Estonian Health Insurance Fund Yearbook 2018

Eesti Haigekassa

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Start of the financial year	1 January 2018
End of the financial year	31 December 2018
Principal activity	National health insurance
Management Board	Rain Laane (Chairman)
	Pille Banhard
	Maivi Parv
	Karl-Henrik Peterson
Company of auditors	AS PricewaterhouseCoopers

Table of Contents

Statement by the Management Board

In 2018, the health insurance sector continued to face the same challenge - how to best ensure access to health services and benefits, considering the aging population, society's expectations as well as the rapid development of information technology.

We believe that a reasonable step would be to increase the share of health promotion and disease prevention in our activity through raising health awareness, maintaining health, and expanding the range of preventive activities. We continue focusing on the health promotion and prevention activities.

Family physician as the first contact for all kinds of health problems should be available to people as close to their homes as possible. We have kept this in mind also when creating primary care centres that bring family physicians together in community centres where they can offer a better and wider range of primary care services. This is also contributed by e-consultation service which enables a family physician to quickly consult with a medical specialist on a patient's health conditions. In 2019, the e-consultation service with a dermatovenerologist, vascular surgeon, rehabilitation physician and algiatrist will be also available (in total, the service is available in 21 specialties). We strongly support health and social care integration, and for this purpose, we started financing the PAIK project in Viljandi in 2018.

Upgrading and expanding the range of specialized medical care services is important for us as it helps provide necessary services to as many people as possible. As a result of our hard work, we will be able to fund 16 new health services and treat illnesses with 13 new in-hospital medications in 2019.

From 2019 onwards, we finance biological treatment and immunotherapy based on new indications. The list also includes six new medications for rare diseases, three of which are very expensive.

As a result of the health reform, we received additional 34 million euros in our budget, which we used to improve the availability of specialized medical care in specialties and areas that were particularly critical. Our priorities were children's diseases, joint prosthesis and eye surgeries. In 2019, the ear-nose-throat diseases, child psychiatry and infectious diseases will be added to the check list.

In 2018, the adult dental care benefit increased to 40 euros, 224,000 adults used the benefit for in total 11 million euros. The dental care budget, together with dental and prosthetic benefits, will be 54 million euros for2019.

Medical devices help control the disease or improve the patient’s condition. In 2018, 155 new products and one new medical device group of 34 products were added to the list. In 2019, we will finance 287 new medical devices. An important achievement is that the out-of-pocket expenditure for purchasing insulin pump therapy device for diabetic children decreased significantly.

To reduce a patient's out-of-pocket expenditure in health care, we introduced an additional benefit for pharmaceuticals that is available immediately at the pharmacy. In 2018, we reduced the cost of medications for 134,000 people.

To ensure the functioning of the health care system, we allocated additional funds for the wages of health care professionals and entered into new treatment financing contracts with healthcare providers. To ensure the quality of healthcare, we have prepared several treatment standards (treatment guidelines) in cooperation with our partners, and we evaluate the compliance to these guidelines by using consensus-based indicators. We have also prepared for the development and implementation of clinical decision support system in 2019.

The new structure of the Health Insurance Fund (effective since October) will also contribute to more effective implementation of our activities.
Through our solidary health insurance, we achieve our common goal - to ensure good health and well-being for Estonian people!

Pille Banhard
Member of the
Management Board
Finances

Rain Laane
Chairman of the
Management Board
General management

Karl-Henrik Peterson
Member of the
Management Board
Digital services

Maivi Parv
Member of the
Management Board
Healthcare

Management Report

Eesti Haigekassa

Health Insurance System and the Estonian Health Insurance Fund

Solidary health insurance holds a central position in the Estonian healthcare system. The Estonian Health Insurance Fund (hereinafter referred to as EHIF) is a public law organization that operates in accordance with the principles of social justice and solidary health insurance.

The purpose of EHIF is to provide health insurance benefits, to fund healthcare services and to perform other tasks related to the organization of healthcare services in accordance with the Health Insurance Act, the Health Services Organization Act and other legislation and the expenses prescribed in the EHIF budget.

The Health Insurance Fund is guided by two principles when organizing health insurance:

Solidarity – currently employed insured persons cover the costs of health insurance for currently unemployed insured persons. It means solidarity between generations - the cost of health care for children, students and pensioners is fully covered by those currently employed. It also means solidarity between employed persons whose financial contribution to the health insurance depends on their income, not on their personal health risks, and who receive health insurance benefits on an equal basis, regardless of the size of their financial contribution.

Equal treatment – we guarantee equal rights and equal treatment for all insured persons and partners in accordance with applicable legislation.

The Estonian health insurance system complies with internationally approved principles:

- as much of the population as possible must be covered with health insurance;
- the scope of health insurance must be as wide as possible, i.e. based on the principle of solidarity, health insurance must offer a package of health services that is as comprehensive, coherent and modern as possible;
- health insurance must be as far-reaching as possible, i.e. the out-of-pocket expenses of a person in the total cost of treatment must be optimal and should not lead to poverty risk.

The vision of the Health Insurance Fund is to provide people with a sense of security concerning their health problems, so that the number of our healthily lived years would increase.

The mission of the Health Insurance Fund is to ensure the availability of health insurance benefits to insured persons.

In carrying out its mission, EHIF shall act as follows:

- health insurance benefits planning is transparent and for long-term;
- the relations between healthcare providers and EHIF are regulated by appropriate contracts;
- the pricing and financing of health services is clear, transparent, flexible and financially sustainable;
- EHIF is one of the best public sector organizations in Estonia in terms of efficiency and quality of service management.

The core values of the Health Insurance Fund

Aspiration – we are aiming at continuous and sustainable development, relying on competent, loyal and result-oriented employees.

Consideration – we are reliable, open and friendly. Our decision-making is transparent and considerate of others.

Cooperation – we create an atmosphere of trust within our organization and in relations with our partners and clients.

Organisation and management

The supreme body of the Estonian Health Insurance Fund is the Supervisory Board, the members of which represent the interests of employers, insured persons and the state. The Chairman of the Supervisory Board is Minister of Health and Labour. The daily work of EHIF is managed by a four-member board. As at 31.12.2018, EHIF had 185 employees.

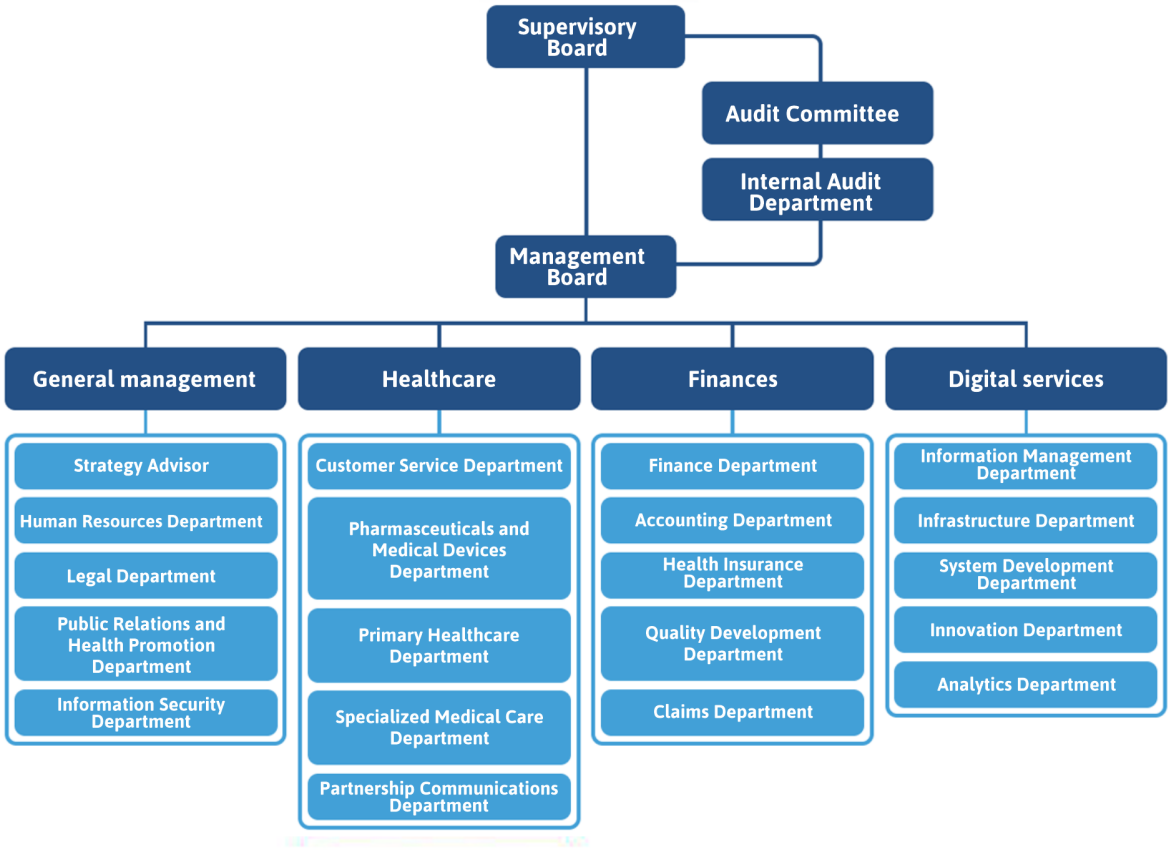


Figure 1. The structure of EHIF

Table 1. Key indicators 2014–2018

	2014	2015	2016	2017	2018	Change compared to 2017
Number of insured persons at the end of the period	1 232 819	1 237 336	1 237 277	1 240 927	1 251 617	1%
Revenue (thousand euros)	900 209	964 353	1 028 962	1 133 971	1 318 541	16%
Health insurance expenditure (thousand euros)	908 213	973 609	1 049 270	1 117 192	1 287 860	15%
Operating expenses of EHIF (thousand euros)	8 502	9 284	9 288	9 975	11 514	15%
Healthcare service indicators						
Primary health care						
Primary healthcare funding (thousand euros)	82 248	92 460	103 199	113 663	127 155	12%
Number of persons who used primary healthcare services	992 848	1 011 305	1 019 429	1 027 837	1 035 493	1%
Specialized medical care						
Specialized medical care funding (thousand euros)	529 869	562 427	590 917	629 133	688 990	10%
Average cost per case in specialized medical care (euros)	158	167	175	190	210	11%
outpatient care	63	68	73	77	84	9%
day care	481	503	549	572	600	5%
inpatient care	1 289	1 376	1 455	1 750	1 944	11%
Number of persons who used specialized medical care services	800 326	799 305	798 582	784 175	779 027	-1%
outpatient care	780 302	779 593	779 316	767 185	761 799	-1%
day care	54 870	56 901	57 705	58 000	60 086	4%
inpatient care	153 032	150 154	145 568	131 749	131 978	0%
Number of outpatient appointments	3 888 729	4 055 968	4 093 624	3 996 857	3 959 231	-1%
Average length of inpatient stay (days)	5,9	5,9	5,9	6,2	6,2	0%
Nursing care						
Nursing care funding (thousand euros)	24 537	28 450	30 103	31 850	35 636	12%
Number of persons who used nursing care services	19 058	18 259	18 078	18 387	19 045	4%
Dental care						
Dental care funding (thousand euros)	20 650	22 599	23 305	29 157	48 779	67%
Number of persons who used dental care services	168 896	170 566	169 287	168 092	167 367	0%
Number of people who used non-financial adult dental care benefit*	0	0	0	78 579	223 619	185%
Number of people who used non-financial benefit for dentures**	38 414	38 799	39 201	43 323	38 653	-11%
Pharmaceutical benefit						
Reimbursed pharmaceuticals (thousand euros)	109 753	112 801	131 246	125 730	136 178	8%
Number of persons who used reimbursed pharmaceuticals	850 206	851 627	847 628	846 554	861 925	2%
Number of reimbursed prescriptions	7 883 659	8 046 298	8 146 879	8 224 178	8 636 819	5%
Average cost of a reimbursed prescription for EHIF (euros)	13,9	14,0	16,1	15,3	15,8	3%

Average cost of a reimbursed prescription for patient (euros)	6,5	6,7	6,7	6,8	6,3	-8%
Benefits for medical devices						
Medical devices funding (thousand euros)	8 770	9 076	9 533	9 481	9 694	2%
Number of persons who used medical devices	62 275	67 848	70 457	71 297	75 157	5%
Benefits for temporary work incapacity						
Payment of benefits for incapacity to work (thousand euros)	103 902	116 977	130 269	141 297	157 570	12%
Number of persons who used incapacity benefits	160 857	168 816	174 187	179 012	186 223	4%
Number of days of incapacity to work compensated for by the Health Insurance Fund	5 362 002	5 670 910	5 905 352	6 113 148	6 458 021	6%
Cost of the benefit for one day of incapacity to work (euros)	19,4	20,6	22,1	23,1	24,4	6%
Treatment abroad						
Funding of the treatment of Estonian insured persons abroad (thousand euros)	8 764	8 519	9 105	14 276	13 194	-8%
Referrals of Estonian insured persons for planned treatment abroad	272	283	258	284	165	-42%

* The number of people who used non-financial adult dental care benefit in 2017 has been corrected compared to the 2017 report.

** The number of people who used non-financial benefit for dentures in 2014–2017 is the number of people who used the financial benefit for dentures that was allocated on the same grounds.

Strategic goals and their achievement in 2018

Weight	*Indicator*	*Goal*	*Execution*	*Achievement %*
1. Ensuring the accessibility of health insurance benefits by purposeful use of health insurance funds				
10	WAITING LISTS FOR OUTPATIENT SPECIALIZED MEDICAL CARE (%) Based on reports, the actual waiting lists for initial scheduled appointments have stayed within 42 days (during up to six weeks).	58	69	10
5	CHILDREN'S COVERAGE WITH PREVENTION AND/OR TREATMENT OF DENTAL DISEASES (%) Percentage of children according to birth year who have participated in prophylactic check-ups and dental care procedures (across all types of treatment). The target group of each calendar year consist of children aged 6,7,9 and 12 years.	73	68.7	4.71
10	PERFORMANCE OF TREATMENT FUNDING CONTRACTS (%) Percentage of EHIF contractual partners whose financial appendices have been completed to the extent of 93–100% of the contractual sum as a result of proper contract execution.	90	97	10
10	PLANNING AND IMPLEMENTATION OF THE HEALTH INSURANCE BUDGET (%) The health insurance budget is planned to be implemented in line with good accounting practices and stays within the range of +/-7%.	6	1.18	10
2. Supporting the high quality of healthcare services provided in the healthcare system				
10	PERCENTAGE OF FAMILY PHYSICIANS' PRACTICE LISTS THAT HAVE JOINED THE PAY-FOR-PERFORMANCE SYSTEM AND ACHIEVED A QUALIFYING RESULT (%) At least 60% of the practice lists have met the requirements of the performance bonus to the extent of at least 80% (512 points).	61	68.8	10
5	PREPARATION OF CLINICAL PRACTICE AND PATIENT GUIDELINES (amount) Five new clinical practice and/or patient guidelines have been published on the website www.ravijuhend.ee	5	5	5
10	MONITORING CHRONICALLY ILL PATIENTS (%) Engaging insured persons in activities leading to improved monitoring of the health condition of people with chronic illnesses. Coverage of hypertension patients at all risk levels in the family physicians' pay-for-performance system based on the results calculated for the previous calendar year.	76	66	8.7
3. Shaping people's health awareness and guiding their health behaviour				
10	CANCER PREVENTION COVERAGE (%) The coverage is measured based on the health insurance database as a % of the women (of all women belonging to the target group by age) who have been screened for cervical cancer and breast cancer in the last three years.	breast cancer 72 cervical cancer 73	breast cancer 68.9 cervical cancer 74	9.8
15	SATISFACTION WITH THE HEALTHCARE SYSTEM (%) Satisfaction with the healthcare system measured through the surveys among insured persons	67	58	12.9
4. Developing an organization that offers high-quality health insurance				
5	LEVEL OF CUSTOMER SERVICE (index) The level of customer service is evaluated by using mystery shopping method in the framework of the Estonian Service Index (ESI) survey.	3.7	3.8	5
5	QUALITY MANAGEMENT (yes/no) According to the auditor's assessment, the quality management system of EHIF meets the requirements of ISO 9001:2015.	yes	yes	5
5	RELIABILITY OF INFORMATION SYSTEMS Compliance with ISKE criteria in terms of the availability of critical services (insurance verification, digital prescription centre).	K3	Availability 99.8	4.9
Total of scorecard				**96.0**

Budget Execution Report

Eesti Haigekassa

Table 2. Budget execution in thousands of euros

	2017 actual	*2018 budget*	*2018 actual*	*Budget execution*	*Change compared to 2017*
REVENUE OF EHIF					
Health insurance component of social tax	1 111 199	1 179 281	1 218 829	103%	10%
Operational support	16 000	95 909	92 541	96%	478%
Revenue from insurance contracts	1 487	1 500	1 518	101%	2%
Recoveries and revenues from health insurance benefits	1 287	1 300	1 571	121%	22%
Financial income	42	50	38	76%	-10%
Other income	3 956	3 000	4 044	135%	2%
TOTAL BUDGET REVENUE	**1 133 971**	**1 281 040**	**1 318 541**	**103%**	**16%**
HEALTH CARE EXPENDITURE					
Health care services costs	**813 135**	**949 898**	**956 919**	**101%**	**18%**
Disease prevention	9 332	12 483	11 339	91%	22%
Primary healthcare	113 663	126 956	127 155	100%	12%
Specialized medical care	629 133	679 631	688 990	101%	10%
Nursing care	31 850	36 676	35 636	97%	12%
Dental care	29 157	51 913	48 779	94%	67%
Ambulance	0	42 239	45 020	107%	-
Health promotion costs	**1 515**	**1 600**	**1 791**	**112%**	**18%**
Costs of pharmaceuticals	**126 116**	**138 677**	**146 479**	**106%**	**16%**
Costs of reimbursable pharmaceuticals	125 730	130 428	136 178	104%	8%
Additional benefit for pharmaceuticals	386	8 249	10 301	125%	2569%
Costs of benefits for temporary incapacity to work	**141 297**	**152 338**	**157 570**	**103%**	**12%**
Costs of benefits for medical devices	**9 481**	**10 353**	**9 694**	**94%**	**2%**
Treatment of Estonian insured persons abroad	**14 276**	**11 661**	**13 194**	**113%**	**-8%**
Costs of benefits for dental care and dentures	**9 274**	**0**	**0**	-	-
Other expenses	**2 098**	**2 262**	**2 213**	**98%**	**5%**
Total health care expenses	**1 117 192**	**1 266 789**	**1 287 860**	**102%**	**15%**
OPERATING EXPENSES OF EHIF					
Labour costs	6 018	7 030	6 735	96%	12%
Administrative costs	1 781	1 921	1 644	86%	-8%
IT costs	1 101	1 340	2 068	154%	88%
Development costs	133	331	187	56%	41%
Other operating expenses	942	909	880	97%	-7%
Total operating expenses of EHIF	**9 975**	**11 531**	**11 514**	**100%**	**15%**
TOTAL BUDGET EXPENSES	**1 127 167**	**1 278 320**	**1 299 374**	**102%**	**15%**
TOTAL NET GAIN/LOSS	**6 804**	**2 720**	**19 167**	-	-
RESERVES					
Change in reserve capital	6 160	2 058	2 058	-	-
Change in risk reserve	2 037	3 210	3 210	-	-
Change in retained earnings	-1 393	-2 548	13 899	-	-
Total change in reserves	**6 804**	**2 720**	**19 167**	-	-

The number of insured persons

Table 3. The number of insured persons

	31.12.2016	*31.12.2017*	*31.12.2018*	*Change compared to 2017 (number of persons)*	*Change compared to 2017*
Employed insured persons	604 781	618 289	632 428	14 139	2%
Persons considered equal to insured persons	586 512	578 221	575 621	-2 600	0%
Other insured persons	45 984	44 417	43 568	-849	-2%
State-insured persons	43 073	41 234	39 895	-1 339	-3%
Persons insured under international contracts	2 356	2 612	3 146	534	20%
Persons considered equal to the insured persons under a voluntary contract	555	571	527	-44	-8%
Total	**1 237 277**	**1 240 927**	**1 251 617**	**10 690**	**1%**

Every permanent resident of Estonia, as well as living in Estonia by virtue of a temporary residence permit or by the right of permanent residence, is entitled to health insurance, provided that social tax has been paid for them. In addition, the state provides health insurance for children under the age of 19, pupils and students, conscripts, pregnant women, unemployed people, people on parental leave, dependent spouses, retired people, caregivers of disabled persons and voluntary insurance contractors. In health insurance statistics, insured persons are divided into five groups, based on the grounds of insurance:

- employed insured persons - persons working under an employment contract, self-employed persons (including spouses involved in their activities), members of the management or control body, persons who have signed a contract under the law of obligations, persons who pay taxes on business income, persons with partial or no work ability;
- persons considered equal to insured persons – old-age pensioners, children, students, pregnant women, dependent spouses, nuns or monks registered in a religious association;
- state-insured persons - persons registered in the Unemployment Insurance Fund, persons on parental leave, parents of dependent children, caregivers of disabled persons, conscripts, recipients of doctoral studies allowances, recipients of support for creative activity, recipients of rescue service support, non-working retirement age persons, beneficiaries of international protection;
- persons insured under international contracts – old-age pensioners from another European Union (EU) Member State residing in Estonia, workers posted in Estonia from another EU Member State, Estonian pensioners leaving to reside in another EU Member State, military pensioners of the Russian Federation;
- persons considered equal to insured persons under a voluntary contract - people insured under a contract for the equalization with insured persons pursuant to the Health Insurance Act.

In statistics, the category of employed insured persons is considered. This means that if a person has several effective insurance covers, these data are not duplicated in health insurance statistics. The data of a person insured both as a pensioner and an employed person are therefore only recognised in the category of employed insured persons.

Revenues

Table 4. Revenue budget execution in thousands of euros

	2017 actual	*2018 budget*	*2018 actual*	*Budget execution*
Health insurance component of social tax	1 111 199	1 179 281	1 218 829	103%
Operational support	16 000	95 909	92 541	96%
Revenue from insurance contracts	1 487	1 500	1 518	101%
Recoveries and revenues from health insurance benefits	1 287	1 300	1 571	121%
Financial income	42	50	38	76%
Other income	3 956	3 000	4 044	135%
Total	**1 133 971**	**1 281 040**	**1 318 541**	**103%**

Health insurance component of social tax

The EHIF revenue budget is most affected by the income from the health insurance component of social tax. In 2018, the health insurance component of social tax was 1.2 billion euros, which exceeded the budget planned for 2018 by 39.5 million euros (budget execution by 103.4%).

In planning for the health insurance component of social tax for 2018, EHIF used a forecast prepared by the Ministry of Finance, which predicted an 8% increase in the health insurance income of social tax in 2018 compared to the 2017 budget.

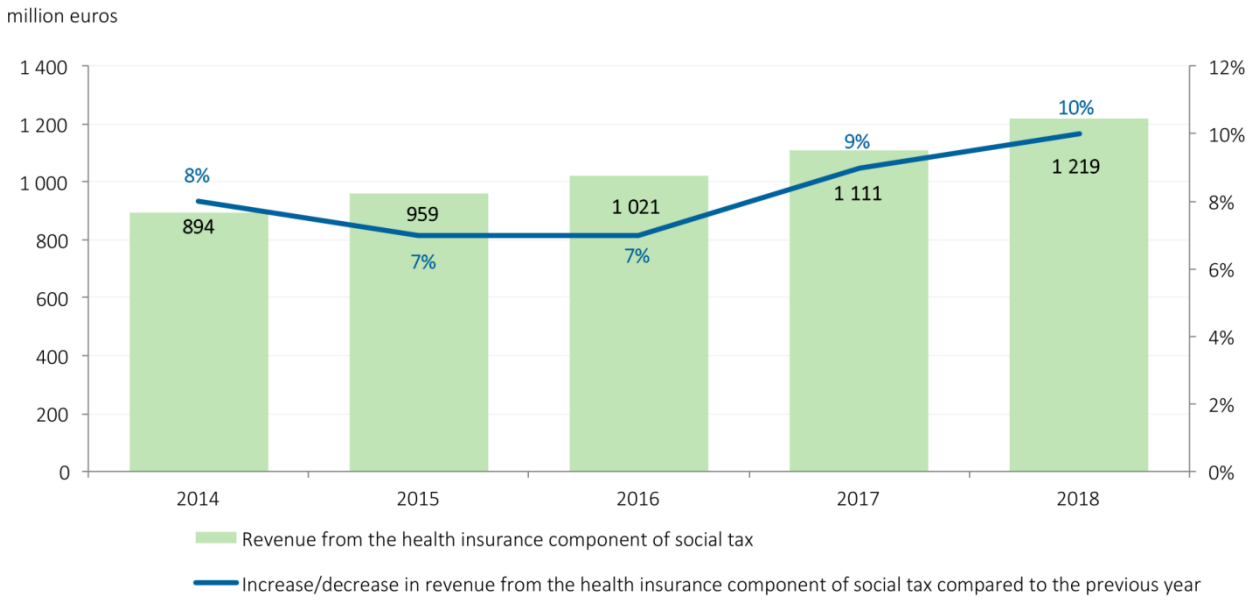


Figure 2. Revenue of the health insurance component of social tax and the increase and decrease of the collection in 2014–2018

Operational support

From 2018, the EHIF budget is earmarked for additional allocation from the state budget, which is calculated from the old age pensions of non-working old-age pensioners. In 2018, the income rate is 7% of the average old-age pension. The purpose of the operating support is to extend the health insurance revenue base in order to reduce its dependence on employment-based funding and thereby ensure the long-term sustainability of the health insurance system.

