Ministry of Social Affairs
Health Information and Analysis Department

HEALTH EXPENDITURE IN ESTONIA, 2004

Tallinn
2006

The Mission of the Health Information and Analysis Department**:**

"Health and Welfare of the People via Better Statistics and Information."

Author: Natalja Jedomskihh-Eigo

We would like to draw your attention to that as it is common to statistical reports, minor corrections in the present analysis are possible during one year. Kindly refer to the web version in using the data.

SUMMARY

In 2004, the health expenditure formed 5.5% from the GDP (5.3% from the GDP in 2003), and the health expenditure of the public sector was 4.2% from the GDP (4.1% in 2003).

- In 2004, the total Estonian health expenditure was **7 783 million kroons**, which makes 970 million, i.e. 14.2% more than in the last year (6 812 million kroons). In comparison with 1999, the total health expenditure has increased by 57%.
- The real growth of the total health expenditure formed 2.0% in 2004.
- At the end of 2005, **1.348 million people** lived in Estonia (among whom 94.4% were covered with compulsory health insurance). This means that the health expenditure **per one resident of Estonia was 5 776 kroons on the average** (369 EUR) in 2004, which makes 734 kroons (47 EUR) more than in the last year.
- The expenditure of the public sector on health care grew 12% compared to the last year, and formed 5 833 million kroons. The largest part of the expenditure of the public sector (87%) was financed by the means of the Estonian Health Insurance Fund.
- During the last five years, the importance of the public sector in financing the expenditure associated with health has decreased a little (1999 – 76.8%, 2004 – 75.5%). Accordingly, the importance of the private sector has grown—1999 – 19.6% , 2004 – 24%.
- In 2004, the percentage of capital expenditure from the total health expenditure was 0.6% (in 2003 0.8%), i.e. 47.1 million kroons. In comparison with the last year, the capital expenditure lessened by 0.1%.

Table of Contents

SUMMARY 3
List of Tables 5
List of Figures 7
Foreword 8
Abbreviations and Symbols 10
1. ANALYSIS 11
1.1. Percentage of Total Health Expenditure from Gross Domestic Product 11
1.1.1. Total Health Expenditure and General Economic Activity 12
1.1.2. Total Health Expenditure per capita 14
1.2. Health Insurance System 16
1.3. Sources of Health Care Financing 19
1.3.1. Public Sector 22
1.3.2. Private Sector 33
1.3.3. Rest of the World 38
1.4. Health Care Providers 40
1.4.1. Hospitals 42
1.4.2. Providers of Ambulatory Health Care 44
1.4.3. Retailers of Medicines and Medical Products 45
1.4.4. Organisation and Administration of Public Health Programmes 47
1.4.5. Health Care Administration 50
1.5. Health Care Services 52
1.6. Conclusion 55
2. INTERNATIONAL COMPARISON 56
3. TECHNICAL NOTES 60
3.1. Background Information 60
3.2. Definition of Total Health Expenditure 61
3.3. Data Sources 63

List of Tables

Table 1. THE in current and constant prices, expansion rates, 1998–2004 11

Table 2. Number of insured persons, 2001–2004 18

Table 3. Main sources of health care financing, 2003–2004 20

Table 4. Main sources of health care financing in per cent of GDP, 1999–2004 21

Table 5. Health care expenditure of ministries, 2003–2004 23

Table 6. Health care services financed by the Ministry of Social Affairs, 2003–2004 24

Table 7. Health care services financed by the central government, 2003–2004 25

Table 8. Current expenditure of the central government by health care providers, 2003-2004 27

Table 9. Health care services financed by local government, 2003–2004 29

Table 10. Current expenditure of local government by health care providers, 2003–2004 29

Table 11. Health care services financed by the EHIF, 2003–2004 30

Table 12. Expenses of the EHIF by health care providers, 2003–2004 32

Table 13. Allocation of health expenditure of private sector, 2003–2004 33

Table 14. Health care services financed by private sector, 2003-2004 34

Table 15. Expenses of the private sector distributed by health care providers, 2003–2004 34

Table 16. Expenses of the private sector by health care services distributed by sources of financing, 2004 35

Table 17. Household out-of-pocket expenditure distributed by health care service, 2003-2004 36

Table 18. Household out-of-pocket expenditure distributed by health care providers, 2003-2004 37

Table 19. Health care providers, 2003-2004 42

Table 20. Expenses of hospitals by health care services, 2003-2004 43

Table 21. Expenses of providers of ambulatory health care by health care services, 2003-2004 45

Table 22. Retailers and other providers of medical products, 1999-2004 46

Table 23. Expenses of the organisation and administration of public health programmes by health care services, 2003-2004 50

Table 24. Health care services per capita, 2003-2004 54

Table 25. International comparison of the THE in per cent of GDP and THE per capita, 1998–2002 57

Table 26. Real growth of THE, 1999–2003 58

List of Figures

Figure 1. THE and GDP in constant prices, 2003-2004 12

Figure 2. THE and public sector health expenditure in per cent of GDP, 1999-2004 13

Figure 3. Population by age groups, 1998-2004 15

Figure 4. Population and insured persons in Estonia, 2000–2004 17

Figure 5. Receipt of social tax, 1994–2004 18

Figure 6. Percentage of public sector, private sector and foreign countries from THE, 1999–2004 19

Figure 7. Amendments to health expenditure, 1999=100 21

Figure 8. Allocation of the financing sources of public sector, 1999–2004 22

Figure 9. Health care services financed by the central government, 2004 26

Figure 10. Current expenditure of the cental government by health care providers, 2003-2004, million kroons 28

Figure 11. Expenditure devided by health care providers, 1999-2004 41

Figure 12. Expenses of pharmacies by types of medicines, 1999-2004 47

Figure 13. Share of the expenses of health care administration, 1999-2004 51

Figure 14. Percentages of health services, 1999-2004 52

Figure 15. Division of curative and and out-patient care, 2004 53

Figure 16. Public sector expenditure on health in per cent of THE, 2002 51

Foreword

Although the structure and financing of the health care system of every country is specific, the purposes and functions of all the systems can be described equally. These are based on the general aims of the health system outlined in the World Health Report 2000 and reflect how the organisation of health financing influences the achievement of goals both directly and indirectly.

The purpose of the financing of the health system (and accordingly of reforms also) is to protect the state from the financial risk resulting from health expenditure and to observ the allocation of monetary charge in the society. Furthermore, to increase the transcendence of the system via just offer of services, which emanate from the needs and use of services, to support the offer of high-quality and efficient services by the aid of incentives and to increase the effectiveness of the financing system.

A regular health expenditure report is important for the better understanding of the Estonian health care system. This statistics shows resources, which have been allocated to the production and consumption of health services, and products that contribute to the health and welfare of the people. “The Analysis of Estonian Health Expenditure 2004” is a continuation to the health expenditure report compiled by the Ministry of Social Affairs since 1997.

The aim of the present report is to provide information on the financing sources of the health care system shown via health services and their providers by using the method of the NHA. The health sector includes the activities of for-profit and not-for-profit health care such as: occupational health, the medicine of the Defence Forces, health care in prisons and the administration of health care in the public and the private sector. Concurrently, this definition has its faults: it does not comprise the expenses incurred on teaching, health-related research and development, environmental health and other services (the primary activity of which is not the improvement of health). Therefore, this definition is too restrictive to cover the resources of the health care system as a

whole. Those who start to use the analysis to plan a health resource must definitely consider that the analysis only concentrates on the expenses incurred on the residents of Estonia. This means that the numbers disclosed in the report do not reflect the expenditure incurred on foreigners by health service providers.

The given analysis provides an overview of the health expenditure incurred in 2004 mostly and consists of three parts: descriptive text, international comparison and technical notes. Larger tables and definitions of classifications are outlined in the appendices. The tables present the absolute numbers and indices of 2004, and the data of 2003 are parallely brought out mostly as well. Also the trends of earlier years have been taken into consideration in writing the textual part.

Abbreviations and Symbols

EHIF	Estonian Health Insurance Fund
GDP	Gross Domestic Product
HIAD	Health Information and Analysis Department
LG	Local Government
NHA	National Health Accounts - NHA
OECD	Organisation for Economic Cooperation and Development
OOP	Out-Of-Pocket expenditure
SOE	Statistical Office of Estonia
THE	Total Health Expenditure
WHO	World Health Organisation
-	incidence did not occur
…	no data has been received

1. ANALYSIS

1.1. Percentage of Total Health Expenditure from Gross Domestic Product

The total health expenditure of Estonia (hereinafter referred to as the THE[1]) formed 7.8 billion kroons in 2004 (Table 1). The nominal growth in comparison with 2003 was 970 million kroons, i.e. 14.2%. The growth was 0.1% lower than in the previous year, although being one of the greatest of the last five years. Mainly, the growth took place because of two types of health care providers:

- Hospitals – 476 million kroons;
- Pharmacies and other providers of medical goods – 364 million kroons.

Table 1. THE in current and constant prices, expansion rates, 1998–2004

Years	In current prices (thousand kroons)	In constant prices (thousand kroons)	Nominal growth (%)	Real growth (%)
1998	4 374 174	…	…	…
1999	4 949 800	…	…	…
2000	5 145 500	…	4.0%	…
2001	5 353 800	…	4.0%	…
2002	5 958 800	…	11.3%	…
2003	6 812 166	4 392 008	14.3%	…
2004	7 782 648	4 479 081	14.2%	2.0%

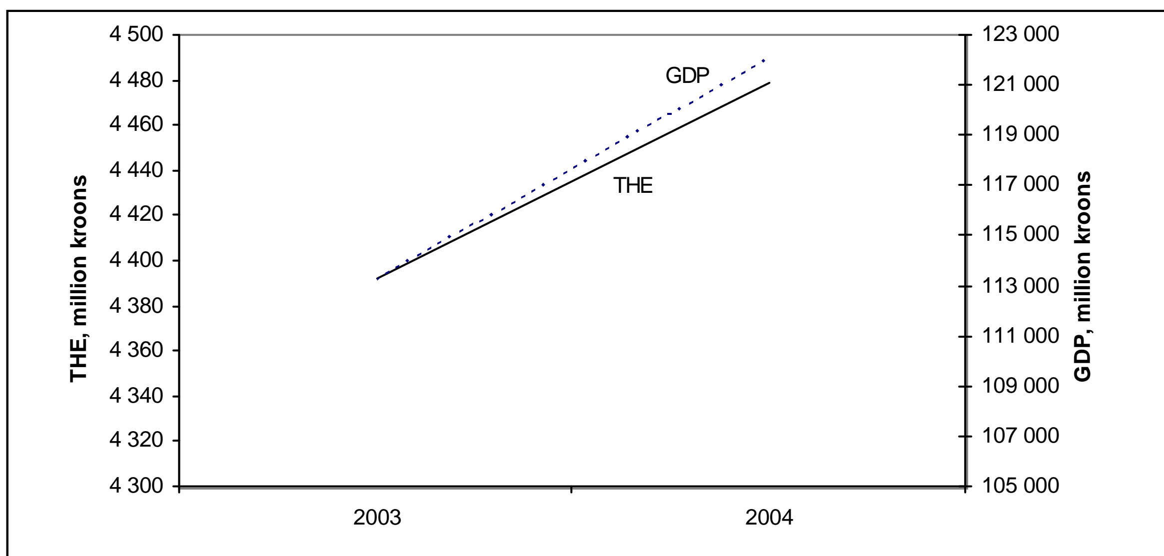
Due to the inflation, the real growth of the total health expenditure turned out to be 2.0%; at the same time the real growth of the gross domestic product (hereinafter referred to as the GDP) was 7.8%.

[1] In the present work the terms "total health expenditure" and "health expenditure" are employed as synonyms. Also, "expenditure" and "expenses" cannot be differentiated.

1.1.1. Total Health Expenditure and General Economic Activity

The nominal growths of both the gross domestic product (hereinafter referred to as the GDP) and of the THE were noticeable in 2004, but the real growth of the HE was significantly smaller than the real growth of the GDP (Figure 1).

Figure 1. THE and GDP in constant prices, 2003-2004

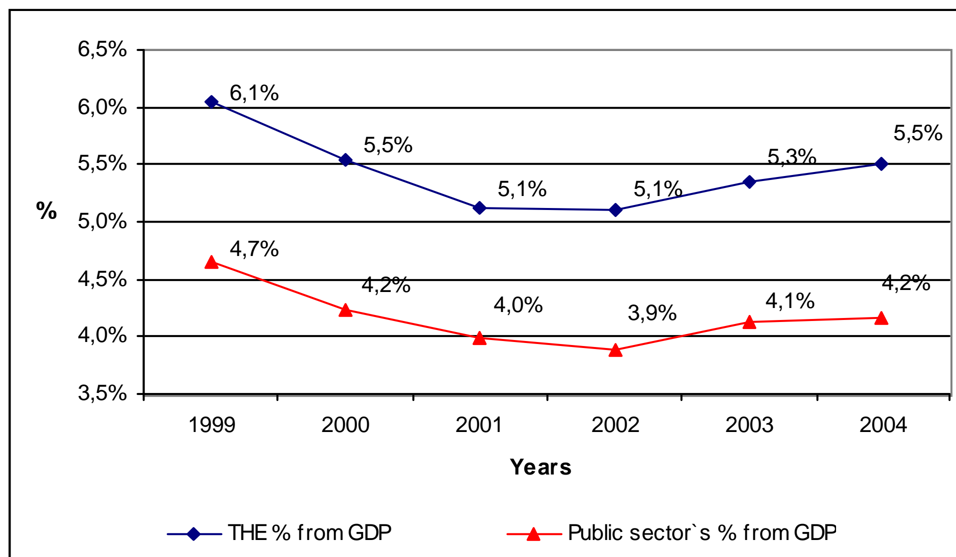


At the state level, the GDP is one of the most important measurers of economic acitivity. It is also employed for the international comparison of different indices of the health expenditure. In 2005, the Statistical Office made amendments to the accounts of the GDP, which raised the amount of the Estonian GDP 2003 and thus lowered the share of the total health expenditure from the gross domestic product. Hence, the total health expenditure formed **5.3%** from the recalculated GDP (5.4% in relation to the GDP published earlier) in 2003 and **5.5%** in 2004. In 1999–2002, the percentage of the THE from the GDP showed a downward tendency (6.1–5.1%), but in 2003 the trend has stopped and the relation has started to grow (Figure 2).

