

Ministry of Social Affairs  
Health Information and Analysis Department

## **Health expenditure in Estonia, 2005**

Tallinn  
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The Mission of the Health Information and Analysis Department:  
**“Health and Welfare of the People via Better Statistics and Information.”**

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## **BRIEF OVERVIEW**

The share of total expenditure on health in GDP decreased 0.2 percentage points in 2005 and comprised 5.1%. Public expenditure on health comprised 3.9% of GDP (4.0% in 2004).

Total expenditure on health increased more than 1.0 billion kroons or 12.9% when compared to the previous year and comprised 8.8 billion kroons in current prices in 2005. However, actual expenditure on health (adjusted with the additional health care consumer price index) decreased 2.5% in 2005 and even 7.7% when compared to the prices in 2000.

Expenditure on health in the public sector increased 14.6% when compared to the previous year and comprised 6.7 million kroons. The majority of public expenditure (86.3%) was financed from the funds of the Estonian Health Insurance Fund.

The share of the public sector in financing health-related costs has increased slightly when compared to the previous year (75.5% in 2004, 76.7% in 2005). The growth occurred on account of the increase in the share of the government's health expenditure and the expenses of the Estonian Health Insurance Fund. The share of the private sector has decreased from 24% in 2004 to 23% in 2005.

The average expenditure on health per resident of Estonia in 2005 amounted to 6,521 kroons (417 EUR), which is 761 kroons (49 EUR) more than in the previous year.

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## Abbreviations and Symbols

DRG	Diagnosis Related Groups
EHIF	Estonian Health Insurance Fund
GDP	Gross Domestic Product
HIAD	Health Information and Analysis Department
LG	Local Government
NPA	Non-Profit Associations
OTC	Over-The-Counter medicines
OECD	Organisation for Economic Cooperation and Development
SHA	System of Health Accounts
SOE	Statistical Office of Estonia
THE	Total Health Expenditure
WHO	World Health Organization
-	phenomenon did not occur
...	no data available

## INTRODUCTION

This report belongs in the series of the Ministry of Social Affairs' reports *Health Expenditure in Estonia*. The objective of the analysis is to give basic information about how the health system is financed through different sources of funding, providers of health services and the service using the methodology developed by the OECD – System of Health Accounts (hereinafter the SHA)<sup>1</sup>. The analysis can be used by all institutions and persons interested in the sphere of health funding and by the wider public. We hope that this material will give additional information about how the health system is funded and health expenditure in Estonia and helps to understand the reasons why health expenditure has changed.

According to SHA, expenditure on health includes such health-related activities as curative care, nursing care and rehabilitative services, occupational health, health care of the Defence Forces and in prisons and administration of health in the public and private sectors. At the same time, total expenditure on health does not include the expenditure of teaching, health research and development, environmental health and other services (whose principal activity is not improvement of health). This means that the SHA definition is restrictive and does not cover the resources of the health system as a whole. Those who wish to use the analysis for planning health resources must consider the fact that the analysis only covers expenditure associated with Estonian residents. This means that the report does not reflect the cost of health services provided to foreigners and the cost of medical goods purchased by foreigners.

This report gives an overview of the health expenditure incurred in 2005 and follows a structure that is similar to the one used for previous analyses in the *Health Expenditure in Estonia* series. The analysis consists of three parts: an analysis of the health expenditure of Estonia, international comparison and technical notes. Major tables and classifications have been highlighted in the appendices. The tables in the first part of the

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<sup>1</sup> The OECD methodology is called the System of Health Accounts (SHA) and it is used in more than 100 countries.



report contain absolute figures and indicators for 2005, and data from 2004 have often been added for comparison. Trends of the previous years have also been considered in the text of the report.

The author is grateful to everyone who contributed their time, provided information and helped to prepare this analysis. The organisations whose data were used in the analysis are listed in Chapter 3.3.

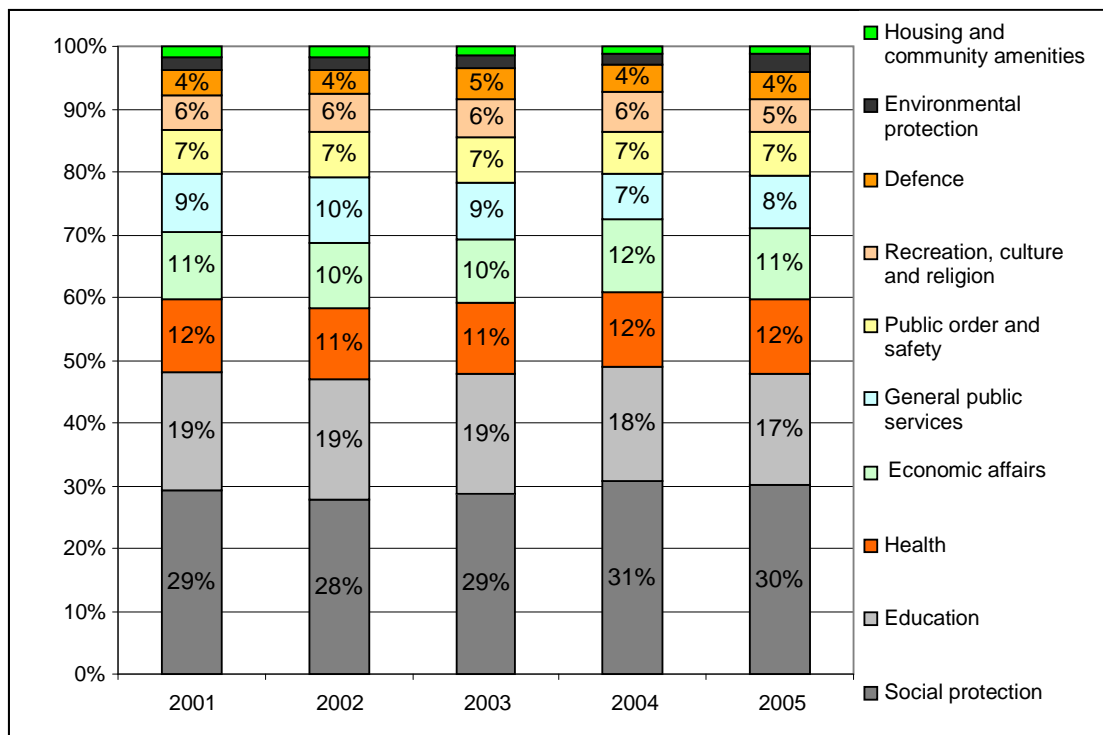
# 1. ANALYSIS

## 1.1. Total Expenditure on Health and General Economic Activity

Estonia has managed to maintain high economic growth from 2001 to 2005 (7.6%) and came second only to Latvia (8.1%) in this respect. Economic growth in Estonia accelerated to 9.8 percent in 2005 and exceeded the average growth for the last five years by 2.6%. The increase of the consumer price index reached 4.1 percent in the previous year.

Priorities of the public sector did not change during the years (Figure 1). When we take a look at expenditure according to areas of activity, then the share of expenditure on health is constantly in third place and by the estimation of the Ministry of Finance comprised 12% of all public sector expenditure in 2005.

**Figure 1.** Public sector expenditure according to areas of activity, 2001–2005



Data source: Statistical Office and Ministry of Finance

Figure: the author

Regardless of the increasingly fast inflation, gross wages in 2005 increased 10.5 and actual wages 6.1 percent. The fast increase in gross wages in 2005 was supported by the favourable economic development. The wages of health care professionals increased even faster in 2005 than the average wages in the state. Gross wages of physicians increased 30% in 2005 when compared to the previous year, the wages of nursing staff increased 40% and the wages of caring personnel 30%. All this had an impact on the increase of total health expenditure on health<sup>2</sup> (hereinafter the THE).

The total expenditure on health in Estonia in 2005 comprised 8.8 billion kroons (Table 1). Nominal increase when compared to 2004 was approximately 1.0 billion kroons or 12.9%. The increase was 1.3 percentage points lower than in the previous year, but still one of the largest in the last five years.

<sup>2</sup> The terms total health expenditure and expenditure on health are used as synonyms in this analysis. Expenses and expenditure are also not differentiated.

**Table 1.** THE in current and constant prices, expansion rates, 2000–2005

Years	In current prices (thousand kroons)	In constant prices (thousand kroons)	Nominal growth (%)	Real growth (%)
2000	5,145,500	5,145,500	4.0%	...
2001	5,353,800	4,763,167	4.0%	-7.4%
2002	5,958,800	4,860,359	11.3%	2.0%
2003	6,812,166	4,694,808	14.3%	-3.4%
2004	7,782,648	4,867,197	14.2%	3.7%
2005	8,787,431	4,747,397	12.9%	-2.5%

The Statistical Office of Estonian (hereinafter the SOE) has been calculating the health care deflator since 2000. THE increased 2.5 percent when compared to the previous year when we consider inflation in health care. This means that even though health expenditure is higher when compared to the previous year, we actually get less services and products for this money. The increase in health care prices in 2005 was mainly caused by the increasing wages of health care professionals. This is also supported by the share of THE in the gross domestic product (hereinafter the GDP), which can increase due to two reasons:

- the increase in the volume of health services and medical products is bigger than the increase in the volume of all services and products in the economy; and
- the price increase in the health sector exceeds the increase in the price level of all economy or inflation in the health sector is higher.

On the level of state, gross domestic product is one of the most important indicators of economic activity. It is also used to compare the ratios of different health expenditure on the international level. The nominal growth of GDP in 2005 was 18% and its actual growth amounted to 10.5% percent. The Statistical Office adjusted the calculation of GDP in 2006, which increased the size of Estonia's GDP and thereby reduced the share of total health expenditure in the gross domestic product. This means that total expenditure on health comprised 5.4% of the recalculated GDP in 2000 (5.5% of the previously published GDP) and 5.1% in 2005 (Table 2).

**Table 2.** Ratio of THE, public sector health expenditure to GDP (%) and GDP at current prices (billion EEK)

	2000	2001	2002	2003	2004	2005
THE as % of GDP	5.4%	4.9%	4.9%	5.1%	5.3%	5.1%
Public sector health expenditure % in GDP	4.1%	3.8%	3.7%	3.9%	4.0%	3.9%
GDP	95,491	108,218	121,372	132,904	146,694	173,062

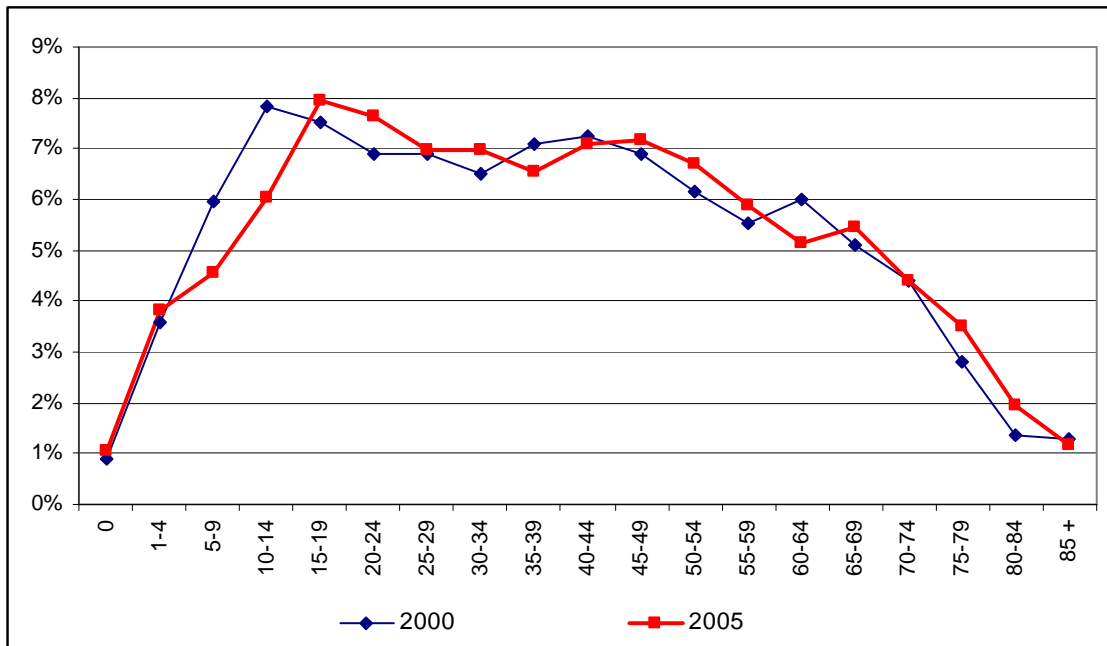
Table 2 shows that there is no certain trend in the way the share of THE in GDP changes. The ratio of THE to GDP demonstrated a tendency of decrease from 1999 to 2002. This trend stopped in 2003 and the ratio started to grow again, but another decrease occurred in 2005. It means that the price effect worked in the area of health care and those prices in the health sector increased faster than in the economy in general.

Even though we are used to assessing national health care through the share of total health expenditure in GDP, it does not describe the actual efficiency of the national health system. In order to observe changes, we should compare the health expenditure incurred in different years with each other and not compare the relevant indicators with those of other countries. We have to keep in mind that all countries are different, their health care history is different and this means that the structure of their health systems is also different. Using the share of THE in GDP for international comparison means we also have to keep in mind that different countries calculate their gross domestic product and THE according to different methodology. If we want to measure the efficiency of the health system, we also have to look at morbidity and other health indicators. For example: how many patients were treated, how many times did patients see doctors with recurring diagnoses, how long are the waiting lists, etc. Average lifetime is also an important indicator.

## **1.2. Total Health Expenditure per capita**

The population of Estonia continued to decrease in 2005 due to the falling number of births and negative birth rate. The data of the Statistical Office show that 1,347,510 people lived in Estonia by the end of 2005, which is 0.3% less than in the previous year (1,351,069 in 2004). The average expected lifetime in Estonia is still considerably lower than in many other European Union countries and it is also lower than the average level of new Member States. The difference in the expected average lifetime of men and women is still high (11 years). The main reason of the low expected average lifetime of men is the high number of early deaths due to cardiovascular diseases, tumours and external reasons (such as traffic and everyday traumas, suicide, etc.). The population of Estonia is aging (Figure 2) and it may also cause an increase in expenditure on health, because the need for health services is increasing.

**Figure 2.** Population according to age groups, 2000, 2005



Data source: Statistical Office

Figure: the author

Health expenditure per person increased by 13.2% on an average in 2005 and comprised 6,521 kroons or €417. The health expenditure incurred per capita in 2004 averaged 5,760 kroons or €368.

