



# Health expenditure 2014



**Tervise Arengu Instituut**  
National Institute for Health Development

National Institute for Health Development

Department of Health Statistics

# **Estonian Health Care Expenditure in 2014**

Tallinn 2016

Mission of the Department of Health Statistics:

Public Health and Welfare through Better Statistics and Information

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Please note! As is normal for statistical analyses, slight adjustments of the data provided in this analysis are possible during a year. Please refer to the online versions (analysis at [www.tai.ee](http://www.tai.ee) and data at [www.tai.ee/tstua](http://www.tai.ee/tstua)) when using the report and the data.

## BRIEF OVERVIEW

- Estonian health expenditure was 1,241 billion euros in 2014.
- Health expenditure as a share of gross domestic product (GDP) was 6.2%.
- The expenditure of the Estonian Health Insurance Fund was 803 million euros and their share of health expenditure was 64.7%.
- The expenditure of the central government was 109 million euros and their share of health expenditure was 8.8%.
- The household health expenditure was 296 million euros and their share was 23.8%.
- Estonian health expenditure per capita was 943 euros in 2014, of which the share of public sector amounted to 703 euros and the share of households 225 euros.
- Since 2013, the calculation of health expenditure has been based on the System of Health Accounts 2011 methodology (SHA2011).
- Capital expenditure has been separately calculated under the SHA2011, therefore, the term of total health expenditure is not used and the term of health expenditure and its share of GDP are used instead. For this reason, the component of capital expenditure has been deducted from the expenditure of the Estonian Health Insurance Fund's services for the period of 2012–2013 compared to previously published data.

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# INTRODUCTION

This analysis is a part of the series “Health Expenditure in Estonia”, published by the National Institute for Health Development. The current analysis provides a brief overview of health expenditure for the period of 2012–2014. General indicators have been provided for 2008–2014 in the figures.

The objective of the analysis is to provide information about the financing of health system through various financing sources, financing schemes, health services, and service providers, using the methodology for calculating national health expenditure titled SHA2011<sup>1</sup> and developed by OECD (Organisation for Economic Cooperation and Development), WHO (World Health Organisation), and Eurostat (Statistical office of the European Union). Internationally comparable health expenditure data is available on the OECD database in the health section: [http://stats.oecd.org/index.aspx?DataSetCode=HEALTH\\_STAT](http://stats.oecd.org/index.aspx?DataSetCode=HEALTH_STAT).

According to the methodology of SHA2011, health expenditure includes health services, such as active treatment, rehabilitation, nursing care, ancillary health services, medical products, prevention, and the administration of health system. However, health expenditure does not include the expenditure of teaching, health research and development, environmental health and other services, where the principal activity is not improvement of health. Capital investments have been excluded from expenditure and are provided as a separate table.

The analysis covers expenditure on Estonian residents. It means that health expenditure does not reflect the cost of health services provided to foreigners and the cost of medical goods purchased by foreigners to the known extent.

With regard to the changes implemented over the past two years, methodological explanations on the principles of the calculation of the cost-sharing by households have been provided in the Annex to the analysis in order to give a better overview of the changes made and their impact.

This publication is intended to be used by all institutions and persons interested in the field of health financing, and by the wider public.

The compilers would like to thank all who provided data and information and in doing so, helped to contribute to the calculation of health expenditure.

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<sup>1</sup> OECD’s methodology is used in more than 100 countries under the name of System of Health Accounts (SHA). Another expression used is the National Health Accounts (NHA). <http://ec.europa.eu/eurostat/documents/3859598/5916161/KS-30-11-270-EN.PDF/655cbab0-4f9d-4d41-82bb-d39b6fb3f397?version=1.0> or on the website of the National Institute for Health Development at [http://www.tai.ee/images/PDF/Metoodika/A\\_system\\_of\\_Health\\_Accounts\\_2011.pdf](http://www.tai.ee/images/PDF/Metoodika/A_system_of_Health_Accounts_2011.pdf)

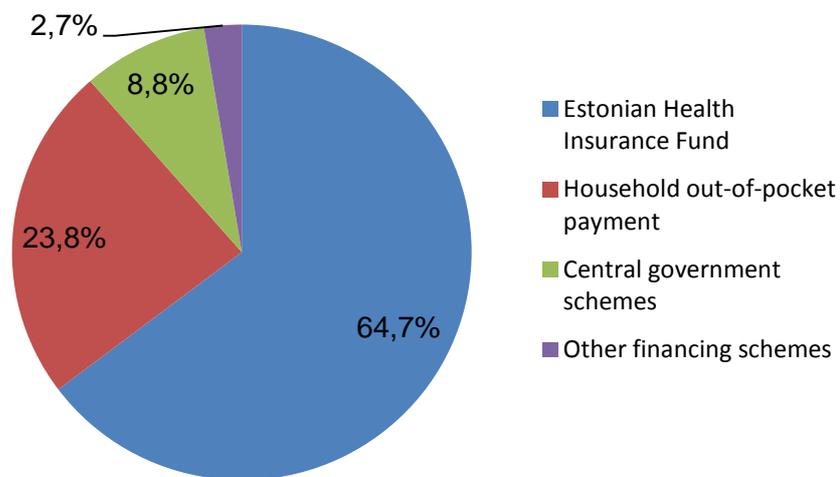
# 1. FINANCING OF ESTONIAN HEALTH EXPENDITURE

## 1.1 Health expenditure by financing schemes

Estonian health expenditure was 1,241 billion euros in 2014. Health expenditure amounted to 6.2% of GDP.

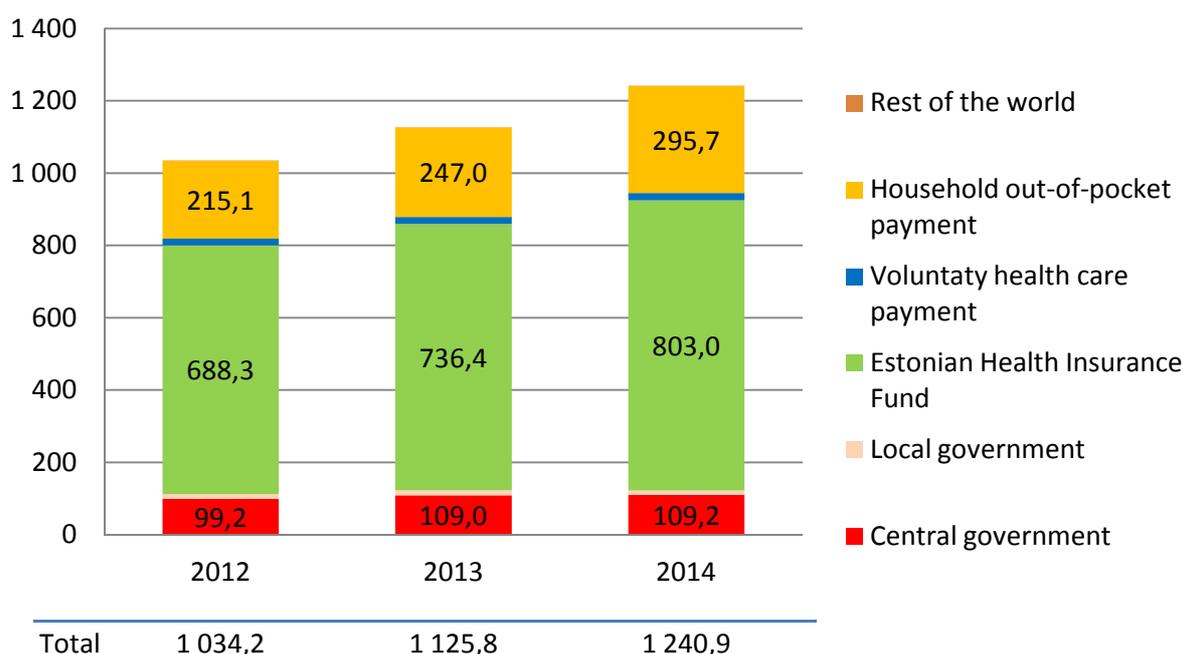
The structure of Estonian health expenditure by financing schemes has been provided in Figure 1. A total of 97.3% of health expenditure was financed through three schemes: 64.7% from the national health insurance fund –Estonian Health Insurance Fund (EHIF), 23.8% from the cost-sharing by households, and 8.8% from the central government. Voluntary health financing schemes have a relatively small share in health expenditure, the corresponding indicator was 1.6% in 2014. Local government financing was 1%. The share of external financing (rest of the world) is extremely small, since the external financing of health sector predominantly takes place through the central government schemes.

Figure 1. Distribution of health expenditure by financing schemes, 2014



From 2012–2014, health expenditure has increased by 206,7 million euros, out of which 115,1 million euros in 2014. Increase in the part of public sector was 124,7 million euros and increase in the cost-sharing by households 80,6 million euros over the past two years (Figure 2).

Figure 2. Health expenditure by financing schemes, 2012–2014, million EUR



Although expenditure in all schemes has increased year-on-year, some changes have taken place in the structure (Table 1). The share of the biggest contributor, the Estonian Health Insurance Fund, has decreased approximately by 2% (from 67% to 65%) and the share of the cost-sharing by households has increased from 20.8% in 2012 to 23.8% in 2014. The share of local governments and central government has decreased from 10.8% to 9.8%.

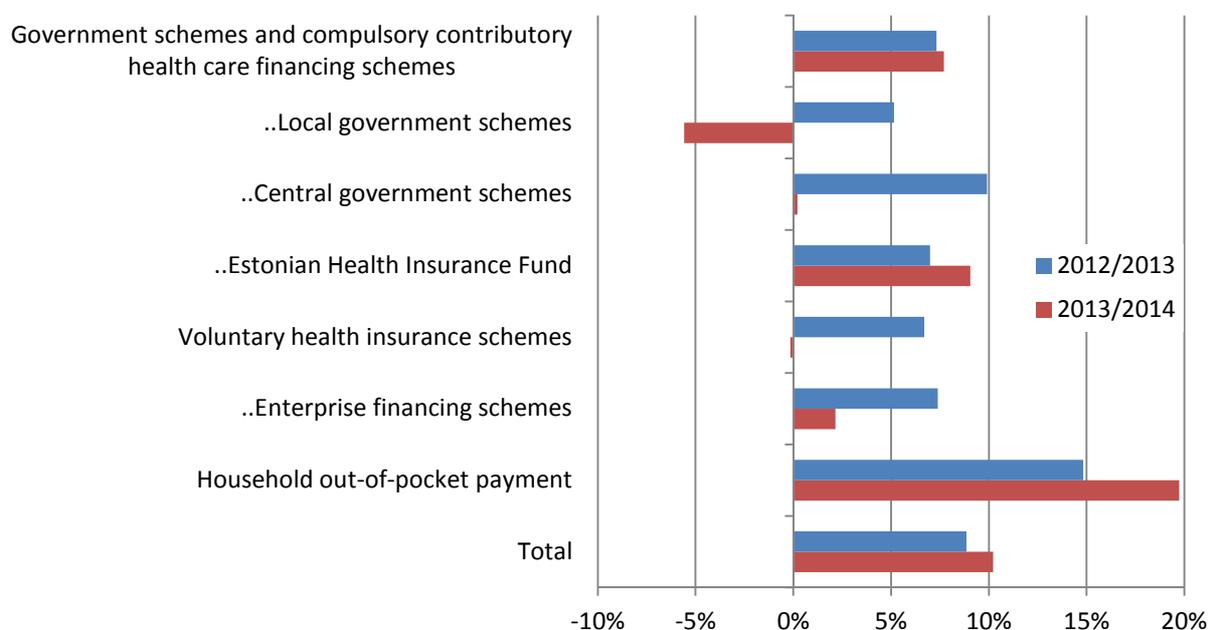
Table 1. Health expenditure by financing schemes, 2012–2014

	2012		2013		2014	
	million EUR	%	million EUR	%	million EUR	%
<b>Total expenditure</b>	<b>1 034,201</b>	<b>100</b>	<b>1 125,771</b>	<b>100</b>	<b>1 240,911</b>	<b>100</b>
Government schemes and compulsory health care financing schemes	800,342	77.4	858,937	76.3	925,054	74.5
..Public sector, except EHIF	112,073	10.8	122,566	10.9	122,041	9.8
...Central government schemes	99,161	9.6	108,988	9.7	109,220	8.8
....Local government schemes	12,912	1.2	13,578	1.2	12,821	1.0
..Estonian Health Insurance Fund	688,269	66.6	736,371	65.4	803,013	64.7
Voluntary health care payment schemes	18,417	1.8	19,650	1.7	19,623	1.6
..Enterprise financing schemes	15,638	1.5	16,794	1.5	17,155	1.4
Households out-of-pocket payment	215,083	20.8	246,992	21.9	295,735	23.8
External financing schemes	0,359	0.0	0,192	0.0	0,499	0.0

Growth in terms of percentage by financing schemes over the past two years is characterised by the following Figure 3. Compared to the previous year, health expenditure increased by 10% in current prices in 2014 and the growth found in constant price (base year 2000) was 3%; a year earlier, the growth rates were 9% and 2%, respectively.