The health expenditure of the public sector follow the same trend – a decrease from 4.7 per cent in 1999 to 3.9 per cent in 2000. In 1999, the Estonian GDP diminished due to the economic crisis that took place in the Russian Federation and the downfall of the

global economic activity, after which the Estonian Health Insurance Fund (hereinafter referred to as the EHIF) used its reserve to compensate for the lack of money. It was followed by the decrease of the THE, which is explicable by the EHIF having built up the reserve in 2003. When the reserve requirements of the EHIF had been fulfilled, the THE and the health expenditure of the publis sector started to increase again.

Figure 2. THE and public sector health expenditure in per cent of GDP, 1999-2004



Despite that we are used to assess the state health care via the percentage of the total health expenditure from the GDP, it does not describe the actual effectiveness of health care. To observe the changes, the health expenditures incurred in Estonia during different years should be compared to one another rather than to compare the respective indices to those of other states. At this point, it should be taken into account that all the states are different, they have a different history of health care and thus a different structure of the health care system as well. In using the percentage of the THE from the GDP, it should also be considered that different states calculate the GDP and the THE according to different methodologies.

If we wish to measure the effectiveness of the health care system, medical indices have to be observed besides the incurred expenditure also. For instance: how many patients

were treated and how many times they turned to a doctor with a repetitive diagosis, how long are the queues, etc. The average lifetime serves as a significant figure also.

The percentage of the THE from the GDP may increse due to the following reasons:

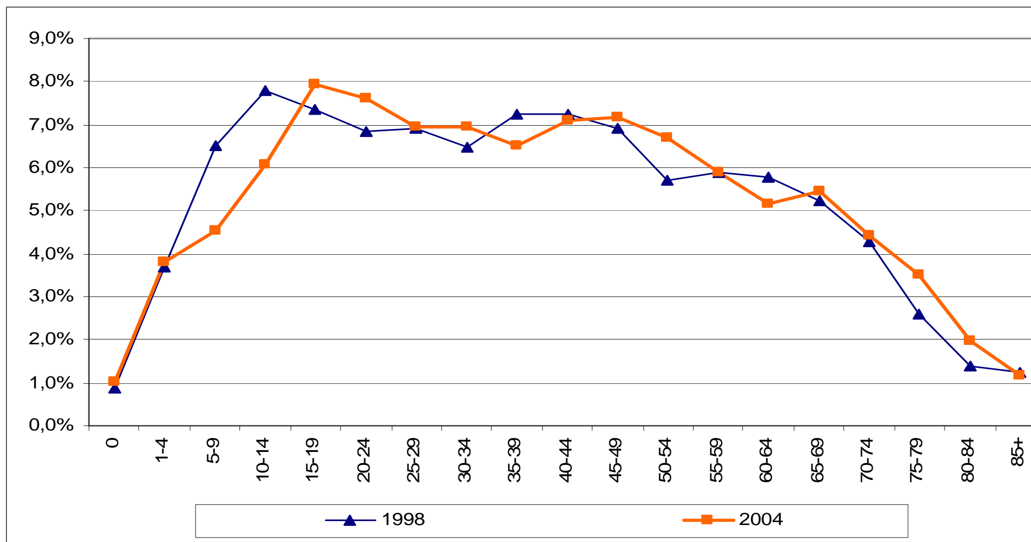
- The growth of the volume of health services and products is larger than the total growth of the services and products of the economy.
- The increase of the prices of the health sector surpasses the total growth of the price level of the economy, i.e. a greater inflation is present in the health sector.

In 2004, the nominal growth of the THE formed 14.2% and the real growth 2%. At that, the nominal growth of the GDP was 11.1% and the real growth 7.8%. This means that a price effect appeared in the field of health, and the health care prices started to grow faster than in the economy on the average. Consequently, a significant part of the growth of the THE took place on the account of the price increase, which emerged due to the rise of salaries.

1.1.2. Total Health Expenditure per capita

According to the data of the Statistical Office, **1 348 000 people** lived in Estonia at the end of 2004, which is 0.3% less than the year before (1 351 000). Since the Estonian population ages (Figure 3), the total health expenditure grows naturally.

Figure 3. Population by age groups, 1998-2004



During 2004, the average health expenditure per capita has increased by 14.5 % and is 5 776 kroons, i.e. 369 €. In 2003, 5 042 kroons, ie. 322 € was incurred on one resident on the average.

1.2. Health Insurance System

Since Janurary 01, 1999 a compulsory health insurance is in force in Estonia. The law imposes an obligation on employers to pay the social tax for all the working people and private persons dealing with business (self-employed persons) shall pay the social tax on their revenue themselves. Hence, 13% from the gross wages goes to the health insurance fund through the Tax Board.

The people for whom the social tax has been paid or who have paid it themselves are called the insured persons – they are working people or self-employed persons. The people supported by the insured persons, i.e. children under 19 years of age, students, pensioners, dependent spouses, who have less than 5 years to the old-age pension, and the pregnant are called persons equal to the insured persons.

In addition, there are insured persons in Estonia for whom the state pays the social tax. These are:

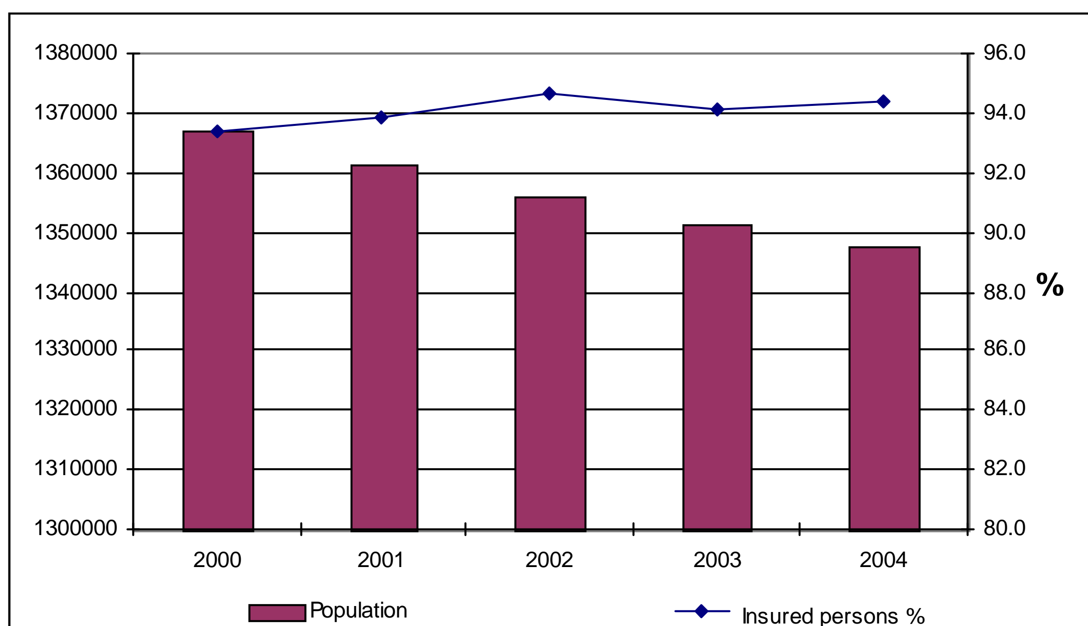
- people on parental leave with a child under 3 years of age,
- non-working single parents raising a child under 3 years of age,
- non-working spouses of diplomats and public servants in the work of foreign mission,
- conscripts in the compulsory military service of the Defence Forces,
- persons registered as unemployed.

The Estonian health insurance follows the principle of solidarity: in case of falling ill, the number and quality of health services does not depend on the amount of the social tax paid for the specific person.

The right for health insurance does not depend upon citizenship but place of residence. The law permits the people who live in Estonia to insure their health via private insurance companies, but this is voluntary.

All the people have the right for emergency medical care in Estonia, irrespective of having health insurance. Emergency medical care has to be provided in a situation in which the postponement of the care or not providing it may cause the death or permanent damage to the health of the person in need of help.

Figure 4. Population and insured persons in Estonia, 2000–2004



As mentioned before, 1 348 000 people lived in Estonia at the end of 2004; 94.4% of them were covered with the compulsory health insurance (Figure 4, Table 2). As of the end of 2004, 1 271 558 people were insured in the health insurance fund. In comparison with the situation at the end of 2003 the number of insured persons has decreased by 493 people, and in comparison with the situation at the end of 2002 it has lessened by 12 518 people[2]. In 2000–2004, the number of people covered with health insurance has not changed significantly.

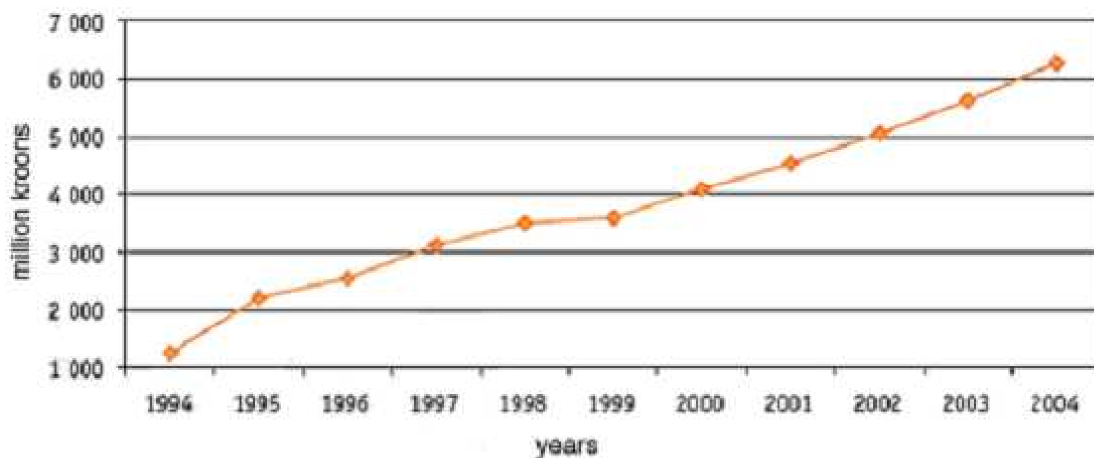
[2] EHIF Annual Report 2004
http://veeb.haigekassa.ee/files/est_haigekassa_aruanded_2004/majandusaasta2004.pdf.

Table 2. Number of insured persons[3], 2001–2004

Persons	31.12.2001	31.12.2002	31.12.2003	31.12.2004	Change % 2004/2003
Insured persons	574 284	578 673	584 885	595 734	1.85%
Persons insured by the state	40 140	48 469	49 119	43 869	-10.69%
Persons equal to the insured persons	663 204	656 926	631 830	626 438	-0.85%
Persons insured on the basis of an international agreement	458	8	6 217	5 517	-11.26%
Persons covered with health insurance in total	**1 278 086**	**1 284 076**	**1 272 051**	**1 271 558**	**-0.04%**

6 276 million kroons of social tax accrued in 2004, which is 3.2% more that was planned and 11.5% more than in the previous year. The social tax forms approximately 99% of the revenue base of the health insurance fund.

Figure 5. Receipt of social tax, 1994–2004[4]



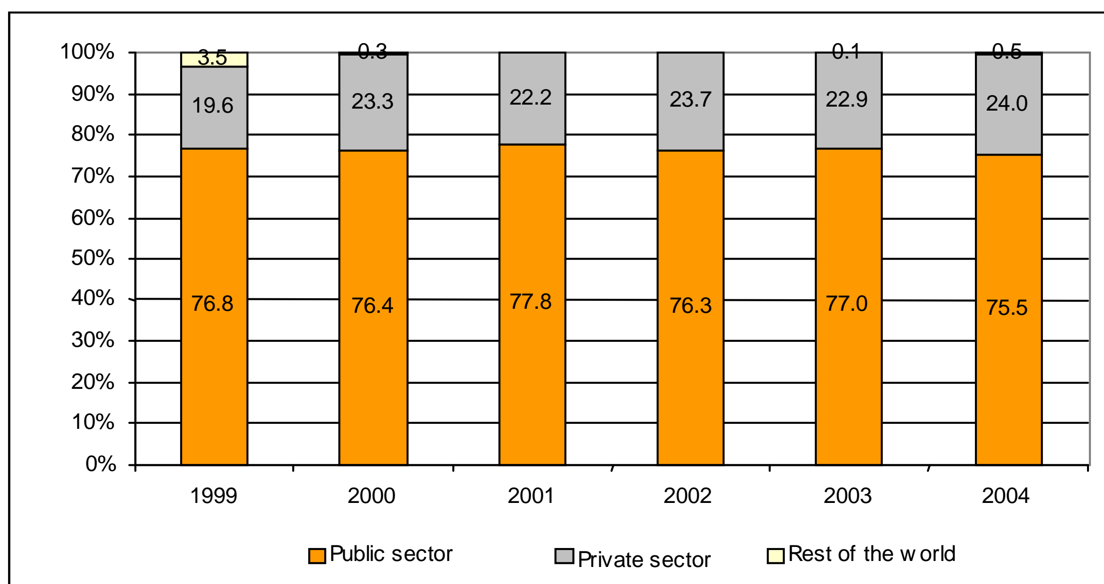
In the last five years, the yearly receipt of social tax has increased more than 10% (Figure 5). The income growth has been caused by the increase of wages and the consumer price index, also the improvement of the economic envronment and a more effective collection of taxes.

[3] Data source: Estonian Health Insurance Fund.
[4] Drawing – Estonian Health Insurance Fund.

1.3. Sources of Health Care Financing

The sources of financing the health care system can be divided into three – public sector, private sector and foreign countries (rest of the world). In Estonia, the major financer of health expenditure is the public sector. During times, the percentage of this source in financing the THE has decreased from 76.8 per cent in 1999 to 75.5 per cent in 2004. (Figure 6). At the same time, the cost-sharing of patients has increased during the past years.