### **1.3. Health Insurance System**

Compulsory health insurance has been applied in Estonia since 1 January 1992. The law requires all employers to pay social tax for all working people and sole traders have to pay social tax on their income. This means that 13% of gross salary is sent to the Estonian Health Insurance Fund through the Tax Board.

The people for whom social tax has been paid or who have paid it themselves are called the insured. Those who are dependent on the insured or children less than 19 years of age, students, pensioners, maintained spouses who have less than 5 years left until retirement age and pregnant women are called persons equal to the insured.

There are also insured persons in Estonia for whom social tax is paid by the state. They are:

- persons on parental leave with children less than 3 years of age;
- non-working single parents who raise children up to 3 years of age;
- non-working spouses of diplomats and officials working in foreign missions;
- conscripts serving in the Defence Forces; and
- persons registered as unemployed.

Estonian health insurance observes the solidarity principle: the quantity and quality of health services provided in the case of illness does not depend on the amount of social tax paid for the specific person.

The right to health insurance does not depend on citizenship, but on the place of residence. The laws of Estonia allow people residing in Estonia to insure their health also through private insurance companies, but this is voluntary.

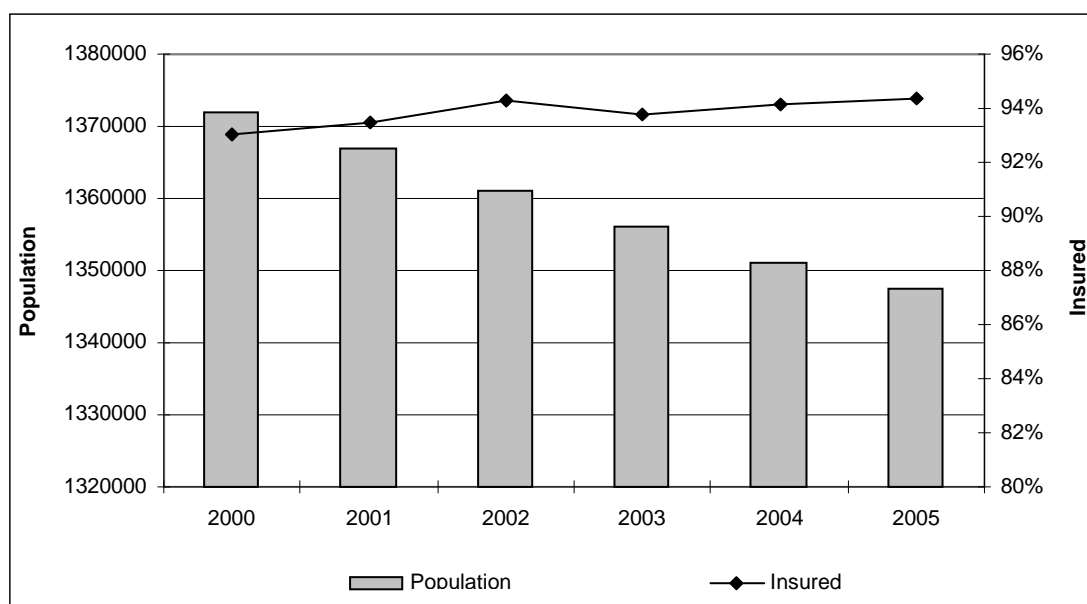
All people in Estonia have the right to receive emergency medical care regardless of whether they have health insurance. Emergency medical care must be provided in situations where postponing the care or failing to provide it may cause the death of the



person in need of assistance or damage their health permanently. The expenses of emergency care are covered by the state or they are paid by the Ministry of Social Affairs.

As said before, the population of Estonia at the end of 2005 was 1,347,510 people, 94.4% of them were covered by compulsory health insurance (Figure 3, Table 3). 1,271,354 people were insured in the Health Insurance Fund as of the end of 2005. The number of the insured has decreased by 204 people when compared to the end of December 2004 and by 697 people when compared to the end of December 2003. The number of people covered by health insurance from 2000 to 2005 has not changed significantly.

**Figure 3.** Population and the insured in Estonia, 2000–2005



Source: Statistical Office and Health Insurance Fund

Figure: the author

The decrease in the number of population reduces existing labour force and puts a strain on the long-term sustainability of the national health system and budget policy. The number of employed people increased 2% or by 11,900 people in 2005. Since employment decreased in the third and fourth quarters of 2004, then the increase in

2005 represented a restoration of the previous level rather than an exceptionally fast increase. This means that the number of working and insured people increased when compared to the previous year. The number of insured persons in other categories decreased at the same time. The decrease was particularly big among people insured by the state (Table 3).

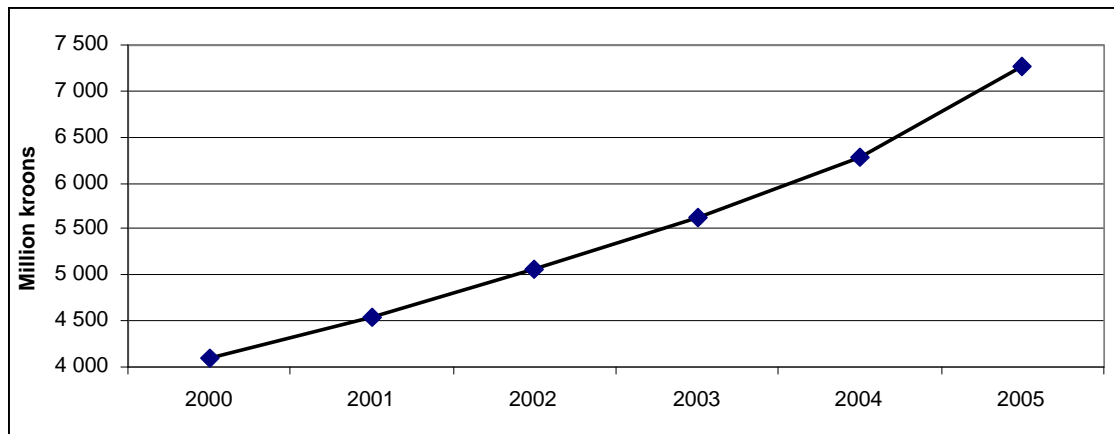
**Table 3.** The number of insured persons, 2001–2005

Persons	31.12.2001	31.12.2002	31.12.2003	31.12.2004	31.12.2005	Change % 2005/2004
Insured persons	574,284	578,673	584,885	595,734	617,625	3.7%
Persons insured by the state	40,140	48,469	49,119	43,869	38,538	-12.2%
Persons equal to the insured	663,204	656,926	631,830	626,438	609,893	-2.6%
Persons insured on the basis of international agreements	458	8	6,217	5,517	5,298	-3.9%
Total persons covered by health insurance	1,278,086	1,284,076	1,272,051	1,271,558	1,271,354	-0.02%

Source: Estonian Health Insurance Fund

Receipt of social tax has increased by more than 10% per year in the last five years (Figure 4). The increase in revenue was caused by the increase in wages and the consumer price index, improvement of the economic environment and more efficient collection of taxes. Social tax receipts increased more than expected and covered the deficit of the Health Insurance Fund that had been forecast before. The surplus in 2005 was almost 160 million kroons.

**Figure 4.** Social tax receipts by years, 2000–2005



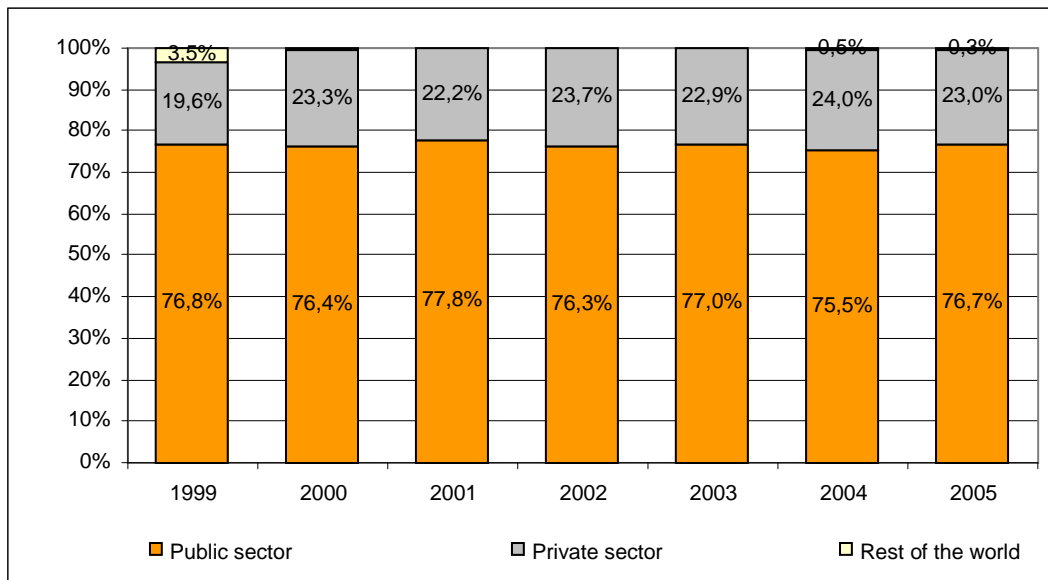
Source: Estonian Health Insurance Fund

Income from the health insurance part of social tax planned for the 2005 budget of the Health Insurance Fund totalled 6 billion and 675 million kroons. Approximately 7 billion and 278 million kroons was received, which is 9% more than planned and 16% more than in the previous year.

## 1.4. Sources of Health Care Financing

The sources of financing for the health system can be divided in three – the public sector, the private sector and the rest of the world. The public sector is the biggest financing agent of health expenditure in Estonia. The share of this source in financing THE has remained more or less stable over time (Figure 5).

**Figure 5.** Share of the public sector, the private sector and the rest of the world in THE, 1999–2005



In 2005, the private sector financed 23% (2 billion and 22 million kroons) and the rest of the world 0.3% (25 million kroons) of total health expenditure. In the same year, the health expenditure of the public sector comprised 76.7 percent of total expenditure or 6 billion and 740 million kroons (Table 4).

**Table 4.** Main sources of health financing, 2004–2005

	2004		2005		Change
	mln kroons	%	mln kroons	%	2005/2004
Public sector	5,880	76%	6,740	77%	15%
Private sector	1,868	24%	2,022	23%	8%
Rest of the world	35	0.5%	25	0.3%	-28%
<b>TOTAL</b>	<b>7,783</b>	<b>100%</b>	<b>8,787</b>	<b>100%</b>	<b>13%</b>

As mentioned before, the amount of expenditure can also be expressed as a percentage of GDP. The share of public sector health expenditure in GDP started decreasing in the beginning of this century, but it has recently stabilised and comprised 3.9 percent of GDP in 2005 (Table 5).

**Table 5.** Share of main sources of health care financing in GDP, 1999–2005

	Public sector	Private sector	Rest of the world
<b>1999</b>	4.7%	1.2%	0.21%
<b>2000</b>	4.2%	1.3%	0.02%
<b>2001</b>	4.0%	1.1%	...
<b>2002</b>	3.9%	1.2%	...
<b>2003</b>	3.9%	1.2%	0.00%
<b>2004</b>	4.0%	1.3%	0.02%
<b>2005</b>	3.9%	1.2%	0.02%

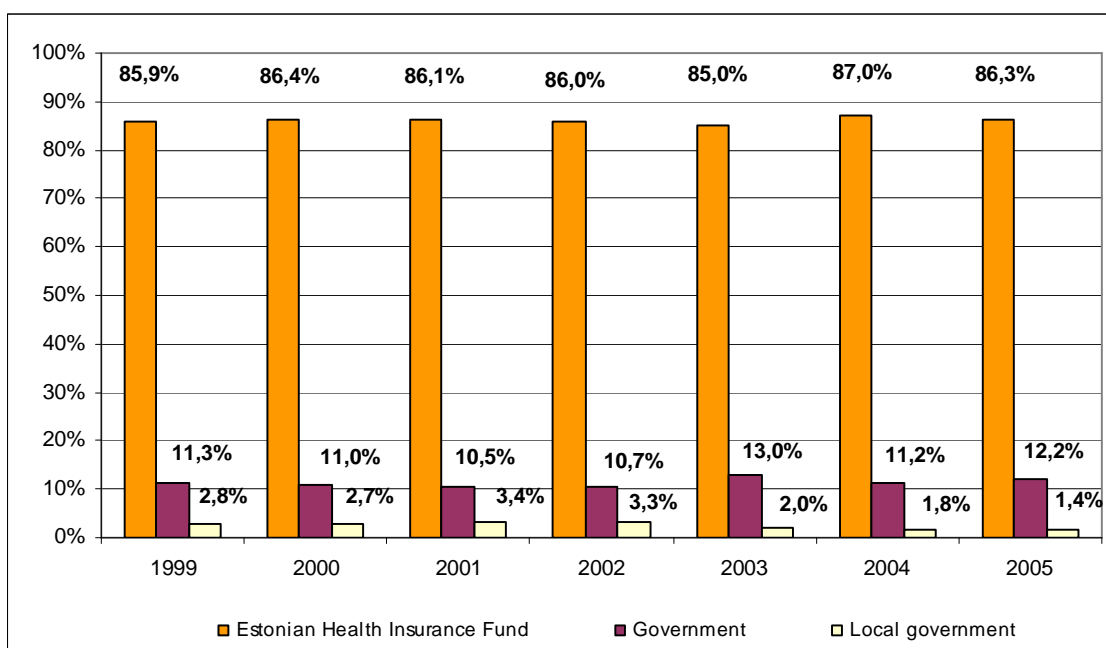
When compared to the previous year, the share of private sector health expenditure in GDP decreased by 0.1 percentage points and dropped from 1.3 percent to 1.2 percent.

### 1.4.1. Public Sector

The public sector is the main source of health funding. When compared to the previous year, the expenditure incurred by the public sector increased by 861 million kroons or 14.6%. The increase in public sector expenditure was one of the largest in six years.

The public sector in its turn consists of three financing agents: the Government, local government and the Estonian Health Insurance Fund. The Estonian Health Insurance Fund is the biggest financing agent of the sector (86.3%).

**Figure 6.** Division of the sources of public sector funding, 1999-2005



Below, we will take a look at all the financing agents of public sector health expenditure separately.