In addition, the operating support budget includes 4.6 million euros for funding of emergency medical care for uninsured people.

Revenue from insurance contracts

Revenue from insurance contracts means the income received from the contract under which a person is considered equal to insured persons and from the insurance of military pensioners of the Russian Federation living in Estonia.

Pursuant to §22 of the Health Insurance Act, an uninsured person can insure themselves by signing a contract with the Health Insurance Fund and paying monthly insurance premiums. The insurance premium is calculated based on the last published average gross monthly salary in Estonia of the previous calendar year, multiplied by 0.13.

The amount of the insurance premium changes each year after the Statistics Estonia publishes the average gross salary of the previous calendar year in Estonia. The amount of the insurance premium for one calendar month was 149 euros until 31 March and 158.70 euros from 1 April in 2018. As of December 31, 2018, there were 527 people insured based on the contract under which a person is considered equal to insured persons, and in 2018 the income was 1 million euro.

In 2018, the income from the insurance of non-working military pensioners of the Russian Federation amounted to 481 thousand euros. As of 31 December, there were 306 insured persons. Until February 28, 2018, the Russian Federation paid 118.08 euros per month for each military pensioner and from 1 March, 125.67 euros per month.

The monthly cost of a health insurance premium is based on the average cost of treatment in 2017 in the age group of 70 to 79 years.

Recoveries and revenues from health insurance benefits

Claims submitted to insurance companies for health insurance indemnities paid as a result of traffic damage, as well as claims submitted to health care service providers, pharmacists and insured persons are recognized as recoveries.

Revenues from recoveries have increased by 22% compared to 2017. 52% of the recoveries in 2018 consist of claims for traffic damages submitted to insurance companies, 27% are claims submitted to health care service and 21% consist of amounts recorded as revenues calculated on the basis of private persons' claims.

Financial income

Based on the deposit contract signed with the Ministry of Finance, EHIF earns interest on the balance of funds held on the state's group account at the rate which equals the profitability of the state cash reserve. The profitability of a period depends on the events that influenced the price fluctuations on the bond market and on short-term deposit interest rates.

During the financial year, EHIF earned a total interest of 38 thousand euros on the balance of funds held in the state group account.

Other income

Other income includes the claims submitted by EHIF to the competent authorities of other Member States for health care services provided in Estonia to insured persons of EU Member States, income from processing of medical treatment invoices, and the exchange rate gains related to operating expenses and health insurance costs.

In 2018, EHIF received income from grants in the amount of 190 thousand euros - 150 thousand euros for the decision support project, 21 thousand euros for the Moldovan health insurance system development project and 19 thousand euros for financing a cross-border project.

In 2018, we submitted to the competent authorities of other Member States claims for the medical care services provided in Estonia to the insured persons of other EU Member States in the amount of 3.8 million euros.

Expenses

The Health Insurance Fund expenditure budget is divided into healthcare costs and operational costs.

In planning of the health care budget for the year 2018, we were guided by the following principles:

- provide insured persons an extended range of evidence-based health care services, pharmaceuticals and medical devices;
- finance 94% of the demand for health care services as assessed by EHIF;
- changed wage component in service prices as of April 1, 2018.

Overrun of the 2018 health care budget is due to:

- the execution of specialized medical care budget;
- the execution of budget for pharmaceuticals;
- the increased use of benefits for temporary incapacity to work;
- the financing of ambulance service.

Execution of specialized medical care budget

For specialised medical care budget of 2018, we had planned 3.1 million treatment cases in the amount of 680 million euros, and the budget was executed by 104% for the cases and by 101% for the amount.

The overrun of the budget has been due to the work performed by the medical institutions beyond the scope of the contract, which they have submitted to EHIF for payment. In 2018, the medical institutions submitted invoices for work exceeding the scope of the contract in the amount of 15.4 million euros, including 8 million euros in the first half of the year and 7.4 million euros in the second half of the year.

Execution of budget for pharmaceuticals

The execution of budget for pharmaceuticals has been affected by the increased use of reimbursable pharmaceuticals by insured persons as well as by the increased use of the budget for supplementary pharmaceutical benefit.

The overrun of the budget for reimbursable pharmaceuticals is due to the increased number of prescriptions and higher average cost of a prescription for EFIF. The number of prescriptions has increased primarily due to a new system of supplementary pharmaceutical benefit, which makes the pharmaceuticals that are reimbursed at the 50% discount rate more affordable for patients. The average cost of a prescription has increased due to new expensive pharmaceuticals added to the list of discount pharmaceuticals, as well as the increased use of new anticoagulants.

The execution of the supplementary pharmaceutical benefit budget has been affected by changes in the principles of compensation - from the beginning of 2018, the supplementary benefit for pharmaceuticals is automatic, an insured person will receive supplementary benefit along with the usual pharmaceutical benefit, at the time of purchase of the product at the pharmacy,

Execution of budget for temporary incapacity to work benefits

The budget for incapacity to work benefit has been exceeded for the payment of both sickness and care benefits and maternity benefits. This is due to increased number of certificates and days reimbursed as well as the increased amount of an average daily benefit.

Execution of ambulance budget

In planning for the 2018 ambulance budget, we proceeded from the explanatory memorandum to the amendments to the legislation, which changed the financing model of health care system. The overrun of the ambulance budget is due to a change in the wage component, for which the budget had fewer resources than actually needed.

Average expenses per insured person

The calculation of average expenses is based on the costs of healthcare services, reimbursed pharmaceuticals and medical devices or benefits compensated by EHIF to insured persons in Estonia. Average expenses per insured person have increased from year to year. Compared to the previous year, the average monthly expenses per insured person increased by 14% in 2018.

The average expenses based on age have grown most in the age group of 80–89.

Table 5. Average expenses per insured person in 2018, in euros

Age	Number of insured persons	Prevention	Primary healthcare	Specialized medical care	Nursing care	Dental care	Pharmaceuticals, including supplementary pharmaceutical benefit	Benefit for incapacity to work	Medical devices	Total
0–9	145 055	13	109	276	0	151	24	0	0	**560**
10–19	134 460	45	78	220	0	128	23	4	0	**453**
20–29	130 120	7	82	346	0	8	53	243	1	**733**
30–39	171 898	1	83	394	1	8	70	335	1	**893**
40–49	164 678	1	88	389	3	10	84	156	3	**734**
50–59	159 302	5	113	573	8	13	136	142	7	**992**
60–69	160 274	6	117	806	24	17	214	92	14	**1 285**
70–79	110 179	0	136	1 122	82	8	300	17	28	**1 692**
80–89	64 383	0	131	1 112	230	3	282	1	37	**1 796**
90–99	11 116	0	119	857	503	3	191	0	30	**1 703**
100–109	152	0	106	594	552	0	94	0	29	**1 376**
Total	**1 251 617**	**9**	**102**	**537**	**28**	**39**	**119**	**124**	**8**	**956**

Health care expenditure

1. Health care services

The health care services budget is a budget for services that are reimbursed to hospitals under contracts signed between EHIF and medical institutions. The health care services budget includes disease prevention, primary healthcare, specialized medical care, nursing, children and adult dental care benefits. These are so-called non-financial health insurance benefits - EHIF pays for them directly to service providers.

One of the major goals of the Estonian solidary health insurance is to ensure equal access to medical care and other health insurance benefits for all insured persons. To achieve this goal, a methodical assessment of the need for medical care, i.e. the demand for health care services, is carried out every year prior to planning for treatment financing contracts. We estimate the demand in all specialties and types of services at county level, according to the place of residence of an insured person. In the evaluation, we assess the projected need for health care services for the next year by age groups with 10-year-interval in the county. As the budget usually allows for less than actually needed, we adjust the estimated demand to EHIF's budget options, based on which we will determine the volume of health care services to be funded. When planning for demand to be financed in 2018, it was agreed that the estimated demand for health care services by insured people would be funded up to 94%.

Demand for funded health care services is a very important input in the planning for contract offers to medical institutions. Based on this, we draw up contracts and consider treatment needs of insured persons by specialty as well as their admittance for treatment in different medical institutions.

We design our contracts so as to ensure even availability of high-quality health care services across Estonia. When planning for contracts, we take into account the estimated and funded demand in Estonia and in the counties, the performance of the first half of the year, the number of treatment cases of the second half of the year, and the average cost of treatment cases, which makes it possible to consider the actual practice.

Table 6. Execution of budget for healthcare services, in thousands of euros

	2017 actual	*2018 budget*	*2018 actual*	*Budget execution*
Disease prevention	9 332	12 483	11 339	91%
Primary healthcare	113 663	126 956	127 155	100%
Specialized medical care	629 133	679 631	688 990	101%
Nursing care	31 850	36 676	35 636	97%
Dental care	29 157	51 913	48 779	94%
Ambulance	0	42 239	45 020	107%
Total	**813 135**	**949 898**	**956 919**	**101%**

The use of health care services in 2018 was affected by the following factors, as compared to the previous year:

- increased salary component of service price;
- modernization of health care services of specialized medical care - adding new services and pharmaceuticals, increase in overhead costs and modernization of the service structure;
- ensuring stable availability of services and pharmaceuticals included in the list in previous years;
- increased number of high-cost treatment cases;
- work submitted for payment by the health care service providers to EHIF, which exceeds the scope of contract volume.

1.1. Disease prevention

The prevention activities funded by EHIF are directly related to the national health plan and the strategic objectives of EHIF. Only a small portion of prevention activities funded by the health insurance are financed from the disease prevention budget, many of the activities are included in various health services. In addition, we also compensated to our insured persons, to a large extent, for pharmaceuticals and medical devices dispensed for preventative purposes

We support prevention activities that enhance early detection of diseases (children's health checks, monitoring of pregnant women and newborn infants, cancer screening), as well as activities aimed at reducing or preventing the onsets of chronic diseases and consequential complications. Rapidly aging population, with an increase in chronic diseases, causes on the one hand, increased demand for healthcare services, but on the other hand, changes the demand. The development and effective implementation of activities for the elderly and chronic patients can help postpone or prevent early incapacity to work, disability and death.

Table 7. Execution of budget for disease prevention, in thousands of euros, and the number of treatment cases

	2017 actual		*2018 budget*		*2018 actual*		*Budget execution*	
	Amount	*Number of treatment cases*	*Amount*	*Number of treatment cases*	*Amount*	*Number of treatment cases*	*Amount*	*Number of treatment cases*
School healthcare*	5 312	-	7 018	-	6 524	-	93%	-
Enhancement of youth reproductive health	1 117	27 721	1 577	37 953	1 298	28 844	82%	76%
Medical check-up of young athletes	885	9 849	1 091	11 400	926	9 737	85%	85%
Early detection of breast cancer	1 003	35 840	1 469	55 759	1 241	44 131	84%	79%
Early detection of cervical cancer	369	17 852	630	26 674	406	17 449	64%	65%
Early detection of colorectal cancer	418	26 294	542	27 055	699	41 865	129%	155%
Analyses to improve disease prevention and development of healthcare system	150	0	156	0	150	0	96%	-
Other prevention	78	0	0	0	95	0	-	-
Total	**9 332**	**117 556**	**12 483**	**158 841**	**11 339**	**142 026**	**91%**	**89%**

* The number of treatment cases does not include the volume of school healthcare, as school healthcare is financed based on the number of students.

The main goal of the school health care service is to systematically monitor the health and development of school-age children, to inform parents in case of possible problems, and refer the child to relevant specialist for further examination and help. The school healthcare service includes students' preventive medical check-up together with nursing anamnesis collection and evaluation of health status. In 2018, a work group was established whose task is to update the code of conduct of school nurses. The work group will continue its activity also in 2019.

In addition, as of 2018, we are funding school healthcare service for 12 months instead of previous 11 months. We also renewed the school healthcare financing model, and the new service price will be effective from1 January 2019. We have designed principles for monitoring the availability of services through financing contracts.

Counselling on youth reproductive health and prevention of sexually transmitted diseases is, as of 1 July 2018, targeted at young people of both sexes up to the age 26 years. In cooperation with the Estonian Sexual Health Association, the Estonian Gynaecologists Society and the Estonian Midwives Association, we described the content of the youth reproductive health service, the competencies of service providers, the scope of the service and the infrastructure. The work group's recommendations have been taken into account in determining the selection criteria of service providers for the next selection period. Next year we will assess the implementation of renewed service and analyse the online counselling of young people - a service taken over from the National Institute for Health Development.

Medical check-up of young athletes is aimed at young people up to the age of 19, who regularly engage in sports for at least three times a week in addition to the physical education classes at school. The medical check-up of young athletes is based on the guidelines for sports medicine medical examinations updated by the Estonian Sports Medicine

Federation and EHIF in 2017. In 2019, we will continue our co-operation with the Ministry of Culture and the Olympic Committee in order to establish the capacity to exchange information between the Sports Register and the Health Insurance Fund.

The purpose of breast cancer screening is to increase the proportion of breast cancer detection in the early stages and to reduce breast cancer mortality.

In 2018, on the initiative of EHIF, the guidelines for breast cancer screening was completed. The document describes the screening team and network, the method for inviting women to the screening, the target group of screening and the grounds for its formation, main studies and the scope of additional studies within a prevention treatment case. The document also includes information about data acquisition and necessary developments that form a prerequisite for structured data transfer. The guideline is available on the EHIF website and it also forms a part of Annex 8 to the treatment financing contract for the selection period of new service providers.

In 2018, the women born in the years 1949, 1950, 1956, 1958, 1960, 1962, 1964, 1966 and 1968 were invited for breast cancer screening. Following the recommendations of the European Commission and the statistical burden of disease, from this year onwards, we have expanded the target group and include women aged 50–69 years (previous upper age limit was 62) in the breast cancer screening. We are extending the target group in stages: this year we will include women aged 50–62 and also 68–69-year-old women who have not had a mammography study in the previous year. By 2022, we will have achieved a situation where the target group of breast cancer screening consists of women aged 50–69.

The goal of cervical cancer screening is to detect and treat pre-cancerous conditions in a timely manner to reduce the incidence of cervical cancer. The further objective of the cervical cancer screening project is to reduce the mortality and incidence of cervical cancer and to increase the survival over a 5-year period.

In 2018, we started, in cooperation with professional associations, reviewing the guidelines for cervical cancer prevention and treatment. The purpose of guideline reviewing is to agree on organizational issues for cervical cancer prevention activities. These include the organizing team and network of screening, the method for inviting women to screening, the study methodology, the target group, quality control issues, incl. compliance with quality requirements, and structured transfer of data to the Cancer Screening Register and Health and Welfare Information System Centre (TEHIK) standard set. The work will continue next year.

In 2018, we invited for cervical cancer screening women born in the years 1963, 1968, 1973, 1978, 1983 and 1988, who had health insurance.

EHIF's communication activities are aimed at increasing the overall coverage of cervical cancer and breast cancer screening. We have increased outreach activities in regions where the participation rate has been lower.

The screening for early detection of colorectal cancer was launched on July 1, 2016. The screening consists of a fecal occult blood test and, if necessary, an additional colonoscopy. Colorectal cancer screening is coordinated by family physicians whose responsibility is to advise the target group and make fecal occult blood test available. Insured persons aged 60–69 are invited to the screening in every two years.

In 2018, we invited for colorectal cancer screening insured women and men born in the years 1954, 1956 and 1958.

Further activities include engaging of new laboratories for the analysis of fecal occult blood tests, as well as analysing of screening implementation, as well as planning and implementation of corrective actions.

Analyses to improve disease prevention and development of healthcare system– in 2018, we continued our cooperation with the World Bank and agreed on the objectives and activities of the third phase of our cooperation project. The goal of the third phase of the cooperation project is to evaluate the integration of treatment from the point of view of health care system, focusing primarily on the role of primary healthcare and specialized medical care. The focus is on chronic disease prevention, improving of health care services availability and development of quality and remuneration systems. The World Bank project team works closely with the Estonian Society of Family Physicians, the Estonian Hospitals Association and other partners. The work has already commenced, and we are expecting first results by the beginning of 2020.

Under other prevention, we have recognized the development costs of the interactions database. The interaction database is an application which helps physicians assess the interactions of pharmaceuticals used by patients. The evaluation of pharmaceuticals interaction aims at improving the quality of care and increasing the safety of pharmaceuticals.

1.2. Primary healthcare

A timely primary contact with the healthcare system is a precondition for achieving a high-quality treatment outcome. Therefore, we consider it important to strengthen and expand the role of family physicians as a treatment coordinator and health advisor. Primary healthcare must contribute to the development of patient-centred health care, which in turn means providing holistic and integrated care in cooperation with different levels of healthcare system, which includes close cooperation with social sector.

We continued working on the development of primary care centre service. In cooperation with the Estonian Family Physicians Association, we developed the requirements of a primary care centre branch, which will receive funding starting from January 2019. The development of a primary care centre model will be critical also in 2019.

By starting up new primary care centres, we support holistic approach to patient care, and expand the selection of primary care services offered by a family physician. In addition to the services of family physicians and family nurses, primary care centres will provide also physiotherapy, midwifery and home nursing services. Depending on the local needs, other medical specialists may also practice there. In this way, the primary care centre system helps ensure the development of primary healthcare, allows for cooperation and exchange of experiences and helps organize work more flexibly.

Table 8. Execution of budget for primary healthcare, in thousands of euros

	2017 actual	*2018 budget*	*2018 actual*	*Budget execution*
Basic allowance	13 111	15 294	14 608	96%
Distance allowance	661	683	645	94%
Second family nurse allowance	6 701	8 539	8 370	98%
Total capitation fee	62 435	68 813	69 096	100%
Capitation fee for insured persons of up to 3 years of age	3 538	3 883	4 004	103%
Capitation fee for insured persons 3–6 years of age	3 788	4 094	4 083	100%
Capitation fee for insured persons 7–49 years of age	25 279	27 701	27 919	101%
Capitation fee for insured persons 50–69 years of age	17 661	19 474	19 452	100%
Capitation fee for insured persons over 70 years of age	12 169	13 661	13 638	100%
Medical tests fund	23 978	25 446	26 721	105%
Operation fund	886	984	1 163	118%
Therapy fund	899	2 346	1 263	54%
Allowance for appointments during non-working hours	387	466	373	80%
Performance pay	3 958	3 636	4 206	116%
Family physician advisory line	647	749	710	95%
Total	**113 663**	**126 956**	**127 155**	**100%**

The funding for primary healthcare in the 2018 budget was planned for 127 million euros. The actual amount of funding was 127.2 million euros, which is 11.9% higher than in 2017.

Capitation fee has increased by 10.7% compared to 2017 due to increased number of insured persons (by 3999 persons) and changed reference price which increased in connection with wage agreement of medical staff.

In 2018, the basic allowance was planned for 793 family physician practices. The use of basic allowance grew by 11.4% as compared to 2017, which was due to changed reference price and increased number of primary care centres. 72 practice lists had joined the primary care centres by the end of 2018.

In 2018, there were in total 793 practice lists, which is 2 lists less than in 2017. In 2018, EHIF had contracts with 399 providers of primary care service. One practice list included an average of 1561 people, which is 9 people more compared to 2017. In the 4Q of 2018, there were 29 practice lists smaller than the normal size. We paid additional capitation fee for 11,229 people in the lists of fewer than 1200 people.

Table 9. The number of family physicians practice lists, the number of insured persons in the list and the number of appointments during non-working hours

	2017 actual	*2018 actual*	*Budget execution*
Number of practice lists			
Number of practice lists	795	793	0%
Number of lists receiving distance allowance	180	179	-1%
Number of lists receiving second family nurse allowance	405	449	11%
Average size of a list (the number of insured persons)	1 552	1 561	1%
Number of people			
Total number of persons for whom capitation fee has been paid	1 234 046	1 238 045	0%
Insured persons under 3 years of age	39 634	40 519	2%
Insured persons 3–6 years of age	57 500	56 095	-2%
Insured persons 7–49 years of age	640 290	642 258	0%
Insured persons 50–69 years of age	316 497	316 457	0%
Insured persons 70 years of age and older	180 125	182 716	1%
Number of appointments at non-working hours			
Family physician's appointments at non-working hours	8 525	7 786	-9%
Family nurse's appointments at non-working hours	8 526	7 718	-9%
Number of calls to advisory line			
Number of calls to advisory line	249 714	257 456	3%

In 2018, a total of 179 practice lists received distance allowance, which is 1 list less than in 2017. 127 of the lists were located 20-40 km from the nearest hospital and 52 were further than 40 km from the nearest hospital.

The number of practice lists receiving second family nurse allowance has increased year by year. In 2018, EHIF provided funding for second nurses in 449 lists, which is by 10,9% more than in 2017.

Medical tests fund (fee-for-service) is allocated to family physicians to carry out necessary lab tests and procedures in patients. In 2018, the funding of medical tests fund increased by 11.4% compared to the previous year. The increased volume of the fund is first of all due to increased reference price, since the medical tests fund is calculated as a share of capitation fee and the use of the fund. The use of medical tests fund is still rather varied among family physicians.

Family physician operation fund was implemented in 2014. The purpose of the operation fund is to support the activities within the competence of a family physician so that they remained in the primary level care. Therefore, the services provided by family physicians (minor surgical procedures and gynaecological services) were transferred from the research fund to the operation fund. The financing of the operation fund is service-based and therefore, the e-consultation service and autopsies ordered by family physicians are recognized under the operation fund expenses. The financing increased by 31.3% as compared to the previous year. In 2018, the services of the operation fund were provided by 437 primary care providers.

In 2018, 953 family physicians from 389 primary care centres used the e-consultation service. In 2018, the Health Information System received 21 763 digital referrals for e-consultation, from a total of 402 institutions and 886 healthcare professionals (881 of them with a physician code, 4 with a nurse code and 1 with a midwife code) for 19 803 patients. The service was provided for 321 000 euros. The biggest number of consultations were in the field of neurology (4095 cases), followed by allergy-immunology (2218 cases), gastroenterology (2189 cases) and orthopaedics (1862 cases). Compared to 2017, the number of e-consultations increased by 67%.

The aim of the therapy fund is to extend the role of a family physician as a coordinator of a patient's treatment process from the beginning to the end. The therapy fund allows the family physicians, if necessary, to order the services of a clinical psychologist, speech therapist and physiotherapist for their patients without them having to visit a medical

specialist, and to pay the providers for their services. In 2018, a total of 413 providers used the opportunity of therapy fund. The service was provided to 15 744 patients in the total amount of 1.3 million euros. The use of therapy fund increased by 40.5% compared to 2017. In 2018, physiotherapy service was the most widely used. The service was provided to 7966 people.

We are aiming at the development of a quality system of family physicians in order to be able to rely on the treatment outcome more than before. The quality system allows to pay family physicians bonuses based on their performance. In 2018, EHIF paid quality bonus to 546 family physician practices. The main purpose of the quality system is to create an incentive for family physicians to actively engage in prevention activities, to prevent the spread of infectious diseases and to monitor patients with chronic diseases more efficiently.

