices. Increased funding for home care is meant to decrease hospital stays and related expenses.

**Hospital Care**

Hungary's previous healthcare system relied on institutional care. The main emphasis was on the development of larger hospitals (with 1,500-2,000 beds) and university clinics. Today, this tendency is changing significantly. There are currently 155 hospitals in Hungary, most owned by local governments. The national institutes (for cardiology, oncology, pulmonology, etc.) and rehabilitation centers belong directly to the MOH, and the four medical schools own five clinics. About twenty institutions belong directly to other owners/ministries (the Hungarian Army, Ministry of Interior, Hungarian Railways, and church/charity organizations). However, their operational costs are covered by the HIF as well. There is only one private hospital that operates without any HIF financing and it is located just outside Budapest and has 50-60 beds.

Currently, there are 38 physicians and 80 hospital beds (60 acute beds) per 10,000 people. The averages for EU countries, where per capita budgets for health care are three times higher than Hungary's, are 25 physicians and 70 beds (50 acute) per 10,000 people. As a result of the ongoing reform in Hungary's healthcare, the number of hospital beds has been reduced by 20% and will be reduced further. Under the previous system, hospital budgets were determined by bed occupancy rates. Therefore, there was no incentive to release patients on a medically timely basis.
Now, hospitals receive funding from the HIF on the basis of patient volume and types of treatment offered, regardless of the length of time of patient stays. Thus, physicians are encouraged to shorten in-patient stays and this has created a growing need for out-patient and in-home healthcare services.

County governments run county hospitals that provide secondary and tertiary care. Some private, church-owned hospitals still exist, but most still operate under HIF financing. Most pharmacies are privatised, but the overall role of the private sector continues to be minimal.

The national government owns university and specialist hospitals, but most healthcare provision comes from local governments.

- Privatisation of the hospital system is not anticipated in the near future, due to the political sensitivities of moving away from socialized care. However, there are a few hospitals that have undergone “quasi-privatization.” In these cases, the owner remains the municipality, while it signs a contract with a private company to operate the entire hospital. The hospital runs on NHIF financing as before. However, the private company manages the operation, and controls the budget as well. The municipality keeps an eye on the performance and quality of the services, and stipulates in the contract that it can be terminated should problems arise.
- **Pharmacies**: All former state-owned pharmacies have been privatised and, in addition, new private ones have been established. According to Hungarian regulations, pharmaceuticals can be sold only in pharmacies, while OTC and paramedical products are available in drugstores as well.

- **Dialysis**: During the last few years, a number of kidney dialysis centers have been separated from the local hospitals and privatized by Hungarian or foreign health care service providers, while NHIF financing was maintained. In addition, new dialysis centers have been established and accepted for financing by the NHIF. As a result, by 2004, for-profit enterprises provided over 90 percent of all NHIF-financed dialysis services.

- **Imaging**: There are about 10 private companies in Hungary that privatised hospital-owned, or set up from scratch, imaging centers to provide X-Ray, CT, MR or PET services for patients referred to them by specialists. NHIF reimburses these facilities, based on performance criteria, in the same way that hospital-owned and hospital-run imaging centers are. The owners are local and foreign companies, often consortiums, with equipment manufacturers as eventual co-owners.

**Out-Patient Services**

Outpatient clinics are affiliated with hospitals and perform day surgeries, while more serious cases are referred directly to hospitals. Following the privatization of the family doctor services, the outpatient services will be privatized in stages. Doctors will be offered the opportunity to purchase specialist consultation rooms under highly specified conditions.
Home Nursing Care

In 1994, the HIF started a pilot program providing in-home nursing care to non-critical patients. Harris Health Services, from the USA was one of the first organisations to successfully introduce home care services in Hungary. Harris has since developed a network of skilled home-nursing providers throughout the country, although the U.S. partner is no longer involved in daily operations. Harris has recently begun a co-operative effort with the International Health Care Education Foundation to establish an educational program for skilled nursing in-home health care. Selected nurses and physiotherapists from Hungary can participate in a 12-month externship program in the United States to expand their knowledge and understanding of home health care delivery.

Since 1995, home care has become part of the HIF's budget, though it is not yet a major category. The fund allocates about 0.6% of the inpatient care budget for home health care services. The goal of the service providers is to reach 3%.

There are over 350 organisations (mostly private) in the country that provide home care based on financing agreements with HIF. Home care companies are reimbursed by the HIF based on the number of visits made. In Budapest, there are approximately 40 home care organisations employing some 400 skilled nurses. Many of the small providers have only nurses on staff, while the larger ones also have a medical director.
Hospital Provision

In Hungary’s current system, the local governments provide most of the healthcare provisions. Municipalities own primary care and outpatient clinics, and municipal hospitals provide secondary care.