1) The health expenditure financed by the **Government** of from the state budget increased by 165 million kroons or 25% in 2005 when compared to the previous year. It was one of the biggest increases in recent years. The share of Government expenditure

comprised 12.2 percent of the public sector health expenditure and 8.5 percent of total health expenditure in 2005 (Figure 6). Expenditure financed by the Government divided between ministries as follows:

**Table 6.** Health expenditure of ministries, 2004–2005

	2004		2005		Change
	thousand kroons	%	thousand kroons	%	2005/2004
Ministry of Education and Research	3,266	0.5%	2,528	0.3%	-23%
Ministry of Justice	...	...	26,065	3.2%	...
Ministry of Defence	19,518	3.0%	22,360	2.7%	15%
Ministry of Environment	136	0.0%	382	0.0%	181%
Ministry of Culture	244	0.0%	150	0.0%	-38%
Ministry of Economic Affairs and Communications	759	0.1%	543	0.1%	-28%
Ministry of Agriculture	522	0.1%	233	0.0%	-55%
Ministry of Finance	462	0.1%	549	0.1%	19%
Ministry of the Interior	10,397	1.6%	5,962	0.7%	-43%
Ministry of Foreign Affairs	447	0.1%	179	0.0%	-60%
Ministry of Social Affairs	623,881	94.5%	766,563	92.9%	23%
<b>Total Government</b>	<b>660,021</b>	<b>100%</b>	<b>825,515</b>	<b>100%</b>	<b>25%</b>

The health expenditure of the Ministry of Foreign Affairs decreased the most – 60%. However, the biggest decrease in absolute figures occurred on account of the Ministry of the Interior. This year, the Ministry of the Interior spent 4 million and 435 thousand kroons less than in the previous year. The health expenditure of the Ministry of Social Affairs increased the most. One of the tasks of said ministry is to regulate and manage the health system of the state. Therefore it is natural that the health expenditure of the Ministry of Social Affairs is the biggest and has grown the most. The Ministry of Social Affairs funded the following health services in 2004 and 2005:

**Table 7.** Health services funded by the Ministry of Social Affairs in 2004–2005

	2004		2005		Change
	thousand kroons	%	thousand kroons	%	2005/2004
CURATIVE CARE	92,186	14.8%	97,987	12.8%	6%
incl. support to persons without health insurance	91,826	14.7%	97,337	12.7%	6%
outpatient curative care	360	0.1%	650	0.1%	81%
REHABILITATION	...	...	527	0.1%	...
NURSING CARE	57,060	9.1%	99,939	13.0%	75%
ANCILLARY HEALTH SERVICES	172,732	27.7%	206,005	26.9%	19%
incl. emergency medical care	172,732	27.7%	206,005	26.9%	19%
MEDICAL PRODUCTS	77,069	12.4%	109,356	14.3%	42%
incl. medicines	14,505	2.3%	14,951	2.0%	3%
PREVENTION	39,145	6.3%	70,816	9.2%	81%
incl. prevention of infectious diseases	31,349	5.0%	42,443	5.5%	35%
prevention of non-infectious diseases	7,617	1.2%	28,036	3.7%	268%
HEALTH ADMINISTRATION	152,560	24.5%	146,612	19.1%	-4%
CAPITAL FORMATION	33,154	5.3%	35,320	4.6%	7%
<b>TOTAL</b>	<b>623,906</b>	<b>100%</b>	<b>766,563</b>	<b>100%</b>	<b>23%</b>

As always, ancillary services or emergency medical care had the biggest share in the expenditure of the Ministry of Social Affairs (27%). Prevention expenditure increased 81 percent with funding for programmes for prevention of non-infectious diseases increasing the most from 7 million and 617 thousand kroons in 2004 to 28 million and 36 thousand kroons in 2005. Development of the following registers and public health programmes was funded in 2005:

- National health programme for children and young people
- National strategy for prevention of drug addiction
- Strategy for prevention of cardiovascular diseases
- Cancer register
- Register of the system of personal health statistics
- Drug monitoring centre

Funding of curative care services, which in the case of the Ministry of Social Affairs covers only support to people without health insurance, increased only 6% when compared to the previous year. Nursing care expenditure increased considerably – by 42 million and 880 thousand kroons or 75%. The expenditure of general health administration decreased both as a percentage and in absolute figures. In total, the



health expenditure of the Ministry of Social Affairs increased by 142 million and 657 thousand kroons or 23% when compared to the previous year.

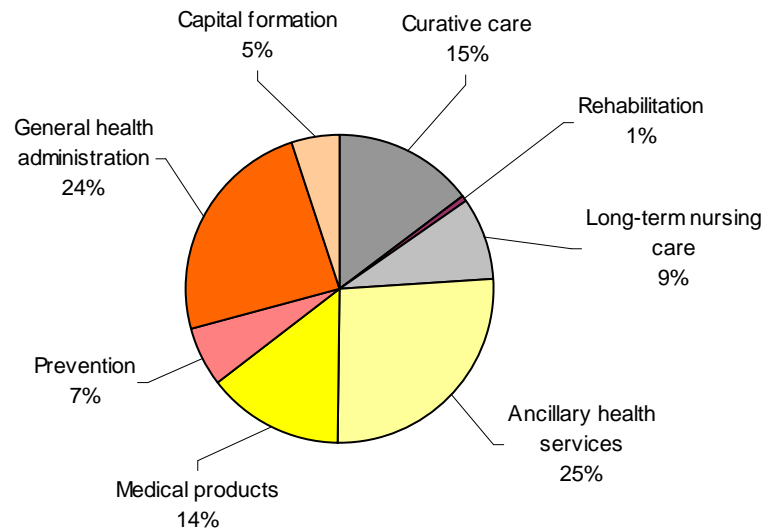
The health expenditure of the Government increased 25% in 2005 when compared to 2004 (Table 8). The increase occurred on account of the increase in the expenditure of rehabilitative and nursing care services and prevention. Similarly to the previous years, a significant part of the Government's health expenditure was spent on ancillary services or emergency medical care (25%) and health administration (20%). Funding capital formation remained on the same level as in the previous year – 5 percent of the Government's expenditure on health. The majority of capital formation has been calculated as part of health services since 2003 and therefore it cannot be separately highlighted.

**Table 8.** Health services funded by the Government in 2004–2005

	2004		2005		Change
	thousand kroons	%	thousand kroons	%	2005/2004
CURATIVE CARE	97,631	15%	103,177	12%	6%
incl. support to persons without health insurance	91,899	14%	97,345	12%	6%
outpatient curative care	5,732	1%	5,827	1%	2%
REHABILITATION	3,495	1%	4,908	1%	40%
NURSING CARE	57,060	9%	99,939	12%	75%
ANCILLARY HEALTH SERVICES	172,942	26%	207,903	25%	20%
incl. emergency medical care	172,797	26%	206,061	25%	19%
MEDICAL PRODUCTS	94,300	14%	129,230	16%	37%
incl. medicines	26,626	4%	29,999	4%	13%
PREVENTION	42,910	7%	76,439	9%	78%
incl. prevention of infectious diseases	31,432	5%	42,498	5%	35%
prevention of non-infectious diseases	7,645	1%	28,057	3%	267%
HEALTH ADMINISTRATION	158,070	24%	166,614	20%	5%
CAPITAL FORMATION	33,614	5%	37,308	5%	11%
<b>TOTAL</b>	<b>660,021</b>	<b>100%</b>	<b>825,518</b>	<b>100%</b>	<b>25%</b>

However, construction of buildings is not recorded as a total amount in THE. For example, construction of the *Pärnu Hospital* started in 2003. Only the annual amount of rent that *Pärnu Hospital Foundation* pays for the use of the building is calculated as part of THE. This rent has been calculated as part of health services.

**Figure 7.** Health services funded by the Government in 2005



Below, we take a look at the Government's expenditure according to health care providers. Pursuant to the methodology, we will discuss **current expenditure** (total expenditure minus capital formation) further in this report.

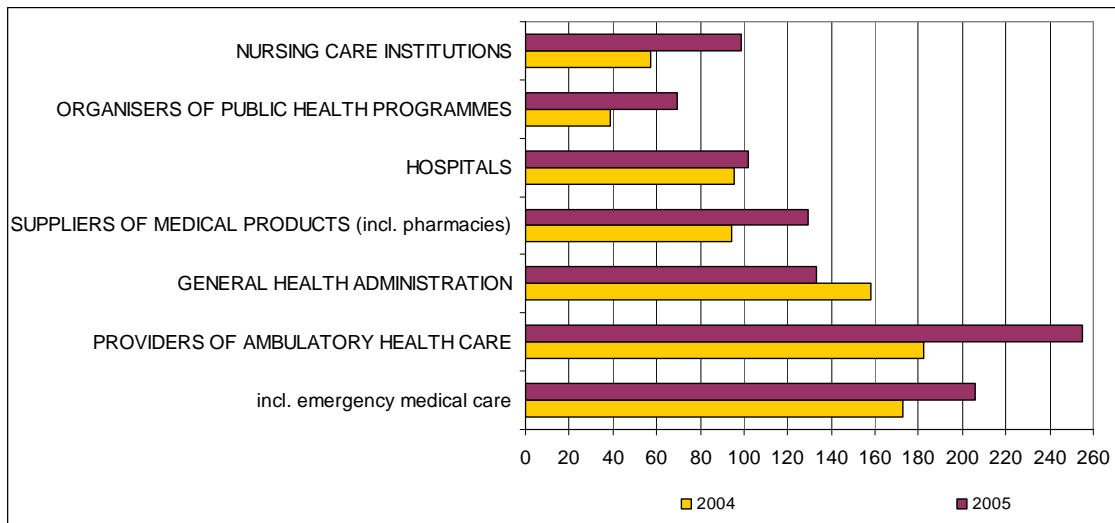
The Government's capital formation in 2005 comprised 5% of the total expenditure on health. This means that current expenditure comprised 95% of the total expenditure of the Government or 788 million and 206 thousand kroons. The current expenditure of the Government according to health care providers was as follows:

**Table 9.** Current expenditure of the Government according to health care providers, 2004–2005

	2004		2005		Change
	thousand kroons	%	thousand kroons	%	2005/2004
HOSPITALS	95,394	12%	102,125	13%	7%
NURSING CARE INSTITUTIONS	57,060	7%	98,863	13%	73%
PROVIDERS OF AMBULATORY HEALTH CARE	182,240	23%	254,895	32%	40%
incl. support to emergency medical care	172,797	22%	206,005	26%	19%
SUPPLIERS OF MEDICAL PRODUCTS	94,300	12%	129,227	16%	37%
incl. pharmacies	12,733	2%	22,161	3%	74%
opticians	2,819	0,4%	4,109	1%	46%
other suppliers of medicines and medical goods	78,748	10%	102,957	13%	31%
ORGANISERS OF PUBLIC HEALTH PROGRAMMES	39,139	5%	69,420	9%	77%
INSTITUTIONS DEALING WITH GENERAL HEALTH CARE ADMINISTRATION	158,070	20%	133,273	17%	-16%
OTHER BRANCHES OF ACTIVITY (incl. schools)	204	0,0%	403	0,1%	97%
<b>TOTAL</b>	<b>626,407</b>	<b>79%</b>	<b>788,206</b>	<b>100%</b>	<b>26%</b>

Similarly to the previous year, the largest amount of Government money planned for health care was used on the services offered by providers of ambulatory health care (Table 9). The expenditure of outpatient curative care increased by 73 million kroons (40%) when compared to the previous year.

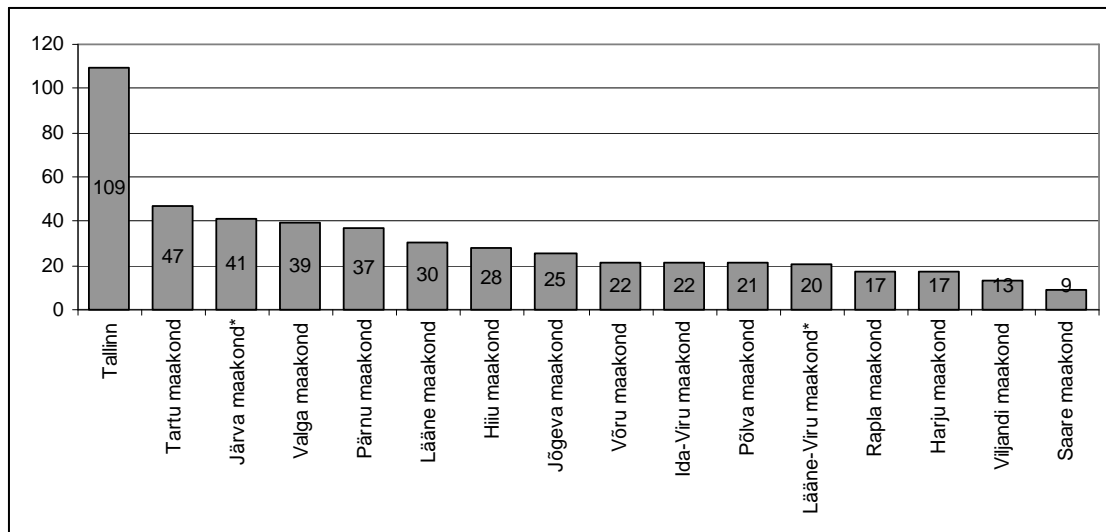
**Figure 8.** Current expenditure of the Government according to health care providers, 2004–2005, million kroons



All providers of health care received more money from the Government in 2005 than in the previous year. The only decrease occurred in health administration (Figure 8).

2) The health expenditure financed from the budgets of **local governments** (hereinafter LGs) comprised 1.4% (1.8% in 2004) of the public sector health expenditure or 1.1% (1.3 in 2003) of total health expenditure. The share of the health expenditure of LGs has decreased constantly since 2001 (Figure 6). Expenses covered from the budgets of local governments decreased 9.0 million kroons in 2005 when compared to the previous year. Expenditure on health in eleven of the fifteen counties decreased from 9 to 74 percent. Expenditure decreased the most in Rapla County. Expenditure on health care increased only in Harjumaa, Tartumaa, Pärnumaa and Läänemaa when compared to 2004.

Among all counties and cities, health expenditure is the highest in Tallinn and it comprises 57 percent of the health expenditure of all LGs. Tallinn also has the highest expenditure per resident (Figure 9). Similarly to most counties, the health expenditure of Tallinn also decreased in 2005.