Figure 6. Percentage of public sector, private sector and foreign countries from THE, 1999–2004



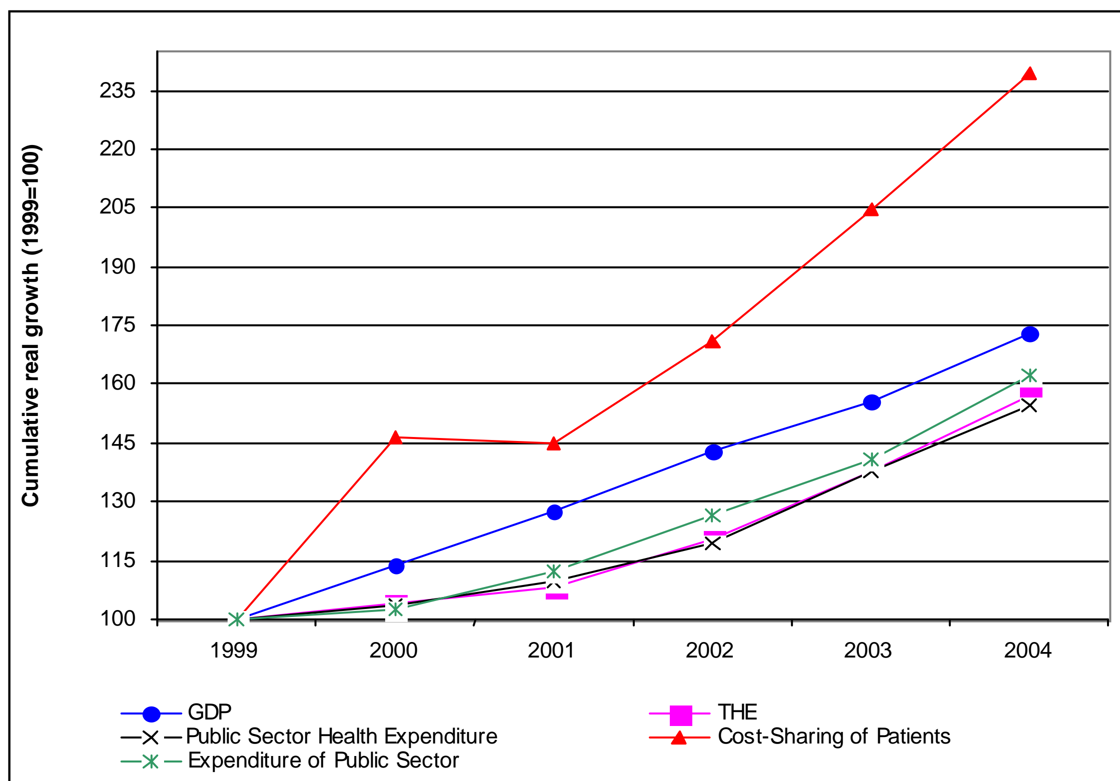
In 2004, the private sector financed 24% (1 868 million kroons) and rest of the world 0.5% (35 million kroons) of the total expenditure. In the same year, the health expenditure of the public sector was 75.5% from the total expenditure, i.e. 5 880 million kroons (Table 3).

Table 3. Main sources of health care financing, 2003–2004

	2003		2004		Change
	million kroons	%	million kroons	%	2004/2003
Public sector	5 245	77%	5 880	75,5%	12%
Private sector	1 563	23%	1 868	24,0%	20%
Rest of the world	…	…	35	0,5%	…
IN TOTAL	**6 808**	100%	**7 783**	100,0%	14%

According to the evaluation of experts, the decrease of the percentage of the public sector in financing the health health expenditure is not the result of a financial crisis like in many other countries. Vice versa, figure 7 shows that in the period of 1999–2004 the expenditure of the public sector grew more than 62% in steady prices. However, the health expenditure of the public sector increased only 55% in those years. It proves again that the percentage of the health expenditure from the state budget lessened. Thus, the private sector exerted bigger pressure on the growth of the THE (57%), mostly by the existence of patients, the cumulative real growth of which in the period of 1999–2004 was approximately 140%.

Figure 7. Amendments to health expenditure, 1999=100



As mentioned before, the amount of the expenses can be expressed by a per cent from the GDP. In recent years, the percentage of the public sector from the GDP has shown a downward trend, but in 2004 the percentage reached again the level of 2000, forming 4.2% from the GDP (Table 4).

Table 4. Main sources of health care financing in per cent of GDP, 1999–2004

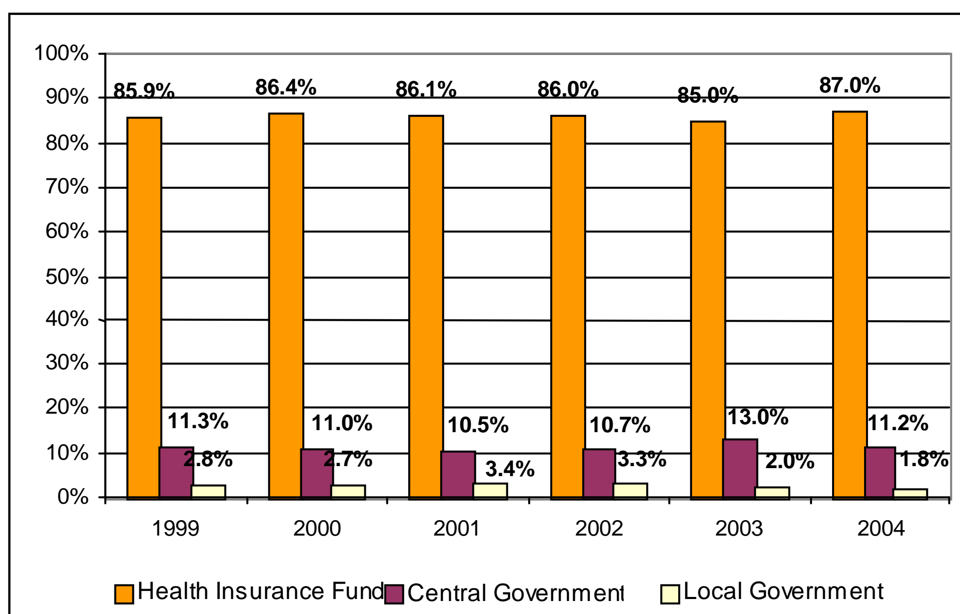
	1999	2000	2001	2002	2003	2004
Public sector	4.7%	4.2%	4.0%	3.9%	4.1%	4.2%
Private sector	1.2%	1.3%	1.1%	1.2%	1.2%	1.3%
Rest of the world	0.21%	0.02%	…	…	0.003%	0.02%

The percentage of the health expenses of the private sector from the GDP increased by 0.1 per cent in comparison with the last year, rising from 1.2 % to 1.3 %.

1.3.1. Public Sector

The public sector is the main source of financing health care. In comparison with the previous year, the expenses incurred by the public sector enlarged 635 million kroons, i.e. 12%. Furthermore, the public sector consists of three financers: the government, a local government and the Estonian Health Insurance Fund. The greatest financer of the sector is the Health Insurance Fund (87%).

Figure 8. Allocation of the financing sources of public sector, 1999–2004



Next, all the financers of the public sector are observed separately.

1) The expenses on health care financed by the **central government**, i.e. the state budget, diminished 2.2 million kroons, i.e. by 3.3% in 2004 as compared to the previous year. In 2004, the percentage of the expenses of the government formed 11.2% of the expenses of the public sector and 8.5% of the total expenditure (Figure 8). Since 2004, the data of the Ministry of Agriculture have been taken into the accounts of the total expenditure, too. However, the percentage of this ministry from the health care

expenditure of the government is marginal (0.1%). The decrease of the expenditure of the government basically took place due to the lessening of the expenses of the Ministry of Justice. The expenses financed by the central government were divided between the ministries as follows:

Table 5. Health care expenditure of ministries, 2003–2004

	2003		2004		Change
	thousand kroons	%	thousand kroons	%	2004/2003
Ministry of Education and Research	2 568	0.4%	3 266	0.5%	27.2%
Ministry of Justice	61 595	9.0%	389	0.1%	-99.4%
Ministry of Defense	19 735	2.9%	19 518	3.0%	-1.1%
Ministry of the Environment	180	0.0%	136	0.0%	-24.7%
Ministry of Culture	10	0.0%	244	0.0%	…
Ministry of Economic Affairs and Communications	410	0.1%	759	0.1%	85.0%
Ministry of Agriculture	…	0.0%	522	0.1%	
Ministry of Finance	659	0.1%	462	0.1%	-29.8%
Ministry of Internal Affairs	13 617	2.0%	10 397	1.6%	-23.6%
Ministry of Foreign Affairs	718	0.1%	447	0.1%	-37.8%
Ministry of Social Affairs	582 966	85.4%	623 881	94.5%	7.0%
Government in total	**682 458**	100.0%	**660 021**	100.0%	-3.3%

Naturally, the Ministry of Social Affairs, one of its aims being to regulate and administer the health care system in the state, has the greatest health expenditure. In the case of the Ministry of Social Affairs, the expenses incurred from the own revenues of all the divisions of the ministries have been taken into account in 2004. This year, the Ministry of Social Affairs financed the following health services:

Table 6. Health care services financed by the Ministry of Social Affairs, 2003–2004

	2003		2004		Change
	thousand kroons	%	thousand kroons	%	2004/2003
SERVICES OF CURATIVE CARE	69 682	12%	92 186	15%	32%
incl. benefit to persons without health insurance	69 322	12%	91 826	15%	32%
out-patient care	360	0%	360	0%	0%
SERVICES OF REHABILITATIVE CARE	4 000	1%	0	0%	…
SERVICES OF LONG-TERM NURSING CARE	51 818	9%	57 060	9%	10%
ANCILLARY SERVICES TO HEALTH CARE	168 759	29%	172 732	28%	2%
incl. emergency medical care	167 732	29%	172 732	28%	3%
MEDICAL GOODS	84 637	15%	77 069	12%	-9%
incl. medicines	18 425	3%	14 505	2%	-21%
PREVENTION AND PUBLIC HEALTH SERVICES	55 298	9%	39 121	6%	-29%
incl. prevention of communicable diseases	40 714	7%	31 349	5%	-23%
prevention of non-communicable diseases	8 013	1%	7 617	1%	-5%
HEALTH ADMINISTRATION	65 371	11%	85 768	14%	31%
HEALTH ADMINISTRATION from own revenue	57 800	10%	66 792	11%	16%
CAPITAL EXPENDITURE	25 602	4%	33 154	5%	29%
IN TOTAL	**525 166**	90%	**557 089**	89%	6%
In total together with HEALTH ADMINISTRATION from own revenue	**582 966**	**100%**	**623 881**	**100%**	**7%**

The greater part of the health expenditure (28%) by the Ministry of Social Affairs was incurred to finance an ancillary service, i.e. emergency medical care. The prevention expenses diminished by 29%, whereas financing the programmes of the prevention of communicable diseases decreased 23% and the financing of the prevention of non-communicable diseases lessened 5% in 2004. The financing of services of curative care, which in the case of the Ministry of Social Affairs includes only the benefits to people without health insurance, increased 32% in comparison with the previous year. The investments, i.e. the capital expenses enlarged significantly – 7.5 million kroons, i.e. 29%. In conclusion, the expenditure of the Ministry of Social Affairs on health care increased in comparison with the last year.

In 2004, the expenses of the central government on health care decreased 3% in comparison with 2003 (Table 7). The decrease took place on the account of services of

rehabilitative care, prevention and medicines. Similarly to recent years, a significant part of the health expenditure of the central government went to ancillary services, i.e. patient transport and emergency (26%) and health administration (24%).

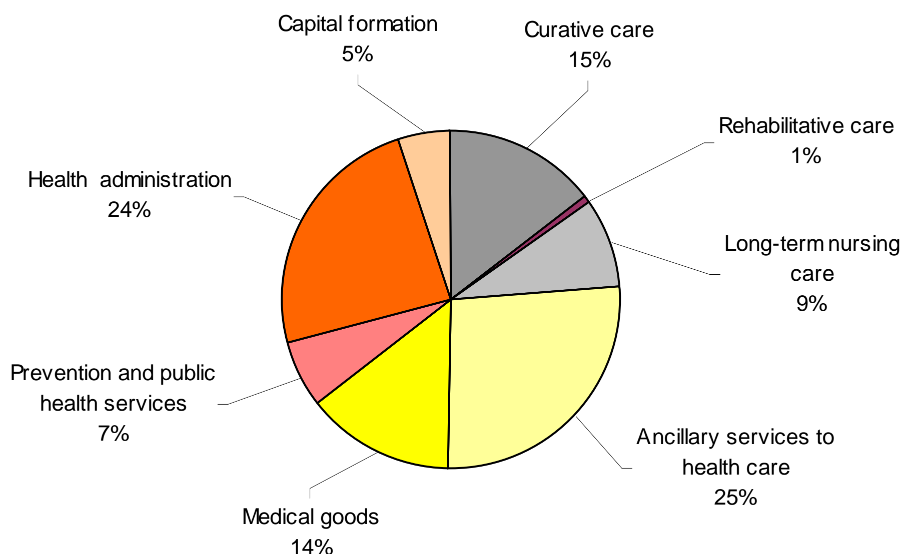
In comparison with the previous year, the total amount of the benefit paid to people without health insurance by the government increased, being 91 899 thousand kroons in 2004 (71 056 thousand kroons in 2003). Moreover, the financing of capital expenditure (30%) and services of curative care (28%) grew significantly. In 2004, the renovation of the buildings of the Ministry of Social Affairs formed a large part of the capital expenditure (i.e. the health care part) – 1/3 (29%). Since 2003, a larger part of the capital expenditure has been included in health services and is impossible to be outlined separately.