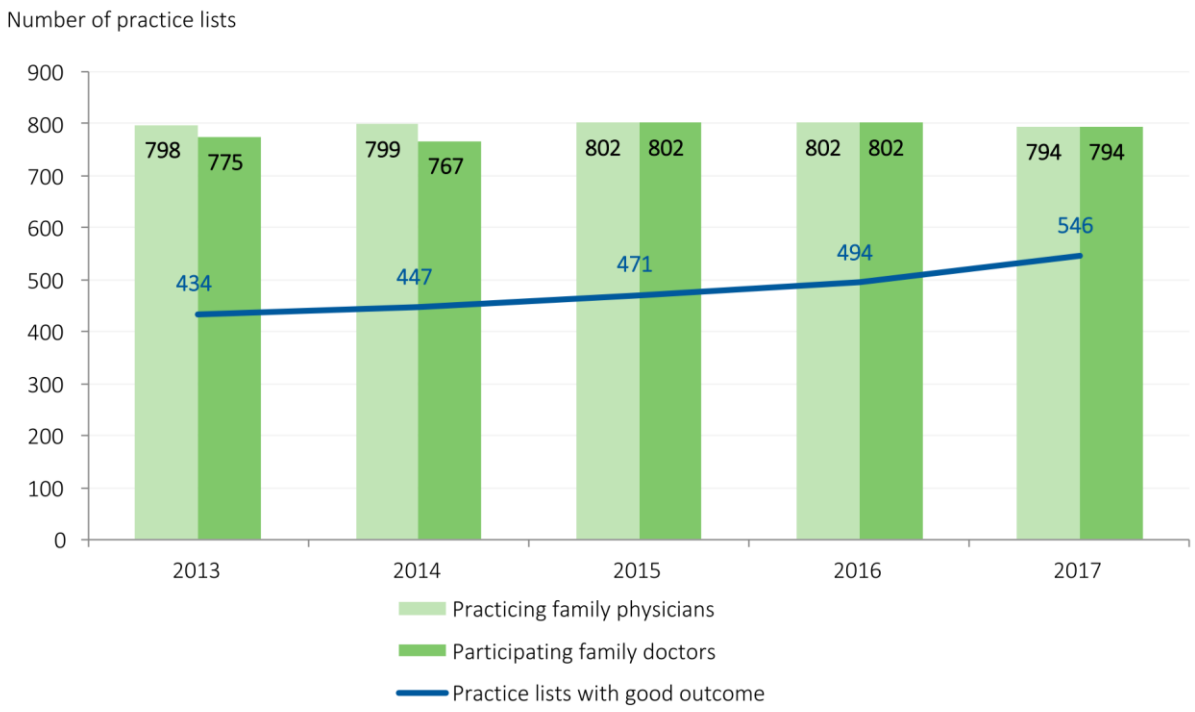


Figure 3. Share of practice lists participating in the quality bonus system that achieved good outcome in 2013–2017

Allowance for appointments during non-working hours

The population's satisfaction survey showed that people would like to have an opportunity to get to the family physician or family nurse appointment also in the evening. Therefore, from 2014 onwards, we have planned funds for appointments during non-working hours. The number of appointments during non-working hours has increased year by year, however, in 2018, the number of family physician and family nurse appointments during non/working hours decreased by 9.1% as compared to 2017.

Family physician and family nurse appointments

The total number of primary care visits has increased annually. In recent years, the number of family nurse appointments has increased, one of the reasons being the implementation of the second family nurse allowance since 2013. Similarly, the number of family physician appointments has increased as compared to previous years. The share of the insured persons visiting family physicians has been stayed at 83% in the last two years.

Table 10. Number of family physician and family nurse appointments in 2014–2018

	2014	2015	2016	2017	2018
Family physician appointments	4 472 141	4 558 967	4 622 354	4 710 294	4 961 469
Family nurse appointments	1 077 039	1 180 147	1 342 697	1 494 205	1 635 461
Prophylactic appointments	297 221	343 625	344 565	368 735	358 428
Total of appointments	**5 846 401**	**6 082 739**	**6 309 616**	**6 573 234**	**6 955 358**
Number of persons admitted	987 635	1 006 406	1 015 123	1 024 118	1 031 449
Number of people in the family physicians' practice lists	1 237 832	1 235 817	1 236 012	1 234 046	1 238 045
The share of people who visited a family physician of all the people in the family physicians' practice lists	80%	81%	82%	83%	83%

Family physician advisory line 1220

In 2018, the advisory line served over 257 000 calls, which is 3,1% more than in the previous year. The increase in the funding of the advisory line is due to increased wage component in the service reference price.

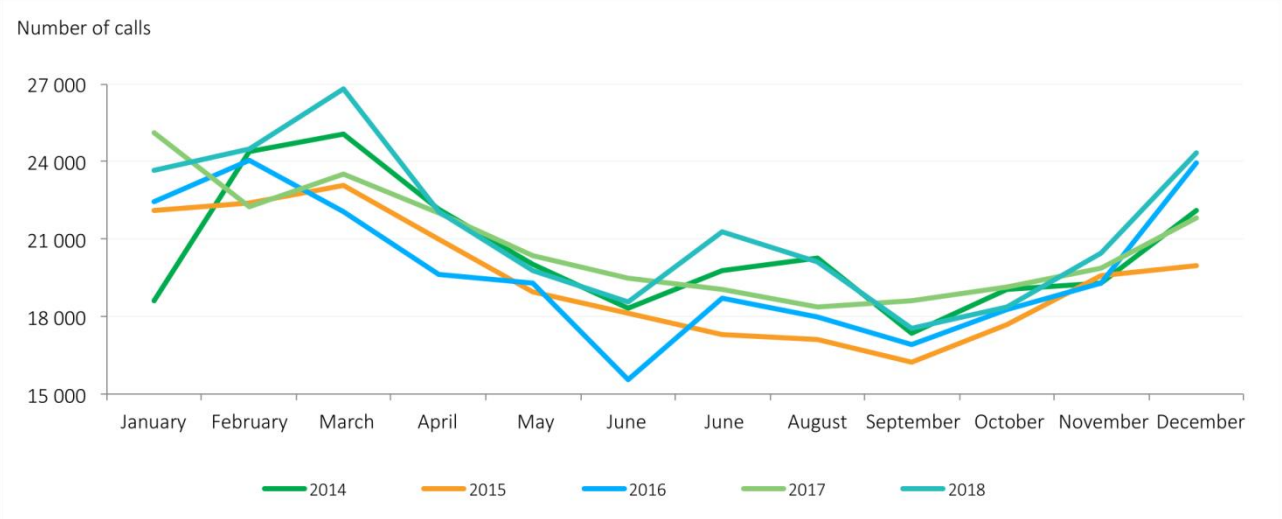


Figure 4. Number of calls to the family physician advisory line by months in 2014–2018

Availability of primary healthcare

EHIF controls regularly the availability of primary healthcare based on the family physician's job description. According to the job description, a patient with an acute condition has to be admitted on the day of referral, other patients within five working days.[1] We monitor the availability of primary medical care by visiting primary care centres.

In 2018, we controlled the availability of family physician service in 251 practice lists, which accounts for 31.7% of all the lists. We monitor the availability of primary care also in secondary establishments, in addition to the family physicians' principal establishment. During the year, we visited 263 establishments, including 239 principal establishments and 24 secondary establishments. At 73 establishments (i.e. 27.8% of the controlled establishments) we did not identify any non-compliances or deficiencies. There were 11 establishments where we found more than 10 deficiencies (4.2% of the controlled establishments).

EHIF controls the time of admission in accordance with the obligation provided for in § 5 (4) of the Regulation of the Minister of Social Affairs "Job description of a family physician and healthcare workers working with him" to ensure a patient an admission on the day of referral in case of acute health condition and in other cases within five working days.

Patients with acute health problems did not get to the physician's appointment on the day of referral in 2 establishments. Elsewhere, the admittance of patients was properly ensured. Patients with non-acute medical condition did not get an appointment within required time in 5 establishments. The requirement of admittance was not met altogether in 7 establishments.

The opening hours of the establishments met the requirements in most cases, in 7 establishments (2.7%) a proper admittance until 18.00 was not ensured on at least one day a week. Independent reception of the family nurse was not ensured at the proper level at 3 (1.1%) establishments.

As for the requirements of primary healthcare availability, deficiencies were found in less than one fifth of the establishments. Access to an appointment was not properly ensured at 5 establishments. Most shortcomings that we detected were related to the disclosure of information.

We discuss all identified deficiencies with the contractual partners to specify the reasons for the deviations and circumstances with regard to their removal. This is all to continuously ensure the availability of primary medical care.

1.3. Specialized medical care

Our priority is to support the introduction of modern diagnostic and therapeutic methods, both by including new services in the list of health care services, as well as by enabling wider deployment of services included in previous years. In cooperation with professional associations, we are regularly updating the structure of services, standard expenses, reference prices and implementing conditions of services in order to provide patients with modern and evidence-based treatment, and to ensure effective use of health insurance resources.

The most significant changes made to the list of health care services that took effect in 2018 are as follows:

- We added new services (including digital dermatoscopy, radiotherapy and pharmaceuticals for the treatment of renal cancer and breast cancer);
- The wage component in service prices increased as of April 1, 2018.
- We renewed the list, reference prices and implementation conditions of obstetrics, abortions services and those with similar content;
- We changed the reference prices of specialties that were updated in 2015 (anaesthesia and intensive care, speech therapy, and vascular surgery) and 2016 (bed day, facial and jaw surgery and gynaecology) in order to bring the reference prices into line with actual costs;
- We changed the reference prices of treatment services in the list of healthcare services as the unit prices of active substances described in the services changed;
- We changed the digital image archiving component due to the purchase cost of a new long-term archive. The image archiving component in the reference price of services covers the cost of all services, including the archiving of ECGs by family physicians;
- Changed air transport prices due to the change in the hourly cost of flights ordered by the Police and Border Guard Board.

Execution of specialized medical care budget by service types

Table 11. Execution of specialized medical care budget, in thousands of euros, and the number of treatment cases by service types

	2017 actual		*2018 budget*		*2018 actual**		*Budget execution*	
	Amount	*Number of treatment cases*	*Amount*	*Number of treatment cases*	*Amount*	*Number of treatment cases*	*Amount*	*Number of treatment cases*
Total of specialized medical care	**614 928**	**3 243 741**	**663 651**	**3 061 509**	**671 635**	**3 192 266**	**101%**	**104%**
Total of outpatient care	230 068	2 969 622	233 763	2 780 035	244 704	2 913 742	105%	105%
Total of day care	46 139	80 601	51 854	83 323	51 146	85 211	99%	102%
Total of inpatient care	338 721	193 518	378 034	198 151	375 785	193 313	99%	98%
Monthly fee of specialized medical care	**0**	**0**	**0**	**0**	**1 781**	**9**	-	-
Preparedness fee	**14 205**	**365**	**15 980**	**368**	**15 574**	**359**	**97%**	**98%**
Total	**629 133**	**3 244 106**	**679 631**	**3 061 877**	**688 990**	**3 192 634**	**101%**	**104%**

* The number of treatment cases of 2018 includes the treatment cases of Hiiumaa Hospital, which are financed from the monthly fee for specialized medical care.

Taking over the remuneration obligation for provided services exceeding the contract volume, i.e. overtime work

The share of medical services exceeding the contract volume in specialized medical care was 5.2% for the treatment cases and 2.3% for the amount in 2018. Over 168 thousand cases were paid by the factor, with a total cost of 15.4 million euros. The amount for the excess work submitted was 2.2 thousand euros more than in the previous year. This is due to increased amount of excess work in outpatient care as the remuneration principles of excess work in outpatient care were changed.

High-cost treatment cases

In 2018, healthcare service providers submitted us 98 treatment cases in the amount of 10 million euros, each with a separate cost of more than 65 thousand euros. In 2017, EHIF financed 79 high-cost treatment cases in the total amount of 8.6 million euros.

Additional funding to improve availability

In the 2018 budget, we planned additional funds of 34 million euros for improving the availability specialized medical services. We directed additional money to nearly 140 000 additional treatment cases that helped us ensure sustainable treatment in time-critical specialties, reduce the number people in waiting lists as well as waiting times, and shorten the duration of active treatment.

Thanks to extra money, the waiting lists have become shorter for the appointments of paediatricians, ear-nose-throat specialists, ophthalmologists and child psychiatrists. The additional money has helped shorten the waiting lists also in cardiology and neurology. The goal for 2018 was to reduce the waiting times for joint replacement and cataract surgeries. People have been able to get to these surgeries faster – in 2018, the doctors performed nearly 4770 eye cataract surgeries and 528 knee and hip replacement surgeries more than in the same period previous year.

Monthly fee of specialized medical care

Hiiumaa Hospital has been implementing a new funding model from April 1, 2018. The goal of introducing a new funding principle is to ensure the sustainability of a hospital in a region with small population and difficult access, and to continue providing people with healthcare services in their home place. According to the new system, EHIF pays Hiiumaa Hospital on a budget basis, which means that EHIF does not buy from the hospital services by case. Instead, they agree on the specialties and services that the hospital will offer as well as on the total amount that EHIF will pay for the service of all patients. The hospital must then decide, within in the given amount, how many appointments, procedures or physicians they need to treat their patients. The new funding concerns both internal diseases, general surgery, obstetrics, follow-up treatment and independent nursing care. Specific performance and quality indicators have been agreed between the parties to assess the effectiveness of the new funding model.

Availability of specialized medical care

Appointments registered in waiting lists as of January 1, 2019

As of January 1, 2019, more than 140 thousand appointments have been registered to all the waiting lists of EHIF's contractual partners in specialized medical care, 81% of which are in the waiting lists of HNDP hospitals and 19% at the external partners.

Compared to the same period of the previous year, fewer appointments were registered in the outpatient care (most registrations were at external partners) and in the inpatient care (at the HNDP hospitals) waiting lists in specialized medical care, however, there were more patients in day care waiting lists at the HNDP hospitals).

Table 12. Appointments registered in specialized medical care waiting lists

	01.01.2018		*01.01.2019*		*Change compared to 01.01.2018*
	Number of appointments registered in waiting lists	*Within max. period of the waiting list*	*Number of appointments registered in waiting lists*	*Within max. period of the waiting list*	*Number of appointments registered in waiting lists*
Outpatient	132 724	55%	115 377	51%	-17 347
Day care	10 043	83%	10 055	81%	12
Inpatient	17 674	73%	14 979	76%	-2 695
Total	**160 441**	**59%**	**140 411**	**56%**	**-20 030**

At the HNDP hospitals, the total number of appointments registered in outpatient waiting list has decreased by 6%, both in regional and central hospitals (the biggest impact coming from Northern Estonian Medical Centre) but also in general hospitals (Narva Hospital). Central hospitals have more appointments registered in the waiting lists.

As for specialties, the HNDP hospitals have less appointments registered in the waiting lists for orthopaedics and oncology.

The share of outpatient appointments within maximum allowed waiting time has decreased at the HNDP hospitals (43% instead of previous 46%).

The waiting lists of the HNDP hospitals have become longer due to lack of doctors. While a year ago, 9% of the patients were in the waiting list due to lack of doctors then this year this number was 13% (based on the HNDP hospitals waiting lists reports). Due to low capacity of a hospital, the patients have to wait longer (over 42 days) for their appointment at Ida-Viru Central Hospital and Pärnu Hospital. By the specialties, the shortage of doctors at the HNDP hospitals is the biggest in ophthalmology and orthopaedics.

The total number of planned appointments registered at the HNDP hospitals on day care waiting lists has increased by 9% (general surgery and orthopaedics), while the number of appointments on inpatient care waiting lists has decreased by 15% (general surgery and orthopaedics). More and more surgeries are performed in day care instead of inpatient care.

The total number of appointments registered on outpatient waiting lists of external partners has decreased by 32% or nearly by 11 500 appointments as compared to the same period in the previous year. This is due to the new contract period that started on 01.10.2018. Service providers whose contract with EHIF has been terminated no longer provide regular waiting lists reports. At the same time, EHIF also pays for the treatment of patients who have already registered in their waiting lists (but they are excluded from this report).

By specialties, the number of appointments registered in the waiting lists at external partners has decreased the most in ophthalmology, gynaecology and orthopaedics.

Due to low capacity of a medical institution, patients are expected to wait longer (over 42 days) for outpatient specialized medical care appointments at 2% of the external partners. By the specialties, the shortage of doctors is the biggest in ophthalmology (like in the HNDP hospitals).

Based on this report, the number of appointments registered in inpatient and day care waiting lists at external partners has decreased (for day care by 50% and for inpatient care by 30%). This is also due to the contract period that started on 01.10.2018, as a result of which the previous EHIF contract partners no longer have to submit waiting list reports. However, the service is provided to all people who were registered in the waiting list before 01.10.2018.

Waiting times for hospital appointments

When assessing the waiting times for appointments registered on waiting lists, account must be taken of the fact that the reports submitted as of the 1st day of the reporting month do not reflect the appointments with a very short waiting time and therefore, the projective report does not give a comprehensive overview of actual waiting times.

The HNDP hospitals provide also a retrospective report on the waiting times for outpatient medical care, i.e. the information on the actual waiting time of initial planned outpatient appointments[2] of the previous month. During the 12 months of 2018, 69% of the initial planned outpatient appointments in specialized medical care at the HNDP hospitals took place within maximum allowed waiting time (up to 42 days).

Table 13. Planned outpatient appointments at the HNDP hospitals by hospital types

	2017		*2018*		*Change compared to 2017*
	Total of appointments	*Within max. period of the waiting list*	*Total of appointments registered in waiting lists*	*Within max. period of the waiting list*	*Total of appointments registered in waiting lists*
Total of regional hospitals	296 770	59%	280 543	54%	-16 227
Total of central hospitals	434 976	71%	404 379	70%	-30 597
General hospitals, total of local hospitals and rehabilitation hospitals	246 705	86%	233 977	86%	-12 728
Total	**978 451**	**71%**	**918 899**	**69%**	**-59 552**

Compared to the same period last year, the number of initial planned outpatient appointments decreased by 6% at the HDNP hospitals (more at East Tallinn Central Hospital and West Tallinn Central Hospital). The number of appointments increased at Narva Hospital (*ca* 4%).

By specialties, there were less outpatient appointments in the specialties of dermatovenerology, orthopaedics, otorhinolaryngology, and neurology.

Different share of appointments within maximum allowed waiting time in the outpatient waiting lists of the HNDP hospitals (43% according to the reports submitted as of the 1st day of the month) and in the actual data (69% according to the data of appointments already held) is due to appointments with a very short waiting period, which are not recorded in the reports submitted on the waiting lists as of the 1st day of the reporting month.

By specialties, according to the projective reports of waiting lists, the share of appointments within allowable maximum period of the waiting list in the outpatient medical care of the HNDP hospitals is the smallest in ophthalmology and paediatrics. This is also confirmed by the data on actually occurred appointments (based on retrospective reports).

For comparison of data from different reports, the figure below shows the information on the waiting time of registered appointments at the HNDP hospitals and the actual waiting time of held appointments.

[2] *In the waiting list report, an initial appointment is defined as follows:* ***Initial planned appointment*** *is the first time when a patient turns to a physician for a follow-up check after a primary illness, exacerbation of a disease, or diseases monitored by a medical specialist outside a single treatment episode.* ***Treatment episode*** *is a provision of outpatient care from the first medical care appointment to the resolution of a health problem; in case of chronic diseases, it usually means a provision of outpatient care over three months of the first appointment.*
The waiting list report only provides information on planned treatment; ***the report does not describe the provision of emergency care.*** *In the case of a chronic disease, for example, a routine annual follow-up visit is considered every year as an initial appointment.*

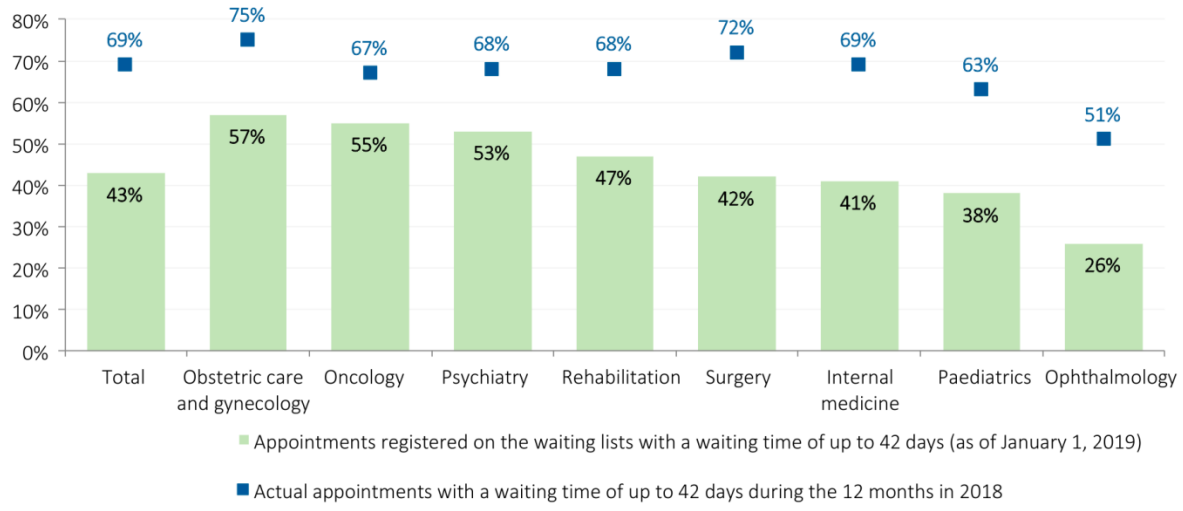


Figure 5. The share of outpatient specialized care appointments with waiting time of up to 42 days at the HNDP hospitals (appointments registered on waiting lists and actually held appointments)

Key indicators of specialized medical care

Table 14. Key indicators of the use of specialized medical care in 2014–2018

	2014	2015	2016	2017	2018	2015/ 2014	2016/ 2015	2017/ 2016	2018/ 2017
Average cost per case in euros	158	167	175	190	210	6%	5%	9%	11%
outpatient care	63	68	73	77	84	8%	7%	5%	9%
day care	481	503	549	572	600	5%	9%	4%	5%
inpatient care	1 289	1 376	1 455	1 750	1 944	7%	6%	20%	11%
Number of treatment cases as excess work	50 094	117 829	119 328	92 579	167 519	135%	1%	-22%	81%
outpatient care	42 264	105 258	101 592	78 359	157 874	149%	-3%	-23%	101%
day care	1 138	3 785	3 659	3 047	2 756	233%	-3%	-17%	-10%
inpatient care	6 692	8 786	14 077	11 173	6 889	31%	60%	-21%	-38%
Number of high-cost treatment cases	46	58	62	79	98	26%	7%	27%	24%
Number of inpatient bed days	1 356 592	1 330 068	1 285 101	1 194 835	1 206 302	-2%	-3%	-7%	1%
Average length of inpatient stay (days)	5,9	5,9	5,9	6,2	6,2	0%	0%	5%	0%
Number of outpatient appointments	3 888 729	4 055 968	4 093 624	3 996 857	3 959 231	4%	1%	-2%	-1%
Outpatient appointments per case	1.31	1.36	1.36	1.35	1.36	4%	0%	-1%	1%
Number of persons who used specialized medical care services	800 326	799 305	798 582	784 175	779 027	0%	0%	-2%	-1%
outpatient care	780 302	779 593	779 316	767 185	761 799	0%	0%	-2%	-1%
day care	54 870	56 901	57 705	58 000	60 086	4%	1%	1%	4%
inpatient care	153 032	150 154	145 568	131 749	131 978	-2%	-3%	-9%	0%
Number of treatment cases per treated person	4.08	4.12	4.14	4.14	4.10	1%	0%	0%	-1%
outpatient care	3.81	3.83	3.86	3.87	3.82	1%	1%	0%	-1%
day care	1.31	1.33	1.37	1.39	1.42	2%	3%	1%	2%
inpatient care	1.50	1.50	1.49	1.47	1,.6	0%	-1%	-1%	-1%
Number of treatment cases per insured person	2.65	2.66	2.67	2.61	2.55	0%	0%	-2%	-2%
outpatient care	2.41	2.42	2.43	2.39	2.33	0%	0%	-2%	-3%
day care	0.06	0.06	0.06	0.06	0.07	0%	0%	0%	17%
inpatient care	0.19	0.18	0.17	0.16	0.15	-5%	-6%	-6%	-6%
Emergency care as a percentage of medical expenses									
outpatient care	17	17	17	17	17	0%	0%	0%	0%
day care	9	10	10	9	14	1%	0%	-1%	5%
inpatient care	63	63	63	65	64	0%	0%	2%	-1%
Emergency care as a percentage of treatment cases									
outpatient care	17	17	16	16	18	0%	-1%	0%	2%
day care	11	11	11	12	11	0%	0%	1%	-1%
inpatient care	61	60	61	64	65	-1%	1%	3%	1%
Number of surgeries*	157 691	159 261	153 919	145 934	141 040	1%	-3%	-5%	-3%
outpatient care	18 459	18 674	17 876	15 137	15 678	1%	-4%	-15%	4%
day care	53 926	55 358	54 035	53 088	57 923	3%	-2%	-2%	9%
inpatient care	85 306	85 229	82 009	77 709	67 439	0%	-4%	-5%	-13%

* The number of surgeries includes normal physiological births.