When comparing the expenditure of 2013 with 2012, changes are characterised by growth in all provided breakdowns, which remain in the range of 5–10%. There is an exception of the cost-sharing by households, which increased more than the others – 15%. The changes of 2014 can be characterised by increase in the financing of households and private companies, and decrease in the financing of local governments. Growth in central government financing was lower than last year. The main component of the financing of companies includes occupational health expenditure. (According to the statistics on the use of services, the number of occupational health doctor consultations increased by 22% compared to 2013 and decreased by 3% compared to 2014.)

Figure 3. **Growth in health expenditure by financing schemes, 2012–2014, %**

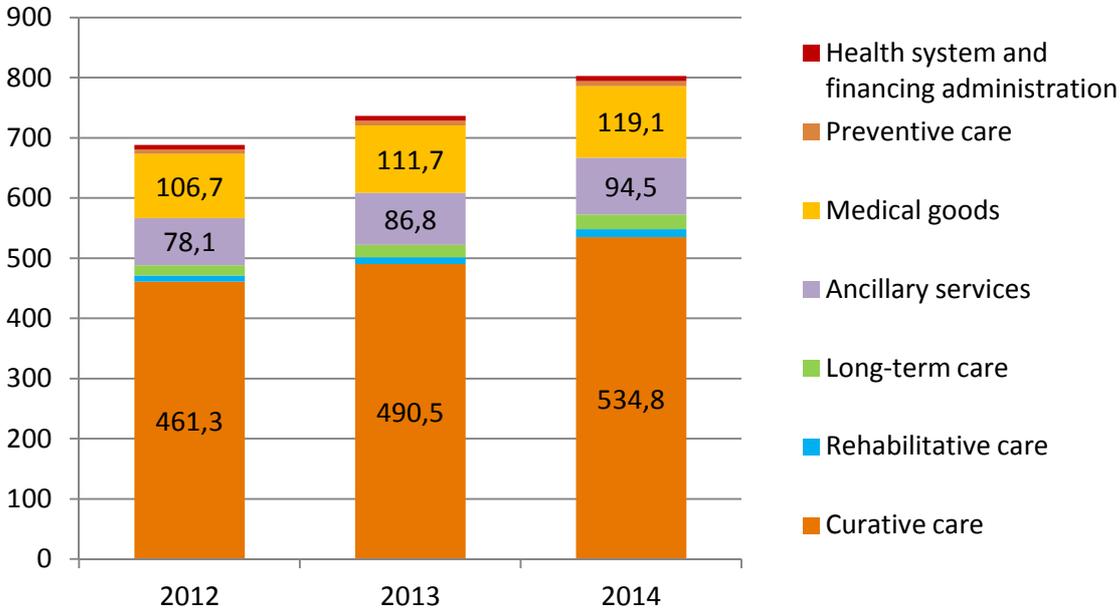


The changes in the health expenditure financing schemes from 2012–2014 have been provided in Annex 2. Almost all expenses of the health expenditure contributors have increased over the past two years; the only exception includes local governments, which spent slightly less in 2014 than in 2012. The largest part of health expenditure is covered by the Estonian Health Insurance Fund; in total amount, the growth in the expenditure of EHIF was 114,7 million euros over the past two years.

During the two years, the cost-sharing of households in health expenditure increased by 80,7 million euros or 37.5%; this was mainly due to those services, which are not financed or partially financed by the Estonian National Health Insurance Fund: dental care (18,6 million euros), nursing care (23,9 million euros), and pharmaceuticals (20,5 million euros). Household expenditure will be discussed more thoroughly in the next chapter.

Almost two-thirds of the total volume of health expenditure in Estonia is financed through **the Estonian Health Insurance Fund**. Health expenditure of the EHIF by service groups have been provided in the following figure.

Figure 4. **Health expenditure of the Estonian Health Insurance Fund by service groups, 2012–2014, million EUR**



Health expenditure of the Estonian Health Insurance Fund increased by 9.1% in 2014 compared to the previous year. Growth in 2013 was 7% compared to the previous year. According to the annual report of the Estonian Health Insurance Fund, the health part of the social tax increased by 8% in 2014; the financing of the services increased as follows: general medical care +8%, specialised medical care +10%, nursing care +19%, dental care +4% and the compensation of pharmaceuticals +6%, prevention +5% and promotion +21%.

Over the reference years, the expenditure structure of the Estonian Health Insurance Fund has remained stable and only minor changes have occurred (Table 2). The task of the EHIF as the main health contributor is to ensure the stability of financing of medical care at different levels and the sustainability of health insurance. However, in the structure of expenditure, the share of day care has somewhat increased and the share of hospitalisation has decreased; the share of nursing and ancillary services has slightly increased and the share of prescribed medicines has decreased.

In absolute value, the health expenditure of the EHIF was 803 million euros in 2014. The largest share was formed by inpatient care expenditure (35% or 281 million euros), out-patient general and specialised medical care covered 27% or 219 million euros of the expenditure of the Estonian National Health Insurance Fund. The compensation on prescribed medicines amounted to 14% or 110 million euros from the health expenditure of the Estonian National Health Insurance Fund.

Table 2. **The health expenditure of the Estonian Health Insurance Fund by services, 2012–2014**

	2012		2013		2014	
	million EUR	%	million EUR	%	million EUR	%
<b>Total health expenditure of the EHIF</b>	<b>688,269</b>	<b>100</b>	<b>736,371</b>	<b>100</b>	<b>803,013</b>	<b>100</b>
Curative care	461,320	67.0	490,514	66.6	534,756	66.6
..Inpatient curative care	252,996	36.8	265,615	36.1	281,242	35.0
..Day curative care	19,168	2.8	22,066	3.0	32,368	4.0
..Outpatient curative care	187,715	27.3	201,458	27.4	219,108	27.3
.... General outpatient curative care	139,693	20.3	149,886	20.4	148,956	18.5
Rehabilitative care	9,941	1.4	11,202	1.5	13,542	1.7
Long-term care (health)	17,221	2.5	20,271	2.8	24,122	3.0
Ancillary services	78,146	11.4	86,795	11.8	94,470	11.8
Medical goods	106,651	15.5	111,716	15.2	119,144	14.8
.... Prescribed medicines	98,967	14.4	103,391	14.0	110,374	13.7
Preventive care	7,659	1.1	7,936	1.1	8,448	1.1
Administration of health financing	7,331	1.1	7,937	1.1	8,531	1.1

**The central government expenditure**, which has a share of 8.8% in Estonian health expenditure, has been provided in Table 3. In absolute value, the central government expenditure on health was 109,2 million euros in 2014.

The largest part of the central government expenditure included patient transportation with 26.5%, the vast majority of which is the financing of the ambulance service. The second highest expenditure group was curative care, which amounted to 25.8% from the share of the central government health expenditure. With regard to curative care services, the central government finances the inevitable care provided to uninsured persons, the health services in prisons and the Defence Forces of Estonia, and 24-hour welfare services.

Structural changes included decrease in the expenditure of medical goods from 2012–2014 (in 2012, 12% and 7% in 2014); these occurred in terms of therapeutic appliances and other medical durable goods. Some consistent increasing tendency can be seen in the share of curative care and rehabilitative care.

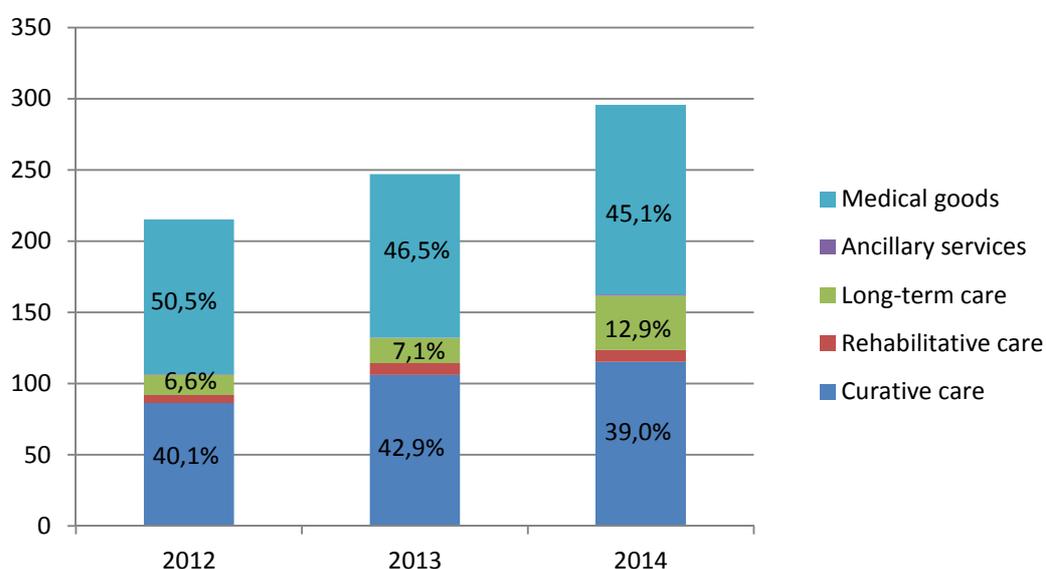
Table 3. **The health expenditure of the central government by services, 2012–2014**

	2012		2013		2014	
	million EUR	%	million EUR	%	million EUR	%
<b>Total health expenditure of the central government</b>	<b>99,161</b>	<b>100</b>	<b>108,988</b>	<b>100</b>	<b>109,220</b>	<b>100</b>
Curative care	21,907	22.1	25,887	23.8	27,741	25.8
Rehabilitative care	0,066	0.1	1,302	1.2	1,850	1.7
Long-term care (health)	12,481	12.6	13,769	12.6	13,770	12.6
.. Inpatient long-term care	12,481	12.6	13,614	12.5	13,755	12.6
Ancillary services	26,898	27.1	29,409	27.0	30,650	28.1
..Patient transportation	26,540	26.8	28,905	26.5	28,897	26.5
Medical goods	15,156	15.3	18,987	17.4	10,899	10.0
..Pharmaceuticals and other medical non-durable goods	3,129	3.2	3,352	3.1	3,474	3.2
..Therapeutic appliances and other medical goods	12,028	12.1	15,635	14.3	7,424	6.8
Preventive care	10,750	10.8	7,588	7.0	12,377	11.3
Governance and health system administration	11,903	12.0	12,045	11.1	11,963	11.0

## 1.2 Household health expenditure

The household expenditure amounted to 23.8% or 296 million euros from the health expenditure in 2014. According to the division of service groups (Figure 5), the largest part in the out-of-pocket expenses of individuals is medical goods – pharmaceuticals and therapeutic appliances – a total of 45%. The next large group is the expenditure of curative care services, including mainly dental care and out-patient specialised medical care expenses, amounting to 39%. Over the past few years, long-term nursing care services have become the third largest groups in addition to the previous ones; its share in the household health expenditure reached 13% in 2014.