Table 7. Health care services financed by the central government, 2003–2004

	2003		2004		Change
	thousand kroons	%	thousand kroons	%	2004/2003
SERVICES OF CURATIVE CARE	76 414	11%	97 631	15%	28%
incl. benefit to persons without health insurance	71 056	10%	91 899	14%	29%
out-patient care	5 358	1%	5 732	1%	7%
SERVICES OF REHABILITATIVE CARE	9 069	1%	3 495	1%	-61%
SERVICES OF LONG-TERM NURSING CARE	51 818	8%	57 060	9%	10%
ANCILLARY SERVICES TO HEALTH CARE	170 706	25%	172 942	26%	1%
incl. emergency medical care	169 006	25%	172 797	26%	2%
MEDICAL GOODS	107 778	16%	94 300	14%	-13%
incl. medicines	35 673	5%	26 626	4%	-25%
PREVENTION AND PUBLIC HEALTH SERVICES	86 399	13%	42 910	7%	-50%
incl. prevention of communicable diseases	40 782	6%	31 432	5%	-23%
prevention of non-communicable diseases	8 112	1%	7 645	1%	-6%
HEALTH ADMINISTRATION	154 485	23%	158 070	24%	2%
CAPITAL EXPENDITURE	25 790	4%	33 614	5%	30%
IN TOTAL	**682 458**	**100%**	**660 021**	**100%**	**-3%**

Pärnu Hospital was started to be built 2003, and 225 million kroons was incurred on this construction in 2004. Riigi Kinnisvara AS that is also the owner of this edifice handled the construction works of the hospital. The building of the hospital is not included as a whole to the THE. Only the annual rent charge the Pärnu Hospital Foundation pays for the use of the edifice is included in the THE. This rent expenditure is included into price of health services.

Figure 9. Health care services financed by the central government, 2004



The expenditure of the central government by health care providers separately are observed next. The **current expenditure** is treated henceforth according to the OECD method (total expenditure minus capital expenditure).

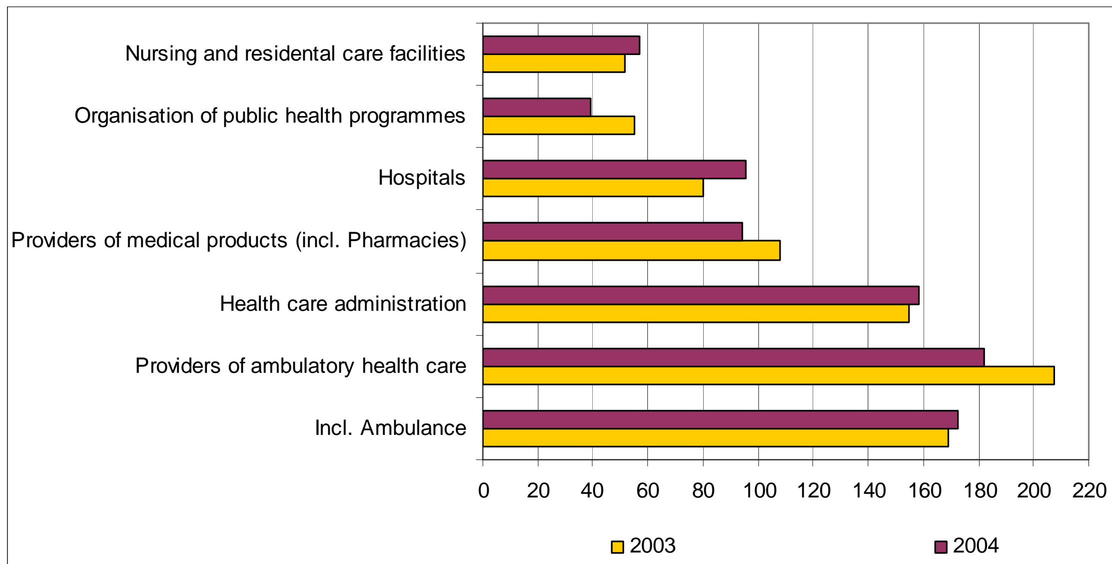
The capital expenditure of the central government formed 5% of the total health expenditure in 2004. Thus, the total current expenditure formed 95% of the total health expenditure of the central government, i.e. 626 407 thousand kroons. The current expenditure of the government by the health care providers separately were as follows:

Table 8. Current expenditure of the central government by health care providers, 2003-2004

	2003		2004		Change
	thousand kroons	%	thousand kroons	%	2004/2003
HOSPITALS	79 805	12%	95 394	15%	20%
NURSING AND RESIDENTAL CARE FACILITIES	51 818	8%	57 060	9%	10%
PROVIDERS OF AMBULATORY HEALTH CARE	207 313	32%	182 240	29%	-12%
incl. ambulance	169 006	26%	172 797	28%	2%
PROVIDERS OF MEDICAL PRODUCTS	107 778	16%	94 300	15%	-13%
incl. pharmacies	24 801	4%	12 733	2%	-49%
optics shops	2 332	0%	2 819	0%	21%
other providers of medicines and medicinal products	80 645	12%	78 748	13%	-2%
ORGANISATION OF PUBLIC HEALTH PROGRAMMES	55273	8%	39 139	6%	-29%
HEALTH CARE ADMINISTRATION	154 485	24%	158 070	25%	2%
OTHER BRANCHES OF ACTIVITY (incl. schools)	195	0%	204	0%	5%
IN TOTAL	**656 667**	**100%**	**626 407**	**100%**	**-5%**

The majority of the money of the central government was incurred via the providers of ambulatory health care (Table 8). At the same time, the expenses on out-patient care decreased 25 million kroons (12%) in comparison with 2003. The expenses of the central government on hospitals grew 20% in 2003, mostly on the account of the increase of expenditure on the persons with no health insurance (Figure 10).

Figure 10. Current expenditure of the cental government by health care providers, 2003-2004, million kroons



2) The expenses on health care financed by the budgets of **local governments** (hereinafter referred to as the LG) formed 1.8% (in 2003 – 2.0%) from the health expenditure of the public sector, i.e. 1.3% (in 2003 – 1.6%) from the total expenditure (Figure 8). In 2004, the expenditure incurred from the budgets of the local governments diminished 2.0 million kroons, i.e. 1.9 times in comparison with the previous year.

Tallinn`s expenditure on health care form 64% of the whole expenditure of the LG on health care. The expenses of the City of Tallinn on health care grew 16% in 2004, but the expenditure of the LG dercreased 2%.

The decrease of the health expenditure of the LG took place on the account of the lessening of the capital expenditure mainly (14 million kroons, i.e. 52%) (Table 9). Furthermore, the expenses on over-the-counter medicines diminished (0.6 million kroons, i.e. 10%). In 2004, the expenses of the LG incurred on emergency medical care (0.6 million kroons, i.e. 132%) and health administration (9.4 million kroons, i.e. 39%) grew significantly. The current expenditure of the LG is considered next.

Table 9. Health care services financed by local government, 2003–2004

	2003		2004		Change
	thousand kroons	%	thousand kroons	%	2004/2003
SERVICES OF CURATIVE CARE	41 955	39%	43 738	42%	4%
SERVICES OF LONG-TERM NURSING CARE	7 368	7%	8 131	8%	10%
ANCILLARY SERVICES TO HEALTH CARE (emergency medical care)	472	0%	1 097	1%	132%
MEDICAL GOODS	6 055	6%	5 472	5%	-10%
PREVENTION AND PUBLIC HEALTH SERVICES	-	-	145	0%	…
HEALTH ADMINISTRATION	23 799	22%	33 145	32%	39%
CAPITAL EXPENDITURE	26 888	25%	12 774	12%	-52%
IN TOTAL	**106 538**	**100%**	**104 502**	**100%**	**-2%**

Tallinn`s expenses on health care per capita remarkably exceed the respective index of other local governments.

Table 10. Current expenditure of local government by health care providers, 2003–2004

	2003		2004		Change
	thousand kroons	%	thousand kroons	%	2004/2003
HOSPITALS	79 805	12%	95 394	15%	20%
NURSING AND RESIDENTAL CARE FACILITIES	51 818	8%	57 060	9%	10%
PROVIDERS OF AMBULATORY HEALTH CARE	207 313	32%	182 240	29%	-12%
PROVIDERS OF MEDICAL PRODUCTS	107 778	16%	94 300	15%	-13%
ORGANISATION OF PUBLIC HEALTH PROGRAMMES	55273	8%	39 139	6%	-29%
HEALTH CARE ADMINISTRATION	154485	24%	158 070	25%	2%
OTHER BRANCHES OF ACTIVITY (incl. schools)	195	0,00%	204	0,00%	5%
IN TOTAL	**656 667**	**100%**	**626 407**	**100%**	**-5%**

In 2004, 15% of the current expenditure of the LG was realised through hospitals (in 2003 – 12%) and 9% (in 2003 – 8%) through nursing and residential care providers (Table 10). The financing of ambulatory health care facilities, providers of medicinal products and organisation of public health programmes lessened. In 2004, the local

governments incurred on school health care more than in 2003, but the sum incurred is marginal in comparison with the expenditure incurred on other health service providers.

3) Continually, the **Estonian Health Insurance Fund** (hereinafter referred to as the EHIF) is the greatest financer of the health expenditure in the public sector. The expenses incurred by the EHIF formed 87% of the whole expenditure of the public sector (Figure 8). Moreover, the expenses of the Health Insurance Fund formed the largest part of the total expenditure incurred on health care altogether – 65.7% (in 2003 – 65,4%). In 2004, the expenses incurred from the budget of the EHIF increased 659 million kroons, i.e. 15% in comparison with 2003 (Table 11). Hence, the largest source of financing the Estonian health care is the social tax paid on remuneration and fringe benefits (13/33 of the whole social tax).

Table 11. Health care services financed by the EHIF, 2003–2004

	2003		2004		Change
	thousand kroons	%	thousand kroons	%	2004/2003
SERVICES OF CURATIVE CARE	3 045 916	68%	3 411 243	67%	12%
incl. in-patient care	1 717 606	39%	2 056 786	40%	20%
day care	68 986	2%	117 605	2%	70%
out-patient care	1 237 694	28%	1 213 940	24%	-2%
incl. dental care	233 189	5%	240 708	5%	3%
home care	21 631	0%	22 912	0%	6%
SERVICES OF REHABILITATIVE CARE	46 452	1%	57 415	1%	24%
SERVICES OF LONG-TERM NURSING CARE	75 019	2%	95 177	2%	27%
ANCILLARY SERVICES TO HEALTH CARE	438 868	10%	507 399	10%	16%
MEDICAL GOODS	704 083	16%	889 815	17%	26%
incl. rescribed medicines	685 237	15%	866 680	17%	26%
other medical products	18 847	0%	23 135	0%	23%
PREVENTION AND PUBLIC HEALTH SERVICES	59 347	1%	73 960	1%	25%
HEALTH ADMINISTRATION	86 625	2%	80 112	2%	-8%
IN TOTAL	**4 456 310**	**100%**	**5 115 121**	**100%**	**15%**

The EHIF does not finance the capital expenditure directly. The capital expenditure was financed together with health services, i.e. the price of health services includes the

capital expenditure as well. Thus, the total expenses of the EHIF coincide with the currenct capital expenditure. Furthermore, the expenditure of the budget of the EHIF differs from the total expenditure, since the accounts of the total expenditure comprise neither the transfers to the reserve capital of the EHIC nor monetary benefits connected to health care (sickness benefits).

Pursuant to the Health Insurance Act, the EHIF shall assume a payment obligation for the provision of dental care service of an insured person under 19 years of age and the services of emergency dental care provided to adults. During 2004, the EHIF assumed the payment obligation for the provision of non-monetary dental care services for 173.8 million kroons in total, which forms 99% of the budget planned for 2004 and is 4% more than in 2003.

The Health Insurance Fund paid 167.9 million kroons for the dental care services of persons under 19 years of age (dental care, orthodontia, prevention of the diseases of teeth) in 2004. For the emergency dental care of the adults (abstraction of a tooth, opening of an abscess), the Health Insurance Fund paid 5.9 million kroons in 2004. The sum is 19% larger than the expenditure of 2003. Respectively, the monetary benefits for dental care and dentures formed 41.4 million kroons and 26.3 million kroons.

The total amount of medicines compensated for the insured persons was 863.7 million kroons in 2004; in comparison with 2003 the expenditure increased 26%, i.e. 181 million kroons. The following circumstances caused the increase of the expenditure on medicines:

- In March and April 2004, a remarkable growth of the compensation for medicines emerged, the reason of which is considered to be the significant increase of the consumption, because of dreading the disappearance of certain medicines from sale, before Estonia joined the European Union;
- The amendments to the Health Insurance Act, which entered into force since August 01, significantly enlarged the number of the persons who receive medicines with the reduced rate of 100% and 90%;
- Continually unconcluded price agreements on medicines to be compensated for;

- The media reports that encouraged the buying panic of the population connected to the enforcement of the calculation of reference prices in January 2005 brought along a more than 70% growth of the expenditure of the benefits of medical goods in December.

The average cost of a prescription was 180 kroons in 2004; the same statistical figure was 171 kroons in 2003. Mostly, the increase of the average cost of prescriptions has resulted from the growth of the percentage of medicines compensated with a reduced rate of 100%.[5]

Table 12. Expenses of the EHIF by health care providers, 2003–2004

	2003		2004		Change
	thousand kroons	%	thousand kroons	%	2004/2003
HOSPITALS	2 783 059	62%	3 175 181	62%	14%
NURSING AND RESIDENTAL CARE FACILITIES	5 952	0,1%	7 200	0,1%	21%
PROVIDERS OF AMBULATORY HEALTH CARE	815 946	18%	887 299	17%	9%
PROVIDERS OF MEDICAL PRODUCTS	704 083	16%	889 815	17%	26%
incl. pharmacies	685 237	15%	866 680	17%	26%
ORGANISATION OF PUBLIC HEALTH PROGRAMMES	59 347	1%	73 960	1%	25%
HEALTH CARE ADMINISTRATION	86 625	2%	80 112	2%	-8%
FOREIGN COUNTRIES	1 298	0,03%	1 554	0,03%	20%
IN TOTAL	**4 456 310**	**100%**	**5 115 121**	**100%**	**15%**

The greatest part od the EHIF's money was incurred via hospitals (Table 12). The expenses on hospitals increased by 392 million kroons in comparison with 2003, i.e. 14%. Furthermore, the expenses incurred on providers of ambulatory health care, providers of nursing and residential care as well as the providers of medical goods increased.

[5] EHIF Annual Report 2004
http://veeb.haigekassa.ee/files/est_haigekassa_aruanded_2004/majandusaasta2004.pdf.