The average cost of a treatment case has grown in all service types. Compared to the previous year, the average cost of a treatment case has increased the most in inpatient care: by 11% or 194 euros. The increased average cost of a treatment case is associated with both, the rise in the prices of healthcare services as well as the fact that the treatment of milder conditions has been transferred to outpatient and day care. The increase in the average cost of a case is also due to high-cost treatment cases - all high-cost treatment cases are in inpatient care.

The number of people who used medical specialist services has decreased by 1% or by 5000 people, compared to the previous year. The decreased number of people is due to outpatient treatment, where the number of people who used the services has decreased by 1%.

The share of emergency care has remained at the previous year's level in treatment expenses but has increased by 2% in treatment cases. The cost of emergency care has grown in large-volume specialties such as surgery and internal medicine. By the types of hospital, the funding of emergency care has increased in regional hospitals.

Compared to the previous year, the number of appointments in outpatient care has decreased by 1%. First-time appointments made up 38% of the outpatient appointments with a medical specialist. The number of first-time appointments with a medical specialist has decreased by 4% compared to the previous year.

In 2018, 14% of all treatment cases were provided in the Emergency Medicine Department. Patients were referred to outpatient treatment through the Emergency Department in 13% of cases and to inpatient treatment in 35% of cases. Most referrals were to the specialty of surgery - in 28% of all cases.

The use of specialized medical services by main diagnosis groups indicated on treatment invoices.

The largest main diagnosis groups[3] that we funded in 2018 were circulatory system diseases, tumours, factors influencing health status and contact with health services[4]. Based on the number of treated persons, the biggest funds were allocated to the following diagnoses: factors influencing health status and contact with health services, eye and adnexa diseases, and musculoskeletal and connective tissue diseases.

The main diagnosis groups, where the number of treated people has increased in 2018 compared to the same period of the previous year, are psychological and behavioural disorders. However, the number of treated people has decreased most in genitourinary diseases, musculoskeletal and connective tissue diseases and factors influencing health status and contact with health services. The biggest increase in funding compared to the previous year is in factors influencing health status and contact with health services and circulatory system diseases. At the same time, funding has decreased in endocrine, nutrition and metabolism diagnosis groups.

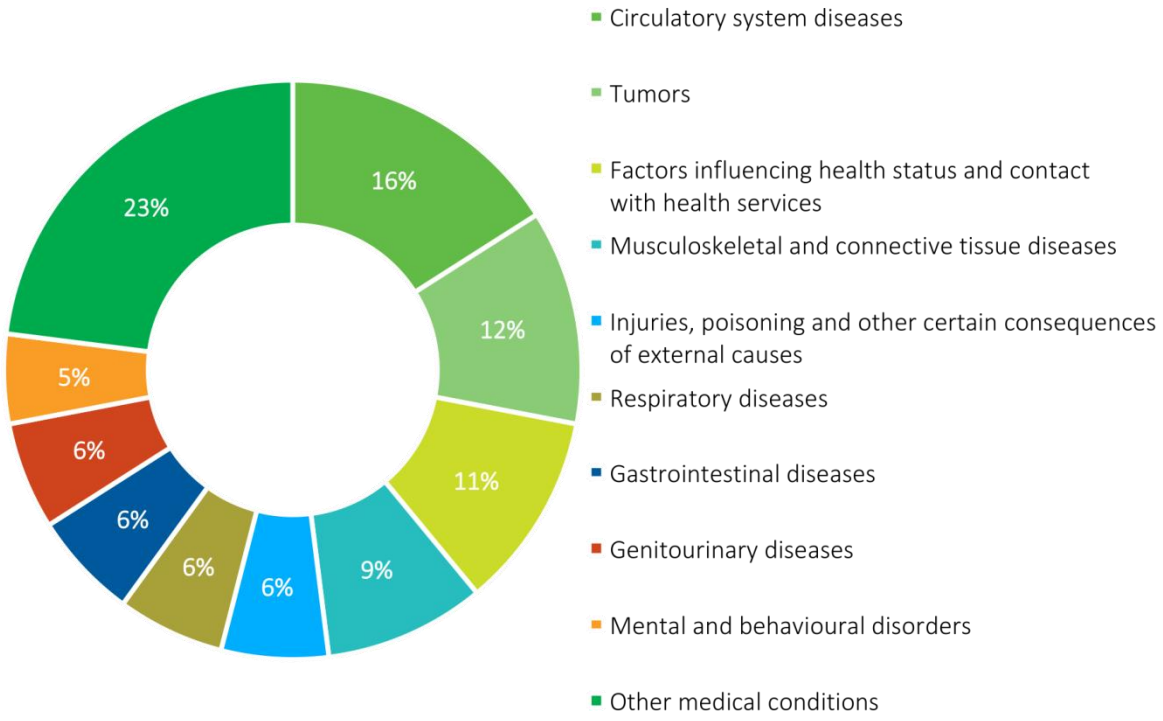


Figure 6. Distribution of specialized medical care funding by health conditions

[3]*The main diagnosis groups indicated on the treatment invoices under the International Classification of Diseases ICD-10.*
[4]*Diagnoses with Z-code, which is used when: (a) a person who may or may not be sick at this moment contacts a medical institution with a specific purpose, for example to receive limited help or a service for a minor health problem, to be a tissue or organ donor, to receive a prophylactic vaccine or to discuss a problem that is not a disease or injury; (b) there is a circumstance or problem that affects the person's state of health but which is not a real disease or injury. Such factors can be identified in mass examinations, when any person may or may not be ill at the time or be marked as a factor to keep in mind if the person receives treatment for any disease or injury.*

Healthcare services indicated on specialized medical care invoices

The biggest part in the specialized medical services invoices in 2018 included laboratory tests and procedures (24%) and bed days (24%).

The volume of tests and procedures increased compared to the previous year, both in terms of the number of uses and amounts. Bed day use increased both in the number of uses and amounts.

Compared to the previous year, the number of service uses has increased most in laboratory tests.

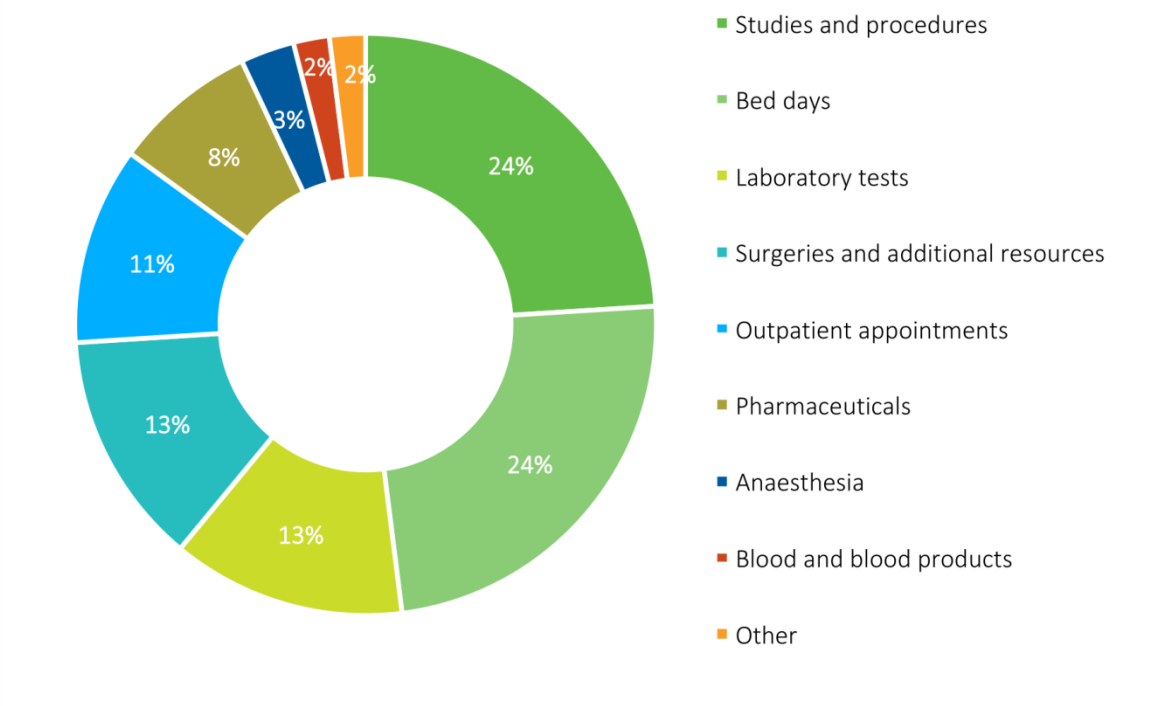


Figure 7. Services indicated on the treatment invoices of specialized medical care in 2018, by service types

High-cost treatment cases in specialized medical care

A treatment invoice with a cost of at least 65 000 euros is considered a high-cost treatment invoice. The planning for high-cost treatment cases is based on the indicators from the previous year and the best knowledge at the time of planning. When in 2017, EHIF received 79 high-cost treatment cases to be reimbursed with the total cost of 8.6 million euros, then in 2018, we funded 98 cases in the amount of 10 million euros.

Table 15. High-cost treatment cases in thousands of euros and the number of treatment cases

	2017 actual		*2018 actual*		*Change compared to 2017*	
	Amount	*Number of treatment cases*	*Amount*	*Number of treatment cases*	*Amount*	*Number of treatment cases*
Surgery	2 432	27	4 408	42	81%	56%
Oncology	1 583	14	1 551	15	-2%	7%
Paediatrics	1 947	17	1 909	18	-2%	6%
Internal diseases	2 596	21	2 102	23	-19%	10%
Total	**8 558**	**79**	**9 970**	**98**	**16%**	**24%**

High-cost treatment cases affect the budget execution for inpatient specialized medical care, as almost all high-cost treatment cases reported during the reporting period are in inpatient care, only one was in inpatient care. In the main diagnosis groups, there were more high-cost cases of gastrointestinal diseases, circulatory system diseases, cancer, certain conditions and injuries occurred during the birth, poisonings, and conditions caused by certain other external causes. The biggest number of high-cost cases occurred at Tartu University Clinic (45 cases) and North Estonia Regional Hospital (27 cases).

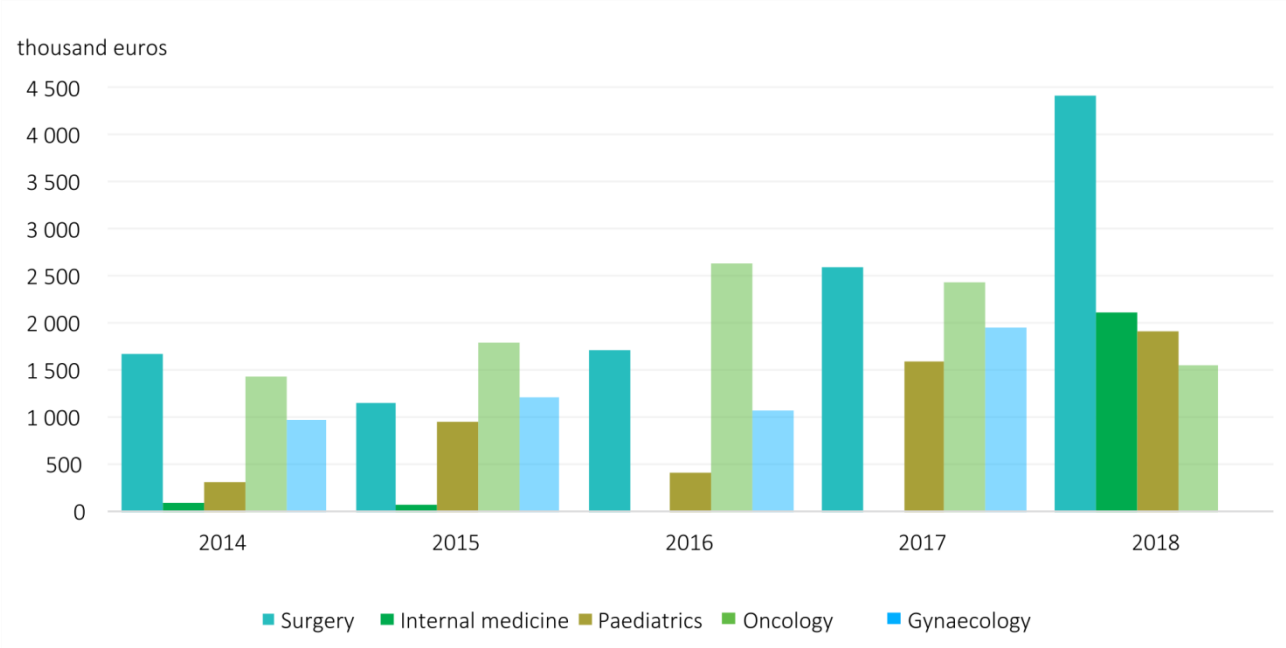


Figure 8. High-cost treatment cases in 2014–2018, in thousands of euros

Taking over the remuneration obligation for provided services exceeding the contract volume, i.e. overtime work

Since 2014, EHIF has assumed the obligation to pay for the medical services exceeding the contract volume for the HNDP hospitals and external partners. Starting from 2018, we pay the treatment invoices issued for healthcare services provided in excess of the contractual volume in outpatient medical care and day care with the coefficient of 0.7 and up to a maximum of 8% of the amount of the provider's funding contract. If the volume of healthcare services provided in excess of the contractual volume exceeds 8% of the total amount of the contract, we will pay the part exceeding 8% by the factor of 0.3. In inpatient care, the invoices for medical services provided in excess of the contract volume are paid by the factor of 0.3. We take over the payment obligation for healthcare services that exceed the contractual amount twice a year.

Table 16. Healthcare services provided in excess of the contractual volume, in thousands of euros, and the number of treatment cases

	2017 actual		*2018 actual*		*Change compared to 2017*	
	Amount	*Number of treatment cases*	*Amount*	*Number of treatment cases*	*Amount*	*Number of treatment cases*
Outpatient care	5 650	78 359	10 690	157 874	89%	101%
Day care	1 264	3 047	956	2 756	-24%	-10%
Inpatient care	6 339	11 173	3 772	6 889	-40%	-38%
Total	**13 253**	**92 579**	**15 418**	**167 519**	**16%**	**81%**

The share of healthcare services exceeding the contract volume in specialized medical care was 5.2% for treatment cases and 2.3% for the amount in 2018. Over 168 000 cases were paid by the factor, with a total cost of 15.4 million euros. In outpatient care, we paid 10.7 million euros for 85 000 treatment cases as medical services provided in excess of the contract volume, in day care 1 million euros for approximately 2800 treatment cases, and in inpatient medical care, 3.8 million euros for nearly 6900 treatment cases. The amount for the excess work submitted was 2.2 million euros more than in the previous year. This is due to increased amount of excess work in outpatient care as the remuneration principles of excess work in outpatient care were changed.

The HNDP hospitals submitted treatment invoices for healthcare services provided in excess of the contractual volume for 15.2 million euros, and external partners for 0.2 million euros.

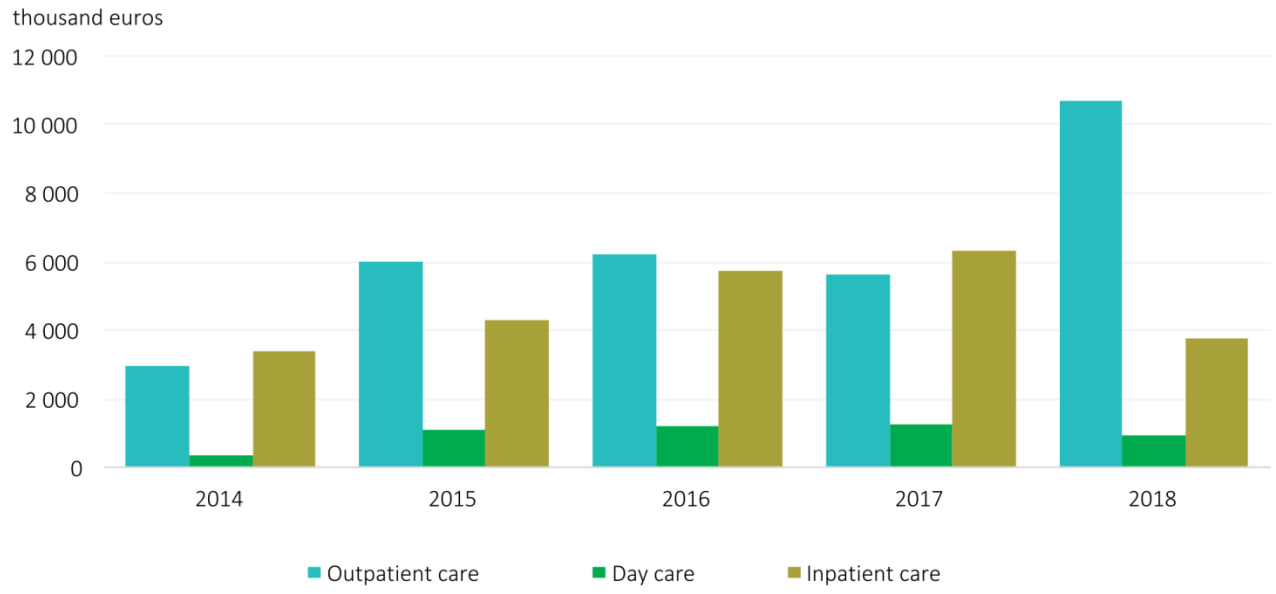


Figure 9. Healthcare services provided in excess of the contractual volume in 2014–2018, in thousands of euros

Budget execution and treatment cases by specialties

In the EHIF budget for specialized medical care in 2018, the main specialties are: primary follow-up treatment, surgery, ophthalmology, oncology, paediatrics, psychiatry, internal medicine, obstetrics and gynaecology, and rehabilitation. An overview of budget execution for main specialties is presented below in alphabetical order.

Primary follow-up treatment

Table 17. Execution of budget for primary follow-up treatment, in thousands of euros, and the number of treatment cases

	2017 actual		*2018 budget*		*2018 actual*		*Budget execution*	
	Amount	*Number of treatment cases*	*Amount*	*Number of treatment cases*	*Amount*	*Number of treatment cases*	*Amount*	*Number of treatment cases*
Primary follow-up treatment	3 213	3 402	4 048	4 133	3 824	3 713	94%	90%
in inpatient care	3 213	3 402	4 048	4 133	3 824	3 713	94%	90%

The patients are referred to the primary inpatient follow-up treatment when at the end of the active inpatient treatment, outpatient treatment is not yet possible. In the context of primary follow-up treatment at general hospitals and external partners, it usually means a situation where patients who had inpatient treatment in a higher stage hospital are now sent to a medical institution of their place of residence for follow-up treatment.

Compared to the previous year, both the number of people receiving follow-up treatment as well as the number of treatment cases has increased. In 2018, 3488 persons received follow-up treatment. The number of people has increased by 10% compared to the previous year. The increase is linked to the establishment of principles for ensuring harmonised availability of high-quality care, in which case, the treatment cases of internal medicine at general hospitals moved to follow-up care. This means that if it is no longer medically necessary to continue the treatment at a central or regional hospital, but the patient cannot yet be sent home, the expedient solution would be to continue treatment in a general hospital close to the patient's place of residence. Increased volume of follow-up treatment is also due to additional funding - in the 2018 budget, we planned additional 600 treatment cases to reduce the duration of active care. Additional treatment cases were referred to the HNDP hospitals, to bring the treatment closer to a patient's home place and make it more convenient for them.

Surgery

Table 18. Execution of surgery budget, in thousands of euros, and the number of treatment cases

	2017 actual		*2018 budget*		*2018 actual*		*Budget execution*	
	Amount	*Number of treatment cases*	*Amount*	*Number of treatment cases*	*Amount*	*Number of treatment cases*	*Amount*	*Number of treatment cases*
Surgery	163 280	870 698	176 955	805 118	178 407	836 583	101%	104%
outpatient care	46 552	790 303	46 498	724 471	48 085	756 460	103%	104%
day care	11 341	25 948	12 148	25 127	12 201	25 417	100%	101%
in inpatient care	105 387	54 447	118 309	55 520	118 121	54 706	100%	99%

The specialty of surgery includes cardiac surgery, paediatric surgery, neurosurgery, face and jaw surgery, orthopaedics, otorhinolaryngology, thoracic surgery, urology, vascular surgery and general surgery. The contracts recognize joint endoprosthesis, hearing implants, and organ transplants as service-based special cases of surgery specialty.

In 2018, EHIF paid for the surgical treatment of 387 000 persons. Compared to the previous year, the number of treated persons has decreased by 10 000 persons, which is due to decreased use of general surgery and otorhinolaryngology services. During the reporting period, the budget was overrun by 31 000 treatment cases. EHIF received 1.5% less medical invoices per a treated person than during the same period of the previous year. At the same

time, the average number of service use per person has increased. While in 2017, a person received an average of 16.7 services then in 2018, the average number of services per person was 17.4.

In the specialty of surgery, the increased spending of the treatment cases budget was most affected by subspecialties like orthopaedics and general surgery. By service groups, the budget spending was mostly influenced by an increase in funding for laboratory tests and bed days.

During the reporting period, there were 266 000 treatment cases in the amount of 56 million euros, which were submitted to EHIF for general surgery services provided to 150 000 persons. Compared to the plan, the actual use was 105% for the treatment cases and 99% for the amount. In order to shorten the waiting list for general surgery by three months, we planned approximately 900 additional surgeries in the 2018 budget, which means that patients would receive treatment at the closest HNDP hospital, which is more convenient for a patient and financially less burdensome. Medical institutions provided over 12 000 outpatient treatment cases more than planned. Compared to the previous year, 6450 people received less general surgery service by 17 000 cases. The change in the number of treated people is due to a decrease in the number of people with circulatory, musculoskeletal and connective tissue disorders and respiratory diseases.

The overrun of the surgery treatment cases budget has also been affected by orthopaedics. In orthopaedics, we funded the treatment of over 158 thousand persons. The number of treated persons has decreased by 1% or by 1151 persons, whereas the number of treatment cases has stayed at the same level compared to the previous year. We funded approximately 17 00 outpatient treatment cases more than planned. Out of service groups, outpatient appointments and laboratory tests and procedures account for the largest share, both in terms of funding and the number of treatment cases.

With regard to sub-specialties, the overrun of the budget was most affected by cardio surgery, which was due to increased average cost of a treatment case. The average cost of a treatment case has increased by 17% compared to the budget. In 2018, we financed cardiovascular services for 2123 people, the number of people receiving treatment has increased by 2% compared to the previous year.

To improve the availability of paediatric care, we planned additional 500 paediatric surgery cases in the 2018 budget. During the reporting period, the biggest number of paediatric treatments were in conditions caused by injuries, poisoning and the effects of certain external causes.

In order to shorten the waiting list of endoprostheses by 12 months, we planned in the budget additional 600 knee and hip surgeries in the total amount of 2.6 million euros. The number of joint endoprostheses has increased by 3% compared to the previous year. In 2018, EHIF paid for the endoprostheses of 3250 persons. This number has grown by 17% or 478 persons.

The number of organ transplants has increased compared to 2017. While in the previous year, EHIF paid for 46 organ transplants then in 2018 this number was 72. During the reporting period, 56 persons received a kidney transplant, 12 persons received a liver transplant and 1 person received a lung transplant. During the reporting period, EHIF paid for hearing implants of 20 people.

Ophthalmology (eye diseases)

Table 19. Execution of ophthalmology budget in thousands of euros and the number of treatment cases

	2017 actual		*2018 budget*		*2018 actual*		*Budget execution*	
	Amount	*Number of treatment cases*	*Amount*	*Number of treatment cases*	*Amount*	*Number of treatment cases*	*Amount*	*Number of treatment cases*
Ophthalmology	23 549	375 490	26 773	368 864	27 899	379 604	104%	103%
outpatient care	14 282	359 621	15 009	349 032	15 598	358 418	104%	103%
day care	7 408	14 175	9 754	18 114	10 217	19 290	105%	106%
in inpatient care	1 859	1 694	2 010	1 718	2 084	1 896	104%	110%

During the reporting period, EHIF paid for ophthalmology services of 177 000 persons. The number of people has decreased by 1.2%, while the financing of eye diseases has increased by 18.5% compared to the previous year. By service groups, the funding increased in surgeries and accessories as well as laboratory tests and procedures.