Figure 5. The household health expenditure by services, 2012–2014, million EUR



According to the structure of expenditure, 2013 and 2014 are relatively different. It seems based on the changes of 2013, that the share of expenditure on curative care and rehabilitative care continues to rise, the share of expenditure on pharmaceuticals continues to decline together with the stable share of medical durable goods, and only minor increase in expenditure on long-term care services. However, more than double growth and increase in the share of nursing expenditure in 2014, particularly expenditure on inpatient long term care, from 7% to 13% has generally decreased the share of curative care, rehabilitation, and medical goods among the household health expenditure. (See the distribution of expenditure in Table 4.) Since the Estonian Health Insurance Fund increased the financing of nursing services in 2014 (it increased by 19% compared to the previous year), this was also expressed in an increase in the household expenditure. This means that services were used more: the number of hospitalised patients increased in stationary independent nursing by 7% and the number of bed days by 8% in 2014 compared to the previous year. Also, the number of home visits of home nurses increased by 10% compared to 2013.

Table 4. **The household health expenditure by services, 2012–2014**

	2012		2013		2014	
	million EUR	%	million EUR	%	million EUR	%
<b>Total household expenditure</b>	<b>215,083</b>	<b>100</b>	<b>246,992</b>	<b>100</b>	<b>295,735</b>	<b>100</b>
Curative care	86,296	40.1	106,035	42.9	115,229	39.0
....Dental outpatient curative care	58,007	27.0	70,857	28.7	76,591	25.9
....Specialised outpatient curative care	22,510	10.5	28,884	11.7	31,455	10.6
Rehabilitative care	5,488	2.6	8,276	3.4	8,311	2.8
Long-term care (health)	14,215	6.6	17,608	7.1	38,121	12.9
..Inpatient long-term care	13,753	6.4	16,861	6.9	37,145	12.6
Ancillary services	0,367	0.2	0,236	0.1	0,738	0.2
Medical goods	108,717	50.5	114,836	46.5	133,338	45.1
..Pharmaceuticals and other medical non-durable goods	92,232	42.9	96,073	38.9	112,258	38.0
....Prescribed medicines	48,389	22.5	48,740	19.7	62,965	21.3
....Over-the-counter medicines	40,417	18.8	43,468	17.6	46,328	15.7
..Therapeutic appliances and other medical goods	16,485	7.7	18,763	7.6	21,080	7.1
....Glasses and other vision products	14,811	6.9	16,879	6.8	17,729	6.0

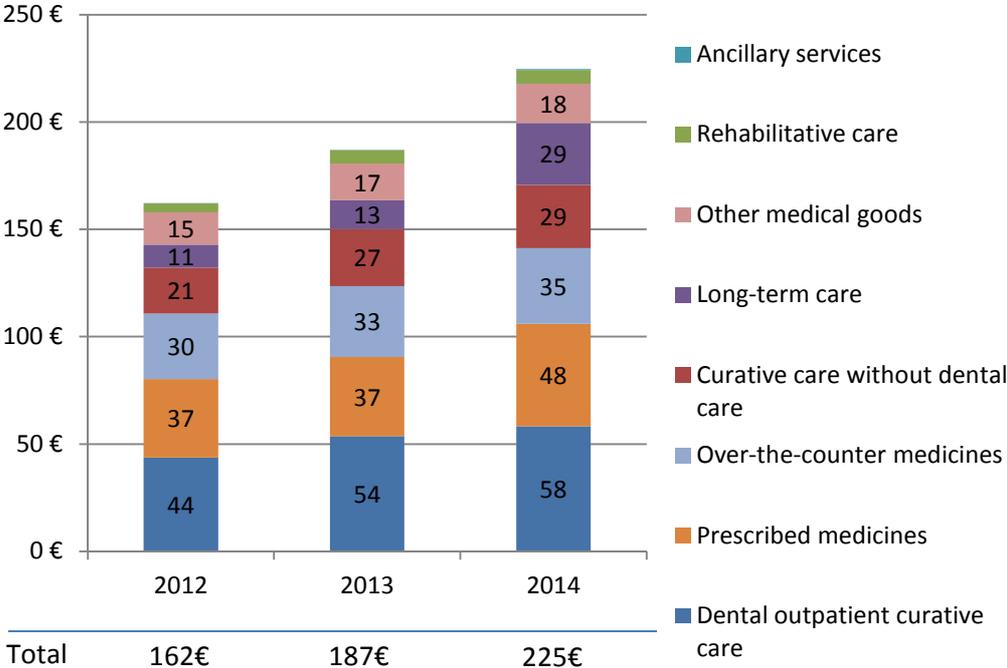
In the view of different services from the household out-of-pocket payments, the largest part included expenditure on dental care – 26%. A total of 21% was spent on prescribed medicines and 16% on over-the-counter medicines from the health expenditure budget of households. A total of 13% of health expenditure was spent on long-term care services, 11% on out-patient specialised medical care, and 7% on various therapeutic appliances (including glasses).

When comparing expenditure with the changes in the use of health services, the number of dental care visits among 15-year-olds and older persons increased by 3.3% in 2014; when comparing 2013 with 2012, this increase amounted to 1%. According to the summaries of interview survey “Population's Ratings of Health and Health Care”, approximately 40% of people aged 15–74 annually visits a dentist. The number of dental care visits among children (0–14 years) remained more or less the same during both years; decrease by 0.5% and 0.4%, respectively. When the general number of visits in out-patient specialised medical care increased by 1% in 2014 (also 1% in 2013), then, for example, the number of visits of rehabilitation physician increased by 10% in 2013 compared to the previous year; in 2014, the corresponding indicator was only 1%. The Estonian Health Insurance Fund added 19 new active substances to the list of discount pharmaceuticals in 2014. This also led to a 29% increase in the amount spent on prescribed medicines for households.

A better overview of the expenses made and about changes in these from 2012–2014 can be obtained if expenditure per capita is observed instead of the general amount. **Average expenditure per person** in euros has been provided in the figure below. On average, each person spent a total of 225 euros on various health services and goods in 2014. Same expenditure in 2013 was 187 euros and 162 euros in 2012. The largest expenditure in 2014 was dental care – 58 euros, this was followed

by prescribed medicines with 48 euros and over-the-counter medicines with 35 euros; a total of 84 euros was paid for the rest of the services.

Figure 6. Annual household health expenditure per person by services, 2012–2014, EUR

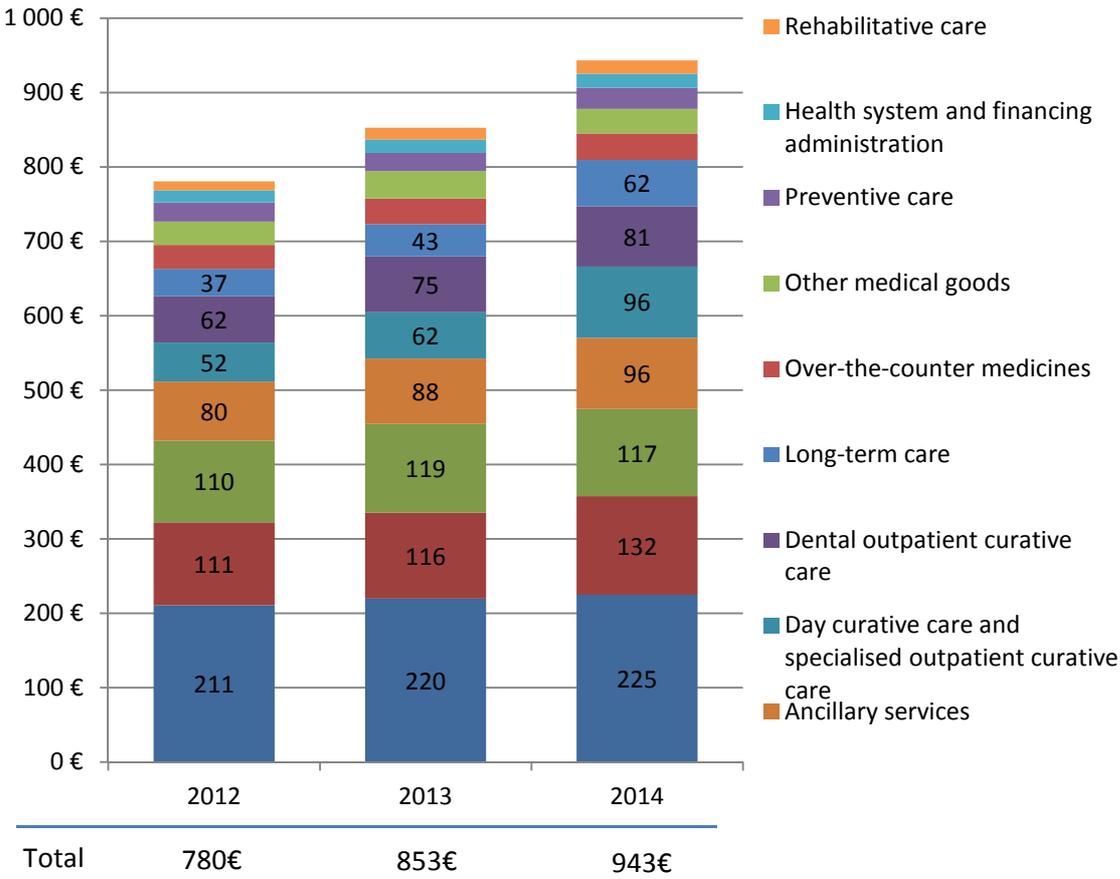


The share of health expenditure from the general household consumption expenditure was 4.7% on the basis of data from 2012 (this is the last year about which Statistics Estonia has published consumption expenditure on the basis of household budget survey).

When considering total health expenditure made through various health financing schemes, it substantively means that spendings of government schemes and compulsory health care financing schemes and voluntary health care payment schemes are added to the expenditure of households previously described, then the amounts per capita increase significantly and also their division by services changes (see Figure 8).

When dividing health expenditure made through all financing schemes with the total population number, then a total of 943 euros was invested in the health of every person in Estonia in 2014; this sum represents the average amount of spending on health services received by each person. Each person used hospitalisation services for 225 euros, consumed prescribed medicines for 132 euros, and received family health care for 117 euros. Average expenditure and its changes per person from 2012–2014 are characterised in Figure 8.

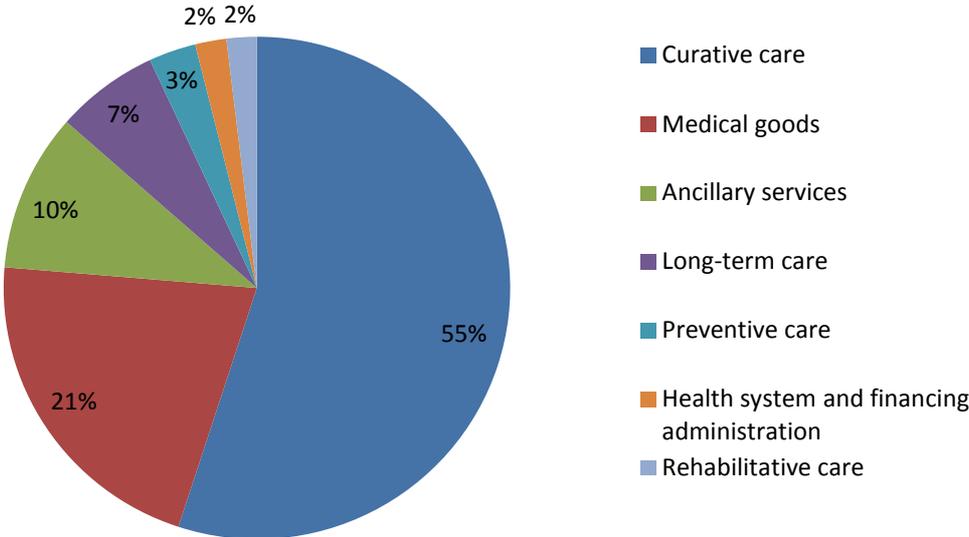
Figure 7. Total annual household health expenditure per person by services, 2012–2014, EUR



## 2. DIVISION OF HEALTH EXPENDITURE BY SERVICES AND SERVICE PROVIDERS

When observing health expenditure by service groups (Figure 8), it appears that more than a half of health expenditure has been spent on curative care services – in the amount of 683 million euros. The next largest group after curative care include expenses on out-patient medical goods – pharmaceuticals and therapeutic appliances; their volume was 264 million euros. Total expenditure of the two biggest groups amounts to 76% of expenditure, followed by ancillary services (10%) and long-term care services (7%). By contrast, a small share is continuously spent on prevention (approximately 3%).