On April 1, 2007, major changes were implemented in Hungarian hospital care. Of the 174 institutes providing in-patient care, five were closed down and four others were merged into one, while in a further 12 institutes, the acute care wards ceased to exist. The number of acute beds dropped by 26%, whereas the number of chronic, rehabilitative and nursing care beds rose by 35% to 27,169. The change in the dispersion of acute care beds among regions is shown in next graph.

Since February 15th, 2007, consultation fees for ambulatory care services and for days spent in hospital have been paid by patients in Hungary. In March 2007, consultation fees were paid by 2.2 million people for 2.8 million visits. More than 80% of the responding institutions still make
out a handwritten receipt for the payment of charges, and only 19% keep a cash register for the fees. As for the machines dispensing vouchers for consultation fees and day charges, the Ministry of Health called for tenders imposing a limit on the number of consultations and the total amount of money allocated.

**Choice of a Physician**

If a patient visits a hospital without a referral or with a referral for another hospital, he must pay 30% of the treatment cost up to a maximum of 100,000 HUF (Euro 388). Beginning June 30 2007, the payment of a partial user charge has not been required for the choice of a physician (patients can chose their doctor) providing prenatal and obstetric care.

**Waiting lists**

Since January 2007, it has been stipulated by a decree that waiting lists are to be made public by hospitals on their websites. The Ministry expects the new regulation to bring about a healthcare system that is characterised by transparency, openness and strict control. Another important goal of the regulation is to prevent the purchase of priority treatment by gratuity payment. The procedure of being put on a waiting list can only be initiated by the attending physician and the documentation thereof should contain the case identifier, probable date and place of the procedure, the patient’s actual number on the waiting list, as well as the date of registration. This information is collected by the Health Insurance Supervision and made public on its website. Currently, the data from eight hospitals can be found there.
The President of the Hungarian Hospital Association has confirmed that the publication of waiting lists has been only partly attained. In practice, even the larger and technologically advanced hospitals cannot update their websites on a daily basis. In addition, some hospitals do not want to disclose their waiting times on the Internet. Moreover, the length of the waiting lists differs by regions. The Jósa András Hospital in Nyíregyháza was among the first to make its waiting lists public. The waiting time for minor surgical interventions can be 2-3 weeks, but the registration for a more complicated hip operation may be 2-3 months.

**Palliative Care Services**

Palliative care in Hungary began with the collapse of the communist system. Prior to the political changes that began in 1989, issues dealing with death and dying were considered taboo.

The Hungarian Hospice Foundation was formally established on April 29, 1991. At first, the foundation focused on making the public aware of palliative care, and on changing attitudes as the concept of a ‘hospice’ was completely unknown to the public at the time. Consequently, the Hungarian Hospice Foundation’s main concern was to bring this new form of care for the dying into public awareness and enlist relevant social organisations for support.

The major umbrella national organisation within Hungary is the *Hungarian Hospice Palliative Association*. Founded in 1995 by the *National Association of Cancer Patients* and 19 hospice organizations, it supports the development of palliative care by inviting applications from organisations that provide (or intend to provide) hospice care, and from individuals who wish to
offer support.

In 2006, there were an estimated 57 palliative care services in Hungary, comprising 21 inpatient palliative care services (one freestanding unit; ten hospital units; four hospital mobile teams; six nursing home units), 34 home care services, and two day care services. There were an estimated 215 palliative care beds allocated to adults: 10 beds in the one freestanding inpatient palliative care unit; 154 beds in the ten hospital units; and 51 beds in the six in-patient palliative care units in nursing homes.

There are no pediatric palliative care services in Hungary. The palliative care service for children in Bethesda Hospital, Budapest, functioned from 1995 to 2003, then closed because there were insufficient patients. However, this service is expected to resume in 2007.

<table>
<thead>
<tr>
<th>Adult/paediatric</th>
<th>Inpatient palliative care units</th>
<th>Existing services (2006)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adult/paediatric total</td>
<td>57</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Adult/paediatric</th>
<th>Inpatient hospices</th>
<th>Consultant teams in hospitals</th>
<th>Home care teams</th>
<th>Day centres</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adult/paediatric total</td>
<td>1</td>
<td>0</td>
<td>34</td>
<td>2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Paediatric</th>
<th>Inpatient palliative care units</th>
<th>Inpatient hospices</th>
<th>Consultant teams in hospitals</th>
<th>Home care teams</th>
<th>Day centres</th>
<th>Paediatric total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paediatric total</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Grand total</th>
<th>57</th>
</tr>
</thead>
</table>
Reimbursement of Palliative Care Services

In 2004, the National Health Insurance Fund (NHIF) and the Ministry of Health made an important decision to create the legal framework and financial foundations of hospice care as an integral part of the health service. On September 1st, a two-year model program started, under which the NHIF supported service givers and hospital wards that provided hospice care for cancer patients and their families from a monthly fund of HUF 100 million. This was intended to multiply the number of people with access to hospice care.