In the 2018 budget, we planned additional funding for reducing the waiting lists of cataract surgery by up to 10 months. For this, we planned in the budget for additional 5000 cataract surgeries in the total amount of 3.4 million euros. In 2018 we paid for cataract surgeries of 13 000 persons. The number of treated persons has increased by 30% or by 3000 persons compared to the previous year.

Oncology

Table 20. Execution of oncology budget in thousands of euros and the number of treatment cases

	2017 actual		*2018 budget*		*2018 actual*		*Budget execution*	
	Amount	*Number of treatment cases*	*Amount*	*Number of treatment cases*	*Amount*	*Number of treatment cases*	*Amount*	*Number of treatment cases*
Oncology	89 907	163 820	97 404	163 429	96 760	175 079	99%	107%
outpatient care	43 504	140 906	45 496	139 346	48 597	152 459	107%	109%
day care	3 707	6 511	5 063	7 130	3 528	6 318	70%	89%
in inpatient care	42 696	16 403	46 845	16 953	44 635	16 302	95%	96%

The data of the main specialty of oncology include also the use of haematology services. The contracts recognize the medical services related to bone marrow transplantation as a service-based special case.

To ensure sustainable treatment of first cancer incidents, we planned in the 2018 budget for oncology and haematology day care and increased inpatient care by for over a thousand cases, in the total amount of 3.8 million euros. Approximately 12 000 treatment cases more were provided than planned.

In oncology, we paid for the treatment of 49 000 persons. The number of treated persons has increased by 2.9% or by 1409 persons compared to the previous year, which is due to increased number of people who received outpatient care. By service groups, the number of people who had outpatient appointments and received laboratory tests, as well as those who underwent laboratory tests and procedures has grown the most.

Paediatrics

Table 21. Execution of paediatrics budget, in thousands of euros, and the number of treatment cases

	2017 actual		*2018 budget*		*2018 actual*		*Budget execution*	
	Amount	*Number of treatment cases*	*Amount*	*Number of treatment cases*	*Amount*	*Number of treatment cases*	*Amount*	*Number of treatment cases*
Paediatrics	23 956	127 601	26 580	117 307	26 174	128 428	98%	109%
outpatient care	7 786	111 907	7 850	101 879	8 309	112 287	106%	110%
day care	1 329	2 916	1 310	2 879	1 559	3 080	119%	107%
in inpatient care	14 841	12 778	17 420	12 549	16 306	13 061	94%	104%

In 2018, we planned for additional 6000 paediatric treatment cases to improve the availability of paediatric care. In 2018, we paid for the treatment of nearly 59 000 paediatric patients. The number of treated children has increased by 2% or by 1133 children compared to the previous year.

By service groups, the number of outpatient appointments and laboratory tests provided to children has increased compared to the previous year. As for disease conditions, the number of children with infectious and parasitic diseases has increased.

Psychiatry

Table 22. Execution of budget of psychiatry, in thousands of euros, and the number of treatment cases

	2017 actual		2018 budget		2018 actual		Budget execution	
	Amount	Number of treatment cases	Amount	Number of treatment cases	Amount	Number of treatment cases	Amount	Number of treatment cases
Psychiatry	32 645	250 520	35 501	238 052	34 750	254 828	98%	107%
outpatient care	9 534	240 414	10 081	228 350	10 046	244 890	100%	107%
day care	629	738	562	625	600	609	107%	97%
in inpatient care	22 482	9 368	24 858	9 077	24 104	9 329	97%	103%

In 2018, EHIF paid for the treatment of 69 000 persons. The number of treated persons has increased by 1.1% or by 724 persons compared to the previous year. The number of persons has grown in outpatient care and is related to increased number of outpatient appointments. By service groups, in 2018, the increase in funding was due to the renewal of bed days calculation.

In 2018, we focused on the funding of children's mental health centres when improving the availability of psychiatry services. To improve the availability of psychiatry services, we planned in the budget for additional funds of 1.2 million euros. During the reporting period, 3036 outpatient treatment cases were provided to 12 000 patients under 19 years of age, which is 8.3% more than in the same period of the previous year. The number of treated children has increased by nearly 400 children.

Internal medicine

Table 23. Execution of budget for internal medicine, in thousands of euros, and the number of treatment cases

	2017 actual		2018 budget		2018 actual		Budget execution	
	Amount	Number of treatment cases	Amount	Number of treatment cases	Amount	Number of treatment cases	Amount	Number of treatment cases
Internal medicine	206 924	882 001	223 252	829 973	225 025	862 246	101%	104%
outpatient care	72 197	806 853	72 163	752 539	76 406	786 562	106%	105%
day care	17 875	12 465	18 999	13 054	18 871	13 620	99%	104%
inpatient care	116 852	62 683	132 090	64 380	129 748	62 064	98%	96%

The specialty of internal medicine covers the medical services of dermatovenerology (skin diseases), endocrinology (hormonal diseases), gastroenterology (gastrointestinal diseases), infectious diseases, cardiology, occupational diseases, nephrology (kidney and urinary tract diseases), neurology, pulmonology (lung diseases), rheumatology and internal diseases. Dialyses (haemodialysis and peritoneal dialysis) are recognized as service-specific special cases in the specialty of internal diseases.

In 2018, EHIF paid for the treatment of 349 000 persons in the specialty of internal medicine. The number of treated persons has decreased by 1,6% or by 5852 persons compared to the previous year. The decrease in the number of people is related to the smaller number of people who received outpatient care.

Based on the medical conditions indicated on treatment invoices, the number of treated persons belonging to the diagnosis groups of musculoskeletal and connective tissue diseases as well as circulatory system diseases has decreased the most. However, the number of people treated for respiratory diseases has increased. As for services indicated on treatment invoices, the funding of bed days, examinations and procedures as well as laboratory tests has increased.

The largest subspecialties of internal medicine are cardiology, internal diseases and neurology, accounting for 59% of the execution of internal medicine budget. The use of services in subspecialties is significantly higher than planned in internal medicine, execution by 103%. Neurology, dermatovenerology, pulmonology and nephrology specialties were under-executed.

During the reporting period, 54 000 persons used cardiology services which included about 93 000 treatment cases for which we paid to medical institutions 53.7 million euros. The number of treated persons has decreased by 2.7% or by 1519 persons compared to the previous year, whereas, the funding has increased by 9%. Compared to the previous year, the funding for examinations and procedures and bed days has increased the most. In order to improve the availability of inpatient cardiology, we planned an additional funding of 4.6 million euros in the 2018 budget. Compared to the previous year, the number of people receiving inpatient cardiology services increased by 1.6% and the funding increased by 3.8 million euros.

In the subspecialty of internal diseases, we paid 49.8 million euros for the treatment of 106 000 persons, which included 170 000 treatment cases. The number of treated persons has increased by 11.3% or by 11 000 persons compared to the previous year. The increase in the number of persons is linked to supplementary funding - to improve the availability of internal medicine, we planned in the 2018 budget for additional 38 000 outpatient and inpatient treatment cases in the amount of 5.3 million euros. By the main diagnosis groups, the increase in the number of treated people has been influenced most by increased number of people diagnosed with respiratory, non-classified symptoms and infectious and parasitic diseases.

In order to improve the availability of inpatient neurology, we planned an additional funding of 0.9 million euros in the 2018 budget. During the reporting period, 66 000 persons used neurology services that included 115 000 treatment cases for which we paid to medical institutions over 29 million euros. The number of treated persons has decreased by 7.8%, or by 5587 persons compared to the previous year. The reduction in the number of treated persons and treatment cases is related to decreased number of outpatient appointments, as well as laboratory tests and procedures.

Obstetric care and gynaecology

Table 24. Execution of budget for obstetrics and gynaecology, in thousands of euros, and the number of treatment cases

	2017 actual		*2018 budget*		*2018 actual*		*Budget execution*	
	Amount	*Number of treatment cases*	*Amount*	*Number of treatment cases*	*Amount*	*Number of treatment cases*	*Amount*	*Number of treatment cases*
Obstetric care and gynaecology	56 840	488 216	58 201	458 875	63 635	470 829	109%	103%
outpatient care	29 379	444 346	30 165	415 617	31 223	428 657	104%	103%
day care	3 834	17 806	4 004	16 358	4 155	16 835	104%	103%
inpatient care	23 627	26 064	24 032	26 900	28 257	25 337	118%	94%

In the main specialty of obstetrics and gynaecology, births and treatment cases related to in vitro fertilization are recognized as service-based special cases.

During the reporting period, 185 000 persons used gynaecology services which included about 454 000 treatment cases for which EHIF paid to medical institutions 42.6 million euros. The number of treated persons has decreased by 1.4% or by 2676 persons compared to the previous year, while the funding has increased by 7,6%.

During the reporting period, we paid for approximately 14 000 births. The number of births has increased by 4.6% compared to 2017.

Rehabilitation

Table 25. Execution of budget for rehabilitation, in thousands of euros, and the number of treatment cases

	2017 actual		2018 budget		2018 actual		Budget execution	
	Amount	Number of treatment cases	Amount	Number of treatment cases	Amount	Number of treatment cases	Amount	Number of treatment cases
Rehabilitation	14 614	81 993	14 937	75 758	15 161	80 956	101%	107%
outpatient care	6 834	75 272	6 501	68 801	6 440	74 009	99%	108%
day care	16	42	14	36	15	42	107%	117%
inpatient care	7 764	6 679	8 422	6 921	8 706	6 905	103%	100%

EHIF paid for the rehabilitation services of 53 000 persons. The number of treated persons has decreased by 0,8% compared to the previous year. The number of treatment cases funded during the reporting period has also decreased.

By service groups, the execution of the 2018 budget was affected mostly by the funding of bed days.

As for medical conditions, the number of people who were treated for injuries, poisonings as well as of people diagnosed as a result of certain other external causes has grown the most compared to the previous year. The number of persons diagnosed with factors influencing health status and contact with health services has also increased. The number of persons treated for musculoskeletal and connective tissue diseases has decreased.

To improve the availability of inpatient rehabilitation care, we budgeted an 8% increase in funding to increase the volume of rehabilitation care particularly in regional hospitals. In 2018, inpatient rehabilitation was provided to 5361 people, the number of treated people has increased by 1.7% compared to the previous year.

Performance of specialized medical care contracts

Until 2018, we monitored the amounts of specialized medical care contracts during the calendar year by half-year, and the contract amount not executed during the first half-year was not automatically transferred to the second half-year. Within a half-year, the performance of a contract depends significantly on the organization of a medical institution. The medical institution is obliged to ensure consistent availability of medical care. We want to make sure that the availability level of medical care will be maintained.

From 2019 onwards, EHIF will monitor the amounts of specialized medical care contracts by first half-year and by calendar year, which allows for the automatic transfer of the contract amount not executed in the first half-year to the second half of the year.

In 2018, the funding for specialized medical care was 10% higher than in 2017. In the second half of 2018, we paid to medical institutions 689 million euros for a total of 3.2 million specialized medical care treatment. The treatment cases of the HNDP hospitals accounted for 83.6% of the above and 94% of the amount was spend on the contracts with the HNDP hospitals.

The table below provides aggregated data on the performance of the contracts signed with the HNDP hospitals and external partners for the first and second half-year of 2018.

Table 26. Performance of specialized medical care contracts, in thousands of euros

	Contract for the first half-year of 2018		*Performance of the contract for the first half-year*		*Contract for the second half-year of 2018*		*Performance of the contract for the second half-year*	
	Amount	*Number of treatments*	*Amount*	*Number of treatments*	*Amount*	*Number of treatments*	*Amount*	*Number of treatment cases*
HNDP hospitals	321 519	1 290 102	102%	108%	312 605	1 208 198	102%	106%
Regional hospitals	180 745	528 344	102%	106%	175 364	496 384	101%	103%
Central hospitals	100 241	525 693	104%	110%	97 550	495 821	104%	109%
General hospitals, local hospital, rehabilitation hospital	40 533	236 065	102%	104%	39 691	215 993	102%	108%
External partners	21 482	286 186	99%	97%	23 348	297 738	85%	82%
Total	**343 001**	**1 576 288**	**102%**	**106%**	**335 953**	**1 505 936**	**101%**	**101%**

Compared to 2017, the amount paid to the HNDP hospitals increased by 10%, and the amount paid to external partners (together with the performance of contracts signed for waiting lists buyout) by 1%. The number of treatment cases at the HNDP hospitals increased by 1%, compared to 2017; the number of treatment cases provided by external partners decreased by 8%. As for the waiting lists buyout, we paid 2 million euros for 16 000 treatment cases.

The amounts paid to regional hospitals, (North Estonia Medical Centre, Tallinn Children's Hospital and Tartu University Clinic) increased by 9% in 2018 compared to the previous year; the number of treatment cases increased by 1% compared to 2017. The treatment cases of regional hospitals amounted to 34%, and the amount to 52% of the total performance of specialized medical care contracts. We paid for 42 000 treatment cases, in the amount of 6 million euros as excess work.

The amounts paid to central hospitals (East Tallinn Central Hospital, Ida-Viru Central Hospital, West Tallinn Central Hospital, Pärnu Hospital) increased by 11% in 2018 compared to the previous year, the number of treatment cases provided in central hospitals decreased by 2% compared to 2017. The treatment cases of central hospitals amounted to 35%, and the amount to 30% of the total performance of specialized medical care contracts. We paid for 102 000 treatment cases, in the amount of 7 million euros, as excess work.

General hospitals, local hospitals, and rehabilitation hospitals (Hiiumaa Hospital, Järvamaa Hospital, Kuressaare Hospital, South Estonian Hospital, Läänemaa Hospital, Narva Hospital, Põlva Hospital, Rakvere Hospital, Raplamaa Hospital, Viljandi Hospital, Jõgeva Hospital and Haapsalu Neurological Rehabilitation Centre) provided 1% less treatment cases than in 2017. The amount paid to those healthcare institutions increased by 8% compared to the previous year. In 2018, the share of general hospitals and local hospitals in the performance of specialized medical care contracts is 14,8% for treatment cases and 11% for the amount. We paid for 18 000 treatment cases in the amount of 1.7 million euros as excess work.

In 2018, external partners provided treatment cases by 8% less than in 2017. For these treatment cases, however, we paid 1% more than in the previous year. We paid external partners for over 5000 treatment cases in the amount of 219 000 euros as excess work.

An overview of the amounts of specialized medical care contracts and their performance by hospitals is available on the EHIF website.

1.4. Nursing care

The goal of nursing care is to help a patient achieve or maintain the best possible quality of life and livelihood. Patients in need of nursing care are those who are not able to independently cope with various disorders and disabilities caused by chronic diseases. These are mostly elderly people.

In the development of nursing care, we have set a priority to improve the availability of home nursing services and reduce the burden of acute care.

In cooperation with the Ministry of Social Affairs, we are developing common principles and guidelines for assessing the need for care assistance and nursing care, and in this regard, we have planned additional resources for inpatient nursing care. In the 2018 budget, we also allocated more resources for enhancing the availability of home nursing service.

In planning for the nursing care budget, we used the assessment of treatment need of insured persons, i.e. the demand for nursing care as a healthcare service.

Table 27. Execution of budget of nursing care, in thousands of euros, and the number of treatment cases

	2017 actual		*2018 budget*		*2018 actual**		*Budget execution*	
	Amount	*Number of treatment cases*	*Amount*	*Number of treatment cases*	*Amount*	*Number of treatment cases*	*Amount*	*Number of treatment cases*
Inpatient nursing care	24 920	18 947	28 989	20 149	27 844	18 920	96%	94%
Home nursing	6 930	38 111	7 687	38 181	7 792	39 026	101%	102%
Total	**31 850**	**57 058**	**36 676**	**58 330**	**35 636**	**57 946**	**97%**	**99%**

* The number of treatment cases of 2018 includes the treatment cases of Hiiumaa Hospital, which are financed from the monthly fee for specialized medical care.

We planned 36.7 million euros for financing of nursing care in 2018, which was by 14% more than in the 2017 budget. In 2018, nursing care services were provided to over 18 000 people.

The increase in nursing care funding compared to the previous year is mainly due to increased wage component in service prices.

In 2018, inpatient nursing care service was provided to 13 000 people. The number of persons who received inpatient nursing care service has increased by 3% compared to the previous year and the number of service events has increased by 5%. The change in the number of service events is due to an increased number of bed days and laboratory tests.

Nearly 8000 people received home nursing service, which is up by 5% compared to the previous year. During the reporting period, over 270 000 home nursing visits which is by 3% more than in the previous year.

Availability of nursing care

As of January 1, 2019, there are over 1000 appointments registered in the nursing care waiting lists.

Compared to the same period of the previous year, the number of appointments registered in the waiting lists for home nursing and inpatient nursing care has decreased.

This is due to the new contract period that started on 01.10.2018. Service providers whose contract with EHIF has been terminated no longer provide regular waiting list reports. At the same time, EHIF also pays for the treatment of patients who have already registered in their waiting lists (but they are excluded from this report).

97% of the appointments registered in the nursing care waiting lists take place within maximum allowed waiting time[5] - waiting times are generally within the maximum allowed waiting time.

Table 28. Number of appointments registered in nursing care waiting lists

	01.01.2018		*01.01.2019*		*Change compared to 01.01.2018*
	Number of appointments in waiting lists	*Within max. period*	*Number of appointments in waiting lists*	*Within max. period*	*Number of appointments in waiting lists*
Inpatient nursing care	1 138	97%	675	96%	-463
Home nursing	636	91%	346	99%	-290
Total	**1 774**	**95%**	**1 021**	**97%**	**-753**

[5]*Maximum allowed waiting time is three months in inpatient nursing care and two weeks in home nursing care.*

Performance of nursing care contracts

In 2018, EHIF paid medical institutions 35,6 million euros for 58 000 treatment cases. The treatment cases of the HNDP hospitals accounted for 40% and the amount for 57% of the performance of nursing care contracts. The funding for nursing care increased by 12% compared to the previous year.

The table below provides information on the performance of nursing care contracts in the 1st and 2nd half of 2018. In both half-years, the contracts were executed financially by 99%, and in treatment cases by 97% in the 1st half-year and by 96% in the 2nd half-year.

Table 29. Performance of nursing care contracts, in thousands of euros

	Contract for the first half-year of 2018		*Performance of the contract for the first half-year*		*Contract for the second half-year of 2018*		*Performance of the contract for the second half-year*	
	Amount	*Number of treatments*	*Amount*	*Number of treatments*	*Amount*	*Number of treatments*	*Amount*	*Number of treatment cases*
HNDP hospitals	**9 971**	**11 932**	**99%**	**96%**	**10 823**	**12 582**	**99%**	**93%**
Regional hospitals	1 346	1 415	99%	100%	1 445	1 444	96%	95%
Central hospitals	4 230	4 170	99%	97%	4 720	4 422	99%	90%
General hospitals, local hospital	4 395	6 347	99%	94%	4 658	6 716	99%	94%
External partners	**7 449**	**17 834**	**99%**	**98%**	**7 751**	**17 720**	**99%**	**98%**
Total	**17 420**	**29 766**	**99%**	**97%**	**18 574**	**30 302**	**99%**	**96%**

Compared to 2017, the amount paid to the HNDP hospitals increased by 13% and to external partners by 11%. The number of treatment cases provided in nursing care did not increase at the HNDP hospitals but did increase by 2% at external partners.

The amount paid to regional hospitals (North Estonia Medical Centre, Tallinn Children's Hospital and Tartu University Clinic) increased by 13% in 2018 compared to the previous year. There were 4% more nursing care treatment cases in regional hospitals, as compared to 2017. The 2018 contracts were executed by 97% both for contract amount and treatment cases. The North Estonia Medical Centre provides inpatient nursing care, and in the 1st half of the year the medical institution executed the contract amount by 95% and in the 2nd half of the year by 85%; treatment cases were executed by 107% and 84% respectively. Tartu University Clinic provides both, inpatient nursing care and home nursing care services. The contract amount was executed by 100%, treatment cases by 98%. The Tallinn Children's Hospital does not provide nursing care services.

The amounts paid to central hospitals (East Tallinn Central Hospital, Ida-Viru Central Hospital, West Tallinn Central Hospital, Pärnu Hospital) in 2018 increased by 12% compared to the previous year, the number of treatment cases provided in central hospitals was down by 1% as compared to 2017. The contracts were executed by 100% for the contract amount and by 93% for the treatment cases.

General hospitals and local hospitals (Hiiumaa Hospital, Järvamaa Hospital, Kuressaare Hospital, South Estonian Hospital, Läänemaa Hospital, Narva Hospital, Põlva Hospital, Rakvere Hospital, Raplamaa Hospital, Valga Hospital, Viljandi Hospital and Jõgeva Hospital) provided the same amount of nursing care treatment cases as in 2017. The amount paid to the general hospitals for nursing care services increased by 13% compared to the previous year. The contracts were executed by 99% for the contract amount and by 93% for treatment cases.

The number of treatment cases in nursing care at external partners in 2018 increased by 2% and the amount by 11% compared to 2017. In 2018, the treatment cases were executed by 98%, the amount by approximately 99%.

An overview of the volumes of nursing care contracts and their performance by hospitals is available on the EHIF's website.

1.5. Dental care

Our goal is to gradually increase the availability of dental services and benefits, considering people's needs related to their age and medical treatment. The majority of dental care services is made up by planned dental care for adults and dental care for children under the age of 19.

We assume the obligation to pay for adult dental care services in case of emergency care. As at July 1, 2017, adult insured persons also qualify for dental care benefit for primary dental care services and as at January 1, 2018 also for non-financial benefit for dentures. People can use the non-financial dental care and dentures benefit at our contract partners, and the institutions must sign a contract with EHIF to be able to provide the benefit.

In order to make the provision of the service and the use of benefit to people and dental care providers as quick and easy as possible, the calculation of the dental care and denture benefit limit and the billing between EHIF and a dental care provider is carried out electronically. People do not have to file any application or document to EHIF or dentist.

Table 30. Execution of budget for dental care, in thousands of euros, and the number of treatment cases

	2017 actual		*2018 budget*		*2018 actual*		*Budget execution*	
	Amount	*Number of treatment cases*	*Amount*	*Number of treatment cases*	*Amount*	*Number of treatment cases*	*Amount*	*Number of treatment cases*
Prevention and treatment of children's dental diseases	19 238	369 985	24 757	371 226	23 071	364 310	93%	98%
Orthodontics	4 816	59 576	5 843	60 473	5 974	65 903	102%	109%
Emergency dental care for adults	1 227	22 658	1 598	21 984	1 327	20 999	83%	96%
Planned dental care for adults	3 628	116 201	19 700	441 000	18 377	389 822	93%	88%
Planned dental care for adults	2	9	0	0	42	57	-	-
Adult non-financial dental benefit	3 626	116 192	12 000	400 000	11 330	346 073	94%	87%
Adult non-financial dentures benefit	0	0	7 700	41 000	7 005	43 692	91%	107%
Preparedness	248	2	15	0	30	8	200%	-
Total	**29 157**	**568 422**	**51 913**	**894 683**	**48 779**	**841 042**	**94%**	**94%**

The increased use of dental care services is due to the fact that the financial dental care benefits for adults were changed into non-financial benefits. Financial benefit is a form of benefit that is paid in cash to a person after receiving the service. Non-financial benefit is a discount that is calculated at the moment of payment for a service provided and a person pays a smaller amount. Adult dental care benefit applied from July 1, 2017 and dentures benefit applied from the beginning of 2018 are non-financial benefits that are applied to services included in the list of healthcare services.

In 2018, dental care services were provided to 395 000 people - we paid for dental diseases prevention and treatment of nearly 146 000 children, and for the orthodontic services of 21 000 children. Emergency dental care services were provided to over 15 000 people. Adult dental care benefit was used by 224 000 people and denture benefit by over 38 000 people.

Prevention and treatment of children's dental diseases

In 2018, there were over 240,000 children aged 3 to 19 years out of whom nearly 148 000 children (61.4% of the target group) visited the dentist.

On the basis of age, the coverage of the target group is the highest among children of 5–11 years of age. This shows that pre-schoolers and elementary level students are taken to the dentist quite often. However, the coverage is decreasing among adolescents aged 17 to 19 years.

In 2018, the coverage was the highest in Saaremaa (75%), in Jõgeva county (70%), Tartu county (67%) and in Põlva county (66%). The coverage was the lowest in Ida-Viru County (57%), Järva County (60%), Valga County (60%) and Harju County (60%).