**Figure 9.** Health expenditure of LGs per capita according to counties, 2005, kroons

The health expenditure of LGs decreased mainly on account of the expenditure incurred on curative care services. The funding provided for these services in 2005 was almost two times less than in the previous year (Table 10). The expenditure of emergency medical care also decreased. Prevention expenditure increased significantly and it was mainly aimed at the prevention of infectious diseases in 2005. LGs also increased their funding of nursing care and started purchasing medical products aimed at the persons living in institutions of nursing care. In 2005, LGs spent most of their health funding on health administration – 37%.

**Table 10.** Health services funded by the LGs in 2004–2005

	2004		2005		Change
	thousand kroons	%	thousand kroons	%	2005/2004
CURATIVE CARE	43,738	42%	26,397	28%	-40%
NURSING CARE	8,131	8%	11,999	13%	48%
ANCILLARY MEDICAL SERVICES (emergency medical care)	1,097	1%	436	0%	-60%
MEDICAL PRODUCTS	5,472	5%	6,903	7%	26%
PREVENTION	145	0%	709	1%	389%
HEALTH ADMINISTRATION	33,145	32%	35,607	37%	7%
CAPITAL FORMATION	12,774	12%	13,243	14%	4%
<b>TOTAL</b>	<b>104,502</b>	<b>100%</b>	<b>95,294</b>	<b>100%</b>	<b>-9%</b>

Most of the current expenditure of LGs was also spent on administration (Table 11). Funding of ambulatory health care providers dropped to the level of 2002, when LGs spent 13 million and 353 thousand kroons on the services provided by them.

**Table 11.** Current expenditure of LGs according to health care providers, 2004–2005

	2004		2005		Change
	thousand kroons	%	thousand kroons	%	2005/2004
HOSPITALS	9,661	11%	12,986	16%	34%
NURSING CARE INSTITUTIONS	8,131	9%	11,999	15%	48%
PROVIDERS OF AMBULATORY HEALTH CARE	35,176	38%	13,847	17%	-61%
SUPPLIERS OF MEDICAL PRODUCTS	5,471	6%	6,903	8%	26%
ORGANISERS OF PUBLIC HEALTH PROGRAMMES	144	0%	709	1%	392%
INSTITUTIONS DEALING WITH GENERAL HEALTH ADMINISTRATION	33,145	36%	35,607	43%	7%
<b>TOTAL</b>	<b>91,728</b>	<b>100%</b>	<b>82,051</b>	<b>100%</b>	<b>-11%</b>

In 2005, local governments spent more on the organisation of public health programmes than in 2004, but the amount spent is marginal when compared to the expenditure incurred on the providers of other health services.

**3) The Estonian Health Insurance Fund** (hereinafter the EHIF) continues to be the biggest financing agent of health care expenditure. The expenditure incurred by the EHIF comprised 86.3 percent of all public sector expenditure (Figure 6). The expenditure of the Health Insurance Fund also comprised most of the total health expenditure – 66.2% (65.7% in 2004). The expenditure incurred from the budget of the EHIF increased by 704 million kroons or 14% in 2005 when compared to 2004 (Table 12). The price of EHIF health services also includes capital formation, i.e. the EHIF does not finance capital formation directly. This means that the total expenditure of the EHIF coincides with current expenditure. The budgetary expenditure of the EHIF also differs from total expenditure, because the calculation of total expenditure does not

include allocations into the reserve fund of the EHIF or monetary benefits associated with health (e.g. sickness benefits).

In 2005, the Estonian Health Insurance Fund used 83 million kroons for prevention, which is 9 million more than in the previous year. Expenditure has increased the most in the area of infectious diseases. The reasons why expenses have increased are the increase in the number of treatment cases and the fact that treatment cases have become structurally more expensive. Prevention also covers health promotion. The EHIF deals with health promotion through project work. 34 projects were funded in 2005, and the activities of 14 of them will also continue in the first half of the next year. 8.6 million kroons were spent on health promotion in 2005.

Expenditure on day cases of curative care increased the most in 2005. This increase occurred as a result of the increase of the average cost of a day case of curative care. This was caused by the implementation of the 50% DRG<sup>3</sup> share or 50% of the service price is now calculated on the DRG principle.

The expenditure of home treatment increased due to the increase in the number of treatment cases with one of the reasons being specification of the term 'case of nursing care at home'.

**Table 12.** Health services funded by the EHIF in 2004–2005

	2004		2005		Change
	thousand kroons	%	thousand kroons	%	2005/2004
<b>CURATIVE CARE</b>	<b>3 411 243</b>	<b>67%</b>	4 068 502	<b>70%</b>	19%
incl. in-patient curative care	2 056 786	40%	2 496 119	43%	21%
day cases of curative care	117,605	2%	157,827	3%	34%
outpatient curative care	1,213,940	24%	1,390,523	24%	15%
<i>incl. dental care</i>	240,708	5%	260,540	4%	8%
home treatment	22,912	0%	24,033	0%	5%
<b>REHABILITATION</b>	<b>57,415</b>	<b>1%</b>	64,991	<b>1%</b>	13%
<b>NURSING CARE</b>	<b>95,177</b>	<b>2%</b>	115,608	<b>2%</b>	21%
<b>ANCILLARY HEALTH SERVICES</b>	<b>507,399</b>	<b>10%</b>	497,052	<b>9%</b>	-2%
<b>MEDICAL PRODUCTS</b>	<b>889,815</b>	<b>17%</b>	900,972	<b>15%</b>	1%
incl. prescription medicines	866,680	17%	874,502	15%	1%

<sup>3</sup> DRG – diagnosis-related groups

other medical goods	23,135	0%	16,881	0%	-27%
<b>PREVENTION</b>	<b>73,960</b>	<b>1%</b>	83,006	<b>1%</b>	12%
<b>HEALTH ADMINISTRATION</b>	<b>80,112</b>	<b>2%</b>	89,384	<b>2%</b>	12%
<b>TOTAL</b>	<b>5,115,121</b>	<b>100%</b>	<b>5,819,515</b>	<b>100%</b>	<b>14%</b>

Pursuant to the Health Insurance Act, the EHIF takes over the obligation to pay for dental care of persons under 19 years of age and for emergency dental care of adults. In 2005, the Health Insurance Fund paid 146 million kroons for the dental care of persons under 19 years of age. The Health Insurance Fund paid 6.4 million kroons for the emergency dental care of adults (tooth extraction, opening an abscess) in 2005. This amount was 29% bigger than planned and 9% bigger than in 2004.

The total amount of medicines compensated to insured persons in 2005 was 874.5 million kroons. Expenditure on prescription medicines increased 7.8 million kroons when compared to the previous year. The rather modest increase in the amount of benefits for medicines in 2005 was achieved primarily on the account of the first quarter of the year, when considerably less medicine was purchased after the buying panic in December 2004.

The average cost of a prescription for the EHIF in 2005 was 173 kroons. The same indicator in 2004 was seven kroons more or 180 kroons. The change in the average cost of a prescription in 2005 was probably caused by changing the methodology for calculating the maximum price chargeable from 1 January 2005. The maximum price chargeable was previously calculated on the basis of the average of the prices of the second and third preparation, then only the price of the cheapest one is considered in the case of two pharmaceutical preparations and the price of the second cheapest medicine is used in the case three and more preparations exist. The EHIF does not pay the part of the price that exceeds the maximum price chargeable. The average cost of prescriptions compensated at the 90% discount rate has decreased the most in 2005.

When talking about health care providers, we have to emphasise that the majority of social security funds were spent through hospitals as usual (Table 13). Expenditure on in-patient curative care increased 560 million kroons or 18% when compared to 2004.



The expenditure associated with providers of ambulatory health care, nursing care and medical products also increased.

**Table 13.** Current expenditure of the EHIF according to health care providers, 2004–2005

	2004		2005		Change 2005/2004
	thousand kroons	%	thousand kroons	%	
HOSPITALS	3,175,181	62%	3,735,256	64%	18%
NURSING CARE INSTITUTIONS	7,200	0.1%	10,600	0.2%	47%
PROVIDERS OF AMBULATORY HEALTH CARE	887,299	17%	987,203	17%	11%
SUPPLIERS OF MEDICAL PRODUCTS	889,815	17%	900,972	15%	1%
incl. pharmacies	866,680	17%	874,502	15%	1%
ORGANISERS OF PUBLIC HEALTH PROGRAMMES	73,960	1%	83,006	1%	12%
INSTITUTIONS DEALING WITH GENERAL HEALTH ADMINISTRATION	80,112	2%	89,384	2%	12%
REST OF THE WORLD	1,554	0.03%	13,094	0.2%	743%
<b>TOTAL</b>	<b>5,115,121</b>	<b>100%</b>	<b>5,819,515</b>	<b>100%</b>	<b>14%</b>

The number of people who apply for planned treatment abroad has increased alongside the awareness of insured persons and the possibilities of free movement in the European Union. Treatment of 9 persons (incl. 5 children) in a foreign country was paid for in 2004; the same indicator in 2005 was 53 insured persons, 28 of whom were children.

### 1.4.2. Private Sector

Health care institutions can also offer patients health services for a charge and collect co-payments for some services compensated by the Health Insurance Fund. The share of the private sector in financing total expenditure on health in 2005 was 23% (24% in 2004, Figure 5). Expenditure increased 154 million kroons or 8% when compared to the previous year. This was the lowest increase in the last six years. The low increase may have been caused by the low quality of the data in the household budget survey (hereinafter the HBS) conducted in 2005.

The private sector consists of four different financiers: private insurance, non-profit associations and private people (cost-sharing by people). The shares of these financing agents have not changed much in 2005 (Table 14) when compared to the previous year.

**Table 14.** Division of health expenditure in the private sector, 2004–2005

	2004		2005		Change
	thousand kroons	%	thousand kroons	%	2005/2004
PRIVATE INSURANCE	5,238	0.3%	23,513	1.2%	349%
COST-SHARING BY PEOPLE	1,658,949	89%	1,794,269	89%	8%
NON-PROFIT ASSOCIATIONS	3,428	0.2%	3,247	0.2%	-5%
PRIVATE COMPANIES	200,086	11%	200,834	10%	0%
<b>TOTAL PRIVATE SECTOR</b>	<b>1,867,702</b>	<b>100%</b>	<b>2,021,863</b>	<b>100%</b>	<b>8%</b>

Similarly to the previous year, expenditure of the private sector increased in 2005 primarily on account of households or the increase in cost-sharing. Private insurance expenditure also grew considerably.

Non-profit associations (hereinafter NPA), whose most remarkable representative in Estonia is the Estonian Red Cross, spent almost as much in 2005 as they did in the previous year. However, the division of financed services has changed in years. In 2004, the funds of NPA were spent primarily on the prevention of infectious diseases (2

million and 395 thousand kroons) and non-infectious diseases (335 thousand kroons). It also invested in school health services in 2004 (339 thousand kroons).

In 2005, NPA also focused mainly on financing services for prevention of non-infectious diseases (3 million kroons). However, financing prevention of infectious diseases and school health by NPA decreased considerably in 2005 and dropped to 13 thousand and 179 thousand kroons, respectively.

Table 15 shows that the private sector spends the most on medical products (medicines, etc.). In 2005, the private sector spent more on all health services than in the previous year. The biggest increase occurred in the expenditure on ancillary health services (85%). This increase was mainly affected by the increase in the expenditure of clinical laboratory tests that people paid for themselves.

The increase of private sector expenditure on nursing care continued in 2005 similarly to the previous year (72% in 2004, 78% in 2005).

**Table 15.** Health services funded by the private sector in 2004–2005

	2004		2005		Change
	thousand kroons	%	thousand kroons	%	2005/2004
CURATIVE CARE	480,437	26%	412,957	20%	-14%
REHABILITATION	133,802	7%	199,586	10%	49%
NURSING CARE	22,288	1%	39,696	2%	78%
ANCILLARY HEALTH SERVICES	16,826	1%	31,046	2%	85%
MEDICAL PRODUCTS (incl. medicines)	1,187,541	64%	1,311,301	65%	10%
PREVENTION	26,808	1%	26,246	1%	-2%
HEALTH ADMINISTRATION AND HEALTH INSURANCE	...	...	31	0%	...
CAPITAL FORMATION	-	-	1,000	0%	...
<b>TOTAL</b>	<b>1,867,702</b>	<b>100%</b>	<b>2,021,863</b>	<b>100%</b>	<b>8%</b>

Even though the expenditure of private insurance on curative care increased considerably in 2005, the decrease of the expenditure of households was much bigger in this category and in total caused the curative care expenditure to decrease in the entire private sector (14%). In 2005, people spent less on dental care and medical massage,

acupuncture, physiotherapy, etc., than in the previous year. It also has to be said that the decrease in curative care expenditure in the private sector was not particularly strong.

Health insurance administration expenses have been shown in the private sector for the first time 2005. This happened because of an insurance company that could, for the first time, calculate how much it spends on health insurance administration.

The capital formation financed by the private sector has also been shown for the first time this year. The private sector does not usually finance capital formation directly according to SHA. However, this case is an exception. In 2005, a businessman donated money to a hospital for renovation of their meeting rooms.

Similarly to the previous year, most of the money in the private sector was spent through providers of ambulatory health care and suppliers of medical products (mainly pharmacies). In absolute amounts, the expenditure on suppliers of medical products (124 million kroons and hospitals (81 million kroons) increased the most (Table 16).

**Table 16.** Current expenditure of the private sector according to health care providers, 2004–2005

	2004		2005		Change
	thousand kroons	%	thousand kroons	%	2005/2004
HOSPITALS	169,035	9%	250,104	12%	48%
NURSING CARE INSTITUTIONS	22,288	1%	38,275	2%	72%
PROVIDERS OF AMBULATORY HEALTH CARE	485,711	26%	416,629	21%	-14%
SUPPLIERS OF MEDICAL PRODUCTS	1,187,540	64%	1,311,301	65%	10%
incl. pharmacies	1,082,431	58%	1,193,557	59%	10%
opticians	78,434	4%	88,654	4%	13%
other suppliers of medicines and medical goods	26,675	1%	29,090	1%	9%
ORGANISERS OF PUBLIC HEALTH PROGRAMMES	2,789	0,0%	4,340	0,2%	56%
INSTITUTIONS DEALING WITH GENERAL HEALTH CARE ADMINISTRATION	...	...	31	0%	...
INSTITUTIONS OTHER BRANCHES OF ACTIVITY (incl. schools)	339	0%	183	0%	-46%
<b>TOTAL</b>	<b>1,867,702</b>	<b>100%</b>	<b>2,020,863</b>	<b>100%</b>	<b>8%</b>

The decrease of some of the expenses incurred by providers of outpatient services is mainly caused by the decrease in the dental care expenditure of households.