1.3.2. Private Sector

It is possible for health care institutions to offer fee-charging health services to patients as well, and to accept co-payments for certain services reimbursed by the Health Insurance Fund. In 2004, the percentage of the private sector in financing the total health expenditure was 24% (in 2003 – 23.%, Figure 6). In comparison with the previous year, the expenses increased by 301 million kroons, i.e. 20%. The private sector consists of four different financers: private insurance, non-profit associations, private companies and private persons (household out-of-pocket expenditure) (Table 13).

Table 13. Allocation of health expenditure of private sector, 2003–2004

	2003		2004		Change
	thousand kroons	%	thousand kroons	%	2004/2003
PRIVATE INSURANCE	-	-	5 238	0,3%	…
COST-SHARING OF PERSONS	1 379 685	88%	1 658 949	89%	20%
NON-PROFIT ASSOCIATIONS	119	0,01%	3 428	0,2%	…
PRIVATE COMPANIES	182 974	12%	200 086	11%	9%
Private sector in total	**1 562 779**	**100%**	**1 867 702**	**100%**	**20%**

The growth of the expenditure of the private sector happened mostly on the account of the expenditure of households, i.e. out-of-pocket expenditure. Also, the expenditure of private companies to health care increased, although their percentage of the expenditure of the private sector diminished. The non-profitable associations, the Red Cross being the most notable representative of them, incurred more in 2004 than in the previous year. In 2003, the money of non-profitable associations was mostly incurred on the prevention of communicable and non-communicable diseases, the larger part of which (114 thousand kroons) went to the prevention of non-communicable diseases namely. In 2004, the non-profit associations invested 335 thousand kroons to prevention of communicable diseases and 2395 thousand kroons to prevention of non-communicable diseases. In addition, 339 thousand kroons were invested in the school health care service (Table 15).

Table 14. Health care services financed by the private sector, 2003-2004

	2003		2004		Change
	thousand kroons	%	thousand kroons	%	2004/2003
SERVICES OF CURATIVE CARE	446 958	29%	480 437	26%	7%
SERVICES OF REHABILITATIVE CARE	76 021	5%	133 802	7%	76%
SERVICES OF LONG-TERM NURSING CARE	12 989	1%	22 288	1%	72%
ANCILLARY SERVICES TO HEALTH CARE	13 330	1%	16 826	1%	26%
MEDICAL GOODS (incl. medicines)	994 793	64%	1 187 541	64%	19%
PREVENTION AND PUBLIC HEALTH SERVICES	18 687	1%	26 808	1%	43%
IN TOTAL	**1 562 779**	**100%**	**1 867 702**	**100%**	**20%**

Table 14 proves that the private sector incurred the most on medical goods (medicines, etc.) both in 2003 and 2004. The private sector incurred more on all the health services in 2004 than in the previous year. The biggest growth took place with regard to expenditure incurred on services of rehabilitative care and long-term nursing care (76% and 72% respectively).

Table 15. Expenses of the private sector distributed by health care providers, 2003–2004

	2003		2004		Change
	thousand kroons	%	thousand kroons	%	2004/2003
HOSPITALS	86 077	6%	169 035	9%	96%
NURSING AND RESIDENTAL CARE FACILITIES	12 989	1%	22 288	1%	72%
PROVIDERS OF AMBULATORY HEALTH CARE	468 059	30%	485 711	26%	4%
PROVIDERS OF MEDICAL PRODUCTS	994 793	64%	1 187 540	64%	19%
incl. pharmacies	919 219	59%	1 082 431	58%	18%
optics shops	65 576	4%	78 434	4%	20%
other providers of medicines and medical goods	9 999	1%	26 675	1%	167%
ORGANISATION OF PUBLIC HEALTH PROGRAMMES	859	0%	2 789	0%	225%
OTHER BRANCHES OF ACTIVITY (incl. schools)	-	-	339	0%	…
IN TOTAL	**1 562 778**	**100%**	**1 867 702**	**100%**	**20%**

As in the previous year, most of the money of the private sector was incurred in 2004 via providers of ambulatory health care and providers of medical products (primarily pharmacies). As to the absolute amount, the expenses incurred through the providers of medical goods (193 million kroons) and hospitals (83 million kroons) increased the most.

All the financers of the private sector are outlined sepatarely and discussed how much each of them incurred on a certain health service.

Table 16. Expenses of the private sector by health care services distributed by sources of financing, 2004

	Private insurance		Household out-of-pocket expenditure		Non-profit associations		Private companies		**PRIVATE SECTOR IN TOTAL**	
	thou-sand kroons	%	thousand kroons	%	thousand kroons	%	thousand kroons	%	**thousand kroons**	**%**
Services of curative care	5 108	98%	475 328	29%	-	0%	1	0%	**480 437**	**100%**
Services of rehabilitative care	15	0.3%	133 761	8%	-	0%	26	0%	**133 802**	**100%**
Services of long-term nursing care	2	0,04 %	22 286	1%	-	0%	-	0%	**22 288**	**…**
Ancillary services to health care	111	2%	16 715	1%	-	0%	0	0%	**16 826**	**100%**
Medical goods	2	0.04 %	1 010 805	61%	-	0%	176 734	88%	**1 187 541**	**100%**
Prevention and public health services	-	-	55	0%	3 428	100%	23 325	12%	**26 808**	**100%**
In total	**5 238**	**100%**	**1 658 949**	**100%**	**3 428**	**100%**	**200 086**	**100%**	**1 867 702**	**100%**

1) All the private insurance companies except the social insurance are regarded as **private insurance**, i.e. as alternative insutance to the EHIF. The expenses of the private insurance include the separate health insurance as well as the health part of travel and motor third party liability insurance. Payments (gross insurance premiums) are not taken into account here.

In 2004, the percentage of the health expenditure of the private insurance formed 0.3% from the expenditure of the private sector (Table 13). The private insurance spent on services of curative care the most (98%) and on the ancillary health care services, incl. laboratory analyses (2%) in 2004.

2) The percentage of the **out-of-pocket expenditure** (OOP) was the largest among the health expenditure of the private sector – 89% (2003 – 88%), forming 21% (2003 – 20%) of the total health expenditure. In comparison with the previous year, the OOP grew by 279 million kroons, i.e. by 20%.

Table 17 outlines that the growth of the OOP happened mainly on the account of the medical goods, incl. prescribed medicines (130 million kroons, i.e. 25%) and medical rehabilitation (58 million kroons, i.e. 76%). As to absolute numbers, a great increase emerged on the account of the expenditure on dental care (31 million kroons, i.e. 9%).

Table 17. Household out-of-pocket expenditure distributed by health care service, 2003-2004

	2003		2004		Change
	thousand kroons	%	thousand kroons	%	2004/2003
SERVICES OF CURATIVE CARE	446 958	32%	475 328	29%	6%
incl. In-patient care	10 056	1%	30 496	2%	203%
Out-patient care	436 901	32%	444 831	27%	2%
incl. dental care	354 123	26%	385 136	23%	9%
SERVICES OF REHABILITATIVE CARE	76 021	6%	133 761	8%	76%
SERVICES OF LONG-TERM NURSING CARE	12 989	1%	22 286	1%	72%
ANCILLARY SERVICES TO HEALTH CARE	11 407	1%	16 715	1%	47%
MEDICAL GOODS	832 310	60%	1 010 805	61%	21%
incl. Prescribed medicines	528 288	38%	658 611	40%	25%
Over-the-counter medicines	197 060	14%	222 401	13%	13%
Glasses and other vision products	65 556	5%	78 418	5%	20%
PREVENTION AND PUBLIC HEALTH SERVICES	-	-	55	0,003%	…
IN TOTAL	**1 379 685**	**100%**	**1 658 949**	**100%**	**20%**

Private persons spent the most on medical goods (1 011 million kroons) and services of curative care (475 mln kroons). As to the figures, the expenses of OOP per capita formed 1 230 kroons in 2004. The same indicator was 1 049 kroons in 2003. In comparison with other European countries, the average contribution of a resident of Estonia to health is smaller, but the international comparison of the given indicator is difficult due to the difference between insurance systems. OOP by the health care providers separately was realised as follows:

Table 18. Household out-of-pocket expenditure distributed by health care providers, 2003-2004

	2003		**2004**		Change
	thousand kroons	%	thousand kroons	%	2004/2003
HOSPITALS	86 077	6%	164 257	10%	91%
NURSING AND RESIDENTAL CARE FACILITIES	12 989	1%	22 286	1%	72%
PROVIDERS OF AMBULATORY HEALTH CARE	448 308	32%	461 548	28%	3%
incl. dental care centres	354 123	26%	385 136	23%	9%
PROVIDERS OF MEDICAL PRODUCTS	832 310	60%	1 010 804	61%	21%
incl. pharmacies	756 754	55%	905 711	55%	20%
optics shops	65 556	5%	78 418	5%	20%
other providers of medicines and medical goods	9 999	1%	26 675	2%	167%
ORGANISATION OF PUBLIC HEALTH PROGRAMMES	-	-	55	0,003%	…
IN TOTAL	**1 379 685**	**100%**	**1 658 950**	**100%**	**20%**

As mentioned above, the private persons spent on medical products the most. Consequently, they financed the providers of medical goods the most (1 011 million kroons, i.e. 61%) and just like in the previous year, the majority of it was spent through pharmacies.

The expenses the households spent on health services grew. The financing of the primary health service providers – hospitals – increased the most both by percentage and absolute numbers (78 million kroons, i.e.91%), and the financing of providers of ambulatory health care by the households grew 13 million kroons, i.e. by 2%. Table 18

shows that the growth of the expenditure incurred on providers of ambulatory health care results from the increase of the expenditure incurred on dental care providers.

3) The health expenditure of **private companies** formed 11% of the expenditure of the private sector (Table 13) and 2.6% of the total health expenditure (respectively, 12% and 2.7% in 2003). Although the percentage of the expenditure decreased in the expenditure of the private sector, the total amount spent on health increased in 2004 by 17 million kroons, i.e. 9% in comparison with the previous year.

Under the private companies, the expenses on health care incurred from the own revenue of the enterprises are displayed, incl. the expenses of the compulsory medical examination of employees by the assistance of Medicover Eesti AS. Primarily, the private companies spent money on over-the-counter medicines and prevention, i.e. occupational health care. The expenses on over-the-counter medicines were 177 million kroons, which formed 88% of the expenditure of the private companies and 21 million kroons on occupational health care (10.5 %) (Table 16).

1.3.3. Rest of the World

The percentage of financing the Estonian health care externally is not very large. In 1999, it formed 3.5% of the THE and almost reached zero by 2001. However, the external financing increased in 2004, reaching to 35 million kroons, i.e. 0.5 per cent of the THE. In 2004, investments into the infra-structure of hospitals were planned from the money of the EU Structural Funds – thus, the increase of external financing is to be expected in the future.

Receipts of external financing have mostly been used for the investments in human resources and technology and also to cover the operating costs. Like in the previous year, foreign aid was received to conduct prevention and public health care

programmes, incl. the prevention of communicable diseases (29 million kroons, i.e. 83%) and for the capital expenditure (329 thousand kroons, i.e. 8.1%) in 2004. This year, the expenditure on the administration of the health care system was added at the level of general management (5 millon kroons, i.e. 15%). External financing does not include loan figures.

The government applied for support from the European Regional Development Fund with regard to investments associated with hospitals, and in the period of 2004–2006 Estonia will receive approximately 388 million kroons for the investments connected with the development of five hospitals.

Due to the cluster of HIV/AIDS among injecting drug addicts, Estonia applied for financial aid from the worldwide fund of combating HIV/AIDS, tuberculosis and malaria. A 10-million-dollar support from the USA has been approved for the intensification of prevention and training work among risk groups and the youth, and to cover the expenditure of HIV-positive persons on medicines[6].

[6] M.Jesse, J.Habicht, A.Aviksoo, A.Koppel, A.Irs, S.Thomson; Tervisesüsteemi Muutused, Estonia; 2005, p.54.

1.4. Health Care Providers

So far, health services were viewed by the sources of financing. But these categories are discussed separately now to have a better picture of the expenditure and providers of health services.

The Estonian health care system concentrates on hospitals and services of curative care. The hospitals use a great part of the resources of the health care system. At the end of 2004, 1 294 independent health care institutions operated in Estonia. The health care institutions can be classified in several ways. In the present analysis, they are categorized according to health care services. In defining a service, the most important thing is considered to be the provision of in-patient health care service: if an institution provides in-patient service, it is classified to be a hospital irrespective of the provision of the rest of the services. The providers of out-patient and day care (day surgery) are classified according to the main service, i.e. the service the provision of which forms the biggest part of the work of an establisment. Pursuant to this, the institutions have been divided into institutions of general medical care, specialised medical care, dental care and other services.