Orthodontics

Demand for orthodontics has been much higher in 2018 than planned in the budget. Compared to the same period last year, the funding for orthodontics services increased by 24% or by 1.2 million euros. The funding of orthodontic services has grown due to renewal of the healthcare services list in 2016, equalization of updated orthodontic reference prices with actual costs, and increased wage component in the service price from April 1, 2018.

In 2018, EHIF paid for orthodontic services of 21 000 children; the number of treated children has remained at the same level as the previous year.

Emergency dental care for adults

Funding for adult emergency dental care increased by 100 000 euros compared to the previous year, while the number of treatment cases decreased by 7.3% or by 1659 cases. During the reporting period, adult emergency dental services have been provided to over 15 000 people. The number of treated persons has decreased by 8,3% or by 1391 persons compared to the previous year.

Planned dental care for adults

Planned dental care for adults includes planned dental care for adults plus non-financial dental and dentures benefits.

Adult dental care benefit is a financial benefit that is applied to the services provided in the list of healthcare services and involves the patient's own contribution. Adult dental care benefits are provided at two different rates: an adult over 19 years of age is entitled to a benefit of 40 euros per year with their own contribution of 50%; and a higher rate will be paid to pregnant women, mothers of children under one year of age, persons receiving pension for incapacity to work and old-age pensioners, persons with partial or no work ability and persons with increased need for dental care. The higher rate of benefit is 85 euros and the out-of-pocket amount forms 15% of the price.

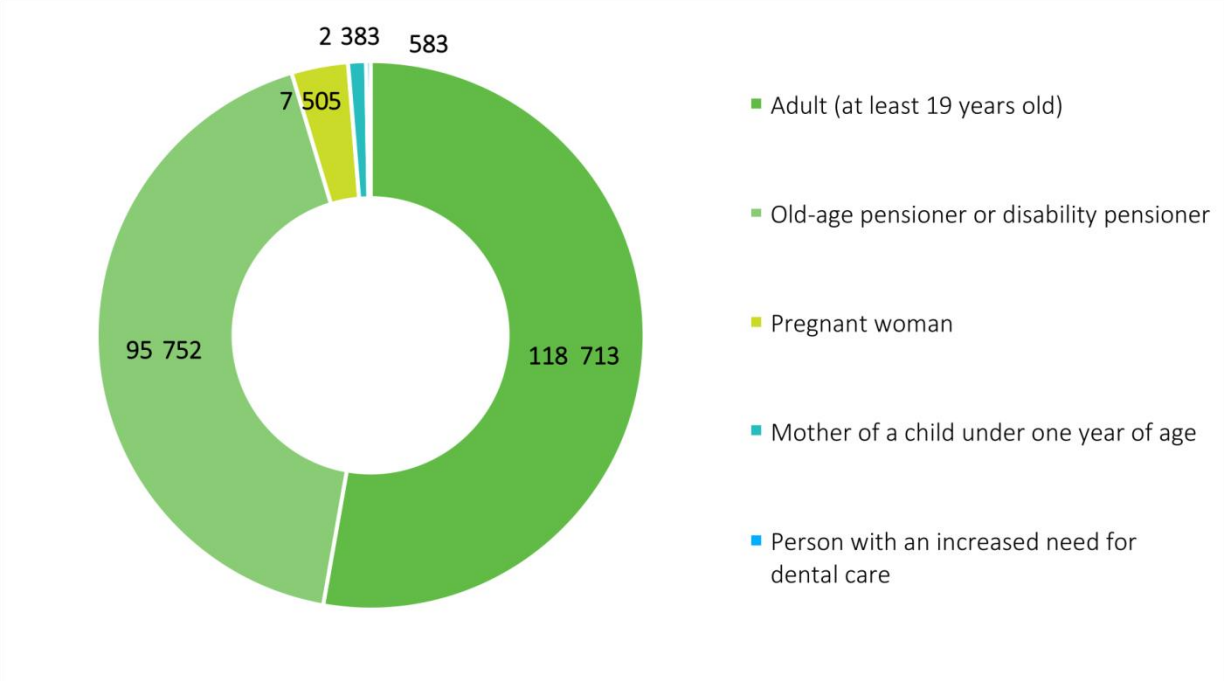


Figure 10. Number of people who used dental care benefit in 2018, by benefit types

In 2018, dental care services were most widely used by adults over 19 years of age, accounting for 53% of the total number of people, they were followed by old age pensioners and persons with partial ability to work (43%). Target group coverage was highest for pregnant women and mothers of children under one year of age (25.5%), which is up by 14.7% compared to 2017. Coverage was the lowest for people with increased dental care, only 8.3%. By different target groups, the highest increase in the number of persons who used the benefit was among adults over 19 years of age (by 15.5% compared to the previous year).

In 2018, the average amount of benefit used was the highest for adults, with a benefit rate of 40 euros per year. The benefit was used in the extent of 84% on average. For the 85 EUR benefit, the highest rate of use was among mothers with children under one year of age and among old age pensioners and persons with no ability to work (82%).

In 2018, the highest use of benefits per one contractual partner was in Võru county, where one medical institution provided the service on average to 1209 people, this was followed by Ida-Viru county with 893 people per medical institution and Rapla and Tartu counties, each having an average of 870 people per contractual partner. Benefit use was the lowest in Hiiu county, on average 345 benefit users per service provider. The interest in the benefit was also low in Lääne-Viru county, 397 people per medical institution.

The results are similar to the ones in 2017. In 2017, the use of benefit per service provider was the highest in Ida-Viru county (866 people per medical institution), which was followed by Tartu County (797 people) and Rapla County (674 people). In 2017, the use of benefit per contract partner was also the lowest in Hiiu county (170 people).

Availability of dental care

As of January 1, 2019, there are a total of 20 000 appointments registered in the waiting lists of dental care. The number of appointments registered in waiting lists of children's dental care has increased by 6%.

95% of the appointments registered in the children's dental care waiting lists takes place within maximum allowed waiting time, in orthodontics respectively 97% of the appointments. One of our priorities is to increase the coverage of children with the prevention of dental diseases.

Table 31. Number of appointments registered in dental care waiting lists

	01.01.2018		*01.01.2019*		*Change compared to 01.01.2018*
	Number of appointments in waiting lists	*Within max. period*	*Number of appointments in waiting lists*	*Within max. period*	*Number of appointments in waiting lists*
Children's dental care	15 408	96%	16 029	97%	621
Orthodontics	3 646	99%	4 235	97%	589
Total	**19 054**	**97%**	**20 264**	**97%**	**1 210**

Performance of dental care contracts

Dental care contracts (service providers are mainly external partners) are underperformed both in total amount and by specialties.

An overview of the volumes of dental care contracts and their performance by hospitals is available on EHIF's website.

Table 32. Performance of dental care contracts, in thousands of euros

	Contract for the first half-year of 2018		*Performance of the contract for the first half-year*		*Contract for the second half-year of 2018*		*Performance of the contract for the second half-year*	
	Amount	*Number of treatments*	*Amount*	*Number of treatments*	*Amount*	*Number of treatments*	*Amount*	*Number of treatment cases*
HNDP hospitals	**1 888**	**31 024**	**95%**	**91%**	**1 682**	**26 506**	**95%**	**92%**
Regional hospitals	1 098	20 172	99%	91%	964	16 944	95%	89%
Central hospitals	585	7 751	93%	93%	536	6 925	96%	97%
General hospitals, local hospital	205	3 101	85%	88%	182	2 637	92%	97%
External partners	**14 238**	**209 667**	**96%**	**97%**	**14 058**	**200 673**	**95%**	**97%**
Total	**16 126**	**240 691**	**96%**	**96%**	**15 740**	**227 179**	**95%**	**97%**

1.6. Ambulance

Table 33. Execution of budget for ambulance, in thousands of euros

	2017 actual	*2018 budget*	*2018 actual*	*Budget execution*
Total of ambulance	0	42 239	45 020	107%

From 2018, some of the health care expenditure that was usually financed from the state budget, including the financing of ambulance service, was brought into EHIF. In 2018, EHIF financed the ambulance service, but the Health Board signed contracts with the ambulance service providers and monitored the compliance of the service. As of 2019, EHIF will sign contracts with the ambulance service providers.

2. Health promotion

Table 34. Execution of budget for health promotion, in thousands of euros

	2017 actual	*2018 budget*	*2018 actual*	*Budget execution*
Health promotion activities for children	325	502	438	87%
Activities aimed at patient awareness	622	628	710	113%
Empowering of the primary level	62	92	14	15%
Development of healthcare system	506	378	629	166%
Total	**1 515**	**1 600**	**1 791**	**112%**

We had planned 1.6 million euros for health promotion in 2018, but the actual expenditure was 1.8 million euros, exceeding the budget by 6%. Budget overrun was mainly related to capacity building of information campaigns and increased volume of activities for the development of healthcare system.

In 2018, we conducted five major campaigns about patient awareness. These campaigns focused on:

- cervical cancer screening;
- breast cancer screening;
- family physician advisory line 1220
- primary care campaign: start from the family physician;
- children's dental health.

In addition, we also carried out smaller-scale campaigns to inform people about the European Health Insurance Card, pharmaceuticals and adult dental care benefit.

We organized a pilot project on activities focusing on children's dental health. The aim of the project is to check and map the state of dental health of Estonian children and youth, by using a common methodology. The project also produced a methodological guide for the staff of educational institutions, which has been introduced to the staff of educational institutions in almost all regions. In 2018, we completed the website suukool.ee.

In the middle of the year, an annual health promotion conference was held in cooperation with the World Bank, the National Institute for Health Development and the Ministry of Social Affairs. The conference brought together 300 health promoters. Next health promotion conference will take place on June 4, 2019, at Kultuurikatel.

This year we started a new project on children's mental health, where we cooperated with the team of peaasi.ee. The project focused on the early detection and treatment of mental and behavioural disorders in children and adolescents. The results show that the number of counselling sessions is increasing. Based on good results, we will increase the project budget by at least half in 2019.

We continued the pregnancy crisis counselling project. In 2018, we understood that due to the lack of advisers, we need to train new advisors and organize refresher trainings, which will commence in 2019-2020. From the beginning of 2018, the pregnancy crisis counselling service has been available also on the islands, which means that counselling service is currently available in 13 Estonian counties and at least 17 medical institutions.

In 2018, we also introduced a new topic - cardiovascular diseases. The aim of our activities was to raise people's awareness about different lifestyle factors that affect potential illness. We spread the information about heart diseases through various media tools across Estonia. We will continue working on the topic of heart diseases also in 2019.

In 2018, EHIF signed with the University of Tartu two contracts for treatment guideline development (in March and October), under which the university will prepare six new treatment guidelines along with accompanying patient guidelines and implementation programs and EHIF provides finances for that.

The strategic objectives set for 2018 were successfully met and respective studies were carried out.

3. Pharmaceuticals

The budget for pharmaceuticals includes:

- reimbursable pharmaceuticals;
- additional pharmaceutical benefit.

3.1. Reimbursable pharmaceuticals

EHIF reimburses the pharmaceuticals intended for hospital use and listed in the healthcare services list in full extent. We also compensate fully for prescription pharmaceuticals that are issued at a pharmacy and are intended for personal use. For reimbursable pharmaceuticals sold at a pharmacy, part of the prescription cost is paid by EHIF and the respective amount is automatically deducted at a pharmacy. This means that the patient can immediately buy the medication at discount price and does not need to apply for reimbursement afterwards. Pharmacies in their turn submit invoices to EHIF at certain intervals. For various diseases and pharmaceuticals, different discount rates apply that are established by the regulations of the Government and the Minister of Social Affairs and the Minister of Health and Labour, which in turn are based on the Health Insurance Act.

Reimbursement of pharmaceuticals that are meant for inpatient use is an open commitment to EHIF. This means that EHIF is obliged to compensate for need-based pharmaceuticals to the extent determined by law and cannot refuse from doing so due to lack of funds.

Table 35. Execution of budget for reimbursable pharmaceuticals, in thousands of euros

	2017 actual	*2018 budget*	*2018 actual*	*Budget execution*
100% reimbursable pharmaceuticals	64 474	64 694	71 873	111%
90% reimbursable pharmaceuticals	36 087	38 644	35 628	92%
75% reimbursable pharmaceuticals	5 957	6 445	5 827	90%
50% reimbursable pharmaceuticals	19 212	20 645	22 850	111%
Total	**125 730**	**130 428**	**136 178**	**104%**

The budget for pharmaceuticals was executed by 104%. The biggest budget overrun occurred in the groups of 100% and 50% reimbursable pharmaceuticals.

Compared to the previous year, the number of reimbursable prescriptions has increased by 5%, reflecting the increased use of pharmaceuticals. The number of prescriptions for 50% reimbursable pharmaceuticals increased the most (13%). The number of prescriptions has increased primarily due to a new system of supplementary pharmaceutical benefit, which makes the pharmaceuticals that are reimbursed at the 50% discount rate more affordable for patients. In the last few months of the year, people bought some prescription pharmaceuticals in advance, as the insured persons believed that this was economically beneficial. The number of prescriptions has significantly increased, for example, for anticoagulants and anti-influenza drugs. Increased use of prescription drugs also led to increased costs.

The average cost of a reimbursable prescription has also increased (by 3%) for EHIF, which is 109 euros per insured patient in 2018. The biggest increase occurred in the cost of 100% reimbursable prescriptions (9%). This is partly related to the fact that from the beginning of 2018, IVF medications are available for women up to 40 years of age (incl.) at 100% discount. In previous years, patients received IVF medications from the pharmacy first with a 50% discount rate and then had to submit an application to EHIF for the reimbursement of the rest of the sum. The cost of 100% reimbursable prescription drugs has increased also due to the addition of new expensive products to the list of reimbursable pharmaceuticals (e.g. hepatitis C drugs for a new target group, new drugs for *Sclerosis Multiplex* and new anticancer drugs). For 50% reimbursable pharmaceuticals, the average cost of a prescription has increased (5%), first of all, due to increased use of new anticoagulants.

The increased number and average cost of reimbursable prescriptions is directly related to the budget overrun.

Table 36. Number of reimbursable prescriptions (RP) and their average cost for EHIF in euros

	2017 actual		*2018 actual*		*Change compared to 2017*	
	Number of RPs	*Average cost of RP for EHIF*	*Number of RPs*	*Average cost of RP for EHIF*	*Number of RPs*	*Average cost of RP for EHIF*
100% reimbursable pharmaceuticals	974 199	66,18	1 000 283	71.85	3%	9%
90% reimbursable pharmaceuticals	3 008 047	12,00	2 934 035	12.14	-2%	1%
75% reimbursable pharmaceuticals	582 798	10,22	569 681	10.23	-2%	0%
50% reimbursable pharmaceuticals	3 659 134	5,25	4 132 820	5.53	13%	5%
Total	**8 224 178**	**15,29**	**8 636 819**	**15.77**	**5%**	**3%**

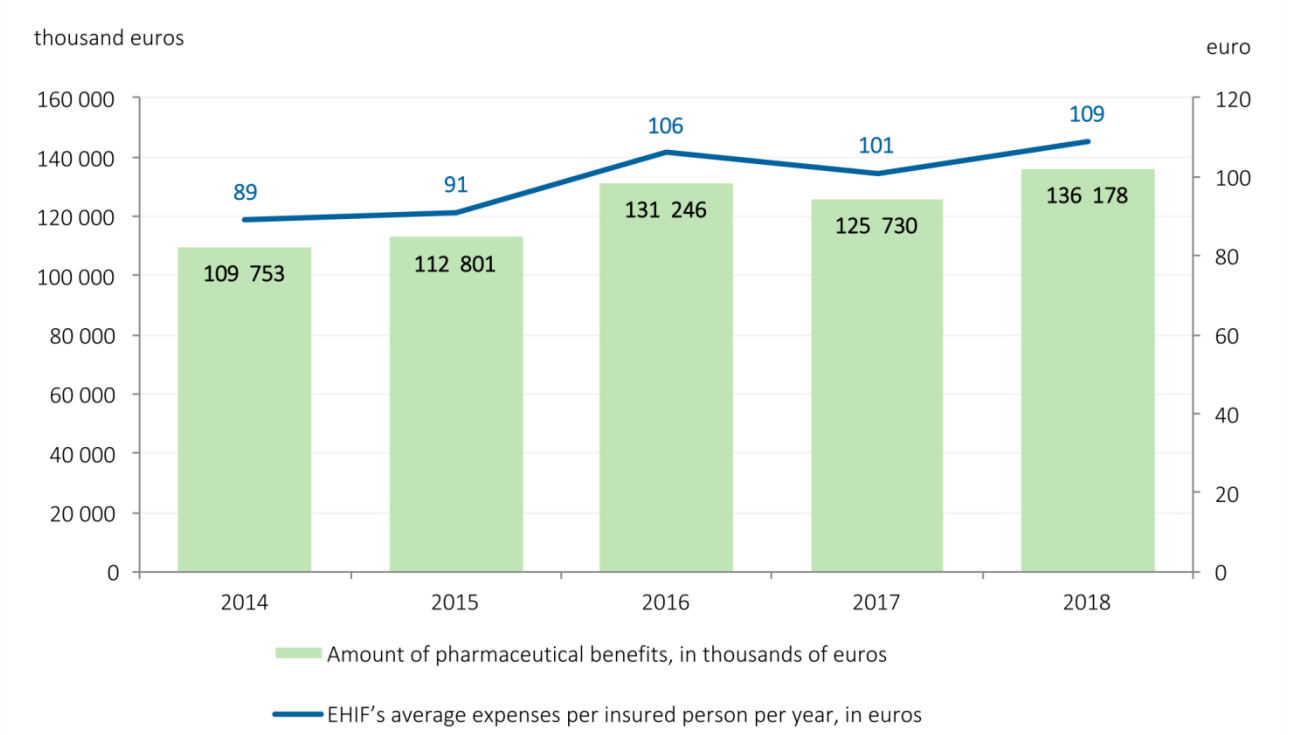


Figure 11. Total cost of pharmaceutical benefits and cost per insured person in 2014–2018

The average cost of a prescription for a patient has decreased by 8% or 0.52 euros over the year. This is due to changed system of supplementary pharmaceutical benefits that enables the patients with high drug expenses to buy prescription drugs at a better price. Due to the change in the base rate of cost-sharing, the discount rates have also changed.

Table 37. Cost-sharing by an insured person, in euros

	2017 actual	*2018 actual*	*Change compared to 2017*
100% reimbursable pharmaceuticals	2.72	3.74	38%
90% reimbursable pharmaceuticals	4.93	5.44	10%
75% reimbursable pharmaceuticals	6.98	7.41	6%
50% reimbursable pharmaceuticals	9.47	7.40	-22%
Total	**6.83**	**6.31**	**-8%**

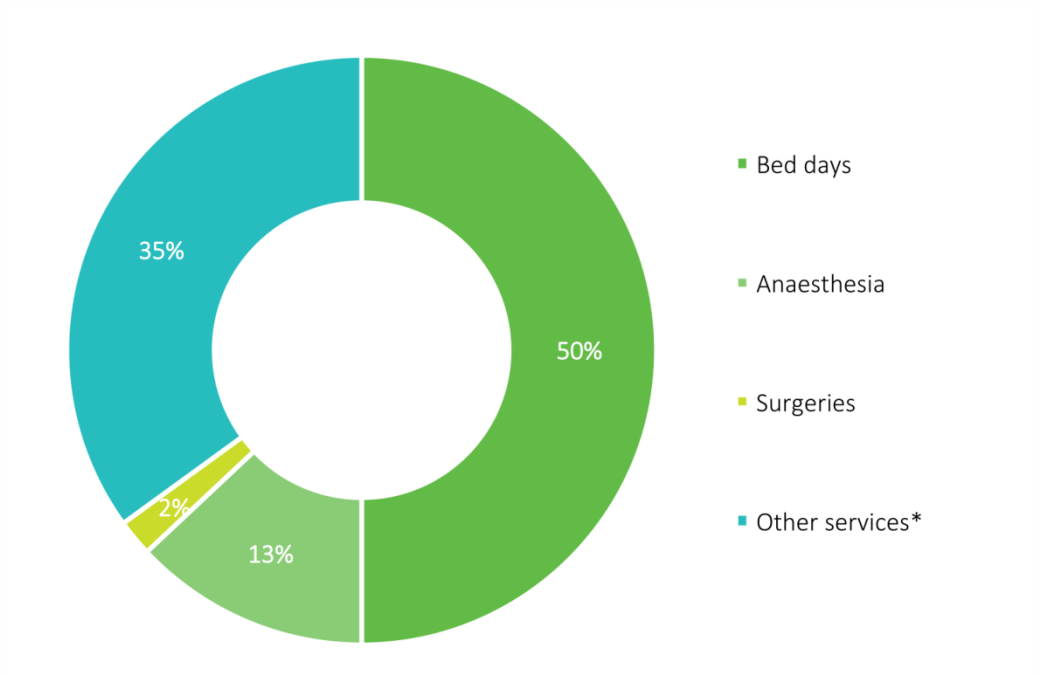
Table 38 shows medical conditions that can be treated by using pharmaceuticals with higher reimbursement rate. Over the year, expenditure for cancer treatments has increased significantly, which is mainly due to new drugs added in the list. In certain cases, EHIF also exceptionally compensates for pharmaceuticals on a patient's individual request. Such arrangement is applied mostly in cases where the medication needed for the patient and used in outpatient care does not have marketing authorization in Estonia and, therefore, it cannot be included in the EHIF pharmaceuticals list. Reimbursement, by way of exception, also allows pharmaceuticals to be made available in the case of several rare diseases. In 2018, 1898 persons received compensation by way of exception in the total amount of 1.3 million euros.

Table 38. Diagnoses related to higher pharmaceuticals benefits, in thousands of euros

	2017 actual		*2018 actual*	
	Reimbursed by EHIF	*% of total reimbursed cost*	*Reimbursed by EHIF*	*% of total reimbursed cost*
Total diabetes, incl.	19 610	16%	20 383	15%
insulins	10 610	8%	9 869	7%
orally administered preparations	9 000	7%	10 514	8%
Hypertension	12 717	10%	10 608	8%
Cancer	16 629	13%	19 795	15%
Bronchial asthma	6 633	5%	5 493	4%
Glaucoma	4 085	3%	3 803	3%
Chronic hepatitis C	10 295	8%	10 558	8%
Mental disorders	2 107	2%	1 848	1%
Hypercholesterolemia	2 142	2%	2 023	1%
Total	**74 217**	**59%**	**74 512**	**55%**

Reimbursement of hospital pharmaceuticals from the healthcare services budget

In addition to the reimbursement of outpatient pharmaceuticals, health insurance money is also used to pay for the pharmaceuticals used in hospitals. In 2018, the pharmaceutical component of healthcare services amounted to 15.3 million euros, which is 6% less than in the previous year. The costs of pharmaceuticals are included in the cost of a bed day, but also in the reference prices of surgical procedures and anaesthesia (see Figure 12).



* Other services are haemodialysis and peritoneal dialysis, bone marrow transplantation-related services, various endoscopic procedures, some dental care services for children, etc.

Figure 12. Division of pharmaceuticals by healthcare services

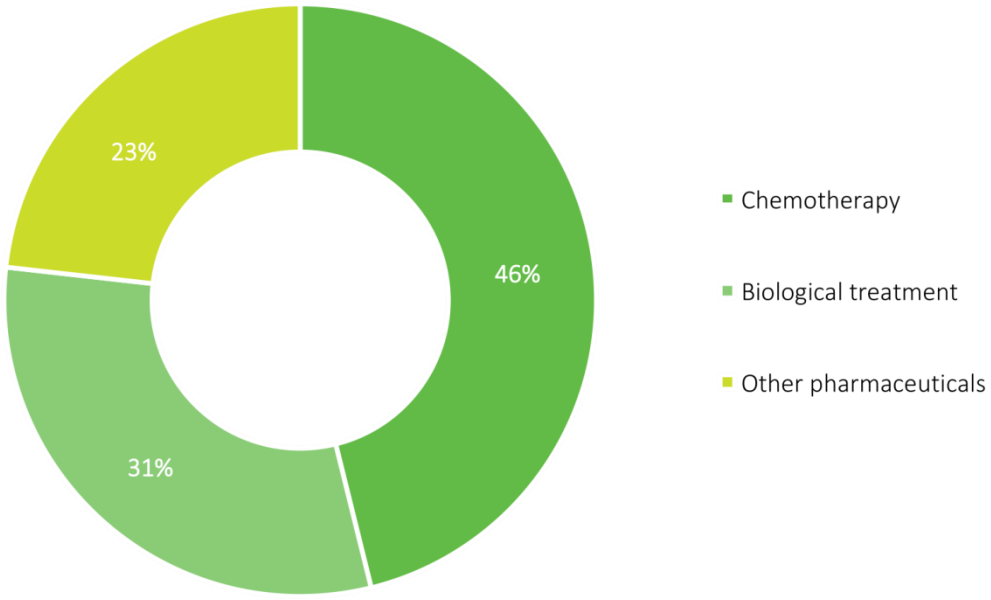


Figure 13. Share of pharmaceuticals reimbursed via the healthcare services list

In 2018, the share of in-hospital pharmaceuticals in the list of healthcare services accounted for 55 million euros, which has increased by 1% compared to the previous year. The major part of the increased costs is due to other pharmaceuticals as well as biological treatment. At the beginning of 2018, several in-hospital pharmaceuticals became

available, the most important being the biological therapy of uveitis and hidradenitis, medications for breast, kidney, prostate and lung cancer, as well as the therapy of acromegaly and caffeine therapy for premature newborns.