Below, we give a breakdown of all private sector financing agents and take a look at how much each of them spent on health services.

**Table 17.** Private sector expenditure by health services and sources of funding, 2005

	Private insurance		Cost-sharing by people		Non-profit associations		Private companies		TOTAL PRIVATE SECTOR	
	thousand kroons	%	thousand kroons	%	thousand kroons	%	thousand kroons	%	thousand kroons	%
Curative care	20,037	85%	392,920	22%	-	-	...	...	412,957	100%
Rehabilitation	703	3%	198,883	11%	-	-	...	...	199,586	100%
Nursing care	1,742	7%	37,954	2%	-	-	-	-	39,696	100%
Ancillary health services	0	0%	31,046	2%	-	-	...	...	31,046	100%
Medical products	996	4%	1,132,466	63%	-	-	177,839	88%	1,311,301	100%
Prevention	4	0%	0	0%	3,247	100%	22,995	12%	26,246	100%
Health administration and health insurance	31	0%	0	0%	-	-	-	-	31	100%
Capital formation	0	0%	1000	0%	-	-	-	-	1,000	100%
<b>Total</b>	<b>23,513</b>	<b>100%</b>	<b>1,794,269</b>	<b>100%</b>	<b>3,247</b>	<b>100%</b>	<b>200,834</b>	<b>100%</b>	<b>2,021,863</b>	<b>100%</b>

1) **Private insurance** means all private insurance companies apart from social security, i.e. alternative insurance to the EHIF. Private insurance expenditure covers separate health insurance and the part of health in travel and motor third party liability insurance. The share of health expenditure in private insurance in 2005 comprised 1.2 percent of the private sector expenditure (Table 14). Private insurance spent the most on curative care services in 2005 (85%). The majority of this was spent on treatment of hospitalised patients.

2) **Cost-sharing by people** represented the biggest share of health expenditure in the private sector – 89% (89% in 2004) and comprised 20% (21% in 2004) of total health

expenditure. In 2005, cost-sharing increased by 135 million kroons or 8% when compared to the previous year. It was one of the lowest increases in the health expenses of households within the last four years.

Table 18 shows that cost-sharing increased on account of the increase in the cost of medical products, incl. prescription medicines (increased 65 million kroons) and rehabilitation (increased 65 million kroons). The expenditure of dental care decreased by 77 million kroons in absolute numbers. As mentioned before, this change can be justified with the bad quality of the HBS data from 2005.

**Table 18.** Cost-sharing by health services, 2004–2005

	2004		2005		Change
	thousand kroons	%	thousand kroons	%	2005/2004
CURATIVE CARE	475,328	29%	392,920	22%	-17%
incl. in-patient curative care	30,496	2%	35,598	2%	17%
outpatient curative care	444,831	27%	357,322	20%	-20%
<i>incl. dental care</i>	385,136	23%	308,453	17%	-20%
REHABILITATION	133,761	8%	198,883	11%	49%
NURSING CARE	22,286	1%	37,954	2%	70%
ANCILLARY HEALTH SERVICES	16,715	1%	31,046	2%	86%
MEDICAL PRODUCTS	1,010,805	61%	1,132,466	63%	12%
incl. prescription medicines	658,611	40%	723,728	40%	10%
OTC medicines	222,401	13%	260,577	15%	17%
glasses and other vision aids	78,418	5%	88,654	5%	13%
PREVENTION	55	0.00%	...	...	0.00%
CAPITAL FORMATION	-		1000	0.06%	...
<b>TOTAL</b>	<b>1,658,949</b>	<b>100%</b>	<b>1,794,269</b>	<b>100%</b>	<b>8%</b>

As usual, private persons spent the most on medical products (1 billion and 132 million kroons) and curative care services (393 million kroons). Cost-sharing expenditure comprised 1,332 kroons per resident in 2005. The same indicator in 2004 was 1,228 kroons (Figure 10).

**Figure 10.** Coast-sharing per capita, 1999–2005, kroons

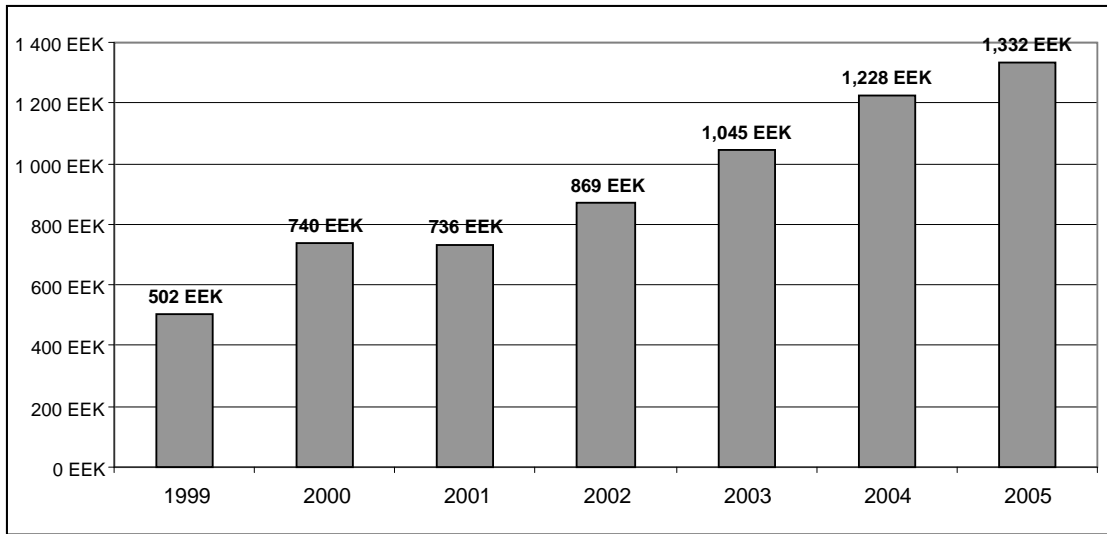
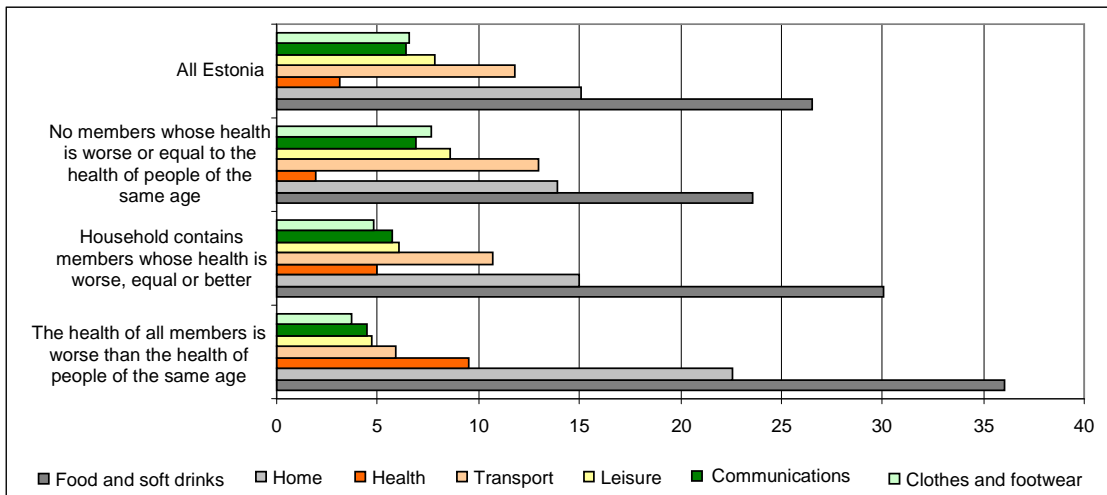


Figure 11 shows the expenditure of Estonian households according to cost types. It appears that the average health expenditure of households is the smallest of the six listed cost types. However, it is obvious that the share of health expenditure depends on the state of health of the household members.

**Figure 11.** Average monthly expenditure of households in 2005, percent



Source: SOE, Living Conditions of Households. 2005

Figure: the author

Households where the health of all members is worse than the health of people of the same age spend the most on health or 9.5% of their outgoings. Health expenditure in such households comprises the third biggest cost group.

Cost-sharing according to providers of health services was realised as follows:

**Table 19.** Cost-sharing by providers of health services, 2004–2005

	2004		2005		Change
	thousand kroons	%	thousand kroons	%	2005/2004
HOSPITALS	164,257	10%	234,481	13%	43%
NURSING CARE INSTITUTIONS	22,286	1%	37,954	2%	70%
PROVIDERS OF AMBULATORY HEALTH CARE	461,548	28%	388,368	22%	-16%
incl. pharmacies	385,136	23%	308,453	17%	-20%
SUPPLIERS OF MEDICAL PRODUCTS	1,010,804	61%	1,132,466	63%	12%
incl. pharmacies	905,711	55%	1,014,722	57%	12%
opticians	78,418	5%	88,654	5%	13%
other suppliers of medicines and medical goods	26,675	2%	29,090	2%	9%
ORGANISERS OF PUBLIC HEALTH PROGRAMMES	55	0,00%	...	...	...
<b>TOTAL</b>	<b>1,658,950</b>	<b>100%</b>	<b>1,793,269</b>	<b>100%</b>	<b>8%</b>

As mentioned before, private persons spent the most on medical products. This means that they financed suppliers of medical products (1 billion and 132 million kroons or 63%) more than any others. Most of this was spent through pharmacies like in the previous year. Financing of ambulatory health care providers of by households decreased by 73 million kroons or 16%. Table 19 shows that the decrease in expenditure on providers of ambulatory health care was caused by the decrease in dental care expenditure.

3) The health expenditure of **private companies** comprised 10 percent of private sector expenditure (Table 14) and 2.3 percent of total health expenditure (11% and 2.6% respectively in 2003). Even though the share of private companies' expenditure in



private sector expenditure decreased, the total amount spent on health remained almost on the same level as in 2004.

The health expenditure incurred by companies from their own income, incl. the expenses of the mandatory medical examinations of employees in Medicover Eesti AS, are shown under private companies. Private companies mainly spent on OTC medicines and prevention or occupational health. The expenditure incurred on OTC medicines amounted to 178 million kroons, which comprised 88% of the expenditure of private companies, and 23 million kroons (12%) was spent on occupational health (Table 17).

### **1.4.3. Rest of the World**

The share of foreign funding of health care in Estonia is not particularly big. In 1999, it comprised 3.5% of THE and dropped to almost nought in 2001. Funding from foreign sources did increase in 2004 and reached 35 million kroons or 0.5 percent of THE. Financing from foreign sources decreased again in 2005 and reached 25 million kroons (0.3%). The decrease occurred primarily on account of the amounts spent on prevention of infectious diseases.

Funding from foreign sources has mainly been used for investments into human resources and technology and also to cover operating expenses. Similarly to previous years, foreign funding in 2005 was received from programmes of prevention and public health, incl. prevention of infectious diseases (16 million kroons or 65%), administration of the health system on the level of general government (6 million kroons or 23%) and capital formation (3 million kroons or 11%). Funding from foreign sources does not include loan amounts.

The Government applied for aid required for investments into hospitals from the European Regional Development Fund. Estonia will receive approximately 388 million kroons for investments associated with the development of hospitals from this fund. Therefore, it can be expected that funding from foreign sources will increase.

Due to the outbreak of HIV/AIDS among injecting drug addicts, Estonia applied for financial support from the Global Fund to Fight HIV/AIDS, Tuberculosis and Malaria. A grant of US\$ 10 million has been approved for strengthening prevention and training in risk groups and among young people and for covering the treatment costs of HIV-positive people.

## **1.5. Health Care providers**

Until now, we took a look at health expenditure according to finance sources. In order to obtain a better picture of health service expenditure and providers of such services over years, we will look at these categories separately.

1,288 independent health care institutions operated in Estonia at the end of 2005. Health care institutions can be classified in several ways. They have been classified according to services in this analysis. Provision of inpatient health services has been considered the most important in determining the type of a service: if an institution provides inpatient services, it is classified as a hospital regardless of its other services. Providers of outpatient and day curative care have been classified according to the principal service or the service the provision of which comprises the biggest part of the institution's work. According to this, institutions are divided into general medical care, specialised medical care, dental care and other institutions.

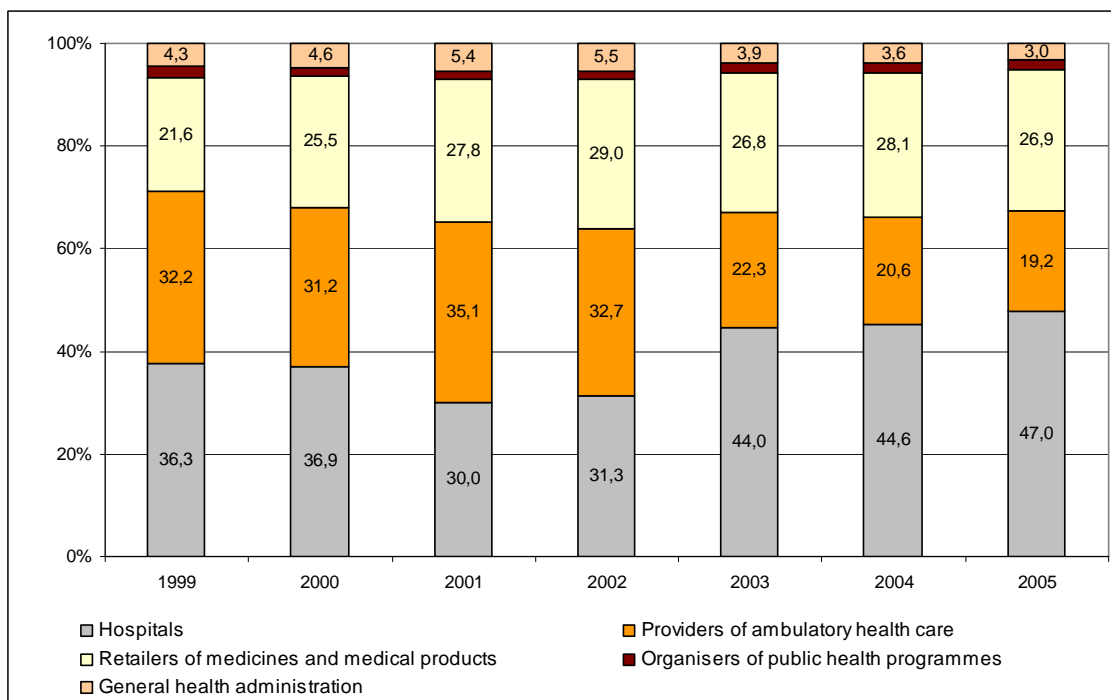
54 hospitals, 724 outpatient institutions, 447 dental clinics and 63 other institutions operated in Estonia in end of 2005 pursuant to the above classification. Outpatient institutions included 491 general and 233 special medical care institutions; most of the general medical care institutions were family health clinics – 476. Other institutions divided as follows: 6 emergency medical care and 35 rehabilitation institutions, 9 institutions that provide diagnostics services, 1 blood service and 10 independent nursing care institutions.