Figure 8. Distribution of health expenditure by service groups, 2014



A more detailed distribution of health expenditure by services has been provided in Table 5. This shows that the largest groups in curative care expenditure are outpatient curative care (28%) and inpatient curative care (24%). The largest expenditure group in terms of medical goods is made up of pharmaceuticals – 19% of the general amount of expenditure, of which, in turn, three quarters constitute as prescribed medicines.

Table 5. Health expenditure by services, 2012–2014

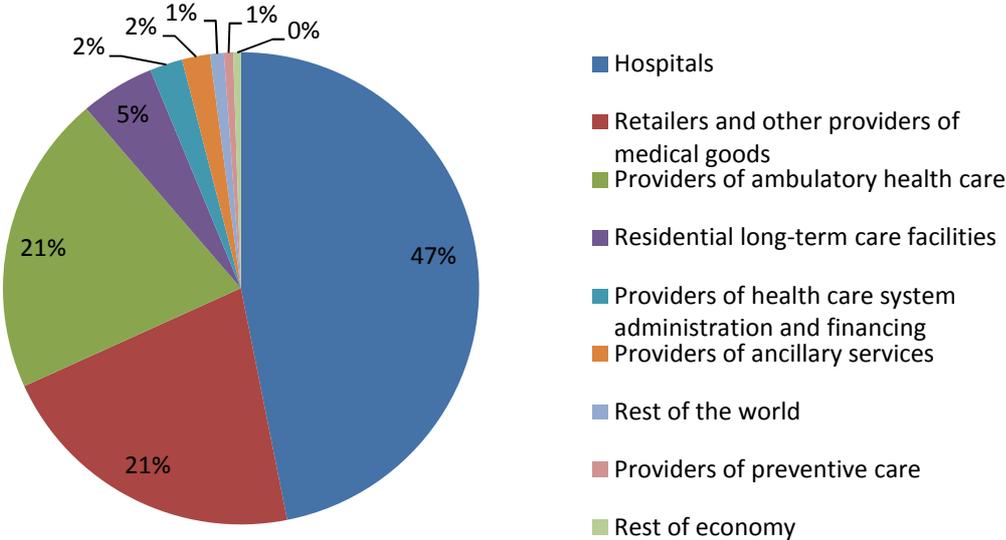
	2012		2013		2014	
	million EUR	%	million EUR	%	million EUR	%
<b>Total services</b>	<b>1 034,201</b>	<b>100,0</b>	<b>1 125,771</b>	<b>100,0</b>	<b>1 240,911</b>	<b>100,0</b>
Curative care	576,593	55.8	628,138	55.8	682,779	55.0
.. Inpatient curative care	279,524	27.0	290,227	25.8	296,279	23.9
.. Day curative care	20,474	2.0	23,260	2.1	34,200	2.8
.. Outpatient curative care	275,063	26.6	313,196	27.8	350,075	28.2
.... General outpatient curative care	145,292	14.0	157,033	13.9	154,281	12.4
....Dental outpatient curative care	82,747	8.0	98,911	8.8	106,484	8.6
.... Specialised outpatient curative care	47,025	4.5	57,252	5.1	89,311	7.2
Rehabilitative care	15,551	1.5	20,975	1.9	23,831	1.9
..Inpatient rehabilitative care	5,280	0.5	7,367	0.7	7,939	0.6
..Outpatient rehabilitative care	10,258	1.0	13,607	1.2	15,860	1.3
Long-term care (health)	48,875	4.7	57,216	5.1	81,919	6.6
.. Inpatient long-term care	44,721	4.3	52,116	4.6	75,936	6.1
Ancillary services	105,571	10.2	116,499	10.3	126,098	10.2
..Laboratory services	46,952	4.5	51,609	4.6	58,150	4.7
..Imaging services	31,366	3.0	35,208	3.1	38,307	3.1
..Patient transportation	27,253	2.6	29,683	2.6	29,641	2.4
Medical goods	231,840	22.4	246,941	21.9	264,196	21.3
..Pharmaceuticals and other medical non-durable goods	201,210	19.5	210,148	18.7	232,154	18.7
....Prescribed medicines	147,731	14.3	152,521	13.5	174,037	14.0
....Over-the-counter medicines	42,685	4.1	45,409	4.0	46,822	3.8
..Therapeutic appliances and other medical goods	30,629	3.0	36,793	3.3	32,042	2.6
Preventive care	34,015	3.3	32,274	2.9	37,306	3.0
Governance and, and health system and financing administration	21,755	2.1	23,728	2.1	24,782	2.0

In 2013, major changes included an increase in the expenditure of dental care, rehabilitation, and long-term care; in 2014, an increase in the expenditure of day care and long-term care. Also, expenditure on rehabilitation, prescribed medicines, and prevention activities increased more than general growth in 2014. At the same time, there was a decrease on the line of prevention activities in 2013. Another, yet minimal drop in expenditure in 2014 took place in terms of patient transportation.

When observing health expenditure by **service providers** (Figure 9), it appears that nearly half of the expenditure (47%) was made by hospitals as the biggest providers of health service in an absolute value of 582 million euros. Retailers of medical goods with their share of 21.3% are the next largest group of service providers. A majority of these medical goods service providers were pharmacies and

the share of other distributors of medical products is only 3.5%. The third largest group of service providers that is more or less similar share to the previous one include out-patient medical institutions – 20.5% of health expenditure. In these institutions, the largest part of expenditure concerns basic medical and diagnostic services and dental care providers.

**Figure 9. Distribution of health expenditure by service providers, 2014**



From 2012–2014, there were no major changes in the distribution of expenditure by health service providers. However, it can be observed that 2012 and 2013 are very similar in structure; in 2014, the share of nursing and welfare institutions has increased by 1.3% and the share of hospitals has decreased nearly by a percentage. It cannot be considered a tendency yet; the following years will confirm whether this is a lasting trend.

Table 6. Health expenditure by service providers, 2012–2014

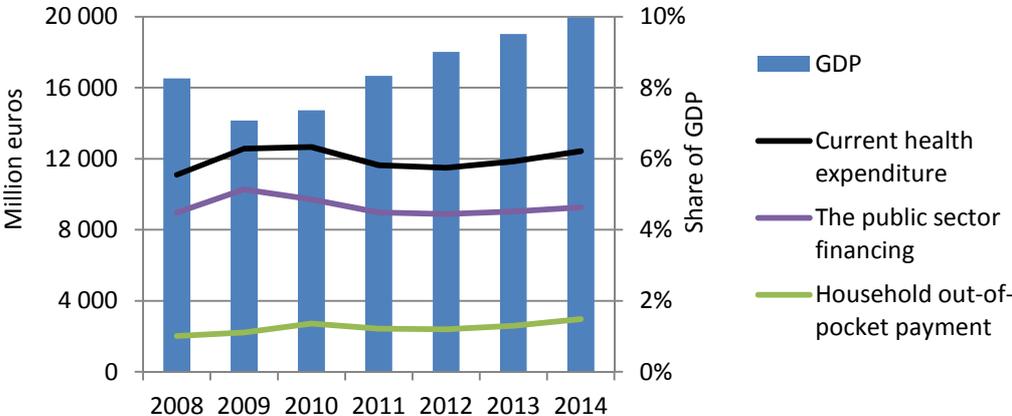
	2012		2013		2014	
	million EUR	%	million EUR	%	million EUR	%
<b>Total service providers</b>	<b>1 034,201</b>	<b>100,0</b>	<b>1 125,771</b>	<b>100,0</b>	<b>1 240,911</b>	<b>100,0</b>
Hospitals	494,796	47.8	538,316	47.8	581,807	46.9
Residential long-term care facilities	31,246	3.0	41,776	3.7	62,585	5.0
Providers of ambulatory health care	220,639	21.3	240,249	21.3	254,894	20.5
Providers of ancillary health services	13,220	1.3	14,495	1.3	23,901	1.9
Retailers and other providers of medical goods	232,179	22.5	247,136	22.0	264,589	21.3
Providers of preventive care	15,709	1.5	15,136	1.3	7,77	0.6
Providers of health system administration and financing	23,768	2.3	23,728	2.1	27,385	2.2
Rest of economy	0,357	0.0	2,53	0.2	6,599	0.5
Rest of the world	2,287	0.2	2,405	0.2	11,382	0.9

### 3. HEALTH EXPENDITURE AS AN INVESTMENT IN HEALTH

Although health expenditure characterises all spending made by the health system, this also constitutes as investment in improving and maintaining human health.

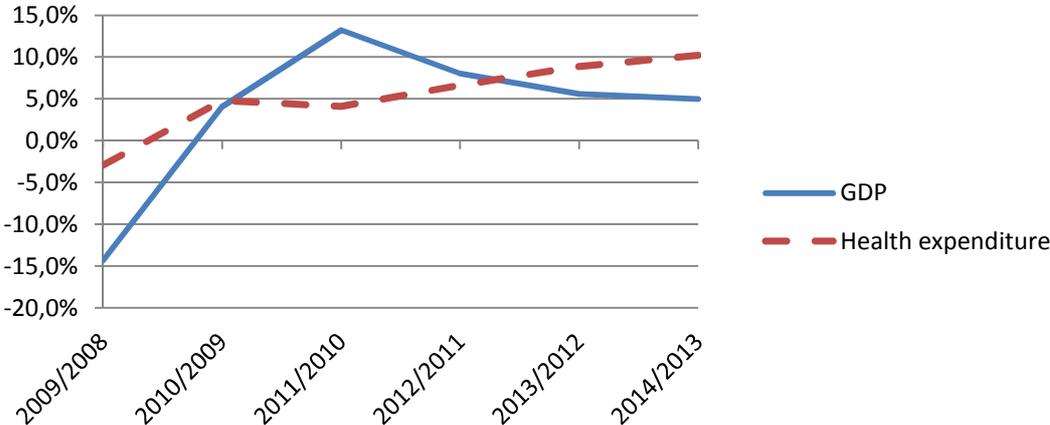
The share of health expenditure of GDP was higher from 2009–2012, when GDP was lower. Growth in GDP has been slower than growth in health expenditure over the past two years (Figure 10 and 11).