During the year 2018, we were negotiating and preparing for the changes that will be applied from the beginning of 2019. As a result, hospitals will once again receive new therapy options for the treatment of different tumours, such as multiple myeloma, Hodgkin's lymphoma and lung cancer. Patients with giant cell arteritis, atopic dermatitis or primary progressive *sclerosis multiplex* will have an opportunity to use biological therapy. In total, pharmaceuticals for 6 rare diseases will be added to the list: Gaucher disease, paroxysmal nocturnal haemoglobinuria, high-risk neuroblastoma, Cushing's disease, lymphoblastic leukaemia and Hodgkin's lymphoma.

In 2018, we funded pharmaceuticals from the budget for healthcare services, and from the budgets for outpatient pharmaceutical benefits and additional benefits for pharmaceuticals in the amount of 216.8 million euros in total, which accounted for 16.8% of the health insurance costs.

Table 39. Funding of pharmaceuticals from the EHIF budget, in thousands of euros

	2017 actual	*2018 actual*	*Change compared to 2017*
Reimbursable pharmaceuticals	125 730	136 178	8%
Use of the pharmaceutical codes in the list of healthcare services	54 251	55 020	1%
Cost of pharmaceuticals in healthcare services	14 459	15 279	6%
Additional benefit for pharmaceuticals	386	10 301	-
Total cost of pharmaceuticals	**194 826**	**216 778**	**11%**

3.2. Additional benefit for pharmaceuticals

From 2018, supplementary benefit for pharmaceuticals is recognized under the budget for pharmaceuticals, whereas until 2017 the benefit was recognized under other expenses.

From the beginning of 2018, supplementary benefit for pharmaceuticals is automatic and an insured person will receive supplementary benefit along with the usual pharmaceutical benefit, at the time of purchase of the product at the pharmacy. The benefit applies to expenses that exceed 100 euros per calendar year. In the past, the benefit applied to expenses starting from 300 euros.

In addition to the supplementary benefit for pharmaceuticals, the so-called “prescription fee” also changed from the beginning of 2018. As of 2018, a prescription fee of 2.5 euros is set for all prescriptions. It used to be 1.27 euros for the 100%, 90% and 75% discount rate, and 3.19 euros for the 50 % discount rate per prescription.

In 2018, a total of 134 000 insured persons received supplementary benefit for pharmaceuticals, which cost to EHIF 10.3 million euros. Due to the change made to the system of supplementary benefit for pharmaceuticals, the number of patients who spent more than 250 euros per year on prescription drugs decreased by 95% or from 24 000 to 1000.

Table 40. Additional benefit for pharmaceuticals

	2017 actual	*2018 actual*	*Change compared to 2017*
Reimbursed amount (thousand euros)	386	10 301	-
Number of people who received the benefit	3 000	134 315	-
Average reimbursed amount per person (euros)	129	77	-40%

4. Benefits for temporary incapacity for work

Benefit for temporary incapacity to work is a financial compensation paid to an employed insured person in case the person loses income due to a temporary release from work. The benefit is paid on the basis of a certificate for incapacity to work.

The payment of the benefit for temporary incapacity to work depends on the type of incapacity certificate and the cause for incapacity to work. Benefits are paid on the basis of supporting documents such as certificate for sick leave, certificate for care leave, certificate for maternity leave and certificate for adoption leave.

In May 2018, we introduced a technical solution for the transfer of incapacity certificates, in which case a physician can send an incapacity certificate to EHIF immediately after its opening. This way, in case of an employee's absence from work, the employer immediately receives information about the certificate for incapacity to work issued by a physician, as well as sees the estimated end date of the employee's incapacity to work on the state portal. The new solution improves information exchange. An employee can check on the state portal information about the incapacity certificate opened for him/her and doctors receive through the updated x-tee services information about incapacity certificates issued and the reasons for their issue.

By the end of 2018, the majority of medical institutions had switched to a new technical solution, and the data of incapacity certificates are forwarded to EHIF after the opening and closing of a certificate.

At the same time, the previous solution is still in use, where the doctor sends the data on a disability certificate to EHIF only after the certificate has been closed. The solution used by a medical institution depends on the software the medical institution uses.

Table 41. Execution of budget for benefits for incapacity to work, in thousands of euros

	2017 actual	*2018 budget*	*2018 actual*	*Budget execution*
Sickness benefits	65 312	70 643	74 177	105%
Carer's allowances	22 318	23 480	24 712	105%
Maternity benefits	49 224	53 213	53 685	101%
Occupational accident benefits	4 443	5 002	4 996	100%
Total	**141 297**	**152 338**	**157 570**	**103%**

In 2018, we paid the benefits for temporary incapacity to work in a total amount of 157.6 million euros, which is up by 16,3 million euros compared to the previous year.

The budget for incapacity to work benefit was overrun for both, sickness and care benefits and maternity benefits.

Table 42. Comparison of benefits for incapacity for work

	2017 actual	*2018 actual*	*Change compared to 2017*
Sickness benefit			
Certificates paid for by EHIF	266 656	285 645	7%
Days paid for by EHIF	3 531 904	3 780 880	7%
Total benefits paid by EHIF	65 312	74 177	14%
Average benefit per day (euros)	18.5	19.6	6%
Average duration of paid leave	13.2	13.2	0%
Carer's allowance			
Certificates paid for by EHIF	124 538	131 443	6%

Days paid for by EHIF	964 351	990 334	3%
Total benefits paid by EHIF	22 318	24 712	11%
Average benefit per day (euros)	23.1	25.0	8%
Average duration of paid leave	7.7	7.5	-3%
Maternity benefit			
Certificates paid for by EHIF	10 530	10 963	4%
Days paid for by EHIF	1 467 805	1 531 299	4%
Total benefits paid by EHIF	49 224	53 685	9%
Average benefit per day (euros)	33.5	35.1	5%
Average duration of paid leave	139.4	139.7	0%
Occupational accident benefit			
Certificates paid for by EHIF	7 464	7 777	4%
Days paid for by EHIF	149 088	155 508	4%
Total benefits paid by EHIF	4 443	4 996	12%
Average benefit per day (euros)	29.8	32.1	8%
Average duration of paid leave	20.0	20.0	0%
Total benefits			
Certificates paid for by EHIF	**409 188**	**435 828**	**7%**
Days paid for by EHIF	**6 113 148**	**6 458 021**	**6%**
Total benefits paid by EHIF (thousands of euros)	**141 297**	**157 570**	**12%**
Average benefit per day (euros)	**23.1**	**24.4**	**6%**

In 2018, the number of compensated sick leave certificates as well as the number of days of incapacity to work increased. The increased number of incapacity certificates is also partly related to the 2% increase in the number of insured persons in 2018.

The average daily compensation rate has increased. The average disbursed compensation per calendar day is linked to the average wage increase. EHIF calculates the benefit for temporary incapacity to work on the basis of income taxed with social tax in the calendar year preceding the date of opening of the incapacity certificate. In 2017, the average gross salary increased by 6.5%, which contributed to the increase in average compensation paid per one calendar day in 2018. In 2018, the average compensation per calendar day was 24.4 euros, increasing by 1,3 euro over the year.

Sickness benefits

Sickness benefits are paid to an insured person during the period of his or her temporary incapacity to work in order to compensate the employee for the partially unreceived wages at the time of illness.

In case of organ donations or hematopoietic stem cells transfers, EHIF will pay compensation from the first day. During the period of incapacity to work caused by illness, domestic injury, traffic injury, and quarantine, no benefits are paid for days 1–3, the benefit for days 4–8 is paid by the employer, and from the 9th day, the obligation of payment is assumed by EHIF. For other reasons, EHIF pays the benefit from the second day of illness.

In 2018, we paid sickness benefits for 168 000 insured persons, which is 7000 cases more compared to the previous year. The main causes of sick leave in 2018 were illnesses and domestic injuries (84% and 11% respectively). Compared to the previous year, there were no significant changes in the causes for the use of sick leave certificates.

We compensated the biggest number of sick leave certificates in March and less from June to September. This figure is particularly affected by the spread of viral diseases.

The average duration of the sick leave reimbursed by EHIF in 2018 was 13.2 days, which is at the same level as in 2017. However, the number of sick leave certificates per an employed insured has increased: in 2017, 0.43 and in 2018, 0.44 sick leave certificates were issued for one employed insured.

EHIF has paid the most sickness benefits based on sick leave certificates issued due to musculoskeletal and connective tissue diseases, injuries, poisoning and other certain consequences of external causes, respiratory diseases, cardiovascular diseases, and malignant tumours.

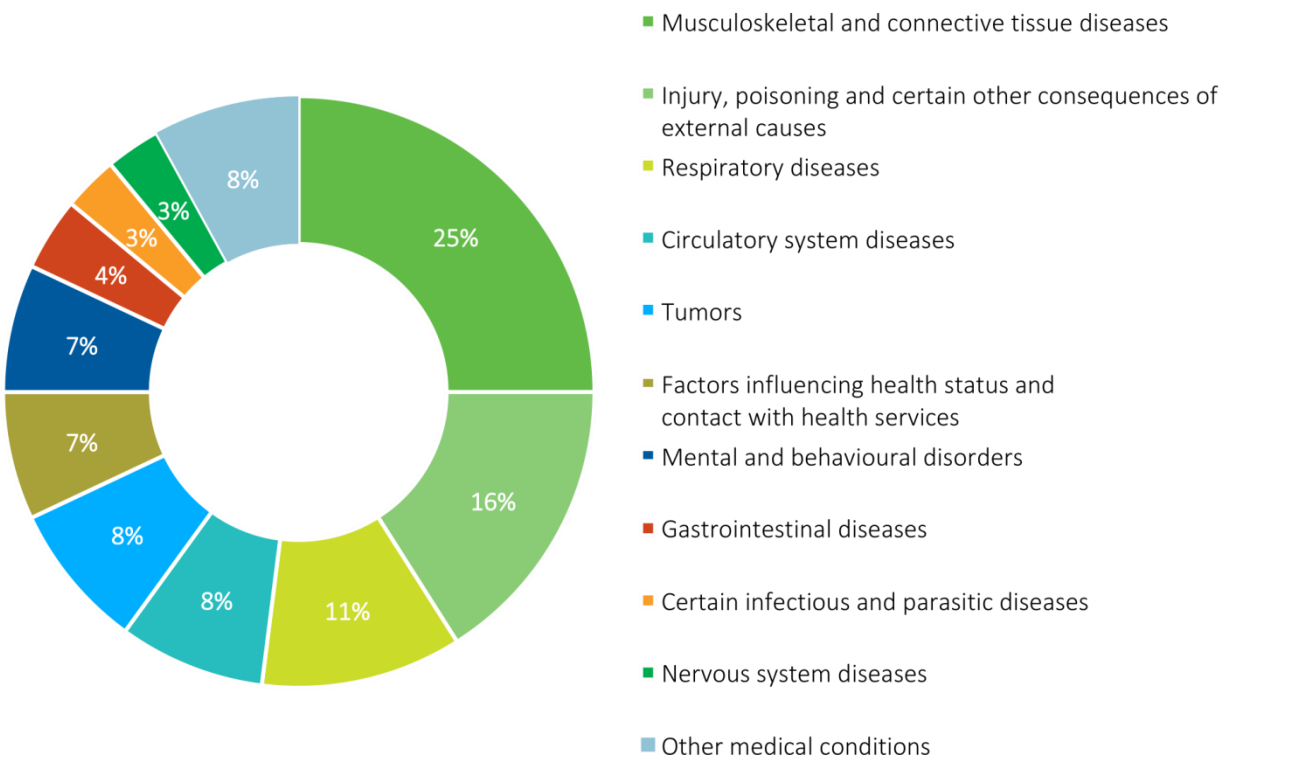


Figure 14. Distribution of sickness benefits by medical conditions

Carer's allowances

Carer's allowances are paid to an insured person who is nursing a sick child or family member. The reasons for using a certificate for carer's leave have not changed compared to the previous year. Certificates for carer's leave for nursing a child under 12 years of age make up 97% of all carer's leave certificates. The care's leave certificate for nursing a child under three years of age, or a disabled child under 16 years of age, accounted for a total of 3% of all the certificates.

In 2018, the number of certificates for carer's leave increased by 6% compared to the previous year. Certificates for carer's leave were in most cases issued for respiratory diseases and certain infectious and parasitic diseases.

Maternity benefit

Maternity benefit is paid to an employed insured woman for pregnancy and maternity leave.

In 2018, the number of certificates for maternity leave increased by 4% compared to the previous year. The number of maternity leave certificates has increased the most in the age group of 30-39 years; during the year 433 maternity leave certificates were issued.

Table 43. The use of maternity benefit by age groups

Age group	Number of people	Number of certificates	Days compensated	Amount of compensation (in thousands of euros)	Average cost per day	Average cost per day
10–19 years	87	87	12 180	197	16.2	140.0
20–29 years	4 569	4 549	635 906	19 468	30.6	139.8
30–39 years	5 758	5 758	804 426	30 723	38.2	139.7
40–49 years	567	567	78 507	3 280	41.8	138.5
50–19 years	2	2	280	17	60.7	140.0

Occupational accident benefits

The Health Insurance Fund pays occupational accident benefits as of the second day from the issue of a certificate of incapacity to work.

The distribution of certificates of incapacity to work issued due to an occupational accident has not changed compared to the previous year. The causes for issue of a sick leave certificate due to an occupational accident in 2018 divided as follows: accidents at work accounted for 96%, complications resulting from an accident at work accounted for 2.5%, and occupational accidents in traffic for 1.5%.

In 2018, EHIF paid occupational accident benefit to nearly 3800 people. The number of compensated cases has increased by 100 and the number of compensated certificates for occupational accident has increased by 4% compared to 2017.

Benefits paid on the basis of certificates issued by physicians abroad

EHIF pays the benefit for temporary incapacity to work to employed persons also based on a certificate issued by a physician of a foreign country. In 2018, foreign physicians issued 1324 leave certificates to Estonian insured persons and EHIF paid compensation in the amount of 342 000 euros to 524 people based on 1073 certificates.

In 2018, 85% of cases were filed for sickness benefit, 9% for carer's allowance, 5% for occupational accident benefit and 1% for maternity benefits based on a foreign physician's certificate.

Figure 15 shows that compared to previous years, the number of leave certificates issued by foreign doctors has increased in all age groups.

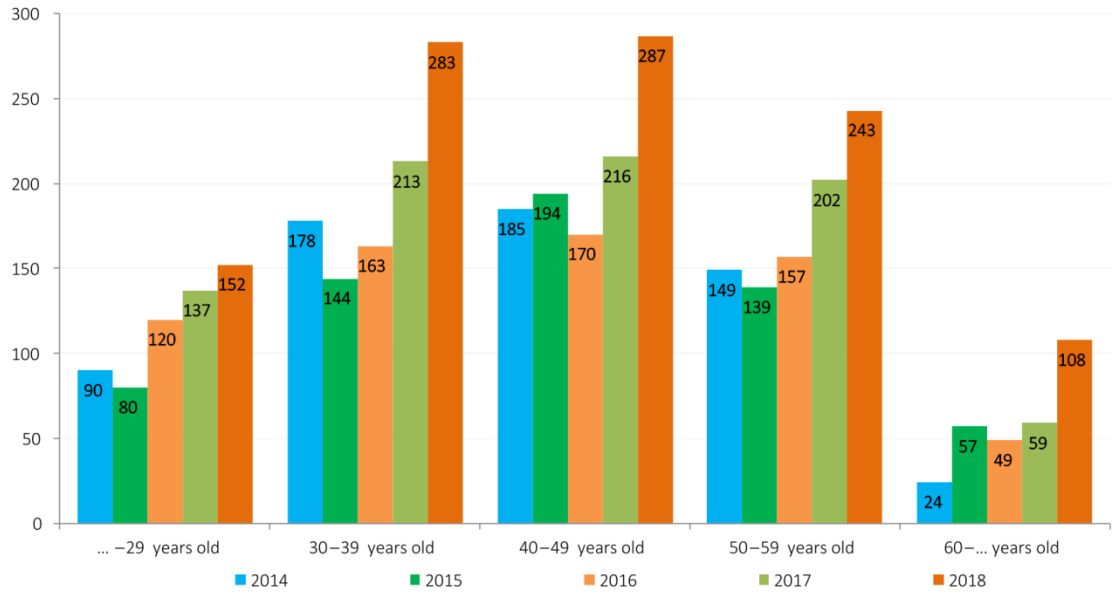


Figure 15. Foreign medical certificates by age groups in 2014–2018

5. Benefits for medical devices

We reimburse self-care medical devices that can be used to treat diseases and injuries, or which help prevent the aggravation of diseases. EHIF reimburses medical devices either at 90% or 50% rate. The patient has to pay 10% or 50% of the cost, respectively (and the amount exceeding the reference price, in case the reference price system is applied).

We are updating the list of medical devices on a yearly basis, adding new products, as necessary, and updating the price list based on contracts signed with medical device distributors. In 2018, the list of medical devices was supplemented with 189 new devices and one new group of medical devices of similar effect and purpose - compression products for the treatment of venous insufficiency and ulcers. This addition helped improve the availability of compression therapy for prevention and treatment of venous ulcers as well as for prevention of recurrence of the condition in patients with venous insufficiency, as recommended in modern treatment guidelines. We also provided compression products at discount for patients with primary lymphedema of stage II and III. In addition, we increased the range of reimbursable diabetes accessories, various pressure clothing, stoma care products, orthopaedic products, wound dressings, and medical devices for sleep disorders therapy.

In 2018, we also prepared a list of medical devices to be applied from the beginning of 2019. The updated list significantly reduces a patient's contribution for purchasing of insulin pumping equipment for diabetic children, moreover, EHIF now reimburses modern insulin pumps for children at the rate of 90%. The change significantly improves the availability of insulin pump therapy for children. The new list has an extended range of medical devices. In addition, we increase the reimbursement amounts of blood glucose monitoring supplies for patients with type 1 diabetes and hypoglycaemia, and the number of colostomy bags for patients with colostomy. Reimbursement of compression products for the treatment of lymphatic diseases will be extended to patients with stage III lipolymphedema, and reimbursement for wound patches and dressings will be extended to patients with rare inflammatory skin diseases.

Table 44. Execution of budget for medical device benefits, in thousands of euros, and the number of persons

	2017 actual		*2018 budget*	*2018 actual*		*Budget execution*
	Amount	Number of persons*	*Amount*	*Amount*	Number of persons*	*Amount*
Primary prostheses and orthoses	1 220	17 409	1 400	1 577	19 554	113%
Glucometer test strips	4 091	45 969	4 214	4 102	47 105	97%
Insulin pumps and insulin pump supplies	726	402	799	727	420	91%
Disposable needles for insulin injection device	344	11 308	365	326	11 493	89%
Lancettes	98	9 467	110	96	10 411	87%
Stoma appliances and accessories	1 311	1 976	1 459	1 343	2 053	92%
Continuous positive airway pressure devices and masks	1 533	4 075	1 688	1 306	4 194	77%
Wound dressings and patches	65	1 698	73	61	1 762	84%
Other medical devices	93	981	247	156	1 570	63%
Total	**9 481**	**71 297**	**10 353**	**9 694**	**75 157**	**94%**

* The total number of persons is not summarized but counted as one person can use several medical devices.

Compared to 2017, the amount of benefits for medical devices has increased by 2%, while the number of users of medical devices has increased by over 5%, i.e. by nearly 4000 people. The medical device budget was executed by 94% during the reporting period.

Compared to the previous year, compensation for other medical devices has increased the most. The increase was expected, as at the beginning of 2017, we expanded the range of medical devices reimbursable via the list of medical

devices to patients with lymphoedema, and at the beginning of 2018 we extended the range of these devices again. Compression products for the treatment of venous insufficiency and ulcers were also included in the list. However, the increase in cost has been somewhat lower than expected. The 2018 budget was executed by 63%, but we expect that people's awareness about new treatment options will improve and the use will increase over time.

The number of users of primary prostheses and orthoses has increased by 12% compared to 2017, and the volume has increased by 29%, being at the same level as in 2016. As expected, the reimbursement costs of prostheses have increased, which is due to updated costs of prostheses and retry sockets for different body parts. The number of patients has mainly increased at the expense of orthosis users, while the cost of orthosis per insured person has remained the same compared to 2017.

The number of medical device users has increased compared to 2017 for diabetes treatment accessories, wound dressings as well as medical devices used for sleep disorders. The financial cost of these medical devices has remained the same or slightly decreased. The continued application of reference prices and new price agreements with lower prices has helped saving reimbursement costs of medical devices. At the beginning of 2018, the reference price dropped for price ranges of glucometer test strips, insulin needles, lancettes, colostomy and ileostomy bags as well as positive airway pressure masks. In 2018, the reference price was applied also to the group of insoles and permanent positive airway pressure devices. As a result, we have reimbursed medical devices to a larger number of people in need, without increasing costs.

6. Treatment of Estonian insured persons abroad

Treatment of an Estonian insured person abroad consists of planned treatment provided under the Health Insurance Act and of benefits under the European Union legislation, where the beneficiary is a person insured by EHIF. The provision of healthcare services and payment is regulated by the Regulation of the European Parliament and of the Council on the coordination of social security systems, pursuant to which the healthcare benefits are an open commitment to EHIF.

Table 45. Treatment of Estonian insured person abroad, in thousands of euros

	2017 actual	*2018 budget*	*2018 actual*	*Budget execution*
Planned treatment abroad	4 753	5 636	2 158	38%
Healthcare service benefit expenses for an Estonian insured person in another Member State	9 434	5 900	10 943	185%
Expenditures under the Directive of the European Parliament and of the Council	89	125	93	74%
Total	**14 276**	**11 661**	**13 194**	**113%**

Planned treatment abroad

Cross-border free movement of insured persons is regulated by European Union legislation and the agreement between EHIF and the Finnish Red Cross in order to find bone marrow donor who are not related. The insured person is referred to a planned medical treatment or study abroad, if the requested healthcare service and its alternatives are not provided in Estonia. The medical efficacy of the healthcare service must be indicated and proven for the patient and the average probability of achieving this goal must be at least 50%. A conseil consisting of at least two medical specialists will provide an assessment of compliance with the criteria.

In 2018, EHIF decided, on the basis of a decision of the Board of EHIF, to assume the obligation to pay benefit for planned treatment abroad in 153 cases. Out of these, 57 decisions were about planned treatment abroad, 71 about studies carried out and for 25 patients it was about searches for a bone marrow donor (non-related) through the Finnish Red Cross Blood Services.

In the reporting period, we made 8 refusals in treatment cases (which is 2 less than in 2017). The reason for refusals was mostly the fact that the requested service or alternative service was available to the patient in Estonia. In 2018, 15 applications were closed without a decision (6 less than in 2017); most of these applications were cancelled at the request of the applicant.

Table 46. Countries the insured persons visited for planned treatment or a study in 2018

Countries	*Total*	*Treatment*	*Study*
United States of America	2	1	1
Netherlands	11	0	11
Lithuania	1	1	0
Latvia	5	5	0
Poland	7	0	7
France	1	1	0
Sweden	16	7	9
Germany	21	7	14
Finland	42	29	13
UK	6	2	4
Switzerland	1	1	0

Denmark	10	0	10
Russia	5	3	2
Total	**128**	**57**	**71**

Treatment invoices are not always received in the year in which the application is submitted, as treatment or study may occur later. Therefore, the number of submitted treatment invoices differs from the number of applications submitted and the number of health insurance decisions made in the respective year.