The number of hospitals stabilised by 2002 already and 54 hospitals were operating in Estonia at the end of 2005. The classification of hospitals is defined in the Health Care Services Organisation Act, which stipulates that a hospital is either a regional hospital, central hospital, general hospital, local hospital, specialised hospital, rehabilitation hospital or nursing hospital. There were 3 regional hospitals, 4 central hospitals, 12 general hospitals, 6 local hospitals, 6 specialised hospitals, 3 rehabilitation hospitals and 30 nursing hospitals in Estonia at the end of 2005.

The number of outpatient health care institutions has also started to stabilise. The number of institutions increased only among family health and dental clinics, but this growth was also marginal.

The Estonian health system focuses on hospitals and curative care services. Hospitals use most of the resources of the health system and remain the major care providers. They are followed by providers of outpatient services and retailers of medical goods and other suppliers of medical products (incl. pharmacies) (Figure 12).

**Figure 12.** Expenditure according to health care providers, 1999–2005, percent



The share of expenditure incurred through hospitals has increased considerably in the last three years and the share of ambulatory health care providers has decreased. Health administration expenditure also decreased, mainly as a result of the decrease in the operating expenses of the EHIF.

Organisation of public health programmes has remained on more or less on the same level over the six years.

**Table 20.** Health care providers, 2004–2005

	2004		2005		Change
	thousand kroons	%	thousand kroons	%	2005/2004
HOSPITALS	3,449,271	45%	4,100,470	47%	19%
NURSING CARE INSTITUTIONS	94,679	1%	159,738	2%	69%
PROVIDERS OF AMBULATORY HEALTH CARE	1,590,426	21%	1,672,575	19%	5%
RETAIL SALE AND OTHER SUPPLIERS OF MEDICAL PRODUCTS	2,177,126	28%	2,348,402	27%	8%
ORGANISERS OF PUBLIC HEALTH PROGRAMMES	145,402	2%	173,638	2%	19%
INSTITUTIONS DEALING WITH GENERAL HEALTH CARE ADMINISTRATION	276,585	4%	264,640	3%	-4%
INSTITUTIONS OF OTHER BRANCHES OF ACTIVITY	543	0.01%	586	0.01%	8%
REST OF THE WORLD	1,554	0.02%	13,094	0.15%	743%
<b>TOTAL</b>	<b>7,735,586</b>	<b>100%</b>	<b>8,733,143</b>	<b>100%</b>	<b>13%</b>

Before Estonia's accession to the European Union, any medical costs incurred abroad were covered by the EHIF pursuant to the agreement that was previously entered into. This was done in the case of rare diseases and if treatment was not available in Estonia. The system became bilateral after accession and the number of people seeking planned treatment abroad has increased. However, the share of treatment expenditure incurred abroad is still small (Table 20).

### 1.5.1. Hospitals

Even though the number of hospitals and beds has decreased over the years, the network of active treatment is still too large and maintaining its infrastructure is expensive. In 2005, hospitals comprised the largest group of health care providers whose expenditure increased even further when compared to the previous year. Hospitals provided services for 4.1 billion kroons in 2005, which is 19% more than in 2004. The expenditure of hospitals according to health services in 2004 and 2005 has been given in Table 21.

**Table 21.** Expenditure of hospitals according to health services, 2004–2005

	2004		2005		Change
	thousand kroons	%	thousand kroons	%	2005/2004
CURATIVE CARE	2,767,907	80%	3,355,881	82%	21%
incl. in-patient curative care	2,192,025	64%	2,641,214	64%	20%
day cases of curative care	90,752	3%	134,232	3%	48%
outpatient curative care	462,318	13%	557,562	14%	21%
treatment at home	22,812	1%	22,873	1%	0%
REHABILITATION	189,066	5%	265,677	6%	41%
LONG-TERM NURSING CARE OF HOSPITALISED PATIENTS	81,043	2%	97,833	2%	21%
ANCILLARY HEALTH SERVICES	411,255	12%	381,040	9%	-7%
incl. clinical laboratory tests	200,302	6%	218,962	5%	9%
incl. radiological tests	210,953	6%	158,535	4%	-25%
PREVENTION AND PUBLIC HEALTH	...	...	40	0%	...
incl. prevention of non-infectious diseases	...	...	40	0%	...
<b>TOTAL</b>	<b>3,449,271</b>	<b>100%</b>	<b>4,100,470</b>	<b>100%</b>	<b>19%</b>

Hospitals provided the majority of health services as curative care. In 2005, hospitals provided curative care services for approximately 3.4 billion kroons the majority of which was incurred in treating hospitalised patients. Expenditure increased on account of outpatient curative care when compared to the previous year – 21 percent. However, in percentage terms, the increase was the fastest in day cases of curative care – 48 percent.

The objective of every country is to reduce the number of hospitalised patients on account of outpatient curative care. Looking at the trend over the six years, we can see that the share of treatment of hospitalised patients has decreased considerably in Estonia. The treatment expenditure of hospitalised patients in the case of curative care comprised 97% in 1999 and only 64% in 2005. The types of curative care services in hospitals have not changed when compared to the previous year: treatment of hospitalised patients – 64%, day cases of curative care – 3%, outpatient curative care – 13-14% and home treatment – 1%.

## 1.5.2. Providers of Ambulatory Health Care

Providers of ambulatory health care have been the third largest group of care providers after hospitals and retailers and other suppliers of medical products since 2003.

A total of 1.7 billion kroons was spent through outpatient care providers in 2005, which is 5% more than in 2004. Regardless of this, the share of ambulatory health care providers has decreased considerably in six years: 32% in 1999, 35% in 2001 and only 19% in 2005.

**Table 22.** Expenditure of ambulatory health care providers according to health services, 2004–2005

	2004		2005		Change 2005/2004
	thousand kroons	%	thousand kroons	%	
<b>CURATIVE CARE</b>	1,263,588	79%	1,242,038	74%	-2%
incl. in-patient curative care	26,853	2%	23,601	1%	-12%
outpatient curative care	1,236,635	78%	1,214,231	73%	-2%
<i>incl. basic medical and     diagnostic services</i>	589,710	37%	643,137	38%	9%
<i>dental care</i>	598,526	38%	529,748	32%	-11%
treatment at home	100	0.01%	1160	0.1%	1060%
<b>REHABILITATION</b>	5,646	0.40%	3,185	0.2%	-44%
<b>NURSING CARE</b>	6,934	0.40%	10,027	0.6%	45%
<b>ANCILLARY HEALTH SERVICES</b>	287,010	18%	355,397	21%	24%
incl. transport of patients and rescue (emergency medical care)	178,000	11%	206,497	12%	16%
<b>PREVENTION AND PUBLIC HEALTH</b>	27,248	2%	28,587	2%	5%
<b>GENERAL HEALTH ADMINISTRATION</b>	...	...	33,341	2%	...
incl. administration of the health system on the level of general government	...	...	33,341	2%	...
<b>TOTAL</b>	<b>1,590,426</b>	<b>100%</b>	<b>1,672,575</b>	<b>100%</b>	<b>5%</b>

Today, ambulatory health care providers offer services mainly in the form of outpatient curative care, which consists mainly of medical and diagnostic services and dental care. One of the reasons why the expenses of outpatient curative care providers increased is the increase in the capitation fee limit of family physicians that resulted from the

performance of the salary agreement of health care professionals and the increase in the limit of the additional fee for distance in order to support family health clinics at more distant locations.

Outpatient curative care providers also incurred general health administration expenditure in 2005. These expenses are associated with the liquidation of the Northern Estonian Blood Centre and the redundancy of its employees.

### 1.5.3. Retailers of Medicines and Medical Products

Retailers of medicines and medical products such as pharmacies, suppliers of glasses and other optical aids and suppliers of hearing aids provided services for 2 billion and 348 million kroons in 2005. Expenditure increased 171 million kroons or 8% when compared to the previous year. This was one of the most modest increases in the last six years. The share generally remained stable within the last five to six years.

**Table 23.** Retailers of medicines and medical products, 2004–2005

	2004		2005		Change
	thousand kroons	%	thousand kroons	%	2005/2004
PHARMACIES	1,962,758	90%	2,091,372	89%	7%
RETAILERS OF GLASSES AND OPTICAL AIDS	81,495	4%	93,067	4%	14%
RETAILERS OF HEARING AIDS	9,211	0.40%	13,723	1%	49%
RETAILERS OF OTHER MEDICAL PRODUCTS	123,662	6%	150,240	6%	21%
<b>TOTAL</b>	<b>2,177,126</b>	<b>100%</b>	<b>2,348,402</b>	<b>100%</b>	<b>8%</b>

The expenditure on the goods offered by all retailers and suppliers increased in 2005 when compared to 2004. The expenditure incurred in the acquisition of hearing aids increased the most. These changes in said cost types occurred mostly on account of the



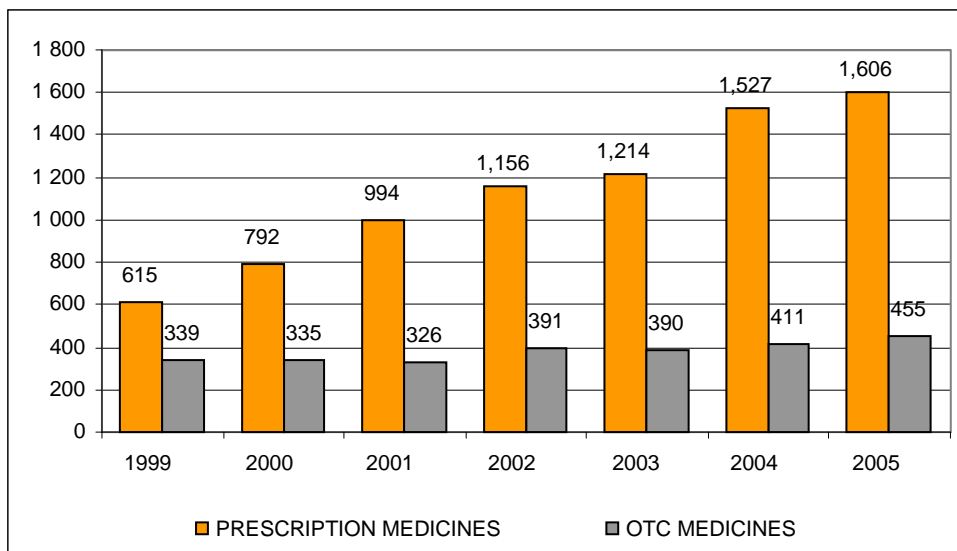
expenditure incurred by the government, which is financed through social welfare programmes.

Households are the main funding agents of pharmacies and other retailers of medical products. This means that these two types of suppliers are primarily influenced the consumption habits of households.

The medicine sales of pharmacies have increased year by year. They amounted to 2 billion and 92 million kroons in 2005, which is 128.6 million kroons more than in 2004. The increase of the expenditure of households comprised 85 percent of this increase.

Sales of medicines per resident amounted to 1,529 kroons in 2005 and they keep growing constantly and strongly (for example, it was 822 kroons in 2000, 1,136 kroons in 2002 and 1,434 kroons in 2004).

**Figure 13.** Expenditure of pharmacies according to types of medicines, 1999–2005, million kroons



Expenditure on both prescription and OTC medicines has increased over seven years. Expenditure on prescription medicines doubled in this period (615 million kroons in

1999 and 1 billion and 606 million kroons in 2005). Expenditure on OTC medicines increased more modestly.

#### **1.5.4. Organisers of Public Health Programmes**

Public health programmes are aimed at prevention of diseases and promotion of health. The objectives of disease prevention are early detection of diseases and measures to prevent sickness. The cause-consequence connections of preventive activities reduce expenditure on the treatment of specific health problems. The objective of health promotion is to propagate the kind of behaviour and a way of life that value and favour the health of people, and to develop a living environment that supports health.

Public health programmes include the following activities: the health of mothers and babies, family planning and counselling, school health, prevention of infectious diseases, prevention of non-infectious diseases, etc., which are financed from the health insurance budget and the state budget. It must be emphasised here that the activities aimed at mothers and children, such as monitoring pregnancies and health checks of children, are generally acknowledged health services in Estonia that are usually not performed in the course of programmes or project activities.

Expenditure on the organisation of public health programmes amounts to 173 million kroons, which was 27 million kroons or 19% more than in the previous year. The share of said providers in the current health expenditure has been decreasing over the years. It was 2.0% in 2005, 2.2% in 2004 and 2.5% in 2003.

The biggest public health programmes financed from the state budget are:

- National Programme for HIV and AID Prevention for 2002-2006;
- National Strategy for Prevention of Drug Addiction until 2012;
- National Strategy for Prevention of Cardiovascular Diseases for 2005-2020;
- Specific National Research Programme of Public Health 1999-2009.

A transfer to funding health promotion on the basis of public procurements occurred in 2005 pursuant to the amendments made to the Public Procurement Act. The former system for financing projects that was built on project applications based on civil initiative changed into a centrally planned system for ordering activities and supervision. Implementation of a centrally planned system is more complicated in administrative terms, but allows for funding activities in areas that are verification-based, cost-effective and contribute to carrying out the systematic changes planned in the state. Use of health promotion funds as efficiently as possible is guaranteed proceeding from the principles of public procurement and this can be done on a budget that is smaller than in previous years.

The existence of a national programme in certain areas has certainly reduced the expenditure of the EHIF incurred in these areas.