Other sources of additional funding include: local governmental support; grants; donations; and the 1% tax law. The Hungarian tax system contains a clause allowing citizens to assign 1% of their salary to the support of local organizations, churches and foundations which benefits hospice institutions. In 2002, Dr. Katalin Muszbek, Director of the Hungarian Hospice Foundation, revealed an unexpected source of income: a charitable donation from events organized through the Charles Dickens Heritage Foundation, by a descendant of Dickens with a family connection to Hungary. The Foundation organised A Christmas Carol Ball and raised 10 million Forints (39,283 Euros).

Opioid Availability and Consumption

In 1994, oral slow release Morphine, Tramadol and Dihydrocodeine became available free of charge to cancer patients and transdermal Fentanyl is also available without charge in out-patient settings. A wide range of opioids is available, including Morphine (immediate release, controlled release and injectable), Methadone, Oxycontin, Pethidine and Fentanyl. All are free to cancer patients except immediate release Morphine and Oxycontin.
From 2002 to 2004, the average defined daily dose consumption of Morphine for statistical purposes (S-DDD)27 in Hungary was 87. This compares with other Central and Eastern European countries as follows: Croatia 15, Romania 54, Serbia 19, Slovakia 114, and Slovenia 146. (Table 2).

In September 2005, the Hungarian Government announced the National Cancer Control Program (NCCP) as part of the National Development Plan. Quality of life improvement and social and professional collaboration for fighting cancer were its main aims and a further aim was to 'accomplish a complex approach and to form and operate an effective care system providing balanced patient care’. With this purpose in mind, the NCCP followed the guidelines and recommendations of the World Health Organization's (WHO) National Cancer Control Program. Approximately 13% of all cancer patients have access to a specialist palliative care service in Hungary. In rural areas, coverage is provided mainly by home palliative care teams connected to regional (not palliative) home services.
Table 2. Average daily consumption of defined daily doses of morphine per million inhabitants, 2002-2004

Central and Eastern
Family Planning and Contraception

The Hungarian Central Statistical Office has carried out five different sample surveys in the last fifteen years to investigate more closely questions of fertility, family planning, and birth control. The main purpose of recent population policy measures was to ensure simple reproduction of the population. Among the countries of Central and Eastern Europe, Hungary has a high oral contraceptive prevalence rate. Until recently, however, Hungarian women did not have access to combined oral contraceptives as Marvelon was only introduced in Hungary in October 1991. Prior to its introduction, a multi-center study was undertaken in Hungary with Marvelon to confirm the clinical results of studies from other countries and indeed the study confirmed Marvelon to be an effective, well tolerated combined oral contraceptive with no relevant effect on blood pressure. Remarkable improvements were noted, especially with regards to side effects, in patients switching from other oral contraceptives. It was concluded that Marvelon is a valuable addition to the range of contraceptive methods available in Hungary. Although Hungary does not have an explicit population policy, incentives and compensations are given to married couples to promote childbearing. Also, the government has implemented programs to protect women of childbearing age, to assist them during pregnancy, and to provide support after childbearing. Hungary has achieved relatively high contraceptive prevalence rates. About 68 per cent of reproductive-age women use modern methods. Although the government does not subsidise contraceptives, a full range is widely available in pharmacies and clinics. Family planning services in Hungary are integrated into national health services and focus on providing antenatal and postnatal care and counselling, and on reducing the number of abortions. However, the knowledge and skills of midwives and nurses in the provision of reproductive health care remains at a low level. Many
individuals do not have easy access to high-quality sexual and reproductive health services. Furthermore, information on sexuality and reproductive health has not been introduced into the school curricula.

According to the “Centre for the Reproductive Rights and NANE”: The Hungarian government does not enforce women’s human rights, including the right to reproductive healthcare and the right to be free from violence. The groups have submitted a report on these rights violations to the United Nations Human Rights Committee (HRC) to coincide with the official Hungarian government report of March 22, 2002. The following issues are highlighted in the report:

Contraception: There is practically no coverage for contraception. While Hungary’s health policy provides free of charge or highly subsidised health services for its population, reproductive health is addressed as maternal health care. Women who use contraceptives must pay for them out-of-pocket and for many these expenses remain out of their reach.