Figure 10. Gross domestic product (GDP) and the health expenditure share of GDP, 2008–2014



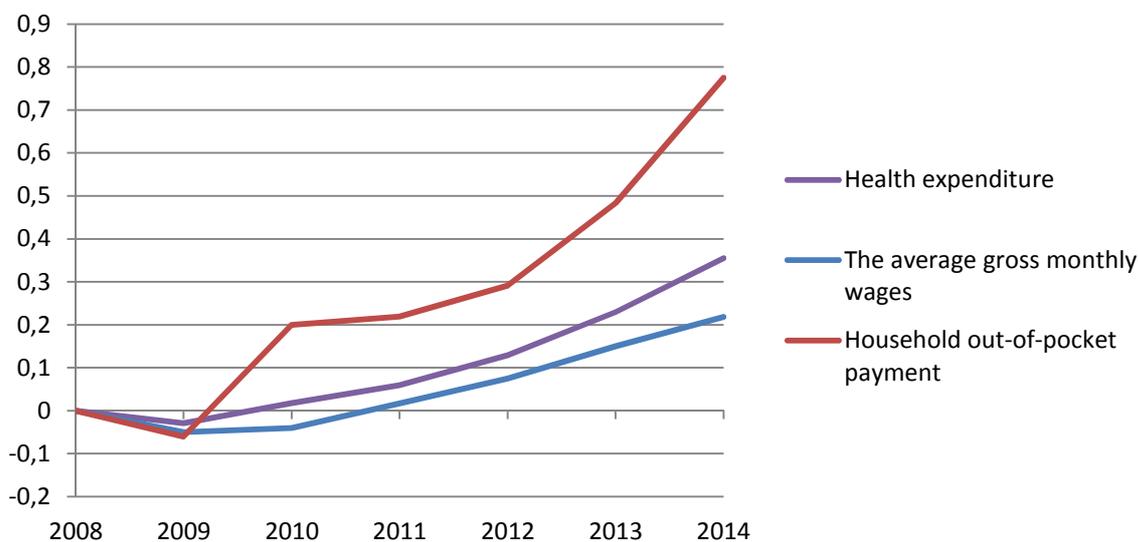
Health expenditure in current prices has increased year-on-year after 2009. By 2010, GDP recovered after major decline (-14%) in 2009 and its growth in 2013 and 2014 has been within 5%. Health expenditure has increased after the decline of 2.9% in 2009, and between 4–5% in 2010 and 2011; thereafter, increase has accelerated and reached 10% by 2014. Thus, the health expenditure share of GDP has increased to 6.2% by 2014.

Figure 11. Increase in health expenditure and GDP compared to the previous year, 2008–2014



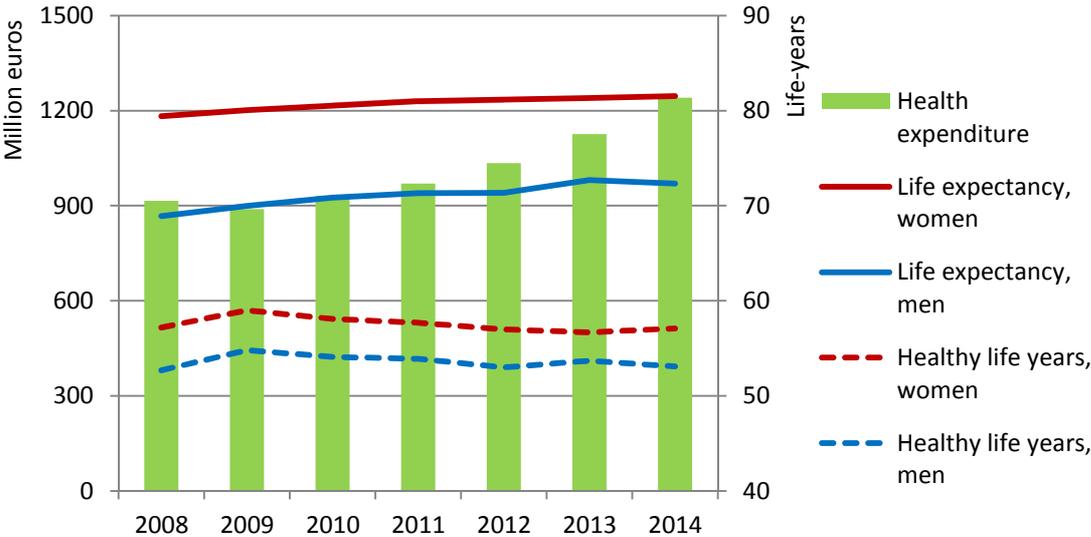
When observing increase in the average wages, in health expenditure, and in the health expenditure of households, it can be seen that the wages grow in a slightly slower manner than health expenditure, however, the motion curve is the same for both. The lowest point turned out to be in the time of crisis in 2009; after this, health expenditure has increased at a faster pace than the average wages. However, the health expenditure of households has increased at a particularly quick pace compared to the change in health expenditure and changes in the average wages, as seen in Figure 12. In the health expenditure of households, there has been the compensation of the lower consumption of 2009 in 2010, and also the introduction of euro has led to the persistence of increase in household expenditure nearly as the same level in 2011. From 2012 onwards, the growth in household health expenditure has been faster than the general growth in health expenditure and the growth in average wages.

Figure 12. Change in health expenditure and average wages compared to 2008



Increase in income and additional treatment services compensated by the Estonian Health Insurance Fund or in other words increase in financing enable people to use the corresponding services more and thereby, the health expenditure of households increases in terms of services where cost-sharing is higher.

Figure 13. Health expenditure, average life expectancy and healthy life years, 2008–2014

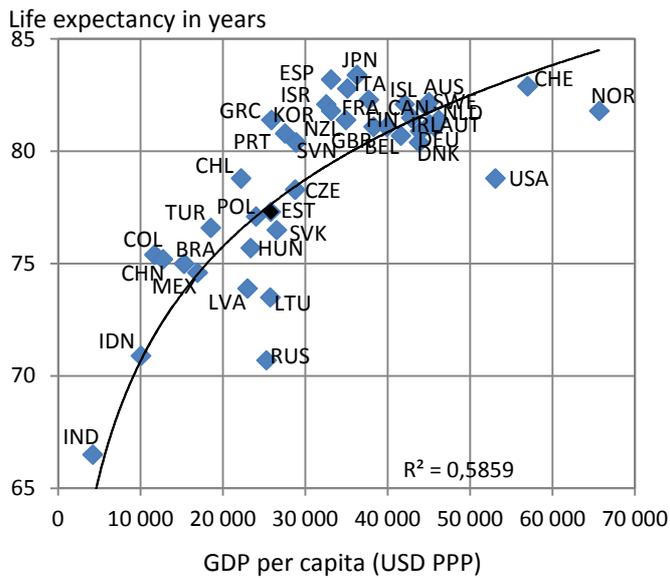


Despite the general increase in health expenditure, small growth in average life expectancy has been achieved thanks to the decrease in mortality. During the reference period (2008–2014), the health expenditure has increased by 300 million euros; the average life expectancy for women has increased by 2.1 and for men by 3.4 years over the same period of time. The gap between the average life expectancy for men and women has decreased by 1.3 years. However, there appears to be nearly no change in healthy life years – men have won 0.4 years and women have lost 0.1 healthy life years.

It has been found that up to a certain level, increase in GDP leads to increase in average life expectancy, however, at some level, it stops. Estonian indicators are, however, clearly still in this group, where one can expect an increase in average life expectancy.

OECD’s database has published the 2013 national data on GDP and health expenditure on the basis of purchasing power parities. The purchasing power parities are used for analysing national economic position and the volume of goods and services. The purchasing power parity is a calculated currency exchange rate, which converts economic indicators expressed in national currency into a single currency that is called purchasing power standard. In this case, it is USD PPP.

Figure 14. Average life expectancy and GDP per person, 2013 (or the previous year)

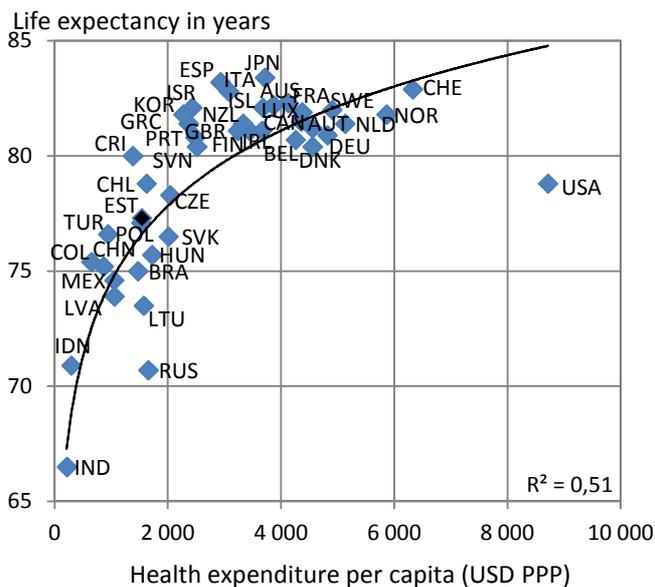


Source: OECD Health Statistics 2015, <http://dx.doi.org/10.1787/health-data-en>.

GDP and health expenditure per capita in comparable prices, or according to USD PPP, have been compared with the national average life expectancy. With comparable GDP that is at the same level, Estonia has achieved higher average life expectancy than our neighbours Latvia, Lithuania, and Russia.

The Nordic countries belong to the group of countries with higher averages life expectancy. For example, Finland’s comparable GDP is 15,000 USD higher than Estonia’s and also average life expectancy (men’s and women’s average) extends over 81 years of age. The average life expectancy for Estonian men and women was 77.28 years in 2013. Finland spent almost 2,000 USD PPP more per capita than Estonia in 2013; in the latter, health expenditure per capita was 1,542 USD PPP (Figure 15).

Figure 15. Average life expectancy and health expenditure per person, 2013 (or the previous year)



Source: OECD Health Statistics 2015, <http://dx.doi.org/10.1787/health-data-en>.

## 4. ACCOUNTING METHODOLOGY OF HEALTH EXPENDITURE

### 4.1 Methodology of the System of Health Accounts (SHA2011)

Since 2013, Estonia has implemented the methodology of SHA2011 for calculating health expenditure.

This methodology is a common further development of OECD-WHO-Eurostat methodology of SHA 1.0 implemented earlier and used for the data preparation of 2000–2012 health expenditure in Estonia. This is an internationally standardised framework, which is used for systematic evaluation of national health expenditure of countries in a comparable way.

The promoter of the introduction of the new SHA2011 methodology was OECD and the development objective was to make the data of various countries more comparable. The countries are provided with more specific instructions on classifying health expenditure and these are used by the Member States of the corresponding organisations in calculating health expenditure. Classification lists used for calculations – health care providers (ICHA-**HP**), health care financing schemes (ICHA-**HF**), health care functions (ICHA-**HC**), revenues of health care financing schemes (ICHA-**FS**), gross fixed capital formation in health system by type of asset (ICHA-**HK**) and factors of health care provision (ICHA-**FP**) – have been published together with explanations on the website of the National Institute for Health Development.

(In Estonian at: <http://www.tai.ee/et/tegevused/tervisestatistika/metaandmed/klassifikaatorid>)

The use of SHA2011 is mandatory for all EU Member States from the financial year of 2014, and the submission of data takes place on the basis of the implementing regulation of the European Commission 2015/359, available at:

<http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32015R0359&from=EN>.

The main conceptual difference between the two methodologies lies in the fact that health capital expenditure is no longer part of health expenditure, since this has been excluded from health expenditure and shown in a separate table. Based on the previous methodology, this was included into total health expenditure.

Another significant change took place in terms of the classification of external financing. According to the former method, expenditure arising from external financing sources was classified under the outside world. SHA2011 classifies expenditure, which is administered by national structural unit, under the financing scheme of the corresponding structural unit. For example, externally financed projects of the Ministry of Social Affairs, where the latter is responsible for the organisation of projects, are shown under the financing schemes of public sector (HF.1). Only amounts directly received from abroad by the health service providers, without any intermediation from Estonia, will be shown inside the rest of the world financing schemes (HF.4). The table of the new classification of the revenues of health care financing schemes (FS) shows income used for financing health expenditure according to their sources, including direct receipts from abroad; in the subdivision FS.7.

## 4.2 Recalculations of health expenditure from 2012–2013

Health expenditure of 2013 was published in October 2014 according to the methodology of SHA2011, including the household out-of-pocket payments calculated on the basis of the new methodology. The changes made in the calculation methodology were described more in detail in the analysis document published at the end of 2014, titled “Health expenditure in Estonia 2013. Change in Methodology” (<http://www.tai.ee/en/health-data/research-reports/download/339>).