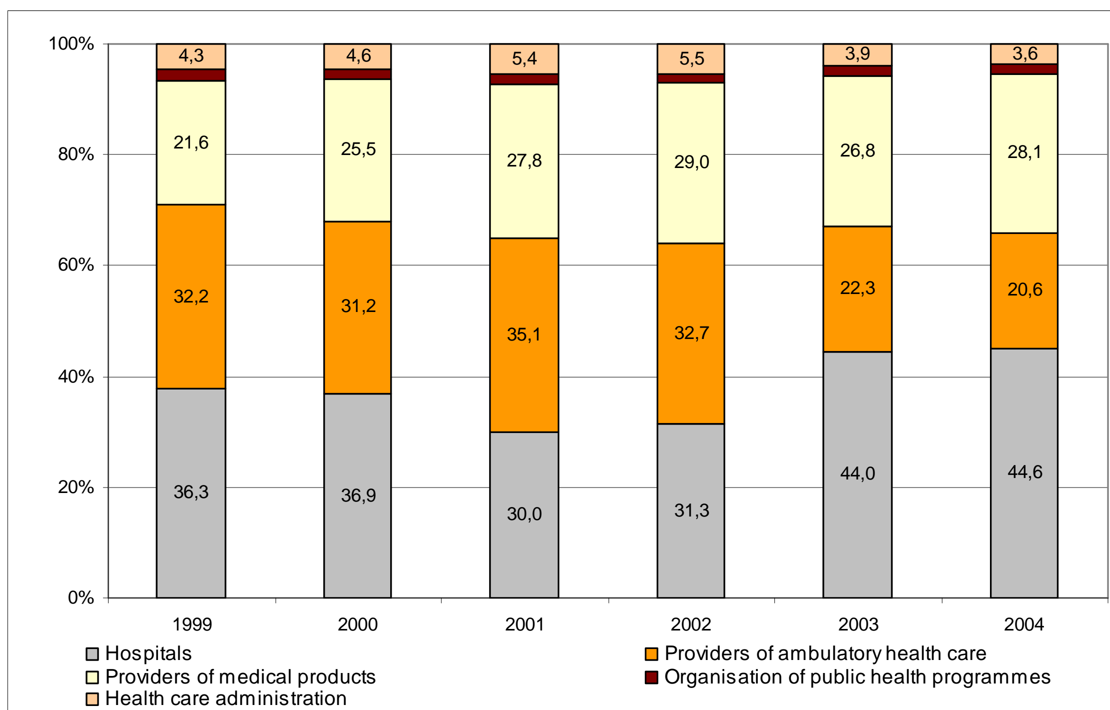
According to the aforementioned classification, 51 hospitals, 711 providers of ambulatory health care, 433 dental care facilities and 61 other institutions operated in Estonia at the end of 2004. Among the providers of ambulatory health care there were 479 general and 241 specialised medical care institutions; the majority of the general medical care institutions consisted of family doctors facilities – 471. The other institutions were divided as follows: 7 institutions providing emergency care, 39 medical rehabilitation institutions, 6 institutions providing diagnostics service, 1 blood establishment and 8 independent nursing care institutions.

The number of hospitals had already been stabilised by 2002, and 51 hospitals operated in Estonia by the end of 2004. The classification of the hospitals is regulated by the “Health Services Organisation Act”, pursuant to which a hospital is either a regional

hospital, a central hospital, a general hospital, a local hospital, a special hospital, a rehabilitation hospital or a nursing hospital. At the end of 2004, 3 regional hospitals, 4 central hospitals, 12 general hospitals, 5 local hospitals, 6 special hospitals, 3 rehabilitation hospitals and 18 nursing care hospitals operated in Estonia.

The number of providers of ambulatory health care increased continually in 2004 also. The number of stomatologic care institutions grew 6% in 2004 in comparison with the previous period. One of the reasons for the increase of dental care institutions was the disappearance of the subdivisions of stomatologic aid and their change into independent establishments.

Figure 11. Expenditure devided by health care providers, 1999-2004



Like in the previous years, hospitals, providers of ambulatory health care services, retailers and other providers of medical goods (incl. pharmacies) remain the largest service providers (Figure 11). The percentage of the expenditure incurred via hospitals has significantly grown in the last two years, and the percentage of the ambulatory health care providers has lessened. Also, the health care administration expenditure

diminished, which happened mainly due to the decrease of the operational costs of the EHIF. The organisation of public health programmes has remained at a relatively same level for all the six years.

Table 19. Health care providers, 2003-2004

	2003		2004		Change
	thousand kroons	%	thousand kroons	%	2004/2003
HOSPITALS	2 973 033	44%	3 449 271	45%	16%
NURSING AND RESIDENTAL CARE FACILITIES	78 127	1%	94 679	1%	21%
PROVIDERS OF AMBULATORY HEALTH CARE	1 509 655	22%	1 590 426	21%	5%
PROVIDERS OF MEDICAL PRODUCTS	1 812 709	27%	2 177 126	28%	20%
ORGANISATION OF PUBLIC HEALTH PROGRAMMES	119 231	2%	145 402	2%	22%
HEALTH CARE ADMINISTRATION	264 909	4%	276 585	4%	4%
OTHER BRANCHES OF ACTIVITY	195	0%	543	0%	178%
FOREIGN COUNTRIES	1 298	0%	1 554	0%	20%
IN TOTAL	**6 759 157**	100%	**7 735 586**	100%	**14%**

The share of medical treatment expenses incurred abroad in the health care budget was small (Table 19). The EHIF covers such medical treatment expenses pursuant to a pre-concluded agreement, in case of a rare disease and if the treatment is unavailable in Estonia (about 20 cases a year on the average). The system of bilateral agreements has changed after Estonia joined the European Union.

1.4.1. Hospitals

In 2004, hospitals formed the greatest group of health care service providers, the expenses of which grew even more in comparison with the previous year.

Speaking of expenditure, the hospitals remain the biggest providers of services of curative care and medical rehabilitation (67% and 97% of current expenditure). In 2004, the hospitals offered services for 3.45 billion kroons, i.e. 16% more than in 2003. The

expenses of the hospitals by health services in 2003 nad 2004 have been brought out in Table 20.

The hospitals provided the primary part of health care services as services of curative care. In 2004, the hospitals provided services of curative care for approximately 2.8 billion kroons, and the treatment of hospitalized patients formed the majority of it. In comparison with the previous year, a moderate growth took place in the expenditure on the account of out-patient care, which lessened 12%. The increase of the medical treatment expenses of day care patients can be noted - 70%, i.e. 37 million kroons.

Table 20. Expenses of hospitals by health care services, 2003-2004

	2003		**2004**		Change
	thousand kroons	%	thousand kroons	%	2004/2003
SERVICES OF CURATIVE CARE	2 421 849	81%	2 767 907	80%	14%
incl. In-patient care	1 821 511	61%	2 192 025	64%	20%
Day care	53 234	2%	90 752	3%	70%
Out-patient care	525 567	18%	462 318	13%	-12%
Home care	21 536	1%	22 812	1%	6%
SERVICES OF REHABILITATIVE CARE	128 623	4%	189 066	5%	47%
SERVICES OF LONG-TERM NURSING CARE	67 998	2,5%	81 043	2,2%	19%
ANCILLARY SERVICES TO HEALTH CARE	354 563	12%	411 255	12%	16%
incl. Clinical laboratory analyses	159 128	5%	200 302	6%	26%
Radiological analyses	195 434	7%	210 953	6%	8%
IN TOTAL	**2 973 033**	**100%**	**3 449 271**	**100%**	**16%**

The aim of every counrty is to decrease the treatment of hospitalized patients on the account of out-patient care. Looking at a six-year trend, it can be stated that the percentage of the care of hospitalized patients has diminished considerably. Although the percentage of the care of hospitalized patients formed 99% in 1999, it was only 64% in 2004. Despite that, cost-efficient services should be developed further; for instance day care, the expenditure of which forms only 3% of all the expenditure incurred on the health services of hospitals. Mainly, long-term health care provided in small hospitals was financed as nursing care. The expenses on nursing care grew 13 million kroons, i.e. by 19% during one year, but its percentage remained at the level of 2%.

1.4.2. Providers of Ambulatory Health Care

In 2004, the providers of ambulatory health care formed the third largest group of service providers, following hospitals as well as retailers and other providers of medical products.
All in all, 1.6 billion kroons, i.e. 5% was more spent via the out-patient care providers than in 2003. Nevertheless, the percentage of out-patient care providers has remarkably diminished in six years; in 1999 – 32%, in 2001 – 35% and in 2004 – only 21%.

Significant changes took place in the structure of the providers of ambulatory health care as well. Estonia is the only one among the new Member States of the European Union that completely switched to a system of family physicians, which covers the entire country. Today, this system is well-organised and regulated. Practice and experience prove that primary care is more cost-efficient than hospitalization. In the future, the Estonian system will enable to direct more hospital services to the out-patient care providers.

Now, the ambulatory health care facilities primarily provide health services of out-patient care, which mostly consist of basic medical and diagnostic services as well as dental care (Table 21). The growth of services of curative care was 75 million kroons, i.e. 6% in comparison with the previous year.

Table 21. Expenses of providers of ambulatory health care by health care services, 2003-2004

	2003		2004		Change
	thousand kroons	%	thousand kroons	%	2004/2003
SERVICES OF CURATIVE CARE	1 188 096	79%	1 263 588	79%	6%
incl. Day care	15 752	1%	26 853	2%	70%
Out-patient care	1 172 250	78%	1 236 635	78%	5%
Basic medical and diagnostic services	*502 468*	33%	*589 710*	37%	17%
Dental care	*560 880*	37%	*598 526*	38%	7%
Home care	94	0,01%	100	0,01%	6%
SERVICES OF REHABILITATIVE CARE	2 919	0,2%	5 646	0,4%	93%
SERVICES OF LONG-TERM NURSING CARE	1 068	0,1%	6 934	0,4%	…
ANCILLARY SERVICES TO HEALTH CARE	268 814	18%	287 010	18%	7%
incl. transport of patients and rescue work (emergency medical care)	170 779	11%	178 000	11%	4%
PREVENTION AND PUBLIC HEALTH SERVICES	48 758	3%	27 248	2%	-44%
IN TOTAL	**1 509 655**	**100%**	**1 590 426**	**100%**	**5%**

The expenditure of general medical care has continually grew in years due to the increase of the reference prices of the money stock and capitation fee, whereas the number of the insured persons has remained almost unchangeable.

The basic medical and diagnostic services grew mostly on the account of the out-patient care of the Health Insurance Fund (87 million kroons, i.e. 17%). The enlargement of the dental care expenditure happened on the account of the increase of households expences on dental care (38 million kroons, i.e. 7%).

1.4.3. Retailers of Medicines and Medical Products

The retailers of medicines and other medical products, like pharmacies, providers of glasses and other vision products as well as hearing aids and other hearing appliances provided services for 364.4 million kroons, i.e. 20% more than in the previos year. The

percentage of the retailers of medicines and medical products remained the same as compared to the last two years.

Table 22. Retailers and other providers of medical products, 1999–2004

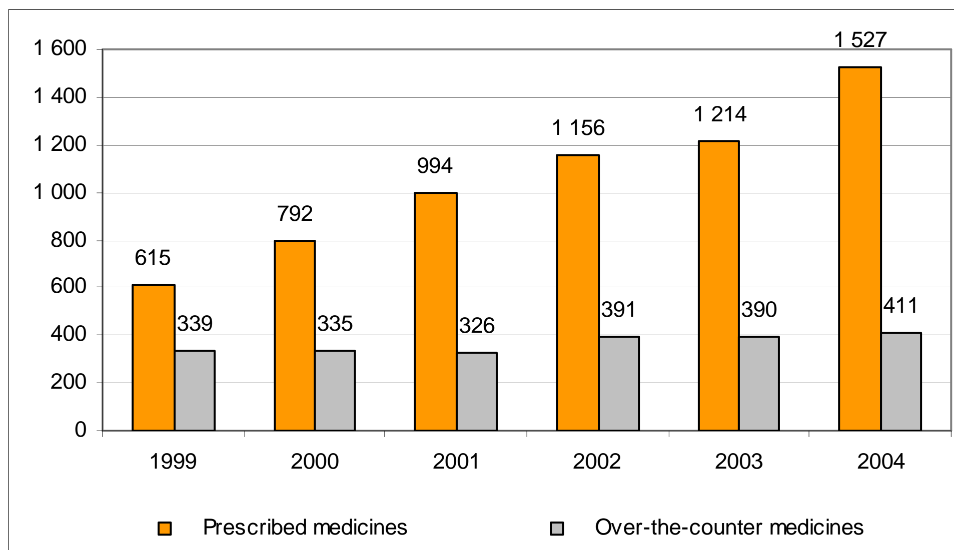
	2003		2004		Change
	thousand kroons	%	thousand kroons	%	2004/2003
PHARMACIES	1 635 311	90%	1 962 758	90%	20%
RETAIL AND OTHER PROVIDERS OF GLASSES AND OTHER VISION PRODUCTS	67 908	4%	81 495	4%	20%
RETAIL AND OTHER PROVIDERS OF HEARING AIDS AND HEARING APPLIANCES	8 388	0.5%	9 211	0.4%	10%
PROVIDERS OF OTHER APPLIANCES	101 103	6%	123 662	6%	22%
IN TOTAL	**1 812 709**	**100%**	**2 177 126**	**100%**	**20%**

The percentage of retailers and other providers of medical products in the current health expenditure was 28% in 2004 and 27% in 2003. In comparison with 2003, the expenditure of all the retailers and providers grew in 2004. The sale of glasses and other vision products increased 13.6 million kroons, i.e. 20%, and the sale of orthopedic and other appliances increased 0.8 million kroons, i.e. 10%. The above-mentioned changes in the mentioned expenditure happened mainly on the account of expenditure spent by households.

The turnover of pharmacies with regard to the sale of medicines has grew year by year. In 2004 it was 1 962.8 million kroons, which was 327.5 million kroons, i.e. 20% more than in 2003.

The sale of medicines was about 1 456 kroons per capita in 2004, which increases continually and thrivingly (for example, in 2002 – 1 154 kroons and 985 kroons in 2001).

Figure 12. Expenses of pharmacies by types of medicines, 1999-2004, million kroons



Both the expenses on prescription medical products and on those not subject to medical prescription increased in six years. The expenses on prescription medical products more than doubled (in 1999 – 615 million kroons and in 2004 – 1 527 million kroons); the growth of the expenditure on over-the-counter medicines was much more modest.

1.4.4. Organisation and Administration of Public Health Programmes

The public health programmes are directed towards the prevention of diseases and the improvement of health. The purpose of preventing diseases is the activity aimed at the early detection of pre-disease conditions of a person and the measures to avoid illness. The cause-consecuence associations of the preventive acitivity decrease the expenditure on the treatment of concrete health problems. The goal of health improvement is to mould the behaviour and lifestyle, which value and promote the health of a person and to systematically develop the physical and social environment which supports health.

These two groups include services like: maternal and child health care, family planning and counselling, school health care, prevention of communicable and non-

communicable diseases, etc., which are financed by the budget of the health insurance as well as the state budget. Here, it should be emphasized that in Estonia, the activities directed towards maternal and child health care such as observation of pregnancy and later the health surveillance of the children are generally acknowledged and not performed during programmemic or project-based activity.

The amount of the expenditure of the organisation and administration of public health programmes was 173 million kroons, which was 5 million kroons, i.e. 3% larger than in the previous year. The percentage of the aforementioned providers from the current health expenditure was 2.2% in 2004 and 2.5% in 2003.