Abortion: Hungary recently amended its abortion law to make it more difficult for women to access abortion services. Women are required to undergo two counseling sessions, to wait a minimum of three days, and are provided with state-funded brochures developed by anti-abortion groups that give misleading medical information on the harms of abortion. The brochure exaggerates the physical effects of abortion, claims that abortion causes breast cancer, characterizes abortion as the killing of babies, and includes drawings of babies being mutilated with knives.

Violence against women: The Hungarian Penal Code does not recognise domestic violence as a
separate crime and the Minister of Justice has specifically stated that domestic violence legislation is not needed, asserting that such legislation would be positive discrimination and is not required by Hungary’s international obligations.

**HIV/AIDS**

The incidence of AIDS cases is relatively low and stable. Recent reductions in AIDS deaths are due to the introduction of newest medications in the country.”

People diagnosed with the disease are treated in a special HIV/AIDS Centre in Budapest, which is separate from the mainstream palliative care services.

<table>
<thead>
<tr>
<th>Number of people living with HIV/Adults aged 15 and up living with HIV</th>
<th>3200</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adults aged 15 to 49 HIV prevalence rate</td>
<td>0.1%</td>
</tr>
<tr>
<td>Women aged 15 and up living with HIV</td>
<td>&lt;1000</td>
</tr>
<tr>
<td>Deaths due to AIDS</td>
<td>No data</td>
</tr>
</tbody>
</table>

Fifteen years ago, HIV/AIDS was recognised in Hungary as one of the major epidemiological challenges of recent decades, and it is even now considered to be an issue of high importance. HIV testing is mandatory for blood donors. A national HIV reporting system has existed since 1985.

Hungary belongs to countries with low HIV/AIDS prevalence. Between 1985 and 2000, 879 HIV
positive persons were detected and of these, 766 were identifiable, while 133 remained anonymous. The cumulative HIV incidence rate was 85 per one million people at the end of 2000. The annual mean of newly detected coded HIV positive persons was 48, an incidence rate of 4.7 per million. Worldwide, transmission categories show changing patterns. Heterosexual transmission of the infection is increasing. Females represent 13% of all registered HIV positive cases, with a growing prevalence. The number of registered HIV positive drug users remained low; only two cases were identified by the end of 2000, in spite of the fact that the number of drug abusers is rising at an alarming rate. Recognising the risks of HIV transmission among drug users, the Hungarian health authorities continue to make significant efforts to address this problem. The data clearly indicate that the HIV/AIDS epidemic has been kept at a relatively low level in Hungary and this has partly been the result of strict epidemiological measures, introduced immediately after the appearance of the first HIV positive cases in 1985, and the consistent attitude of the Hungarian authorities during this fifteen-year period. Hungary has consistently emphasised prevention of HIV disease. Traditional epidemiological surveillance has been developed along with voluntary counseling and testing, particularly in high risk groups, providing HIV positive persons with information and advice. This promotes social understanding, and helps combat stigmatisation and discrimination. With the help of education and the media, nationwide preventive programs and intensive campaigns have been organised, financed and implemented, with the strong involvement of civil society.
According to WHO data, by the end of 2005, there had been 1285 HIV cases reported in Hungary, in which 505 people were reported to have developed AIDS, including 786 who died. In 2005, there were reported 110 new HIV cases, 33 new AIDS cases, and four AIDS deaths. The incidence of AIDS cases is relatively low and stable.

4.5. Health Supplies and Medications

In Hungary, the pharmaceutical industry is comprehensively regulated, from production to marketing and distribution. Pharmaceutical companies and manufacturers were previously owned by the state and supplied not just most of the domestic market, but exported to countries of the former socialist bloc. In the early period of the economic transition, the market was liberalised, and all but one Hungarian pharmaceutical company was privatised. The majority of the wholesale and retail industries have also been privatised, and by the end of 1997 all of the previously state-owned pharmacies serving the general public were private. In 1992, Hungary signed the European Free Trade Area agreement and the Pharmaceutical Inspection Convention, and now follows EU registration conventions and inter-country notification practices, and
enforces good laboratory, manufacturing and clinical practices.

**Pharmaceutical Market**

Hungary represents one of the more advanced pharmaceutical markets of Central Europe. The country has a strong tradition of pharmaceutical manufacturing and has always maintained a relatively high level of consumption. However, increased use of expensive drugs, among other factors, has led to an ever-expanding drugs budget deficit. Over the past few years, the government has implemented a number of measures to reduce the deficit, but they have mainly been at the expense of pharmaceutical companies. Recent legislation designed to limit the overspending of the drugs budget has hit the pharmaceutical industry hard. The sector has witnessed a number of changes, particularly since January 2007, including reduced reimbursement rates, new prescription charges, and further mandatory contributions from manufacturers. The most recent legislation is likely to result in manufacturers contributing at least twice as much as they did in 2006 toward the drug bill.