Together with launching the recalculations process of the previous years at the beginning of 2015, during the search of additional data sources and the comparison of statistics, became obvious the need and possibilities to specify the new calculation methodology of the household expenditure. These changes are more specifically addressed in **Annex 1** to this document, which covers the modifications made more in detail compared to the initial methodology both in terms of services and goods. Household expenditure on 2012–2013 has been recalculated on a uniform basis.

Besides the household expenditure, the rest of the parts have remained virtually the same in the calculations from 2012–2013 compared to previously published data. Only a few inaccuracies found have been corrected. Data from 2012, which were collected on the basis of the former SHA1.0 methodology, have been made comparable by means of reconfiguring the corresponding subdivisions. In addition the share of capital expenditure included in the prices of treatment services is subtracted from the data of services provided by the Estonian Health Insurance Fund of 2012 and 2013 according to the requirements of the methodology of SHA2011, which in 2012, amounted to 1.81% and in 2013, 1.63% of the price of treatment services.

In 2015, all health service providers who were active from 2008–2014 have been re-encoded according to the list of SHA2011 health service providers HP on uniform bases together with the preparations for recalculating longer time series. Due to the implementation of the new list, there may be differences in the subdivisions in terms of comparing service providers with previously published data. The updated list also served as a basis for the division of the Estonian Health Insurance Fund expenditure by service providers in 2014.

The recalculations of data for 2008–2011 are still ongoing. The plan is to publish them in 2016.

## 4.3 Calculations of health expenditure 2014

All data necessary for the calculation of health expenditure have been collected similarly to the previous years through the organisers of financing (Estonian Health Insurance Fund, state budget, ministries, private insurances, etc.<sup>2</sup>). The data will be verified and if necessary, specified together with the data providers and all made expenditure are classified according to the purpose (goal) for which the money was spent.

During the work, it will be specified as much as possible through which service provider money was spent for the corresponding purpose, and where final consumption took place. Since the objective is to classify expenditure according to final consumption (and exclude intermediate consumption), then the contributor is often not the one, which carries out the corresponding activity or where the money is actually spent – therefore, the data obtained through organisers will be further classified according to the corresponding service providers and activities. In practice, classification means

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<sup>2</sup> See the list in Data sources.

marking each amount spent according to all applicable lists (financing source, activity, service provider, and financing scheme). Expenditure not related to health and health care will be excluded.

In the calculation of the household health expenditure, the main basis consist of the data of the health service providers on the volumes of the services provided and revenue received from natural persons payments from the statistical reports of the National Institute for Health Development on health statistics. In terms of goods (including pharmaceuticals), the data is based on the statistics of the corresponding field, obtained from various sources. The calculation of the health expenditure of households in 2014 has been carried out in the same way as from 2012–2013, and it is described in details by Annex 1 of the above-cited analysis.

## DATA SOURCES

The data for the calculation of health expenditure have been derived from the following sources. The data have been collected both on standard forms and in a custom format. Also, statistics that have been made publicly available on websites has been used.

1. Estonian Health Insurance Fund – expenditure on health insurance benefits.
2. Ministry of Finance – 2014 annual statement on local government budget implementation.
3. Health expenditure on ministries and their divisions: Ministry of Education and Research, Ministry of Justice, Ministry of Defence, Ministry of the Environment, Ministry of Economic Affairs and Communications, Ministry of Rural Affairs, Ministry of Finance, Ministry of the Interior, and Ministry of Foreign Affairs.
4. Data on health expenditure from insurance companies.
5. State Agency of Medicines – turnover of pharmaceuticals in hospital and retail pharmacies.
6. Institutions of occupational health – statistics on mandatory medical examinations of employees.
7. Statistics Estonia – expenditure on occupational health in companies, population, national accounting indicators.
8. Database of the State Treasury – 2014 State Budget Execution Report is the source of data on the health expenditure incurred by the Ministry of Social Affairs.
9. Departments of the Ministry of Social Affairs:
  - a. Department of Finance and Asset Management – specified data on medical treatment expenses of uninsured persons, foreign aid projects, foreign loans; projects financed through the Ministry of Finance from gambling tax; expenditure on purchased services
  - b. Department of Analysis and Statistics – institutional reporting on social welfare.
10. National Institute for Health Development – health promotion projects and programmes and statistical reports:
  - a. Health economic activities,
  - b. Consultations and home visits,
  - c. Day care,
  - d. Hospital beds and hospitalisation.
11. Estonian Red Cross – health expenditure.
12. Estonian E-Health Foundation – expenditure on promoting and developing the e-solutions of the national health system.

# REFERENCE MATERIAL

Estonian Health Insurance Fund – website, annual report

<https://www.haigekassa.ee/en/home/organisation>

<https://www.haigekassa.ee/en/annual-reports>

Website of the Ministry of Social Affairs

<https://www.sm.ee/en>

State Agency of Medicines – sales statistics of pharmaceuticals

<http://www.ravimiamet.ee/en/statistics-medicines>

Database of Statistics Estonia – economy and population

[http://pub.stat.ee/px-web.2001/l\\_Databas/Economy/databasetree.asp](http://pub.stat.ee/px-web.2001/l_Databas/Economy/databasetree.asp)

[http://pub.stat.ee/px-web.2001/l\\_Databas/Population/databasetree.asp](http://pub.stat.ee/px-web.2001/l_Databas/Population/databasetree.asp)

Health statistics and health studies database of the National Institute for Health Development

<http://pxweb.tai.ee/esf/pxweb2008/dialog/statfile1.asp>

Website of the Department of Health Statistics of the National Institute for Health Development

<http://www.tai.ee/en/r-and-d/health-statistics>

Health expenditure methodology of the National Institute for Health Development, 2014

<http://www.tai.ee/en/health-data/research-reports/download/339>

Database of Eurostat (the statistical office of the European Union)

<http://ec.europa.eu/eurostat/data/database>

Database of the World Health Organisation

<http://www.euro.who.int/en/data-and-evidence/databases>

Database of the Organisation for Economic Cooperation and Development (OECD)

[http://stats.oecd.org/index.aspx?DataSetCode=HEALTH\\_STAT](http://stats.oecd.org/index.aspx?DataSetCode=HEALTH_STAT)

## **Annex 1. Additions to the methodology of the calculations of the household health expenditure, 2012–2013**

Two major changes took place in the methodology of the calculation of Estonian health expenditure from the data of 2013. First, the introduction of the new international methodology SHA 2011 took place (the previous methodology was titled SHA 1.0). Second, there was a change in the household health expenditure calculations – a transfer from the data of household budget survey to the data submitted by the health service providers.

First results – current health expenditure of 2013 – were published according to the new methodology by the National Institute for Health Development at the end of October in 2014. The publication describing the changes in methodology was published in December 2014 (<http://www.tai.ee/en/health-data/research-reports/download/339>). The recalculation of the previous years and the comparison of the statistics of additional data sources revealed the need and possibilities to specify the methodology of the household expenditure in its certain parts. This document precisely describes those changes.

### **Health services**

According to the new methodology that was introduced for the expenditure of 2013, the calculation of household expenditure was based on health service prices paid to the health service providers by the Estonian Health Insurance Fund and weighted results of household budget survey in terms of pharmaceuticals and medical goods. Used methodology underestimated the two largest sources of payments of households – the expenditure on teeth and eyes, or dental care (including orthodontics) and glasses. (Although included was the ophthalmology service of three companies). In terms of expenditure on pharmaceuticals, however, the expenditure on pharmaceuticals compensated by the EHIF was not based on actual expenditure but expenditure predicted on the basis of household budget survey of the previous years, which did not consider greater introduction of pharmaceuticals prescribed on the basis of active ingredient and the resulting change – decrease in expenditure on pharmaceuticals for households – and showed that the cost-sharing of pharmaceuticals by households was higher than in reality.

In principle, we could continue with this, but

- Statistics Estonia does not carry out household budget survey on an annual basis, therefore, data cannot be obtained from there on a regular basis;
- the data of interview survey that has served as a basis for the division of health expenditure between services and service providers, and during intermediate years only forecasts, are inaccurate compared to administrative statistics collected on an annual basis, since it does not reflect any changes in prices and human behaviour;
- some of the underlying accounting indicators and actual expenditure diverged quite significantly.

While critically reviewing and analysing the new methodology of calculating the household expenditure and searching for additional data, components were revealed on what must and can be additionally considered when calculating the household expenditure:

- adults almost fully pay for their dental care;

- a large part of the expenditure on orthodontics is not subject to compensation by EHIF (only few individual cases are compensated based on diagnosis) and most is paid by parents;
- compensation of glasses is not general; a small part of the glasses of employees is subject to compensation; the purchase of the glasses of children is not compensated;
- a day spent inpatient care costs 2.5 euros a day for a person; a visit to medical specialist 5 euros;
- household expenditure in outpatient care generally arises from buying a queuing place, using long-term care (sending a family member to a care or nursing home), and rehabilitation after receiving active treatment;
- generally people do not go to hospital to receive curative care at their own expense; however, they purchase day care service in otolaryngology, gynaecology, dermatovenerology, and ophthalmology.
- in terms of certain procedures, the service list of EHIF has clearly defined the rate of the cost-sharing by people, or there is a limited number of days for services to be compensated for.

Therefore, it is not justified to use stationary services generally and uniformly while dividing expenditure in terms of the household expenditure four times compared to out-patient receptions (previously used relation) if there are detailed data available.

When considering the specifications, the expenditure calculated on the basis of the statistics of the volumes of the provision of health services have been found at the corrected methodology by means of the following coefficients:

	2012	2013	
doctor's consultations	5	5	price of medical specialist consultation; for family physicians have used 1
dental consultations	33,7	38,5	the number differs, since the ratio between the revenue of the annual report of dental care institutions and consultations is different during different years. In addition result is multiplied with adult consultations share in the corresponding health care provider group, in order to deduct free children dental care
physicians' home visits	7	7	for family physicians 3 euros
dentist's home visits	15	15	price of home visit of medical specialist according to EHIF
day care operations	7	7	more expensive than out-patient consultation; assessed by using very rounded data of a big hospital (8 euros, average work considered in a smaller place may not be that complicated and therefore more inexpensive)
long-term care bed-day	6,45	6,87	The remaining part of the amount that is paid to health care provider by EHIF, and which must be paid by the person as a cost-sharing of the service
hospital bed-day	2,5	2,5	inpatient fee established by hospitals (up to 10 days)

Initial methodology did not cover nursing care services and home visits. The only information used on home visits included physicians' home visits of home nursing care provider (4,486 visits in 2013) with its amount considered under curative care. Providers of home nursing care (home nurses) made a total of 281,000 home visits in 2013. Therefore, the corresponding amount will be classified under home nursing care. Curative care covers home visits of family physician.

Currently, the same division is used in terms of outpatient services (HC1.3) – main and other specialised services. The work of family physician has been shown under main medical and diagnostics services (HC.1.3.1) and the out-patient work of medical specialist under all other specialised health services (HC.1.3.3).

## Therapeutic appliances and pharmaceuticals

The upgraded methodology of household expenditure largely continues to use the data of additional module of 2006 household budget survey (about health spending), which so far has been taken further on the basis of coefficients. These coefficients served as a basis in distributing expenditure between different services and goods. However, the amounts calculated in this manner no longer reflect the actual situation. This is illustrated by the comparison between the predicted results calculated in the scheme and the statistics of actual expenditure on pharmaceuticals of the Estonian Health Insurance Fund and the State Agency of Medicines. Over the recent years, both the EHIF and the SAM have made available sufficiently detailed annual statistics, which did not exist yet during the development of initial new methodology 7–8 years ago.

Therefore, some changes have been made:

Instead of the price of glasses calculated on the basis of household budget survey, data of annual reports of optical shops from the Commercial Register on the previous years in order to establish an accounting basis on the division of health and other goods and services for optical shops. According to this, the average turnover of the goods and services is divided as follows:

Glasses, contact lenses and other optics (health goods)	87%
Consultations (services)	2%
Associated miscellaneous items (cleaning products, containers, boxes, etc.)	1%
Sunglasses and colourful contact lenses	10%

Additionally, the services of ophthalmologist in optical shops have been included to the appointments of medical specialist.