The greater public health-related programmes financed by the state budget are the following:

- The state programme of HIV and AIDS prevention for 2002-2006;
- The health programme for the children and the youth until 2005;
- The state strategy for the prevention of drug addiction until 2012;
- The state strategy for the prevention of cardiovascular diseases 2005-2020;
- The state specific research programme of the R&D of public health 1999– 2009.

The Estonian Health Insurance Fund supports the promotion of health via project work based upon voluntary action presented in a public competition.

In 2005, the conversion to the financing of health improvement based on public procurements takes place pursuant the amendments to the Public Procurement Act. The financing system of projects built up on project applications based upon voluntary action turns into a system of ordering and surveillance of actions planned centrally. Although the implementation of a system planned centrally is more complicated from an administrative perspective, it enables to finance activities in evidence-based and cost-efficient fields, which contribute to the introduction of systematic changes planned in the state. Pursuant to the principle of public procurements, as effective use of the means to improve health with a smaller budget as possible is guaranteed in comparison with the earlier years.

The presence of state programmes in some domain has decreased the expenditure incurred by the EHIF on the given field.

In 2004, the EHIF invested 73.9 million kroons into activities related to the prevention of diseases and health improvement, the most important of which was school health care (46%) and the early detection of breast cancer (10%)[7]. The most significant projects of the prevention of diseases of the EHIF in 2004 were as follows:

- School health care
- Project of the reproductive health for the youth
- Projects for early detection of breast cancer
- Projects of phenylketonuria and hypoth. studies
- Pre-natal diagnostics of hereditary diseases
- Early detection of osteoporosis
- Projects of the prevention of cardial diseases
- Vaccination against B-hepatitis
- Early detection of the cancer of cervix
- Prevention of cardiovascular diseases
- Prevention of home and leisure time injuries and intoxications
- Prevention of malignant tumors
- Prevention of mental health problems
- Prevention of communicable diseases, incl. sexually transmitted diseases
- Projects directed at many high-priority domains

[7] EHIF Annual Report 2004
http://veeb.haigekassa.ee/files/est_haigekassa_aruanded_2004/majandusaasta2004.pdf.

Table 23. Expenses of the organisation and administration of public health programmes by health care services, 2003-2004

	2003		**2004**		Change
	thousand kroons	%	thousand kroons	%	2004/2003
Maternal and child health care, family planning and counselling	17 173	14%	1 522	1%	-91%
School health care	17 278	14%	34 657	24%	101%
Prevention of communicable diseases	52 147	44%	61 767	42%	18%
Prevention of non-communicable diseases	32 828	27%	47 999	33%	46%
IN TOTAL	**119 426**	**100%**	**145 945**	**100%**	**22%**

The greatest expenses in the field of public health programmes have been made in the prevention of non-communicable and communicable diseases.

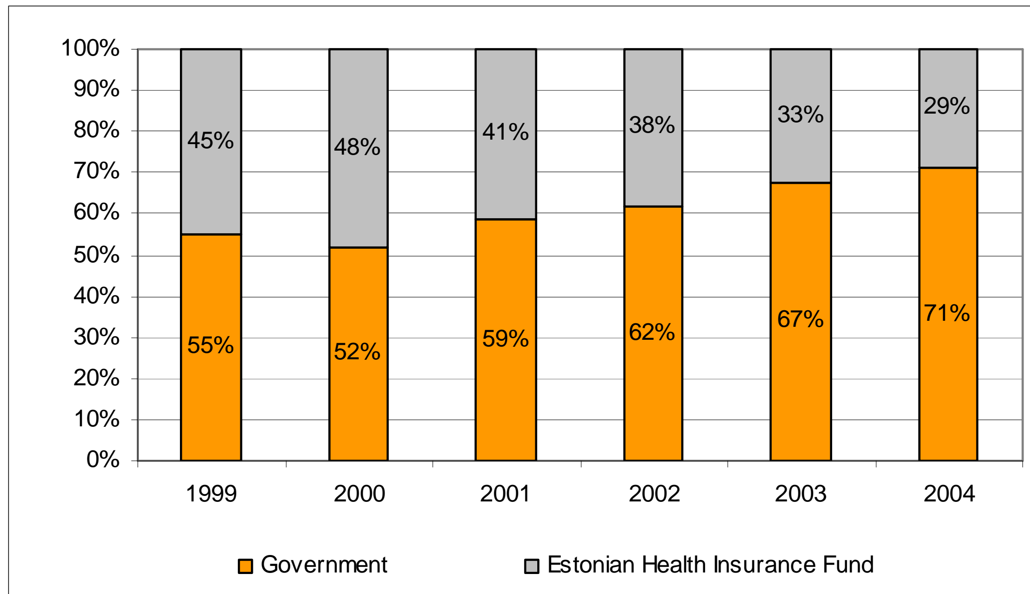
Since 2001, the projects aimed at helping drug addicts, alcoholics and the HIV-positive as well as other projects directed at health improvement, financed via the Ministry of Finance by the gambling tax, have been implemented as well.

1.4.5. Health Care Administration

The expenses of health care administration were 276.6 million kroons in 2004, which makes 11.7 million kroons, i.e. 4% more than the year before.

Primarily, the mentioned expenses consist of the operational costs of the government, i.e. the Ministry of Social Affairs, the institutions it administers and the EHIF. Herewith, the growth of the expenditure of the Ministry of Social Affairs has been contingent to some extent, because by agreement the operational costs of health care are yearly considered to be 1/3 of all the operational costs of the ministry. Also, the operational costs associated with the health insurance of the private insurance are included in the expenditure of healt care administration, but these amounts are marginal and not present in the next figure.

Figure 13. Share of the expenses of health care administration, 1999-2004

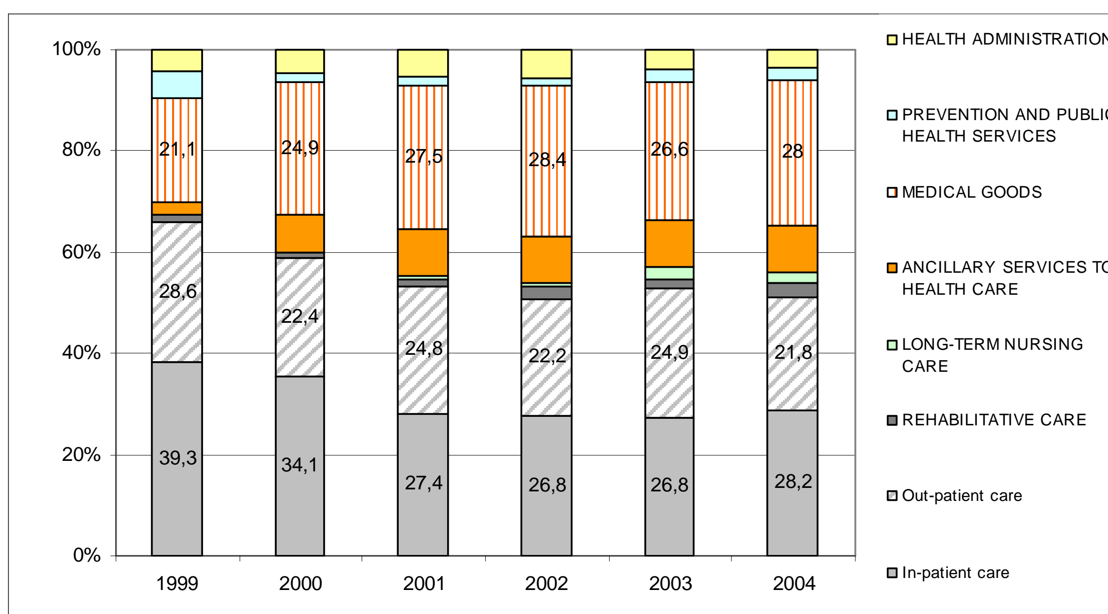


The percentage of the expenditure of the government in the expenditure of health care administration increased, and the growth occurred in absolute numbers also (Table 5). In 2003, an agreed-upon growth took place due to a change in the methods. Since 2003, also the expenses incurred from the own revenue of subordinary establishments are considered among the expenditure of the government administration, which notionally increase the expenditure of the government.

1.5. Health Care Services

As noted before, the Estonian health care system is focussed on services of curative care, which is also illustrated by figure 14. The services of curative care that consist of the care of a in-patient and out-patient care form the largest part of health care services. In comparison with the previous year, the expenditure with regard to these services has decreased (in 1999 – 62.9% and in 2004 – 51.8%). Whereas the percentage of the care of in-patient care has increased as compared to the year before, and the percentage of the expenditure on out-patient care decreases continually, reaching the lowest level of the last six years in 2004 – 21.8%.

Figure 14. Percentages of health services, 1999-2004



The increase of the budget of nursing care ensures the consistent development of nursing care services, because hospitals, which do not belong to the hospital network development plan, have started the provision of nursing care services. In 2003, the providers of home nursing care service began work as well.

First and foremost, the main reasons for the increase of the expenditure on nursing care in 2004 were the rise in the price of nursing day-care and adding the geriatric

assessment service to the list of health services. Looking at the period between 2001-2004, the general expenditure on nursing care has increased over 47 million kroons in total; at that the provision of out-patient nursing care services has developed remarkably fast.

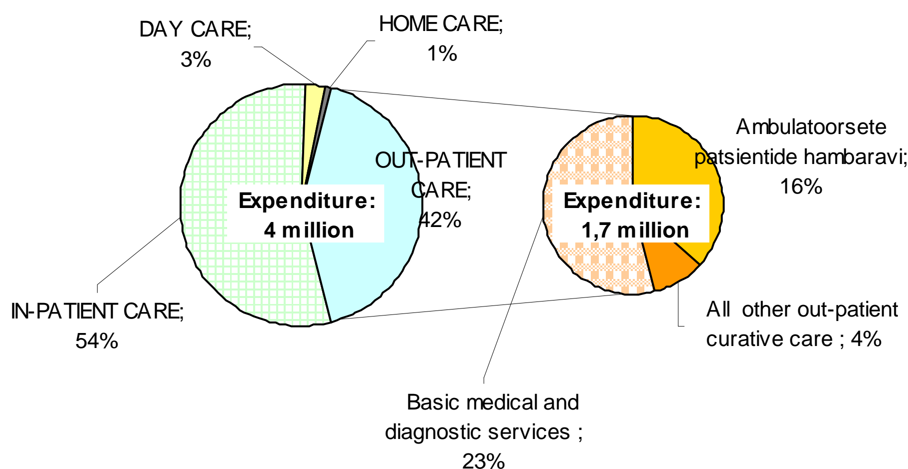
The share of the expenditure on ancillary services to health care (laboratory analyses, emergency medical care) has remained the same during the last four years—9% of the HE on the average.

As compared to the previous year, the percentage of medical goods (medicines, vaccines, prostheses, glasses, medical equipment) has increased and the prevention services have more or less remained at the same level.

In 2004, the percentage of capital investments formed 0.6% of the total health expenditure. The expenses diminished, because the majority of the capital expenditure has been calculated among health services and it is impossible to be distinguished.

Since services of curative care form the most important part of the health services provided in Estonia, it is given a closer look once more.

Figure 15. Division of services of curative and out-patient care, 2004



Curative care can consist of in-patient, out-patient, day or home care. Whereby the in-patient care forms the largest part of services of curative care in 2004 (54%) (Figure 15). Out-patient care, which includes the basic medical and diagnostic services (23% of all the services of curative care) and dental care (16%), forms the second largest group – 42% of the services of curative care.

Taking into consideration that 1.348 million people lived in Estonia in 2004, the expenses on health services per capita were 2 993 kroons, which makes 320 kroons more than in 2003 (Table 24).

Table 24. Health care services per capita, 2003-2004

	2003		**2004**		Change
	kroons	%	kroons	%	2004/2003
SERVICES OF CURATIVE CARE	2 673	53%	2 993	52%	12%
incl. In-patient care	1 349	27%	1 628	28%	21%
Day care	51	1%	87	2%	71%
Out-patient care	1 257	25%	1 261	22%	0%
Basic medical and diagnostic services	*582*	*12%*	*678*	*12%*	*16%*
Dental care	*435*	*9%*	*465*	*8%*	*7%*
All other special health services	*204*	*4%*	*118*	*2%*	*-42%*
All other care of out-patientsi	*35*	*1%*	*0,04*	*0%*	*-100%*
Home care	16	0%	17	0%	6%
SERVICES OF REHABILITATIVE CARE	97	2%	144	3%	48%
SERVICES OF LONG-TERM NURSING CARE	109	2%	136	2%	24%
ANCILLARY SERVICES TO HEALTH CARE	461	9%	518	9%	12%
MEDICAL GOODS	1 342	27%	1 616	28%	20%
PREVENTION AND PUBLIC HEALTH SERVICES	124	2%	129	2%	3%
HEALTH ADMINISTRATION	196	4%	205	4%	5%
CAPITAL EXPENDITURE	39	1%	35	1%	-11%
IN TOTAL	**5 042**	**100%**	**5 776**	**100%**	**15%**

As calculated, 5 776 kroons invested in the health of one person in 2004. Just like in the previous year, the greatest expenses were incurred on in-patient care(1 628 kroons) and medical goods (1 616 kroons).

1.6. Conclusion

In 2004, the nominal growth of the THE formed 14.2% and the real growth 2%. At the same time the nominal growth of the GDP was 11.1% and the real growth 7.8%. This means that a price effect occurred in the field of health care and the health care prices increased faster than in the whole economy on the average. A significant share of the increase of the THE happened on the account of the rise in prices mainly caused by the raise of the wages of health care professionals. The gap arisen from the price increase was covered on the account of the private sector, the expenditure of which on health services grew the most in 2004 (19.5%).

In conclusion it could be noted that:

1. In 2004, the growth of the THE took place mainly as the consequence of price increase

2. The growth of the THE occurred on the account of the increase of the households out-of-pocket expenditures

3. In the future, the analysis of the THE has to be conducted together with non-financial indices, which shows the effectiveness of the health care system and enables to make important strategic decisions.