Pharmaceutical production in Hungary specialises in the production of generic drugs and generic prescribing will increase in 2007 due to the increased pressure on physicians to prescribe the cheapest available drugs. Privatisation of the main pharmaceutical companies took place between 1991 and 1996, starting with “Chinoin”. Foreign investors control “Gedeon Richter”; while foreign professional investors own majority shares in other companies. The country has an enviable market size and robust growth is forecast, with the value of the pharmaceutical market expected to reach nearly US $5 billion by 2010. Amid attempts to cut the country's budget deficit ahead of the Euro adoption in 2011, Hungary announced drastic changes to its healthcare system...
in September 2006, including new fees to see doctors, patient co-payments and new pharmacy rules. These reforms were criticised by opposition parties and by the general population, but the government pointed out that receiving the highest level of medical care with no cost penalties is not a tenable situation.

The instances of foreign direct investment in Hungary are increasing. GSK Biologicals announced in September 2006 that it is to build a EUR100m vaccines production facility in Godollo, outside Budapest. The plant will be one of Europe's most advanced biotechnology facilities, and it will manufacture two vaccine products.

BMI's adjusted Business Environment Rankings for Central & Eastern Europe place Hungary in eighth place, down from its premier position in 2006. The primary reason for this fall is the emergence of countries like Russia and Romania as extremely attractive places for pharmaceutical companies to operate. Nevertheless, Hungary still remains an important destination for multinationals due to its favorable geographical location and transparent operating environment.

Two large domestic producers, Egis and Gedeon Richter, dominate the competitive landscape. Both have recently posted robust financial results; however, the companies reduced their financial forecasts for 2006 as a result of price cuts and new taxes announced by the Prime Minister. Assuming the 4% "solidarity tax" on profit before taxation is approved, Gedeon Richter's profit may fall by up to US$2.7ml per annum.
Strength of the Market

Hungary has many universities and research institutes focusing on life sciences. In addition, numerous local biotechnology companies such as Clone Star Biotech and Exbio, and global pharmaceutical companies such as Baxter, are targeting the hidden market potential. At present, labour costs in Hungary are very low compared to other EU countries and this situation is expected to attract foreign investors in pharmaceutical research.

CEE countries boast qualified medical practitioners who are willing to conduct clinical studies. Patient recruitment for clinical trials is yet another positive factor for the CEE countries as the homogenous patient base coupled with the high treatment compliance rates of patients makes it easier to recruit patients for clinical trials. As clinical trial results comply with EU regulations, more pharmaceutical companies are now focusing on conducting research in CEE countries. The quantity of research conducted in these countries has increased dramatically, and currently Poland, Hungary and the Czech Republic host around 950 studies altogether on an annual basis.

The increase in demand for cardiovascular treatment due to increasing mortality rates is the prime-driving factor for this market. However, high levels of genericisation reduce market growth in this therapeutic field.

For now, the Central Nervous System (CNS) represents the second largest therapeutic field. The higher incidence of CNS disorders is driving growth in this sector. Cancer therapeutics have also experienced strong growth in the CEE. The increased demand for innovative medicines has propelled the growth of the cancer, respiratory, and anti-infectives market segments. The cardiovascular and CNS markets, coupled with the cancer segment, are likely to experience
considerable growth in the coming years.

Reimbursement

The Minister of Health also determines prescription rules, which can have an effect on the amount of subsidy the patient is eligible for. For instance, certain outpatient medicines are subsidised less if the family doctor prescribes it, and not the relevant specialist. The subsidy can be 0%, 50%, 70%, 90% or 100% of the agreed consumer price, or a fixed amount. The 90% and 100% subsidy categories are reserved for medicines prescribed by specialists for special medical conditions, such as insulin for diabetic patients. In addition, certain very expensive drugs are purchased centrally by the NHIFA. In 1999, of 3705 listed drugs, 2172 could be purchased with a subsidy. In Hungary, there is a special restricted list of drugs that can be prescribed within the pharmaceutical co-payment exemption system. Patients have to make co-payments for medicines purchased in out-patient care only, as in-patient care includes the costs of pharmaceuticals, and hospitals purchase medicines in a market free from central regulations.

Pharmaceutical expenditures consume a substantial part of the HIF budget. Successive governments have struggled to control overspending in the pharmaceutical sub-budget, which has been a major cause of the ongoing deficit of the HIF. Various cost shifting measures have been implemented, and the subsidy system is continuously revised. A recent measure was the extension of fixed amount subsidies, whereby patients pay the difference between the price of the medicine and a fixed amount, and consequently have an incentive to buy cheaper drugs. Wholesale and retail price margins for expensive drugs were decreased to make pharmacists disinterested in increasing consumption of the most expensive drugs, while the rationalisation and
stricter control of physician prescriptions have also been on the government agenda.