Instead of assessing expenditure on hearing aids and medical aids on the basis of household budget survey, the calculation is based on the expenditure in the statistical reports of appliances by the Estonian Health Insurance Fund and the Ministry of Social Affairs. In addition to the previous, there was a unit conversion error in the time series with regard to two categories (hearing aids, orthopaedic and other aids) of the expenditure assessed on the basis of household budget survey; the correction of this error reduced the expenditure of these two categories the most and in general, was the reason for the decrease in the household expenditure.

The reporting of the Ministry of Social Affairs has mentioned pharmaceuticals in residential long-term care institutions (welfare institutions), which are a part of site fee and divided between

pharmaceuticals and maintenance products, depending on the requirements established by the service provider and local government. There are situations where the site fee includes some over-the-counter pharmaceuticals (to a certain limit) or only maintenance products; however, very rarely prescribed medicines. Since the cost of prescribed medicines have been counted according to the general procedures, then ¼ of the household expenditure on pharmaceuticals of social welfare institutions and other medical non-durable goods has been included in over-the-counter pharmaceuticals and ¾ in other medical non-durable goods.

The gap between the turnover of the prescribed medicines of the State Agency of Medicines and the sales data of the discount prescriptions of the Estonian Health Insurance Fund is approximately 4 million euros on the basis of the published statistics. This gap may be due to two factors: from the data on pharmaceuticals prepared on site in pharmacies and veterinary pharmaceuticals sold in general pharmacies (published statistics on the website of the State Agency of Medicines, veterinary pharmaceuticals have been included in the statistics of prescribed medicines and their turnover has not been separately provided; the SAM could not provide reasons for the gap with the EHIF data). Therefore, the cost-sharing of pharmaceuticals have been based on the statistics of the Estonian Health Insurance Fund on the cost-sharing of prescribed medicines by patients, and also additional compensation for pharmaceuticals has been taken into account.

## **Impact of changes**

With regard to additions, the household health expenditure of 2013 has decreased by 3.2% compared to the primary results issued in the publication reflecting changes in methodology at the end of 2014. From the viewpoint of service providers (according to HP), there was a change only in terms of retailers of medical goods (HP.5), where decrease amounted to 8,5 million euros or 6.9%, while decrease in pharmacies (HP.5.1) was 8.4%.

While observing the changes by services (HC), it can be said that the changes that have taken place in these subdivisions are greater. However, the amount of curative care, rehabilitative care, long-term nursing care, and ancillary services increased only by 0.3% after recalculation. Since the calculation of the general volume of health services paid by individuals out-of-pocket is based on statistics submitted by service providers, increase in the expenditure of one type decreases the expenditure of another. In addition to changes in percentages, it is necessary to also observe the volume of the work and in terms of cost, consider the cost-sharing rates of households. For certain services, these are relatively small absolute numbers (e.g. home visit of specialist); the volume of other services is very big (visit of family physician), but the cost-sharing by individuals in this very small. Thus, due to increasing dental expenses in accounts (increase of 15%), the household expenditure has decreased to other health services, including hospitalisation.

In the expenditure structure, the share of curative care increased by 2.6 percentage points compared to initial calculations; however, the share of rehabilitative care, long-term care, and medical goods decreased (0.2, 0.6, and 1.8 percentage points, respectively).

Changes according to the groups of selected services have been provided in the following table.

Table 1.1 Household health expenditure on services according to primary and modified methodology, 2013 (million EUR)

	primary		modified		change	change
	million EUR	%	million EUR	%	million EUR	% (+/-)
Curative care	102,697	40,3	106,035	42,9	3,338	3,3
.. Inpatient curative care	14,687	5,8	3,388	1,4	-11,299	-76,9
.. Outpatient curative care	86,564	33,9	101,388	41,0	14,824	17,1
....Dental outpatient curative care	61,472	24,1	70,857	28,7	9,385	15,3
Rehabilitative care	9,127	3,6	8,276	3,4	-0,851	-9,3
Long-term care (health)	19,700	7,7	17,608	7,1	-2,092	-10,6
Ancillary services	0,236	0,1	0,236	0,1	0	0,0
Medical goods	123,301	48,3	114,836	46,5	-8,465	-6,9
.. Prescribed medicines	61,620	24,2	48,740	19,7	-12,880	-20,9
..Over-the-counter medicines	40,729	16	43,468	17,6	2,739	6,7
..Therapeutic appliances and other medical goods	18,460	7,2	18,763	7,6	0,303	1,6
<b>TOTAL CURRENT EXPENDITURE</b>	<b>255,060</b>	<b>100</b>	<b>246,992</b>	<b>100</b>	<b>-8,068</b>	<b>-3,2</b>

With regard to health services, the largest changes in absolute values took place in the division of inpatient curative care, and from out-patient care in dental care and specialist care. Increase in outpatient care was 17.1% (14,767 million euros), including in dental care 15.3% (9,385 million euros) and out-patient specialist care 23.3% (5,441 million euros). Decline in terms of inpatient care was 11,299 million euros or 76.9%.

In the group of medical goods, there was a decrease in the division of pharmaceuticals and medical non-durable goods – a total of 6.9%. Besides the decrease in the cost-sharing of prescribed medicines (20.9%), the expenditure on over-the-counter pharmaceuticals increased by 6.7%, also the expenditure on medical non-durable goods (55.1%), which generally reduced the expenditure on pharmaceuticals and other medical non-durable goods by 8.4% (8,768 million euros). The main reason for the decrease in the pharmaceutical spending is the implemented practice of prescribing pharmaceuticals that are based on the active ingredient that has significantly improved as a result of targeted work of the Estonian Health Insurance Fund and the Health Board. Already 80% of prescriptions were issued on the basis of the active ingredient by physicians during the second half of 2013; the EHIF paid 13.6 euros and the patient 6.4 euros for an average discount prescription. It is 20% less than in 2009, when the cost-sharing by patient was 8 euros for an average discount prescription. This change had been not considered in the primary calculations.

In general, the change in expenditure on therapeutic appliances and other medical durable goods was 1.6%. Despite the fact that the expenditure on visual aids (glasses, etc.) has increased two and a half times (158% or 10,377 million euros) and the expenditure on orthopaedic aids 22.1% (0,172 million euros) due to change in the data source (sales statistics of optical shops), then the correction of an error on the rows of hearing aids and other medical durable goods led to a decrease in those items of expenditure – 87.6% (2,517 million euros) and 93.0 (7,689 million euros), respectively.

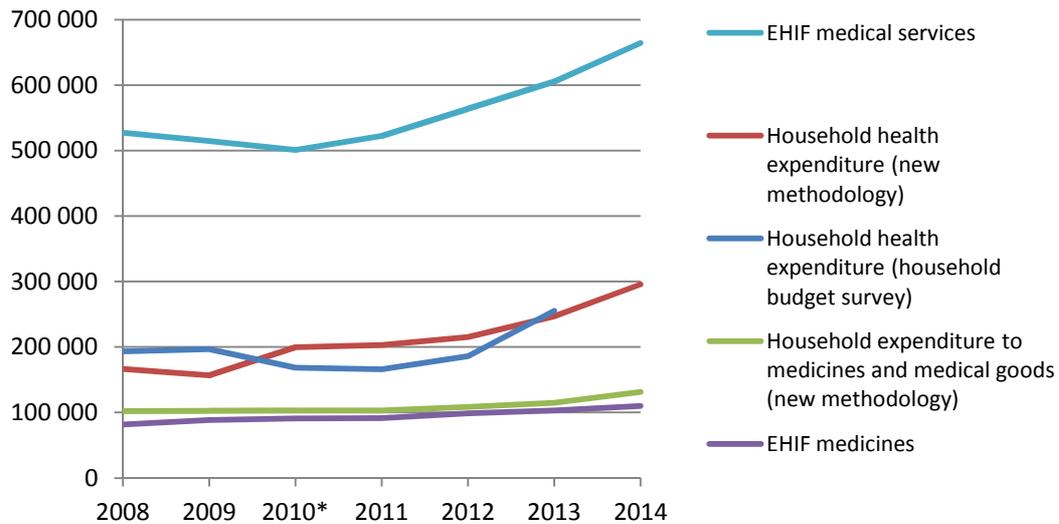
According to the private consumption accounting of **SNA** (System of National Accounts 1993), the health expenditure of households may be 12 million or 4.9% higher than in the calculations of health expenditure; however, the data of Statistics Estonia do not enable to assess whether these could include the expenditure of services or goods.

Household final consumption expenditure in current prices, million EUR (data of Statistics Estonia)

	2009	2010	2011	2012	2013
06.Health	226,4019	231,5543	219,6777	234,9516	256,7743

General comparison of the time series of the primary and upgraded methodology of household out-of-pocket expenditure has been provided in the following figure. According to the data of household budget survey, an important change can be seen in the data of 2010. The methodology of household budget survey for 2010 differed from the previous surveys in terms of several aspects; the greatest changes included the reduced amount of survey materials, which means that instead of previously used two questionnaires and two diaries there are one questionnaire and one diary, and also decreased survey time. After 2007, during the development of the new survey methodology, until 2010, no household budget surveys have been carried out, therefore, the household expenditure for 2008 and 2009 were already forecasted for health expenditure and thus, the results for these years were estimated. See also <http://www.stat.ee/households>.

Figure 1.1 Comparison of the household health expenditure, 2008–2014

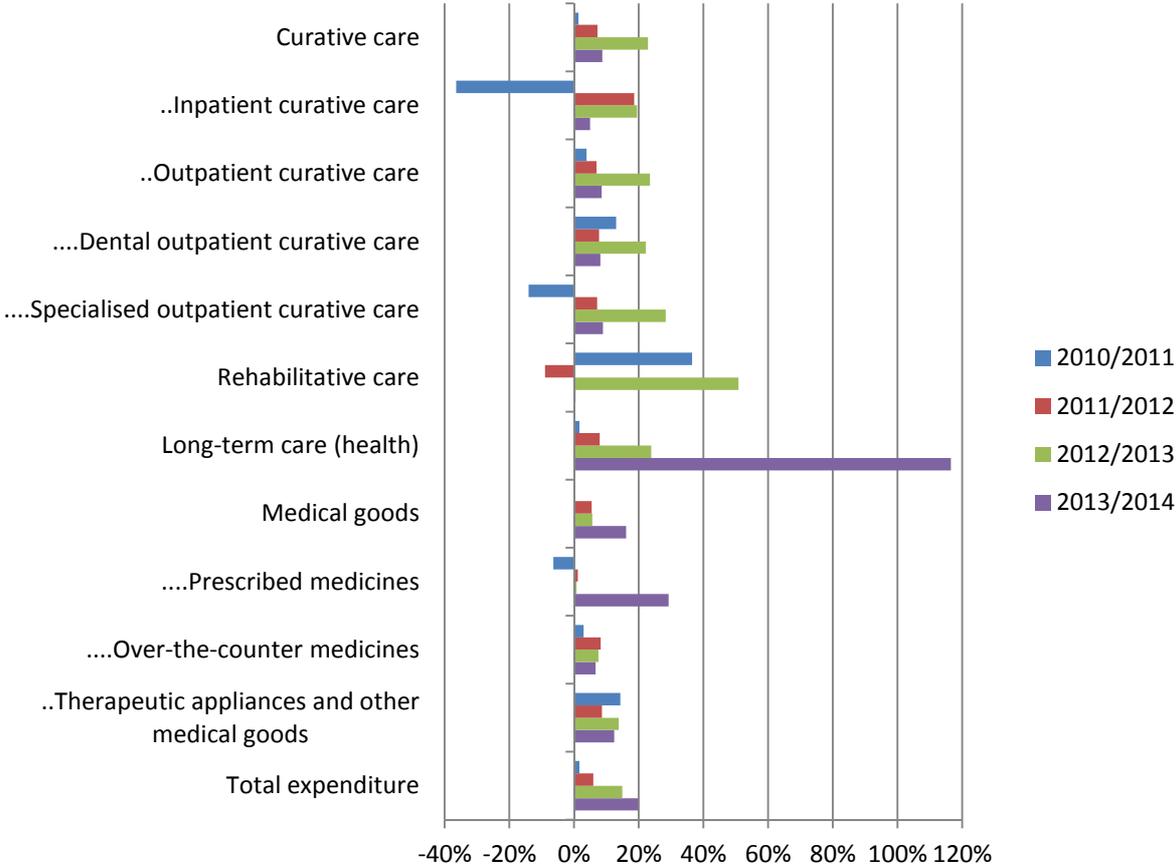


\*Sample and methodology of household budget survey was changed in 2010

The upgraded calculation of household expenditure that is based on administrative data is well compatible with the statistics on the service expenditure of the Estonian Health Insurance Fund. This means that in addition to decline in the service expenditure of the EHIF, there is increase in the out-of-pocket share of households.