2. INTERNATIONAL COMPARISON

The comparable countries are the members of the European Union, which shall apply the OECD method to calculate the THE according to the recommendation of Eurostat. The comparable period lasts from 1998 to 2002. Unfortunately, newer data for international comparison have not yet been disclosed. The fact that every country understands the methods in their own way and the term of THE may carry an extremely different meaning renders the comparison difficult. Hence, be careful in figure conclusions!

Furthermore, it is important to mark that so far no definite connection between the volume of the state health expenditure and the situation with the public health exists. The THE of different countries may be compared as a percentage of the GDP. It measures the percentage of health care services, products and capital investments from the added value produced by the national economy. As mentioned before, the instabilities of the relation between the HE and the GDP may be interpreted misleadingly, since they may be contingent upon the changes of the GDP as well as of the THE itself.

The THE *per capita* allows to perform domestic and international comparison during time without the misrepresentative effect of the GDP and the difference in population.
With regard to the EU, the average percent of the THE from the GDP was 8.2% in 1998, 8.3% in 2000 and 8.7% in 2002. During the same period, the share of the Estonian THE from the GDP was much smaller, respectively: 5.6%, 5.5% and 5.1% (Table 25).

Germany has the highest percent of health expenditure from the GDP; in 2002 – 10.9%. All those years, the German THE per capita was five times larger than the Estonian one. For instance, in 2002 Germany incurred 2 817 international $ and Estonia incurred 604 international $ (Table 25). In the case of the given analysis, it is important not to decide

immedialtely whether Estonia spends too much or too little but to view other indices of health care as well. All the presented monetary figures have been rendered in international dollars.

Table 25. International comparison of the THE in per cent of GDP and THE per capita, 1998–2002[8]

	1998		2000		2002	
	THE in per cent of GDP	**THE per capita**	**THE in per cent of GDP**	**THE per capita**	**THE in per cent of GDP**	**THE per capita**
Countries	%	$ International	%	$ International	%	$ International
Austria	7.7	1 953	7.7	2 147	7.7	2 220
Belgium	8.6	2 041	8.8	2 288	9.1	2 515
Croatia	7.9	575	9.0	689	7.3	630
Cyprus	6.1	715	6.3	712	7.0	883
Czech Republic	6.6	916	6.6	977	7.0	1 118
Denmark	8.4	2 141	8.4	2 353	8.8	2 583
Estonia	**5.6**	**494**	**5.5**	**548**	**5.1**	**604**
Finland	6.9	1 607	6.7	1 698	7.3	1 943
France	9.3	2 231	9.3	2 416	9.7	2 736
Germany	10.6	2 470	10.6	2 640	10.9	2 817
Greece	9.4	1 428	9.7	1 617	9.5	1 814
Hungar	7.3	775	7.1	847	7.8	1 078
Iceand	8.6	2 252	9.2	2 561	9.9	2 802
Ireland	6.2	1 487	6.4	1 775	7.3	2 367
Italy	7.7	1 800	8.1	2 001	8.5	2 166
Latvia	5.8	381	5.6	423	5.1	477
Lithuania	6.2	451	6.5	507	5.9	549
Luxembourg	5.9	2 326	5.5	2 680	6.2	3 066
Malta	8.4	760	8.8	804	9.6	962
Netherlands	7.9	1 955	7.9	2 112	8.8	2 564
Poland	6.0	563	5.7	584	6.1	657
Spain	7.5	1 371	7.5	1 493	7.6	1 640
Sweden	8.3	1 960	8.4	2 241	9.2	2 512
United Kingdom	6.9	1 607	7.3	1 839	7.7	2 160
EL average	**8.2**	**1 741**	**8.3**	**1 910**	**8.7**	**2 129**
EL average before May 2004	**8.6**	**1 937**	**8.7**	**2 127**	**8.0**	**2 361**
EL average after Mai 2004	**6.2**	**645**	**6.0**	**688**	**6.4**	**800**

[8] Data source: European health for all database (HFA-DB); World Health Organization Regional Office for Europe; Updated: June 2005.

The factors which support the growth of the relationship between the THE and the GDP are firstly inflation (both the general inflation of the economy[9] and the inflation in the health sector) and secondly the changes in the levels of the services and products used, which have resulted either from the increase of the population or a more intensive use of services and products.
Unfortunately, the SOE started to calculate the inflation of the health sector since 2003 only. Hence, it is impossible to provide data for the comparison with Estonia, although the respective indices of other countries may be observed. The real growth of the Estonian HE was 2% in 2004.

Table 26. Real growth of THE, 1999–2003[10]

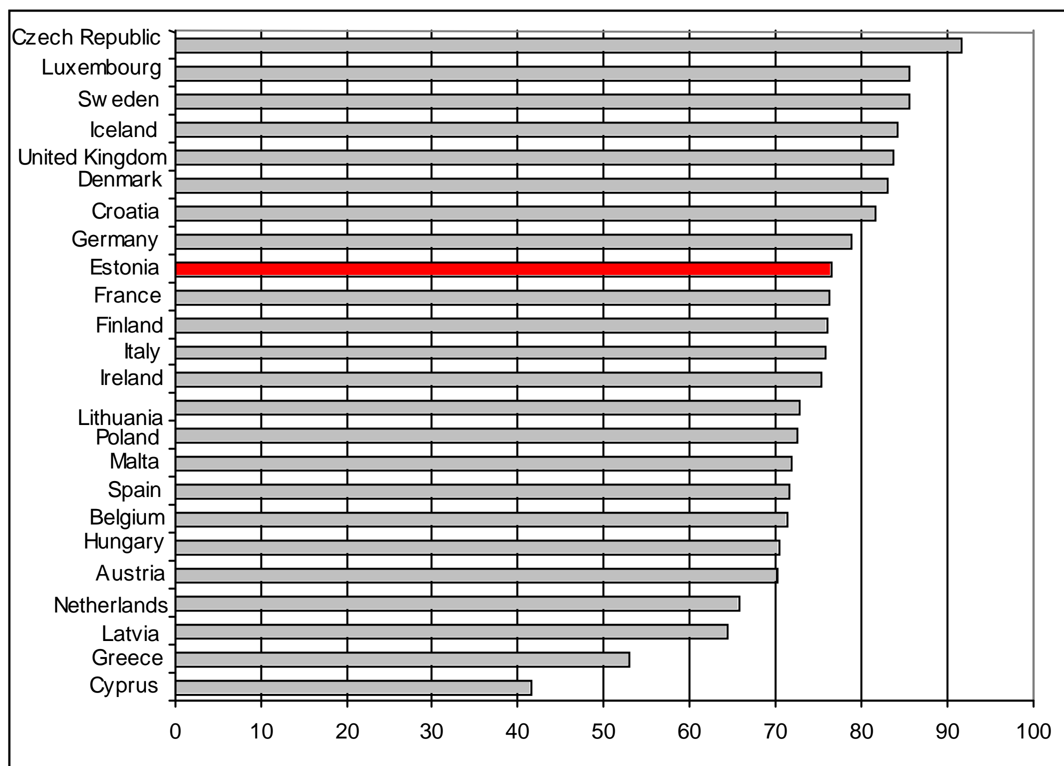
States	1999/2000	2000/01	2001/02	2002/03
Austria	1.8	-1.0	1.1	1.4
Belgium	4.6	1.9	3.8	6.0
Czech Republic	3.8	7.1	6.3	9.1
Denmark	0.7	4.4	3.1	1.9
Finland	1.4	4.7	5.9	5.3
France	3.7	3.0	3.2	4.6
Germany	2.4	2.3	1.4	0.9
Greece	7.2	6.4	-0.9	6.0
Hungary	2.3	7.5	9.4	11.4
Iceland	2.9	1.5	6.0	8.3
Ireland	9.8	13.3	11.2	2.6
Italy	7.6	3.8	2.1	-0.3
Luxembourg	5.2	8.3	11.1	-1.8
Netherlands	1.7	5.4	7.1	4.5
Poland	1.4	7.4	10.8	2.3
Spain	2.7	2.9	1.2	2.3
Sweden	4.2	5.1	6.4	2.7
United Kingdom	5.1	6.9	4.1	...

Moreover, it is fascinating to study how much the public sector spends on health care in comparison with the private sector. In 2004, the Estonian public sector invested 75.5% from the THE to health care, which surpasses the average of the EU (73.9%) (Figure 16). In comparing the last five years, the investments of the Estonian public sector in

[9] General inflation is an indicator of price incrase, which is in force in the whole economy, whereas excessive inflation in the health sector shows a greater increase in health care prices, in comparison with the general situation in the state.
[10] Data source: OECD Health Data 2004.

health care have decreased by 1.3 per cent, but the average of the EU has remained almost the same.

Figure 16. Public sector expenditure on health in per cent of THE, 2002[11]



[11] Data source: European health for all database (HFA-DB); World Health Organization Regional Office for Europe; Updated: June 2005.

3. TECHNICAL NOTES

3.1. Background Information

The method of the National Health Accounts[12] (NHA) is used in calculating the THE. The analysis and tables are internally published every year on the webpage of the Ministry of Social Affairs. The obligation to develop the method of the Estonian THE is imposed on the Health Information and Analysis Department (HIAD). Since 2002, the HIAD collects and presents the data on health expenditure so that it would be possible to forward them simultaneously to international organisations: EU, OECD and WHO.

The health expenditure accounts were performed for the first time on the basis of the data of 1998. The method of Harvard University was applied that year. Since the Harvard method somewhat differs from the method used in the European countries, then in 1999 the OECD method was employed.

Pursuant to the OECD method, the calculation of the total health expenditure takes place with the aid of two-dimensinal matrix tables, in which the health expenditure is displayed by the following:

- current health expenditure by health care services and their providers;
- current health expenditure by health care service providers and sources of financing;
- current and total health expenditure by health care services and sources of financing.

The calculation of the total health expenditure is based upon a triaxial system, in which the international classification of health accounts is applied at the calculation of health expenditure (ICHA—*International Classification for Health Accounts*, see Annex 1), its parts being:

[12] The method for the calculation of the state health expenditure is elaborated by the European Organisation for Economic Cooperation and Development (OECD).

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

3.2. Definition of Total Health Expenditure

The expression “Total Health Expenditure” refers to health services and products, services related to health care and capital investments connected to health care.

Pursuant to the OECD method, **the final consumption of goods and services related to the health of the country’s residents are measured by the total health expenditure, which is supplemented by the capital expediture of health service providers.** In other words, economic resources incurred on health-related goods and services are measured with the total health expenditure. In addition to health services and prevention, this amount includes health administration and capital expenditure also, but does not comprise sickness benefits or the training expenditure of medical personnel.

The following division is used to classify health care services. It is important to differentiate between the current health expenditure, which does not include capital expenditure, and the total health expenditure which comprises capital expenditure.

ICHA code:

HC.1 – HC.5	**Personal expenditure on health services**
HC.6	Prevention and public health care
HC.7	Health administration
HC.1 – HC.7	**Current health expenditure in total**
HC.R.1	Capital expenditure
THE	**Total health expenditure**
HC.R	Health-related expenditure

According to the given scheme, the calculation of health expenditure takes place pursuant to health services HC.1 – HC.4 (health care services directed towards a person), which is supplemented by function HC.5 (medical goods dispensed to out-patients). The functions HC.1 – HC.5 characterize the health care expenditure directed towards a person. If to add HC.6 (prevention and public health care) and HC.7 (health administration), *the current health care expenditure*. By adding investments, i.e. capital expenditure (HC.R.1) to the latter, *the total health care expenditure* is received.

Health care-related functions (HC.R) are outlined as a separate section, though its expenditure is not added to the total health care expenditure pursuant to the OECD method (for example, sickness benefits).

THE does not include:

- expenditure, the aim of which is health but has been provided outside the health care sector (for instance: production of unleaded fuel, education of health care professionals);
- personal activities directed towards the maintenance and improvement of health (sports);
- health care expenditure, which is the result of the main activity and is not connected with economic income and does not describe the primary indices of the national economy.

In addition, it has to be taken into consideration that some categories of the total health expenditure are known better than the others. For example, the expenses incurred on the prevention and control of public health have been underestimated in the present analysis. The type of an indicator becomes clear if it can be distinguished statistically (e.g. the public health policy for immunisation schedule, etc.). Hence, the majority of health care providers which deal with counselling or consultation are classified as providers of health care services, not prevention services.
The labour costs of health care professionals have been included in the expenditure on services.

3.3. Data Sources

The data sources for the total health care expenditure accounts:

1. Estonian Health Insurance Fund – expenditures of health insurance benefits.
2. Ministry of Finance – annual report of budget implementation by local governments 2004.
3. Data on health care expenditure from the following ministries: Ministry of Education and Research, Ministry of Justice, Ministry of Defence, Ministry of the Environment, Ministry of Culture, Ministry of Economic Affairs and Communications, Ministry of Agriculture, Ministry of Finance, Ministry of Internal Affairs and Ministry of Foreign Affairs.
4. Statistical Office:
    a. The study of the incomes and expenses of a household is the main initial source for the data on health expenses incurred by households,
    b. Report *"Taastusravi"* ("Medical Rehabilitation") – the basis for the expenses incurred by the population on medical rehabilitation.
5. Data on health expenses from insurance companies.
6. Sate Agency of Medicines – turnover of medicines in hospital and retail pharmacies.
7. Health Protection Inspectorate – data related to the control of food, hygiene, drinking water and environmental health.
8. Medicover Eesti AS, Töö ja Tervis OÜ and OÜ Pärnu Töötervishoiuteenistus – data on compulsory medical examination of employees.
9. Casinos – donations and expenses on health care.
10. Data base of State Treasury
    a. The report of state budget implementation 2004 is the initial source for the health expenditure incurred from state budget by ministries separately,
    b. Regarding the health expenditure incurred from the reserve capital of the Government of the Republic.
11. Riigi Kinnisvara AS – expenditure on building Pärnu Hospital.
12. Departments of the Ministry of Social Affairs:

a. Finance and Property Management Department – elaborated data on medical treatment expenses of uninsured persons, foreign aid projects, foreign loans, operational costs of emergency medical care and projects financed from the gambling tax via the Ministry of Finance;

b. Public Health Department – health improvement projects and programmes;

c. Social Policy Information and Analysis Department – institutional accounts of social welfare.