**Drug Registration**

All pharmaceuticals must pass a registration and licensing procedure administered by the National Institute of Pharmacy before they can be sold. The price of drugs, including the wholesale and retail margins, is also regulated. Price negotiations for the out-patient sector take place between the producers and a governmental committee. Representatives of the Ministry of Health, the Ministry of Finance, and the NHIFA take part in the annual negotiations. This has been formalized as the Social Insurance Price and Subsidy Committee. During the negotiations, the parties agree on the amount of any subsidies a drug will receive and its consumer price.

Previously the Minister of Health promulgated the agreement, but as of January 1, 2000, it is done by a governmental decree. Although the price set by this regulation is not compulsory, producers, wholesalers and retailers usually adhere to it. Hospitals may buy medicines directly from wholesalers or manufacturers.

Laboratory control (since 1927), clinical trials (since 1951), and human clinical pharmaceutical experiments (since 1967) are prerequisites for new-drug approval. The procedure follows several steps: evaluation of chemical and pharmaceutical data by the staff of the National Institute of Pharmacy; evaluation of toxicological and pharmacologic documentation with the help of the Committee on Drug Administration; authorized clinical pharmacologic investigations conducted in the units of the Clinical Pharmacological Network, which are supervised by the National Center for Clinical Pharmacology and which follow consultation with the Committee on Medical
Research Ethics (mandatory in cases of new drugs); clinical trials; application for registration (scientific evaluation); and finally, application to the Ministry of Health for a marketing authorization. The process may be facilitated appreciably by preparations already registered in another country. Moreover, Hungary is an active member of the World Health Organization (WHO), the Pharmaceutical Inspection Convention of the European Free Trade Association (EFTA PIC), the Council of Mutual Economic Assistance (COMECON), and other international pharmaceutical and clinical pharmaceutical collaborations.

**Pharmaceutical Industry**

Hungarian manufacturers see themselves not only as players in Western European and North American markets, but also as being well-positioned to offer large Western multinational pharmaceutical firms access to the extensive distribution networks in Russia, Ukraine, Belarus, and other former Soviet republics. There are more than 160 pharmaceutical manufacturers represented in the Hungarian market.

“Gedeon Richter” is the only remaining privatized Hungarian drug maker without considerable foreign corporate "strategic" investment.

Unlike many of their North American and Western European counterparts, almost all Hungarian drug manufacturers are vertically integrated; they produce their own raw materials, manufacture finished pharmaceuticals, and do their own marketing and distribution.
Drugs Distribution

Since the beginning of the year, some 300 medicines may be distributed outside of pharmacies. Up to the end of April, 182 applications for drug distribution authorisation were submitted to the National Public Health and Medical Officer's Service, 120 of which gained approval. It was the MOL gas (petrol) station network that first set up the distribution of over-the-counter drugs. The delivery of medicines outside of pharmacies was popular with customers, so the company decided to extend its practice from five gas stations - four of them in Budapest, one in Veszprém - to five more gas stations in the capital and in the country. Some preparations appear on the shelves of the shops and gas stations in a smaller container or dosage than usual. Price wise, the holder of the marketing authorisation is allowed to establish a maximum price for the medications sold OTC. Besides the MOL network, “Shell” Hungary also started drug marketing at twelve of its gas stations in Hungary.

In accordance with the stipulations of the law on pharmaceutical efficiency, a new system of drug subsidisation came into force on January 15, 2007. Price subsidisation keys changed from 90% to 85%, from 70% to 55%, and from 50% to 25%, respectively. Moreover, the category of medicines with 0% price support was broadened. For those drugs with a 100% subsidisation, a packet surcharge of HUF 300 is paid by patients.

Physicians and pharmacists are legally obliged to inform patients about drug substitution.

As to the forecasts of the National Health Insurance Fund, it can be expected that the fund will be able to secure coverage of the costs up to the end of the year.
Since February 15th, 2007, prescription drugs may be dispensed to patients up to 90 days after the date of prescription. The price and the co-payment for about 1000 substances and for 348 medicines have decreased.

The fall of drug prices is due to intensive market competition induced by the legal regulation of manufacturers. Reduction of co-payments mainly affects preparations with high turnover, as these are the focus in manufacturers' attempts to gain favorable market positions.