The percentage increase (decrease) in expenditure by year and main service groups has been provided in Figure 2 below. This shows that the growth of expenditure has generally been relatively stable. When observing total expenditure, there has been year-on-year growth compared to the previous year, and at an increasing pace. In 2011, compared to 2010, people probably started to save more money with regard to the introduction of euro and spent less on health services, except in case of dental care, rehabilitative care, and medical durable goods. Part of the expenditure was probably inevitable that could not be postponed. In 2012, the increase in expenditure was much more stable by services; the only field that decreased was rehabilitative care (-9%). The year 2013 stands out for further growth in all service groups in terms of the use of services; most outstanding growth was detected in out-patient specialist care and rehabilitation. In terms of rehabilitation, the growth compensated for the decline that took place in the previous year. In 2014, the biggest change was the growth of the expenditure on nursing services – 116% – during the previous year; additionally, the expenditure on prescribed medicines was higher – 29%.

Figure 1.2 Changes of the household health expenditure in the main service groups, 2010–2014



In general, the current health expenditure in 2013 decreased by 0.9% due to modifications and corrections of the methodology of household expenditure and amounted to 247 million euros instead of 255 million euros compared to primary results. Also, the share of household expenditure in health expenditure decreased and reached to 21.9% instead of initial 22.6%; however, the share of the central and local government increased to 10.9% (instead of 10.8%) and the share of the Estonian Health Insurance Fund decreased to 65.4% (instead of 66%).

## Annex 2. TABLES. Health expenditure and changes in HE, 2012–2014

Table 2.1. Changes by financing schemes, 2012–2014

	2012	2013	2014	Change 2013/2012		Change 2014/2013	
	million EUR	million EUR	million EUR	million EUR	%	million EUR	%
<b>Total expenditure</b>	<b>1 034,201</b>	<b>1 125,771</b>	<b>1 240,911</b>	<b>91,570</b>	<b>8,9</b>	<b>115,14</b>	<b>10,2</b>
Government schemes and compulsory health care financing schemes	800,342	858,937	925,054	58,595	7,3	66,117	7,7
.. Public sector, except EHIF	112,073	122,566	122,041	10,493	9,4	-0,525	-0,4
.... Central government schemes	99,161	108,988	109,220	9,827	9,9	0,232	0,2
.... Local government schemes	12,912	13,578	12,821	0,666	5,2	-0,757	-5,6
..Estonian Health Insurance Fund	688,269	736,371	803,013	48,102	7,0	66,642	9,1
Voluntary health care payment schemes	18,417	19,650	19,623	1,233	6,7	-0,028	-0,1
.. Enterprise financing schemes	15,638	16,794	17,155	1,156	7,4	0,361	2,2
Households out-of-pocket payment	215,083	246,992	295,735	31,909	14,8	48,744	19,7
External financing schemes	0,359	0,192	0,499	-0,167	-46,5	0,308	160,6

Table 2.2. Changes by services, 2012–2014

	2012	2013	2014	Change 2013/2012		Change 2014/2013	
	million EUR	million EUR	million EUR	million EUR	%	million EUR	%
<b>Total services</b>	<b>1 034,201</b>	<b>1 125,771</b>	<b>1 240,911</b>	<b>91,570</b>	<b>8,9</b>	<b>115,141</b>	<b>10,2</b>
Curative care	576,593	628,138	682,779	51,545	8,9	54,641	8,7
.. Inpatient curative care	279,524	290,227	296,279	10,703	3,8	6,052	2,1
.. Day curative care	20,474	23,260	34,200	2,786	13,6	10,940	47,0
.. Outpatient curative care	275,063	313,196	350,075	38,132	13,9	36,880	11,8
.... General outpatient curative care	145,292	157,033	154,281	11,741	8,1	-2,752	-1,8
....Dental outpatient curative care	82,747	98,911	106,484	16,164	19,5	7,573	7,7
.... Specialised outpatient curative care	47,025	57,252	89,311	10,228	21,7	32,059	56,0
Rehabilitative care	15,551	20,975	23,831	5,424	34,9	2,857	13,6
..Inpatient rehabilitative care	5,280	7,367	7,939	2,088	39,5	0,571	7,8
..Outpatient rehabilitative care	10,258	13,607	15,860	3,350	32,7	2,253	16,6
Long-term care (health)	48,875	57,216	81,919	8,340	17,1	24,704	43,2
.. Inpatient long-term care	44,721	52,116	75,936	7,395	16,5	23,820	45,7
Ancillary services	105,571	116,499	126,098	10,928	10,4	9,598	8,2
..Laboratory services	46,952	51,609	58,150	4,656	9,9	6,541	12,7
..Imaging services	31,366	35,208	38,307	3,841	12,2	3,099	8,8
..Patient transportation	27,253	29,683	29,641	2,430	8,9	-0,042	-0,1
Medical goods	231,840	246,941	264,196	15,101	6,5	17,255	7,0
..Pharmaceuticals and other medical non-durable goods	201,210	210,148	232,154	8,937	4,4	22,007	10,5
....Prescribed medicines	147,731	152,521	174,037	4,790	3,2	21,516	14,1
....Over-the-counter medicines	42,685	45,409	46,822	2,724	6,4	1,413	3,1
..Therapeutic appliances and other medical goods	30,629	36,793	32,042	6,164	20,1	-4,751	-12,9
Preventive care	34,015	32,274	37,306	-1,741	-5,1	5,032	15,6
Governance and, and health system and financing administration	21,755	23,728	24,782	1,973	9,1	1,054	4,4

Table 2.3. Changes in services financed by central government schemes, 2012–2014

	2012	2013	2014	Change 2013/2012		Change 2014/2013	
	million EUR	million EUR	million EUR	million EUR	%	million EUR	%
<b>Central government expenditure, total</b>	<b>99,161</b>	<b>108,988</b>	<b>109,220</b>	<b>9,827</b>	<b>9,9</b>	<b>0,232</b>	<b>0,2</b>
Curative care	21,907	25,887	27,741	3,980	18,2	1,854	7,2
Rehabilitative care	0,066	1,302	1,850	1,236	1859,6	0,548	42,1
Long-term care (health)	12,481	13,769	13,770	1,288	10,3	0,001	0,0
.. Inpatient long-term care	12,481	13,614	13,755	1,133	9,1	0,141	1,0
Ancillary services	26,898	29,409	30,650	2,511	9,3	1,241	4,2
..Patient transportation	26,540	28,905	28,897	2,365	8,9	-0,008	0,0
Medical goods	15,156	18,987	10,899	3,830	25,3	-8,088	-42,6
..Pharmaceuticals and other medical non-durable goods	3,129	3,352	3,474	0,223	7,1	0,123	3,7
..Therapeutic appliances and other medical goods	12,028	15,635	7,424	3,607	30,0	-8,211	-52,5
Preventive care	10,750	7,588	12,377	-3,161	-29,4	4,789	63,1
Governance and, and health system and financing administration	11,903	12,045	11,934	0,142	1,2	-0,111	-0,9

Table 2.4. **Changes in services financed by EHIF, 2012–2014**

	2012	2013	2014	Change 2013/2012		Change 2014/2013	
	million EUR	million EUR	million EUR	million EUR	%	million EUR	million EUR
<b>EHIF expenditure, total</b>	<b>688,269</b>	<b>736,371</b>	<b>803,013</b>	<b>48,103</b>	<b>7,0</b>	<b>66,642</b>	<b>9,1</b>
Curative care	461,320	490,514	534,756	29,194	6,3	44,242	9,0
.. Inpatient curative care	252,996	265,615	281,242	12,619	5,0	15,626	5,9
.. Day curative care	19,168	22,066	32,368	2,898	15,1	10,302	46,7
.. Outpatient curative care	187,715	201,458	219,108	13,744	7,3	17,650	8,8
.... General outpatient curative care	139,693	149,886	148,956	10,194	7,3	-0,930	-0,6
Rehabilitative care	9,941	11,202	13,542	1,262	12,7	2,340	20,9
Long-term care (health)	17,221	20,271	24,122	3,051	17,7	3,851	19,0
Ancillary services	78,146	86,795	94,470	8,648	11,1	7,675	8,8
Medical goods	106,651	111,716	119,144	5,065	4,7	7,428	6,6
.... Prescribed medicines	98,967	103,391	110,374	4,424	4,5	6,983	6,8
Preventive care	7,659	7,936	8,448	0,277	3,6	0,512	6,5
Governance and, and health system and financing administration	7,331	7,937	8,531	0,606	8,3	0,594	7,5

Table 2.5. **Changes in household health expenditure by services, 2012–2014**

	2012	2013	2014	Change 2013/2012		Change 2014/2013	
	million EUR	million EUR	million EUR	million EUR	%	million EUR	million EUR
<b>Total household expenditure</b>	<b>215,083</b>	<b>246,992</b>	<b>295,735</b>	<b>31,909</b>	<b>14,8</b>	<b>48,744</b>	<b>19,7</b>
Curative care	86,296	106,035	115,229	19,739	22,9	9,193	8,7
....Dental outpatient curative care	58,007	70,857	76,591	12,850	22,2	5,733	8,1
....Specialised outpatient curative care	22,510	28,884	31,455	6,374	28,3	2,571	8,9
Rehabilitative care	5,488	8,276	8,311	2,788	50,8	0,035	0,4
Long-term care (health)	14,215	17,608	38,121	3,393	23,9	20,512	116,5
..Inpatient long-term care	13,753	16,861	37,145	3,108	22,6	20,284	120,3
Ancillary services	0,367	0,236	0,738	-0,131	-35,7	0,502	213,0
Medical goods	108,717	114,836	133,338	6,119	5,6	18,501	16,1
..Pharmaceuticals and other medical non-durable goods	92,232	96,073	112,258	3,841	4,2	16,184	16,8
....Prescribed medicines	48,389	48,740	62,965	0,351	0,7	14,225	29,2
....Over-the-counter medicines	40,417	43,468	46,328	3,051	7,5	2,860	6,6
..Therapeutic appliances and other medical goods	16,485	18,763	21,080	2,278	13,8	2,317	12,3
....Glasses and other vision products	14,811	16,879	17,729	2,068	14,0	0,850	5,0

## Health and health care statistics:

- **Health statistics and health research database**

<http://www.tai.ee/tstua>

- **Website of Health Statistics Department of National Institute for Health Development**

<http://www.tai.ee/en/r-and-d/health-statistics/activities>

- **Dataquery to National Institute for Health Development**

[tai@tai.ee](mailto:tai@tai.ee)

- **Database of Statistics Estonia**

<http://www.stat.ee/en>

- **Statistics of European Union**

<http://ec.europa.eu/eurostat>

- **European health for all database (HFA-DB)**

<http://data.euro.who.int/hfad/>

- **OECD's statistical databases (OECD.Stat)**

[http://stats.oecd.org/index.aspx?DataSetCode=HEALTH\\_STAT](http://stats.oecd.org/index.aspx?DataSetCode=HEALTH_STAT)