The EHIF invested 83 million kroons into prevention of diseases and health promotion in 2005. The most important disease prevention projects of the EHIF were:

- Prenatal diagnostics of hereditary diseases
- Project for prevention of osteoporosis
- Project for prevention of heart diseases
- Hepatitis B vaccination<sup>4</sup>
- Project for early detection of cervical cancer
- Newborn hearing screening

The Estonian Health Insurance Fund deals with health promotion through project work. The supervisory board of the EHIF approves priorities as coordinated with the Ministry of Social Affairs. 34 projects were funded in 2005, the activities of 14 of them will continue also in the first half 2006. The first quarter of 2005 was the stage of finding partners and launching for most projects. This means that the deadlines of the initially planned activities of long-term projects changed. The health promotion activities planned for achievement of goals was aimed mainly at two target groups:

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<sup>4</sup> Since 2006, hepatitis B vaccination has been done on the basis of the national immunisation programme funded from the state budget.

schoolchildren and adults. Pregnant women, parents of small children and patients with chronic diseases have been defined as the target groups that will be added.

**Table 24.** Expenditure of public health programme organisers by functions, 2004–2005

	2004		2005		Change
	thousand kroons	%	thousand kroons	%	2005/2004
Health of mothers and children; family planning and counselling	1,522	1%	19,128	11%	1156%
School health	34,657	20%	38,374	22%	11%
Prevention of communicable diseases	61,767	36%	63,848	37%	3%
Prevention of non-communicable diseases	47,999	28%	51,983	30%	8%
<b>TOTAL</b>	<b>145,945</b>	<b>84%</b>	<b>173,334</b>	<b>100%</b>	<b>19%</b>

The biggest expenditure in the area of public health programmes has been incurred in the prevention of non-communicable and communicable diseases. Expenditure on the health of mothers and children; family planning and counselling decreased considerably in 2004. However, this expenditure reached its previous level in 2005 thanks to funding from the EHIF (17 million and 173 thousand kroons in 2003).

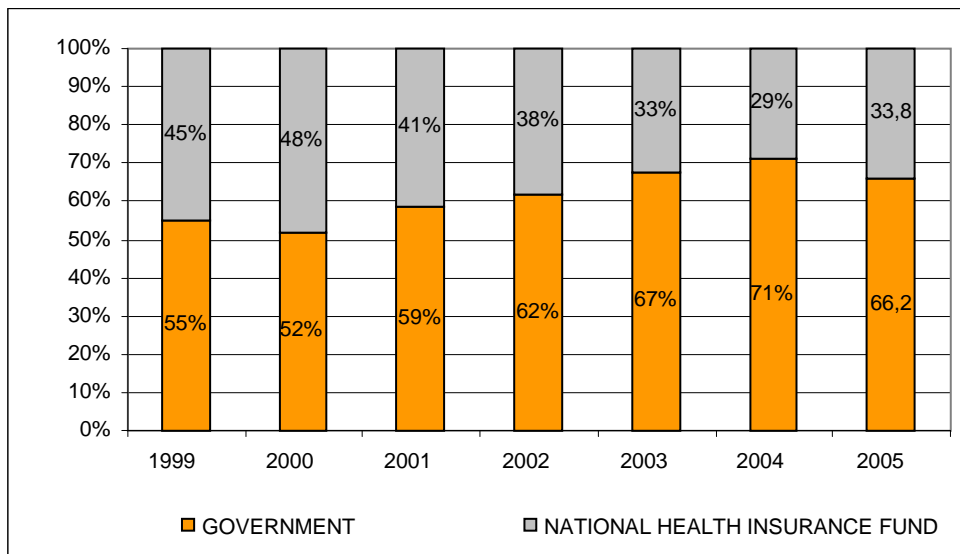
Projects financed from the gambling tax through the Ministry of Finance have also been implemented since 2001 and they are aimed at helping drug addicts, alcoholics and HIV positive people and other health promotion.

### 1.5.6. Institutions Dealing with General Health Administration

General health administration expenditure in 2005 amounted to 264.6 million kroons, which was 11.9 million kroons or 4% less than in the previous year. This means that administration expenditure dropped to the level of 2003 (264.9 million kroons).

Said expenditure mainly consists of the operating expenses of the Government or the Ministry of Social Affairs<sup>5</sup> and the institutions administered by the latter and the EHIF. General health administration expenditure also includes the operating expenses associated with private health insurance, but these amounts are marginal and not shown in the figure below.

**Figure 14.** Share of general health administration expenditure, 1999–2005<sup>6</sup>



General health administration expenditure decreased both in absolute numbers and as a percentage of THE. This was caused by the decrease in the Government’s expenditure whilst the administration expenditure of the EHIF increased.

<sup>5</sup> The expenses of the Ministry of Social Affairs are somewhat conditional here, because 1/3 of the total operating expenses of the Ministry have been calculated as operating expenses of health care every year by agreement.

<sup>6</sup> An agreed growth occurred in 2003, because the methodology changed. Expenditure incurred from the own income of divisions, which conditionally increase government expenditure, have also been considered as part of the government’s administration expenditure.

## 1.6. Health Services

As said before, the health system in Estonia focuses on curative care services, which is also illustrated by Figure 15. Curative care services, which consist of treatment of hospitalised patients and outpatient curative care, comprise the biggest part of health services. The expenditure of these services has decreased when compared to the previous years (62.9% in 1999 and 52.5% in 2005). The share of treatment of hospitalised patients has increased when compared to the previous year and the share of outpatient expenditure continues to decrease and reached its lowest level of the last seven years in 2005 – 20.2% (Figure 15).

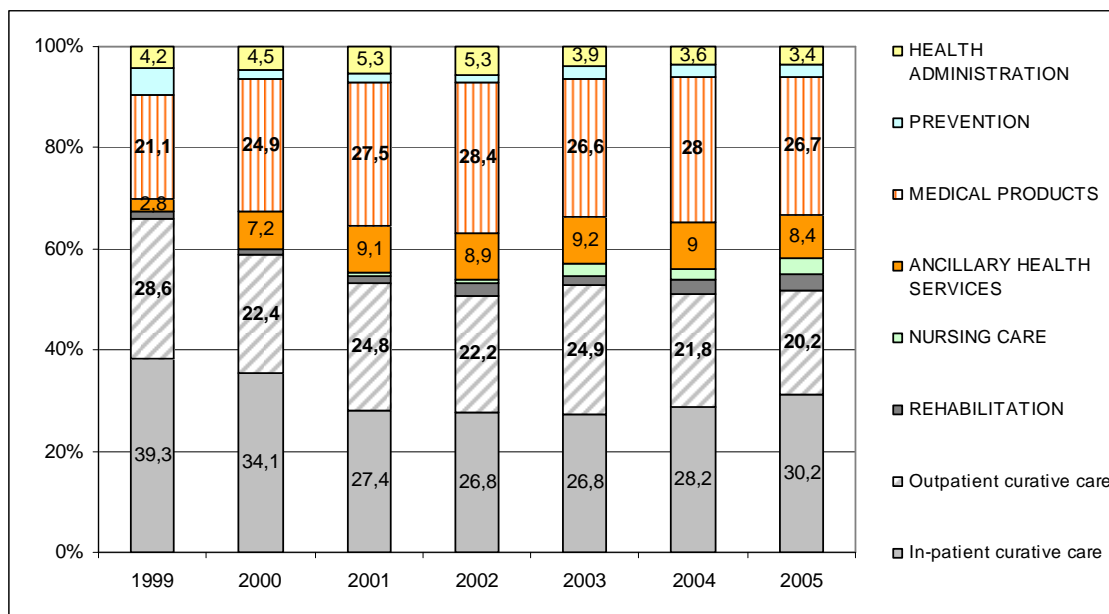
The average length of time spent in inpatient treatment and the number of inpatient treatment days have increased by 5% and 1%, respectively, when compared to 2004. In simpler cases, more inpatient and day treatment was provided to patients in 2005 when compared to the previous year. This caused a 4 percent decrease in the number of cases of inpatient curative care. Since the cases of inpatient curative care were more difficult than in the previous periods, then they were also more expensive and the average duration of treatment was longer.

The total number of outpatient admissions in 2005 increased by 8 percent in 2005 when compared to 2004. Repeat admissions in the same case of curative care have also increased.

The main reason why the expenditure of nursing care increased in 2005 was the salary agreement made between the Government of the Republic, the Estonian Hospitals Association and the Estonian Medical Association, which determined the increase in the maximum fee chargeable for nursing care, incl. the increase of the maximum inpatient fee chargeable for nursing care by approx. 18%. The overhead costs of nursing care increased by almost 66 million kroons in total from 2001 to 2005 and provision of outpatient nursing care services to patients has developed particularly fast. Geriatric

assessment is a new service launched in 2004. Twice as much of the service was provided when compared to 2004.

**Figure 15.** Share of health services, 1999–2005



The share of the expenditure on ancillary health services (laboratory tests, emergency medical care) has remained the same in the last for years – an average of 9% of THE.

The share of medical products (medicines, vaccines, prostheses, glasses, medical equipment) has decreased somewhat when compared to the previous year and prevention services have remained on more or less the same level.

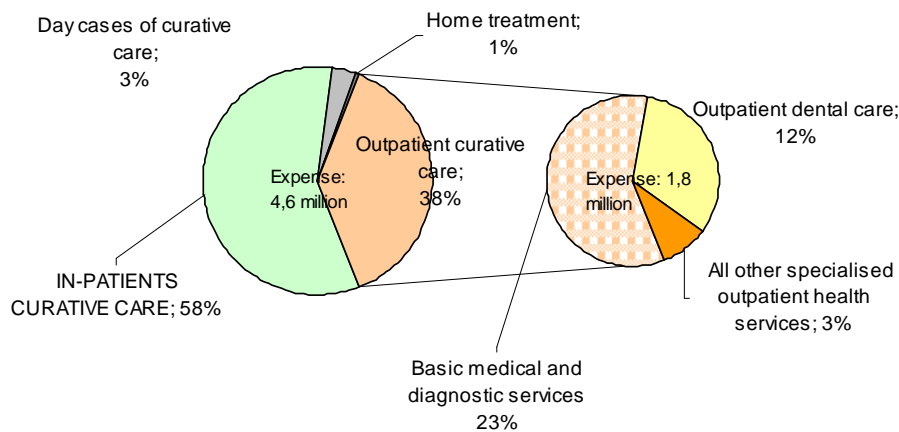
The share of capital investments in total health expenditure compared 0.6 percent for the second year in a row. The expenditure increased in absolute numbers. However, the majority of capital formation has been calculated as part of the health services and cannot therefore be differentiated.

Since curative care services comprise the most important part of the health services provided in Estonia, then we will take another look at them.

Curative care consists of in-patients curative care, outpatient curative care, day cases of curative care and home treatment. Hospitalisation also comprises the largest part of curative care services in 2005 – 58 percent (Figure 16).

Outpatient curative care, which consists of basic medical and diagnostic services (23% of all health services) and dental care (12%) comprises the second largest group – 38% of health services.

**Figure 16.** Division of curative care services and outpatient curative care, 2005, million kroons and percents



When we consider that 1.348 million people lived in Estonia in 2005, then curative care expenditure per capita in 2005 amounted to 2,422 kroons, which is 429 kroons more than in 2004 (Table 25).



**Table 25.** Health services per capita, 2004–2005

	2004		2005		Change
	kroons	%	kroons	%	2005/2004
CURATIVE CARE	2,993	52%	3,422	52%	14%
Incl. in-patient curative care	1,628	28%	1,972	30%	21%
day cases of curative care	87	2%	117	2%	34%
outpatient curative care	1,261	22%	1,315	20%	4%
<i>Incl. basic medical and diagnostic services</i>	678	12%	772	12%	14%
<i>dental care</i>	465	8%	423	6%	-9%
<i>all other special health services</i>	118	2%	119	2%	1%
<i>all other outpatient curative care</i>	0	0%	1	0%	2778%
home treatment	17	0%	18	0%	5%
REHABILITATION	144	3%	200	3%	38%
LONG-TERM NURSING CARE	136	2%	198	3%	46%
ANCILLARY HEALTH SERVICES	518	9%	547	8%	5%
MEDICAL PRODUCTS	1,616	28%	1,743	27%	8%
PREVENTION AND PUBLIC HEALTH SERVICES	129	2%	150	2%	17%
HEALTH ADMINISTRATION	205	4%	221	3%	8%
CAPITAL FORMATION	35	1%	40	1%	15%
<b>TOTAL</b>	<b>5,776</b>	<b>100%</b>	<b>6,521</b>	<b>100%</b>	<b>13%</b>

6,521 kroons was invested into a person's health in 2004. Similarly to the previous year, expenditure on hospital treatment (1,972 kroons) and medical products (1,742 kroons) was the biggest.

## Summary

In general, it may be said that the structure of Estonia's health expenditure is stable. No major changes, increases or decreases can be noticed in the last five to six years.

The total health expenditure of Estonia in 2005 comprised 8.8 billion kroons or 5.1% of GDP. The nominal increase of THE was 12.9 percent. The increase was 1.3 percentage points lower when compared to the period a year ago, even though it was one of the largest in the last five years. A significant part of the increase in THE occurred on account of price increase mainly caused by the increase in the salaries of health care professionals.

THE increased 2.5 percent when compared to the previous year if we consider the inflation of health care. Health care prices increased quicker than the entire economy on an average.

The share of expenditure on health in 2005 comprised 12% of all public sector expenditure and holds the third position after the social sphere and education for many years now. The public sector financed 76.7% of total expenditure on health in 2005. The health expenditure of the private sector and foreign countries amounted to 23% and 0.3%, respectively, in the same year.

Expenditure on health increased an average of 13.2 percent per person in 2005 and comprised 6,521 kroons. An average of 5,760 kroons was spent per capita in 2004.

Cost-sharing by people comprised the biggest share of private sector health expenditure – 80%, which at the same time comprised 20% of total expenditure on health. The biggest share of household health expenditure was spent on medical products (63%) and outpatient services (20%). Calculated cost-sharing expenditure comprised 1,332 kroons per capita in 2005.

## 2. INTERNATIONAL COMPARISON

Comparable countries are European Union Member States, who use the OECD methodology for THE calculation as recommended by Eurostat. The comparable period is from 1998 to 2005. The THE of different countries can be compared as a percentage of GDP. It measures the share of health services, products and capital investments in the added value produced by national economy. As said before, the instability in the ratio of THE and GDP may be misleadingly interpreted, because it may be caused by changes in GDP as well as THE itself.