**Parallel Trade**

While Hungary continues to offer exciting prospects for biopharmaceutical and biotechnology companies, parallel trade is expected to remain the key concern. Typically, parallel trade occurs in inverse proportion to drug prices within the EU, encouraging parallel importers in the belief that parallel trade promotes competition, thereby lowering prices.

With 'new' EU countries having lower average drug prices than Europe's western markets, parallel imports principally follow an east-west channel (with a south-north channel to a lesser extent).

The east-west parallel trade axis originates from the Czech Republic, Hungary and Poland, whose domestic producers meet EU standards and criteria. Parallel trade is currently estimated at $3.8 billion and is projected to last for a minimum of another five years. This practice is expected to wane when there is a single EU25 market and price differences narrow significantly.

Several international drug companies have attempted to tackle parallel trade by applying restrictions to wholesalers, seeking to prevent exports using legal loopholes, or removing or
reducing the ex-manufacture price differentials of their products across the various EU states. Others, such as Schering AG, have attempted to limit parallel trade through a consistent European pricing policy, and setting prices within a narrow band.

4.6. Roma in Hungary

There are 300-400 Roma colonies in Hungary, scattered across 530 habitats. There are 456 family paediatricians providing medical care to Romany colonies.

Only 60% of medical care provided for Roma children is undertaken by specialists in paediatrics. Regular family doctors provide 94% of emergency care for children. In addition, 12.5% of district nurses caring for the colonies provide care for more than 2 habitats; 147 of them (22% of all district nurses) provide care for more than 750 persons. (Experience shows that appropriate care can be ensured if the number of care recipients does not exceed 300, and the maximum number of settlements under care is two.)

The Roma in Hungary and in the whole of Central and Eastern Europe are documented as experiencing the worst health conditions (Ringold, 2000), and morbidity and mortality levels are generally worse than for the majority population in Hungary (Babusik, 2004). In addition, the Roma often face negative discrimination from majority members of society due to their unique culture, besides economical, social and regional disadvantages.

After the breakdown of the communist system, most of these unskilled Roma people became unemployed, whereas previously they were working as manual laborers. As a result, in the post-
transition years, the unemployment rate was considerably higher among the Roma (35.8%) than among the non-Roma (11.2%) (Speder, Habich, 1997). The rate of unemployed Roma people is presently estimated at ten times higher than the national average (Human Rights Watch, 2002), which means a major decline in the status of this group on the Hungarian labour market.

Therefore, the real danger concerning this minority is more poverty than ethnicity. Because of their low social status, they are marginalised and stigmatised, and have insufficient self-advocacy skills, which can result in a lack of motivation for social mobility.

Current central government legislation on the improvement of the living and health standards of disadvantaged social groups such as the Roma aims to support equal access to quality healthcare services and preventive programs.

The Hungarian government is encouraging a non-discriminatory attitude amongst healthcare providers towards Roma patients. The modification of graduate and post-graduate education for medical personnel to take into account the socio-economic background, health status and cultural characteristics of the Roma minority is included in the strategic programs of the Ministry of Health. Despite these goals, the Roma’s access to quality health care is still inadequate. According to a 2001 survey of the National Institute for Health Development, smoking, insufficient nourishment, and a lack of preventive activities commonly and negatively affect the health status of the Roma people. Mortality rates among the Roma are double those of the average population, while the most frequent illnesses causing death are cardio-vascular diseases and liver disease. According to a representative survey conducted in 2003, Roma people often
lack proper medical treatment when they are based in segregated settlements far from local hospitals and GP facilities.

4.7. Map of Hungary
### 4.8 Appendix: PHYSICIANS IN HUNGARY, By Specialty and Gender, 2005

<table>
<thead>
<tr>
<th>Specialization</th>
<th>Total</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male, female together</td>
<td>Male, female together</td>
</tr>
<tr>
<td>Addictology</td>
<td>132</td>
<td>181</td>
</tr>
<tr>
<td>Allergology and clinical immunology</td>
<td>176</td>
<td>6</td>
</tr>
<tr>
<td>Anaesthesiology, intensive therapy</td>
<td>1,016</td>
<td>214</td>
</tr>
<tr>
<td>Audiology</td>
<td>227</td>
<td>169</td>
</tr>
<tr>
<td>Internal medicine</td>
<td>1,497</td>
<td>512</td>
</tr>
<tr>
<td>Dermatology</td>
<td>412</td>
<td>11</td>
</tr>
<tr>
<td>Paediatric otolaryngology</td>
<td>62</td>
<td>23</td>
</tr>
<tr>
<td>Paediatric cardiology</td>
<td>63</td>
<td>–</td>
</tr>
<tr>
<td>Paediatrics</td>
<td>1,472</td>
<td>239</td>
</tr>
<tr>
<td>Cytopathology</td>
<td>161</td>
<td>3</td>
</tr>
<tr>
<td>Endocrinology</td>
<td>139</td>
<td>107</td>
</tr>
<tr>
<td>Vasculosurgery</td>
<td>196</td>
<td>14</td>
</tr>
<tr>
<td>Physiotherapy</td>
<td>42</td>
<td>90</td>
</tr>
<tr>
<td>Occupation medicine</td>
<td>1,379</td>
<td>72</td>
</tr>
<tr>
<td>Phoniary</td>
<td>30</td>
<td>130</td>
</tr>
<tr>
<td>Otolaryngology</td>
<td>287</td>
<td>513</td>
</tr>
<tr>
<td>Gastroenterology</td>
<td>449</td>
<td>257</td>
</tr>
<tr>
<td>Geriatrics</td>
<td>3</td>
<td>860</td>
</tr>
<tr>
<td>Paediatric and youth psychiatry</td>
<td>1</td>
<td>47</td>
</tr>
<tr>
<td>Paediatric gastroenterology</td>
<td>2</td>
<td>418</td>
</tr>
<tr>
<td>Paediatric radiology</td>
<td>16</td>
<td>608</td>
</tr>
<tr>
<td>Paediatric neurology</td>
<td>83</td>
<td>128</td>
</tr>
<tr>
<td>Paediatric gynaecology</td>
<td>73</td>
<td>4</td>
</tr>
<tr>
<td>Paediatric psychiatry</td>
<td>114</td>
<td>–</td>
</tr>
<tr>
<td>Paediatric surgery</td>
<td>86</td>
<td>53</td>
</tr>
<tr>
<td>Paediatric ophthalmology</td>
<td>42</td>
<td>25</td>
</tr>
<tr>
<td>Paediatric pulmonology</td>
<td>117</td>
<td>736</td>
</tr>
<tr>
<td>Haematology</td>
<td>141</td>
<td>59</td>
</tr>
<tr>
<td>Family medicine (General medicine)</td>
<td>3,525</td>
<td>1,067</td>
</tr>
<tr>
<td>Defence and catastrophe medicine</td>
<td>93</td>
<td>98</td>
</tr>
<tr>
<td>Neurosurgery</td>
<td>108</td>
<td>104</td>
</tr>
<tr>
<td>Forensic psychiatry</td>
<td>28</td>
<td>492</td>
</tr>
<tr>
<td>Forensic medicine</td>
<td>61</td>
<td>9</td>
</tr>
<tr>
<td>Forensic psychiatry</td>
<td>–</td>
<td>410</td>
</tr>
<tr>
<td>Infectology</td>
<td>163</td>
<td>362</td>
</tr>
<tr>
<td>School medicine, youth protection</td>
<td>411</td>
<td>33</td>
</tr>
<tr>
<td>Isotopdiagnostics</td>
<td>84</td>
<td>3,296</td>
</tr>
</tbody>
</table>

---

56
<table>
<thead>
<tr>
<th>Specialty</th>
<th>Number</th>
<th>Specialty</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cardiology</td>
<td>722</td>
<td>Dental anaesthesiology</td>
<td>–</td>
</tr>
<tr>
<td>Hand surgery</td>
<td>112</td>
<td>Orthodontics</td>
<td>219</td>
</tr>
<tr>
<td>Clinical pharmacology</td>
<td>174</td>
<td>Paediatric dentistry</td>
<td>202</td>
</tr>
<tr>
<td>Clinical genetics</td>
<td>6</td>
<td>Stomatology</td>
<td>161</td>
</tr>
<tr>
<td>Clinical laboratory examination</td>
<td>283</td>
<td>Parodontology</td>
<td>22</td>
</tr>
<tr>
<td>Clinical oncology</td>
<td>418</td>
<td>Specialists, total</td>
<td>26,847</td>
</tr>
<tr>
<td>Public health, epidemic laboratory examinations</td>
<td>17</td>
<td>Physicians without specialization</td>
<td>5,138</td>
</tr>
<tr>
<td>Public hygiene, epidemics</td>
<td>98</td>
<td>Dentists without specialization</td>
<td></td>
</tr>
<tr>
<td>Laboratory haematology and immunology</td>
<td>4</td>
<td>(Licentiate in dental surgery)</td>
<td>575</td>
</tr>
<tr>
<td>Preventive and public medicine</td>
<td>59</td>
<td>Other physicians without specialization</td>
<td>3</td>
</tr>
<tr>
<td>Thoracosurgery</td>
<td>94</td>
<td>Total</td>
<td>32,563</td>
</tr>
<tr>
<td>Molecular genetic diagnostics</td>
<td>15</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>