Even though new countries joined the EU, whose THE ratio in GDP is lower than the average of the old EU, the average percentage of the European Union is still growing over years. The percentage of THE in the European Union was 8.2% of GDP in 1998, 8.7% in 2002 and 8.92% in 2005. The ratio of THE to GDP in Estonia decreased in the same period and was 5.6% in 1998, 5.1% in 2002 and 5.0% in 2005 (Table 26).

THE and its share in GDP grew the most in Austria as it changed by more than two percentage points. The percentage of health expenditure in GDP was the highest in France in 2005 – 11.2%. Estonia was in the last place among European Union countries in terms of this ratio.

**Table 26.** International comparison of the THE and GDP ratio and THE per capita, 1998–2005

Countries	1998		2002		2004		2005	
	THE and GDP ratio	THE per capita	THE and GDP ratio	THE per capita	THE and GDP ratio	THE per capita	THE and GDP ratio	THE per capita
	%	Inter-national \$	%	Inter-national \$	%	Inter-national \$	%	Inter-national \$
Austria	7.7	1,953	7.7	2,220	10.3	3,398	10.2	3,485
Belgium	8.6	2,041	9.1	2,515	9.7	3,006	9.6	3,071
Bulgaria	...	...	...	...	7.5	655	7.7	734
Croatia	7.9	575	7.3	630	7.7	974	7.4	1,001
Cyprus	6.1	715	7	883	6.3	1,355	6.1	1,550
Czech Rep.	6.6	916	7	1,118	7.2	1,388	7.1	1,447
Denmark	8.4	2,141	8.8	2,583	9.4	3,030	9.4	3,169
Estonia	<b>5.6</b>	<b>494</b>	<b>5.1</b>	<b>604</b>	<b>5.2</b>	<b>740</b>	<b>5</b>	<b>846</b>
Finland	6.9	1,607	7.3	1,943	7.4	2,203	7.5	2,299
France	9.3	2,231	9.7	2,736	11	3,211	11.2	3,406
Germany	10.6	2,470	10.9	2,817	10.6	3,166	10.7	3,250
Greece	9.4	1,428	9.5	1,814	9.6	2,667	10.1	2,949
Hungary	7.3	775	7.8	1,078	8.1	1,315	7.8	1,329
Ireland	6.2	1,487	7.3	2,367	7.5	2,723	8.2	3,125
Italy	7.7	1,800	8.5	2,166	8.7	2,405	8.9	2,494
Latvia	5.8	381	5.1	477	6.8	796	6.4	860
Lithuania	6.2	451	5.9	549	5.7	756	5.9	862
Luxembourg	5.9	2,326	6.2	3,066	8.1	5,317	7.7	5,521
Malta	8.4	760	9.6	962	8.2	1,608	8.4	1,733
Holland	7.9	1,955	8.8	2,564	9	3,002	9.2	3,187
Poland	6	563	6.1	657	6.2	808	6.2	844
Portugal	...	...	...	...	10	1,913	10.2	2,034
Rumania	...	...	...	...	4.9	427	5.5	507
Slovakia	...	...	...	...	7.2	1,058	7.2	1,130
Slovenia	...	...	...	...	8.5	1,863	8.5	1,959
Spain	7.5	1,371	7.6	1,640	8.1	2,097	8.2	2,242
Sweden	8.3	1,960	9.2	2,512	9.2	2,964	9.2	3,012
United Kingdom	6.9	1,607	7.7	2,160	8	2,506	8.2	2,598
<b>EU average</b>	<b>8.2</b>	<b>1,741</b>	<b>8.7</b>	<b>2,129</b>	<b>8.78</b>	<b>2,357</b>	<b>8.92</b>	<b>2,468</b>
<b>EU average before May 2004</b>	<b>8.6</b>	<b>1,937</b>	<b>8</b>	<b>2,361</b>	<b>9.42</b>	<b>2,760</b>	<b>9.57</b>	<b>2,883</b>
<b>EU average after 2007</b>	<b>6.2</b>	<b>645</b>	<b>6.4</b>	<b>800</b>	<b>6.4</b>	<b>860.87</b>	<b>6.49</b>	<b>918.37</b>

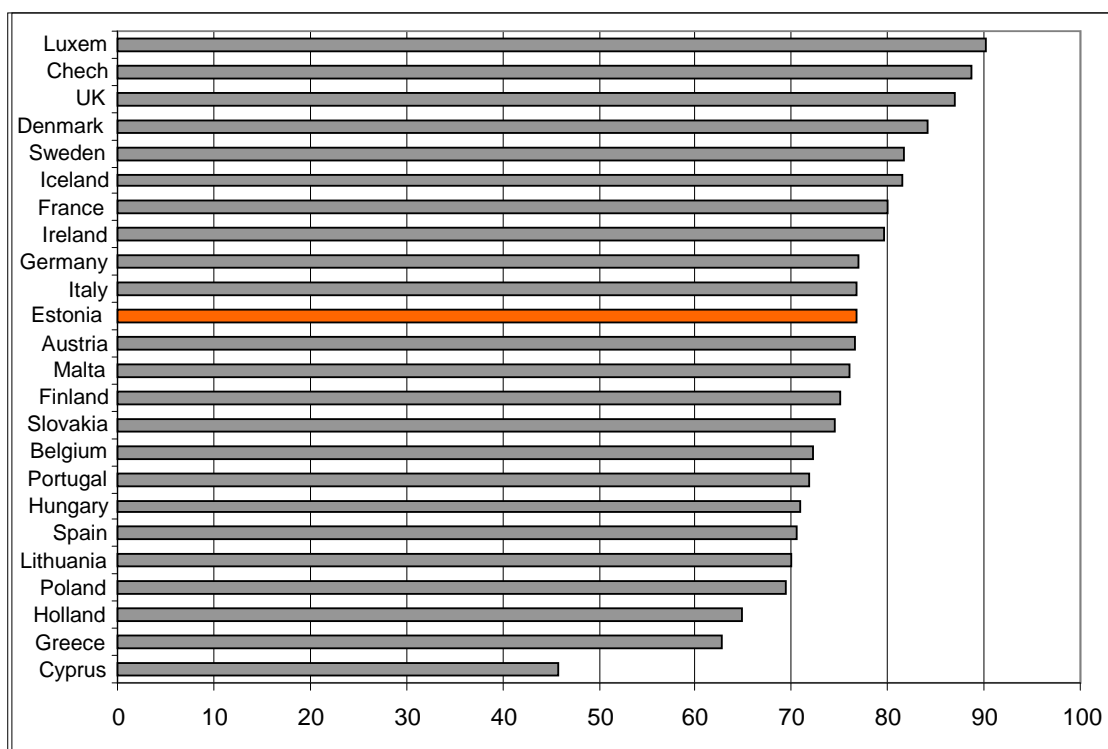
Source: European health for all databases (HFA-DB); World Health Organization Regional Office for Europe; Updated: September 2008

THE per capita is an indicator that allows for comparison of health expenditure both nationally and internationally without the impact of GDP and the size of population.

Even though the ratio of THE and GDP was not the highest in Luxembourg in 2005, its per capita indicator shows that health expenditure there was the biggest – 5,521 international dollars. In Estonia, this indicator is lower than the EU average and gives the country the fourth place from the bottom after Romania, Bulgaria and Poland. Our neighbours Latvia and Lithuania spend more on the health of their people than Estonia. This position changed in 2004. Before that, Estonia invested more into the health of its people than the other Baltic States (Table 26).

It is interesting to study how much the public sector spends on health when compared to the private sector. The next figure illustrates how the health system is financed in different European countries.

**Figure 17.** Share of the public sector in THE, 2005



Source: European health for all databases (HFA-DB); World Health Organization Regional Office for Europe; Updated: September 2008

Figure: the author

The public sector of Estonia invested 76.7% of THE into health in 2005, which is on approximately the same level as the EU average (Figure 17). The share of the public sector in health expenditure has remained almost the same in Estonia over the last five years. The public sector spends the most on health in Luxembourg and the Czech Republic. The public sector in Austria covers only 76.5 percent of all health expenditure, which is just 0.2 percentage points less than in Estonia. At the same time, Austria is in second place after Luxembourg in terms of per capita health expenditure.

## 3. TECHNICAL NOTES

### 3.1. Background Information

The System of Health Accounts<sup>7</sup> (SHA) is used to calculate THE. The analysis and tables are published on the website of the Ministry of Social Affairs every year. The Health Information and Analysis Department (HIAD) is responsible for the development of the THE methodology of Estonia. Since 2002, the HIAD has been gathering and presenting data about THE in such a manner that they can be simultaneously sent to international organisations: the EU, the OECD and the WHO.

Total health expenditure was calculated for the first time on the basis of the data from 1998. The methodology of Harvard University was used in the calculation of total expenditure in that year. Since the Harvard methodology differs from the methodology used in some European countries, then the OECD methodology has been used since 1999.

Pursuant to the OECD methodology, total health expenditure is calculated with two-dimensional matrix tables where health expenditure is shown as follows:

- current expenditure on health according to services and their providers;
- current expenditure on health according to services and sources of financing;
- current and total expenditure on health according to services and sources of financing.

Calculation of total expenditure on health is based on a system of three axes, where the ICHA (International Classification for Health Accounts) is used for calculating expenditure on health. It consists of the following parts:

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<sup>7</sup> The System of Health Accounts method has been developed by the Organisation for Economic Co-operation and Development (OECD).

- classification of health care (ICHA-HC);
- classification of health care providers (ICHA-HP);
- classification of health care financing (ICHA-HF).

### 3.2. Definition of THE

The term ‘total expenditure on health’ refers to health services and products, services associated with health care and capital investments associated with health care.

Pursuant to the OECD methodology, total expenditure on health is used to measure final consumption of goods and services associated with the health of residents, to which the capital formation of health care providers is added. In other words, it can be said the total expenditure on health is used to measure the economic resources spent on health goods and services. In addition to health services and prevention, this amount also includes administration and capital formation, but does not include sickness benefits or the training expenses of medical staff.

The following division is used for classification of health services. It is important to differentiate current expenditure on health that does not include capital formation and total expenditure, which includes also capital formation.

ICHA code:

HC.1 – HC.5	Expenditure on personal health
HC.6	Prevention and public health services
HC.7	Health administration
HC.1 – HC.7	Total current expenditure on health
HC.R.1	Capital formation
HC.1–HC.7+ HC.R.1=THE	Total expenditure on health
HC.R	Health care-related expenditure



According to the given scheme, expenditure on health is calculated pursuant to health services HC.1 – HC.4 (total expenditure on personal health), to which function HC.5 has been added (medical goods dispensed to outpatients). Functions HC.1 – HC.5 characterise expenditure on health aimed at persons. Adding HC.6 (prevention and public health services) and HC.7 (health administration) to these gives us *current expenditure on health*. When we add investments or capital formation (HC.R.1) to the latter, we then get *total expenditure on health*.

*Health care-related functions* (HC.R) are highlighted as a separate block, but their expenses are not added to the total expenditure on health pursuant to the OECD methodology (e.g. sickness benefits).

THE does not include:

- expenditure that is aimed at health, but incurred outside the health sector (for example: production of lead-free fuel, education of health care professionals);
- personal activities aimed at preservation and improvement of health (sport);
- health expenditure, which is a consequence of principal activities and not associated with people's income and does not describe the main indicators of the national economy.

We also have to keep in mind that some categories of total expenditure on health are known to us in greater detail than others. For example, expenditure on prevention in public health have been undervalued in this analysis. The type of the indicator will become clear when it can statistically differentiated (e.g. immunisation plan, public health policy, etc.). This means that the majority of health care providers who deal with counselling or consultations have been classified as providers of health services, not prevention services.

The labour costs of health care professionals have been calculated as part of service expenditure.

### 3.3. Sources of Data

Sources of data in the calculation of total health expenditure:

1. Estonian Health Insurance Fund – health insurance benefit expenditure.
2. Ministry of Finance – 2005 Annual Report on Execution of Local Government Budgets.
3. Data of health expenditure from the following ministries: Ministry of Education and Research, Ministry of Justice, Ministry of Defence, Ministry of Environment, Ministry of Culture, Ministry of Economic Affairs and Communications, Ministry of Agriculture, Ministry of Finance, Ministry of the Interior and Ministry of Foreign Affairs.
4. Statistical Office
  - a. The survey of household income and expenditure is the main source of data about the health expenditure incurred by households;
  - b. The report *Rehabilitation* is the basis of the rehabilitation expenditure incurred by people.
5. Data of health expenditure from insurance companies.
6. State Agency of Medicines – turnover of medicines in hospital and retail pharmacies.
7. Health Protection Inspectorate – data associated with food, hygiene and drinking water and inspection of environmental health.
8. Medcover Eesti AS, Töö ja Tervis OÜ ja OÜ Pärnu Töötervishoiuteenistus – data of the mandatory health checks of employees.
9. Casinos – donations and expenditure on health care.
10. Database of the State Treasury
  - a. The 2005 State Budget Execution Report is the source of data about the health expenditure incurred from the state budget according to ministries;
  - b. about the health expenditure incurred from the reserve fund of the Government of the Republic.
11. Departments of the Ministry of Social Affairs:

- a. Department of Finance and Asset Management – specified data about the medical treatment expenses of uninsured persons, foreign aid projects, foreign loans; operating expenses of emergency medical care and projects financed through the Ministry of Finance from gambling tax;
- b. Public Health Department – health promotion projects and programmes;
- c. Social Policy Information and Analysis Department – institutional reporting on social welfare.

## References

1. EHK Majandusaasta aruanne 2005 /Annual Report of the EHIF/, [http://www.haigekassa.ee/files/est\\_haigekassa\\_aruanded/aruanne2005.pdf](http://www.haigekassa.ee/files/est_haigekassa_aruanded/aruanne2005.pdf)
2. ESA, Leibkonna Elujärg. 2005 /SOE, Living Conditions of Households. 2005/.
3. European health for all databases (HFA-DB); World Health Organization Regional Office for Europe; Updated: September 2008.
4. M. Jesse, J. Habicht, A. Aviksoo, A. Koppel, A. Irs, S. Thomson; Tervisesüsteemi muutused, Eesti; 2005 /Changes in the Health System, Estonia; 2005/, p. 54.
5. Ministry of Finance, Budget Strategy of the State 2007-2010, Tallinn.
6. Ministry of Social Affairs, Haiglate tervishoiutöötajate tunnipalk märts 2005 /Hourly Wages of Health Care Professionals, March 2005/, Tallinn.
7. Statistical database, <http://pub.stat.ee/px-web.2001/Database/Majandus/01EHITUS/01EHITUS.asp>