In 2018, we received invoices from other countries for 165 persons. Out of these, 57 insured persons had gone abroad for treatment, 66 for studies and 42 persons had expenses due to bone marrow donor searches.

In 2017, we received invoices from other countries for 284 persons. Out of these, 77 insured persons had gone abroad for treatment, 158 for studies and 49 persons had expenses due to bone marrow donor searches.

Table 47. High-cost cases of planned treatments abroad, for which EHIF paid in 2018, in thousands of euros

	Country	*Amount*
Allogeneic bone marrow transplantation	Finland	458
Haploidentical hematopoietic stem cell transplantation	Sweden	424
Vascular surgery	Sweden	322
Heart transplantation	Finland	171
Operative treatment of malignant spinal tumour	Finland	165
Heart transplantation	Finland	154

Healthcare service benefit expenses for Estonian insured persons in another Member State

According to Regulation (EC) No 883/2004 of the European Parliament and of the Council, EHIF insured persons are entitled to:

- Receive temporary medical care needed in another Member State;
- Receive any medical care in another Member State.

The budget for 2018 was planned at 5.9 million euros, the actual spending was 10.9 million euros (185%). From this amount, 93 000 euros were used to reimburse for necessary medical care to Estonian insured persons. The reimbursement of necessary medical care is made to insured persons if, for any reason, a person did not have the European Health Insurance Card with him/her during a stay in another Member State and he/she was invoiced. The rest of the healthcare benefit costs are made up of Estonian insured persons who are entitled to any medical care while living in another Member State.

Benefits according to the Patients' Rights Directive

According to the Patients' Rights Directive 2011/24/EU (hereinafter referred to as the Directive), patients may go to another EU Member State with a goal to receive local medical care and, after obtaining healthcare service, apply for financial compensation from EHIF for services they are entitled to receive at the expense of EHIF, in accordance with the prices set by EHIF. In 2018, we approved 97 applications (compared to 74 applications in 2017) under the Directive and reimbursed 93 000 euros for healthcare services provided to people abroad.

In 2018, majority of the applications for compensation under the Directive were for the healthcare services provided for the treatment of bone and joint diseases (14%). Compared to the previous year, the number of cases of cardiovascular disease has increased (13%). However, the number of applications for studies and treatment of tumour diseases remained at the previous year's level, accounting for 12% of all applications. These were followed by cardiovascular diseases, gynaecological diseases, head and neck surgical diseases, eye diseases, rehabilitation, ear-nose-throat diseases, skin diseases, various consultations, studies, tests, pharmaceuticals, etc.

Two applications were rejected - one was for cosmetic surgeries and the other for eye prosthesis - in such cases EHIF does not assume the obligation to pay for the services.

In 2018, insured persons received treatment in 16 EU Member States under the Directive. While in 2017, Finland was the most preferred country to travel for healthcare services, then in 2018, people went the most in Latvia (21%) and Germany (18%). These were followed by Spain (14%), Finland (13%), Lithuania (8%) and Bulgaria, Italy, Cyprus, Slovenia, France, Luxembourg and Czech Republic. Occasional visits were made to other countries.

7. Other expenses

Other expenses are

- support activities;
- healthcare services for European insured persons;
- other healthcare expenditure

Table 48. Execution of budget for other expenses, in thousands of euros

	2017 actual	*2018 budget*	*2018 actual*	*Budget execution*
Support activities	0	262	196	75%
EU insured person's healthcare services	1 562	2 000	1 830	92%
Target-financed health insurance costs	509	0	0	-
Miscellaneous healthcare costs	27	0	187	-
Total	**2 098**	**2 262**	**2 213**	**98%**

7.1. Support activities

As of 2018, the EHIF budget includes support activities related to functions transferred from the state budget. Support activities include replacement fees of family physicians, the possibility to provide sailors with 24-hour remote medical consultation in Estonian and English on board ships and supporting the work of the HIV and AIDS medical council.

7.2. Healthcare services for European insured persons

Insured persons of other EU Member States are entitled to:

- receive the necessary healthcare during their temporary stay in Estonia;
- receive any medical care while living in Estonia.

The necessary medical care for the EU Member State's insured persons is first paid by EHIF, but the final healthcare expenses are bone by the country of affiliation.

We paid a total of 1.8 million euros for healthcare services and reimbursable pharmaceuticals provided to patients from other Member States.

Table 49. Execution of budget for healthcare services and pharmaceuticals of European insured persons, in thousands of euros

	2017 actual	*2018 budget*	*2018 actual*	*Budget execution*
Health care services	1 524	1 950	1 790	92%
Pharmaceuticals	38	50	40	80%
Total	**1 562**	**2 000**	**1 830**	**92%**

7.3. Other healthcare expenditure

The budget for other healthcare expenditure recognizes health expenses exceptionally reimbursed on the basis of decisions made by the Board of EHIF and the expenses of activities or projects that improve the quality, availability and efficiency of healthcare provision.

The execution of the 2018 budget includes implementation expenses of the project "Preliminary analysis and planning for local healthcare and social care services integration" in the amount of 183 000 euros. The purpose of the pilot project is to have healthcare and social care services providers in Viljandi County prepare innovative services for different target groups and plan for technological solutions necessary for effective delivery of these services.

In addition, the budget for other healthcare expenditure recognizes exceptionally reimbursed healthcare expenditure in the amount of 4000 euros.

Operating expenses of the Health Insurance Fund

EHIF, when planning its activities and operating expenses, proceeds from the approved development plan and the objectives of the current year's scorecard. In 2018, EHIF planned 11.5 million euros for administrative operating expenses of healthcare benefits and the budget was executed by 100%.

The EHIF's operating expenses in 2018 accounted for 0.89% of total expenditure, which is slightly more than in the last two years, but still very low for all years of operation.

Table 50. Execution of budget for the EHIF operating expenses, in thousands of euros

	2017 actual	*2018 budget*	*2018 actual*	*Budget execution*
Labour expenses	6 018	7 030	6 735	96%
Management expenses	1 781	1 921	1 644	86%
Information technology expenses	1 101	1 340	2 068	154%
Development expenses	133	331	187	56%
Other operating expenses	942	909	880	97%
Total	**9 975**	**11 531**	**11 514**	**100%**

Labour expenses

The EHIF's structural reform was completed in Q3, resulting in a new and simpler structure of the institution. When planning for 2018 budget, we estimated our human resource need at 217.9 positions. In October 1, 2018, were confirmed the human resource need at 196 positions.

Management expenses

Management expenses cover the expenses of day-to-day activities, EHIF's training expenses, consultation expenses (including audit) and studies, and internal communication expenses. Management expenses were executed by 86% in 2018.

The under-execution of management expenses budget is due to less than planned expenditure on consultations and studies.

On the occasion of the 100th anniversary of the Republic of Estonia, the Estonian Health Insurance Fund hosted in Tallinn top managers of the AIM network that unites the health insurance companies in Europe, Latin America, Africa and the Middle East. On 20-22 June, heads of state health insurance institutions and social offices from 25 countries met in Tallinn to look for answers on how to improve access to and quality of treatment for people, what health insurance providers and organizers can do for that, and how patients' out-of-pocket payments affect the financing of healthcare services. The International Association of Mutual Benefit Societies (AIM) is an umbrella organization of health insurance organizations operating based on solidarity. The mission of the association is to find solutions to global health challenges such as an aging population, prevention of chronic diseases, increasing healthcare costs and changing lifestyle.

Before the start of year 2018, security tests of the website ravijuhend.ee were carried out to detect any risks and set priority tasks for 2018 considering possible security vulnerabilities. Risks were hedged in cooperation with the developer.

In 2018, the EHIF website was tested after the implementation of Drupalgeddon vulnerability patches and after switching to new software version. Testers did not detect any risks or problems regarding security.

In 2018, the focus was also on security testing of the network perimeter made in 2017, which significantly affected orders for additional security tests. No external server could be damaged during this test, but the testers gave us valuable feedback on the vulnerabilities that could endanger the security of the institution. Test results made us focus on how to mitigate these vulnerabilities, however, the changes outlined in the mitigation plan cannot be quickly implemented as they require changes to be made into the information systems that support critical services (24/7) of EHIF.

With regard to the implementation of Regulation 2016/679 of the European Parliament and of the Council, EHIF has established a data protection management procedure. It allows to manage the responsibilities of the responsible and authorized controller provided for in the Regulation, ensuring the rights of the data subject, and compliance with the integrated data protection and default data protection requirements. In addition, an impact assessment guide and a register of data processing operations were created. The privacy policy document was updated to ensure that the data subject is informed. Based on the results of the conformity assessment conducted by KPMG Baltics OÜ, an action plan for the implementation of the General Data Protection Regulation of the European Union has been prepared, which forms the basis for data protection activities excluded from the data protection management procedure.

Information technology expenses

Information technology (IT) expenses include the purchase of information technology equipment and software to EHIF and the expenses related to the development and maintenance of IT-systems.

In 2018, IT expenses included 1.3 million euros for IT-system license fees, 315 000 euros for maintenance, 288 000 euros for depreciation and 158 000 euros for development. The overhead of information technology costs is due to the greater than expected payment of SAP business software licenses.

Development expenses

The development expenses include the expense of health insurance benefits audits and consultations, and the expenses associated with informing the public (including the development of the EHIF homepage). In 2018, total development expenses were executed by 56%.

From the development expenses of 2018, the expenses for developing and auditing the health insurance system account for 121 000 euros and the expenses of external communication 66 000 euros.

From the end of 2018, EHIF has been updating its website, which has made it easier for the user to find information. The EHIF website is a very important information channel for people, which is visited by over half a million users a year. It is critical that people could find information about health insurance, benefits and medical care quickly and easily. In spring 2018, the EHIF website was tested for ease-of-use to find out whether it was easy to navigate on the website and how easily people could find the information they were looking for. Based on the feedback received, we brought the most important and searched topics to the front page, made the site more user-friendly, renewed the design and simplified the texts.

EHIF continued developing infographic solutions and publish health statistics in cooperation with STACC OÜ. Our infographic solutions[6] and database of health statistics[7] enable us to visualize and electronically view the financial data and other important health indicators and statistics. Interested parties can make their own data inquiries in the health statistics database within the limits of published reports, visualize data as they prefer (table, figure, graph) and download them.

Other operating expenses

In the budget execution for other operating expenses, in addition to the VAT calculated on operating expenses, the target-financing of operational expenses and losses resulting from changes in the exchange rate related to operating expenses and health insurance expenses are also recorded. Other operating expenses were executed by 97% in 2018.

The largest share of other operating expenses was for VAT amounting to 706 000 euros. Under-execution of other operating expenditure was due to under-execution of VAT expenditure, which in turn is linked to the under-execution of other budget rows.

[6] https://www.haigekassa.ee/haigekassa/aruanded-eelarve-ja-statistika/finantsnaitajad/infograafika

[7] https://statistika.haigekassa.ee/

Capital reserve

The formation of the capital reserve is governed by § 38 of the Estonian Health Insurance Fund Act as follows:

- The EHIF's reserve capital is a reserve created by the resources in EHIF budget fund for the health insurance system to reduce the risks arising from macroeconomic changes.
- The size of the reserve capital is 5.4% of the budget.
- The reserve capital can be used only exceptionally by the order of the Government of the Republic of Estonia on the proposal of the Minister responsible for the field. Before giving a proposal to the Government of the Republic of Estonia, the Minister responsible for the area shall listen to the opinion of the Council of EHIF.

By the end of 2017, EHIF had a reserve capital of 67 million euros. According to § 38 of the EHIF Act, the reserve capital for 2018 had to be 69 million euros. In order to meet the required legal level in 2018, we increased the reserve capital by 2 million euros.

In 2019, the required reserve capital is 78.5 million euros. In order to meet the required level of legislation, the reserve capital will be increased by 9.5 million euros in 2019.

Risk reserve

The formation of a risk reserve is regulated by § 39^1 of the Estonian Health Insurance Fund Act as follows:

- The EHIF risk reserve is a reserve created by the EHIF budget resources to reduce the risks arising from obligations arising from the health insurance system.
- The risk reserve is 2% of EHIF's health insurance budget.
- The risk reserve can be used by a decision of the Council of EHIF.

At the end of 2017, EHIF had a risk capital of 22.1 million euros. According to § 39^1 of the EHIF Act, the re- quired risk reserve size in 2018 was 25.3 million euros. In order to meet the required legal level in 2018, we increased the risk reserve by 3.2 million euros.

In 2019, the required risk reserve is 28.8 million euros. In order to meet the required legal level, the risk reserve in 2019 must be increased by 3.5 million euros.

Retained earnings

The EHIF's use of retained earnings from previous periods is regulated by § 36^1 of the EHIF Act as follows:

- EHIF's retained earnings of previous periods is allowed to be used up to 30% in the financial year, but not more than 7% of the healthcare service expenses in the EHIF's budget in the previous calendar year.
- The use of the EHIF's retained earnings of previous periods will be decided by the Board on a proposal from the Council.

At the beginning of 2018, EHIF had retained earnings of 76.3 million euros.

In 2018, 2 million euros was allocated to reserve capital from the retained earnings and 3.2 million euros into the risk reserve to bring the reserves to required level.

By 2018, the planned earning was plus 2.7 million euros. Since EHIF received more money from the social tax component of health insurance than was planned in the reporting year, the result for 2018 was 19,2 million euros.

As at December 31, 2018, the total retained earnings were 97 million euros.

The Board of EHIF proposes to the Council to transfer 9.5 million euros of the retained earnings of previous periods to the reserve capital and 3.5 million euros for the risk reserve in order to bring the reserve to the required legal level of 2019.

Annual accounts

Eesti Haigekassa

Balance sheet

Assets			
In thousands of euros	*31.12.2018*	*31.12.2017*	*Note*
Current assets			
Cash and cash equivalents	148 602	120 991	2
Receivables and prepayments	131 359	120 571	3
Inventories	4	4	
Total current assets	**279 965**	**241 566**	
Fixed assets			
Tangible fixed assets	719	1 067	4
Total fixed assets	**719**	**1 067**	
Total assets	**280 684**	**242 633**	

Liabilities and net assets			
In thousands of euros	*31.12.2018*	*31.12.2017*	*Note*
Liabilities			
Current liabilities			
Payables and prepayments	89 316	70 432	6
Total current liabilities	**89 316**	**70 432**	
Total liabilities	**89 316**	**70 432**	
Net assets			
Reserves	94 365	89 097	7
Total net gain (loss) for prior periods	77 836	76 300	
Total net gain (loss) for the accounting year	19 167	6 804	
Total net assets	**191 368**	**172 201**	
Total liabilities and net assets	**280 684**	**242 633**	

Economic outturn account

In thousands of euros	*2018*	*2017*	*Note*
Health insurance component of social security tax and recoveries from other persons	1 220 400	1 112 486	8
Expenses related to health insurance	-1 287 860	-1 115 821	10
Income from government grants	190	1 489	14
Expenses related to government grants	-63	-1 419	14
Total gross gain (loss)	**-67 333**	**-3 265**	
Administrative expenses	-10 634	-9 033	11
Other operating income	97 913	19 954	9
Other operating expenses	-817	-894	12
Operating gain (loss)	**19 129**	**6 762**	
Interest and other finance income	38	42	2
Total net gain (loss) for the accounting year	**19 167**	**6 804**	

Cash flows

In thousands of euros	*2018*	*2017*	*Note*
Cash flows from principal activity			
Social security tax received	1 210 237	1 098 345	8
Operational support received	95 485	0	9
Invoices paid to suppliers	-1 279 323	-1 116 632	
Fees paid to employees	-5 021	-4 440	11
Taxes paid on personnel expenses	-1 701	-1 281	11
Other receipts	8 025	25 611	9
Total cash flow from principal activity	**27 702**	**1 603**	
Cash flows from investment activities			
Paid for fixed assets	-91	-232	
Total cash flows from investment activities	**-91**	**-232**	
Net change in cash	**27 611**	**1 371**	
Bank accounts and cash equivalents at the start of the period	120 991	119 620	2
Change in cash	27 611	1 371	
Bank accounts and cash equivalents at the end of the period	148 602	120 991	2

Statement of changes in net assets

In thousands of euros	*2018*	*2017*	*Note*
Reserves			
Reserves at the beginning of the year	**89 097**	**80 900**	
Allocation to reserves	5 268	8 197	
Reserves at the end of the year	**94 365**	**89 097**	**7**
Total net gain (loss) for prior periods			
At the beginning of the year	**83 104**	**84 497**	
Allocation to reserves	-5 268	-8 197	
Total net gain (loss) for the accounting year	19 167	6 804	
At the end of the year	**97 003**	**83 104**	
Net assets at beginning of the year	**172 201**	**165 397**	
Net assets at the end of the year	**191 368**	**172 201**	

Notes to the annual accounts

Note 1. Accounting policies used for preparing the annual report

The annual accounts of the Estonian Health Insurance Fund (hereafter also EHIF) for 2018 have been prepared in accordance with the Estonian Standard for Financial Reporting. The Estonian Standard for Financial Reporting is generally accepted accounting principles based on internationally recognized accounting and reporting principles, and its basic requirements are set out in the Estonian Accounting Act and the guidelines issued by the Estonian Accounting Standards Board. These annual accounts are also based on the Public Sector Financial Accounting and Reporting Guidelines.

The financial year began on January 1, 2018 and ended on December 31, 2018. The numeric data in the financial statements are presented in thousands of euros.

Report layouts

The income statement layout 2 established with the Accounting Act, the structure of the entries of which has been adjusted to the nature of EHIF's activities, is used as an economic outturn account.

Financial assets and liabilities

Financial assets are deemed to be cash, trade receivables, and other current and long-term receivables. Financial liabilities are deemed to be outstanding invoices to suppliers, accruals, and other short-term and long-term debt obligations.

Financial assets and liabilities are initially recognized at their acquisition cost, which is equal to the fair value of the consideration given or received for the respective financial asset or liability. The initial acquisition cost comprises all expenses directly attributable to the financial asset or liability.

Purchases and sales of financial assets are consistently recognized at the value date, i.e. at the date the assets are transferred to EHIF or EHIF loses ownership over the sold financial assets.

In the balance sheet, financial liabilities are recognised at adjusted acquisition cost.

A financial asset is removed from the balance sheet when the EHIF's right to the cash flows from the financial asset expires or it transfers the cash flows from the financial asset and most of the risks and rewards associated with the ownership of the financial asset to a third party. A financial liability is removed from the balance sheet when it is satisfied, cancelled or expires.

Cash

Cash on bank accounts is recognised as cash. The statement of cash flows has been prepared using the direct method.

Recognising foreign currency transactions

Transactions recorded in foreign currencies are recognized by applying the European Central Bank exchange rates quoted at the date of transaction. Monetary financial assets and liabilities denominated in a foreign currency and non-monetary financial assets and liabilities that are recognized at fair value are retranslated to euros as at the balance sheet date using the European Central Bank exchange rates quoted at that date. Exchange gains and losses are recognised in the economic outturn account as income and expenses respectively in the period in which they arise.

Receivables

Trade receivables comprise receivables for goods sold, services provided, and recoveries of health insurance benefits that fall due in the following financial year. Receivables falling due within more than a year are recorded as long-term receivables.

Receivables for goods sold and services provided comprise receivables for prescription forms sold to medical institutions and family physicians, receivables from the Ministry of Social Affairs for the service of processing health care invoices, and receivables for health services provided in Estonia to patients from other EU Member States from the competent authorities of such persons' insuring countries.

The recoverability of receivables is assessed at least once a year as at the reporting date. Receivables are measured on an individual basis. Under the concept of prudence, only recoverable amounts are recognised in the balance sheet. Doubtful items are recognised as an expense in the period in which they arise. Recovery of previously expensed doubtful receivables is recognized as a reduction of expenses from doubtful receivables.

Receivables whose collection is impossible or economically impractical are considered irrecoverable and written off the balance sheet.

Inventories

Inventories are initially recognised at cost and expensed using the FIFO formula. Inventories are measured in the balance sheet at acquisition cost or net realisable value, depending on which is lower.

Tangible fixed assets

Assets are classified as tangible fixed assets when their estimated useful life extends beyond one year and acquisition cost exceeds 5000 euros. Assets with a shorter estimated useful life or lower acquisition cost are expensed at acquisition.

Tangible fixed assets are initially recognized at acquisition cost and depreciated under the linear method according to their expected useful lives. Land and art values are not depreciated.

The following depreciation periods (in years) are applied:

- buildings and construction work 10–20
- fixtures and fittings 2–4
- plant and equipment 3–5

Expenditure on items of property, plant and equipment incurred after acquisition is generally recognized as an expense as incurred. Subsequent expenditure is added to the cost of a tangible asset when it is probable that future economic benefits generated by the expenditure will exceed the originally assessed benefits and the expense can be measured reliably and attributed to the asset.

Intangible assets

Intangible assets are identifiable items without physical substance that are used in the EHIF's activities, whose estimated useful life extends beyond one year and whose cost exceeds 5000 euros.

Intangible assets are initially recognized at acquisition cost and depreciated under the linear method over 2 to 5 years.

Expenditure on intangible assets incurred after acquisition is generally recognized as an expense as incurred. Subsequent expenditure is added to the cost of an intangible asset when it is probable that future economic benefits generated by the expenditure will exceed the originally assessed benefits and the expense can be measured reliably and attributed to the asset.

Government grants

A government grant is assistance given and received under certain conditions for a designated purpose where the provider of the grant checks whether the assistance is used as designated. Grants are not recognised as income and expenses until the conditions associated with them have been met.

Grants are recognised as income when they become recoverable.

Revenue and expenses

Revenue and expenses are recognized on an accrual basis. Interest income is recognized as it accrues.

The EHIF's revenue comprises mostly the health insurance component of social security tax and recoveries from other persons. The health insurance component of social security tax is received from the Estonian Tax and Customs Board through weekly transfers. Once a month, the Estonian Tax and Customs Board sends to EHIF a statement of transfer of tax balances which serves as a basis for recording as revenue in the accounts. Recoveries from other persons are recognized when a claim is submitted against a legal entity based on the law or a contract for compensation of damage caused to EHIF. Claims against natural persons are recorded upon receipt of payment.

Operating and financial leases

A lease that transfers all substantial risks and rewards incidental to the ownership of an asset to the lessee is recognised as a financial lease. Other leases are classified as operating leases. On classifying leases as operating or financial leases, public sector entities also consider the requirements of chapter 15 of IPSAS 13 (Leases) and regard the cases where the leased assets cannot easily be replaced by another asset as meeting the criteria of financial leases.

Assets acquired under financial leases are recognised as assets and liabilities at amounts equal to the fair value of the leased property. Lease payments are apportioned between the financial charge and the reduction of the outstanding liability. The financial charge is recognized during the lease term.

Operating lease payments are recognised as an expense on a linear basis over the lease term.

Provisions and contingent liabilities

EHIF allocates provisions for liabilities of uncertain timing or amount. The amount and timing of provisions is determined on the basis of estimates made by the management or relevant experts.

A provision is recognized when EHIF has incurred a legal obligation or an obligation arising from its operations prior to the balance sheet date, the probability of the provision upon the outflow of resources exceeds 50%, and the amount of provision can be reliably measured.

Legal reserve

EHIF's reserve capital is a reserve created by the resources in the EHIF budget fund for the health insurance system to reduce the risks arising from macroeconomic changes.

Section 38 of the Estonian Health Insurance Fund Act regulates the formation of the legal reserve as follows:

- The legal reserve amounts to 5,4% of the budget. Each year, at least one-fiftieth of the total budget of the health insurance fund and revenue from social tax revenue prescribed for the payment of health insurance benefits, which is higher than prescribed in the state budget, is transferred to the legal reserve, until the amount of the legal reserve provided by this Act is reached or restored.
- The legal reserve may only be used as an exception by an order of the Government of the Republic on the proposal of the Minister of Social Affairs. Prior to submitting a proposal to the Government of the Republic, the Minister of Social Affairs shall hear the opinion of the Supervisory Board of the Health Insurance Fund.

A transfer to the legal reserve is made based on the decision of the supervisory board after the audited annual report has been approved.

Risk reserve

The EHIF risk reserve is a reserve created by the EHIF budget resources to reduce the risks arising from obligations arising from the health insurance system.

Section 39^1 of the Estonian Health Insurance Fund Act regulates the formation of the risk reserve as follows:

- The size of the risk reserve shall be 2% of the health insurance budget of the health insurance fund.
- The risk reserve can be used by a decision of the Council of EHIF.

EHIF has had the obligation to create the risk reserve as of October1, 2002 when the Health Insurance Act entered into force. The Act amended the Estonian Health Insurance Fund Act by adding section 39^1.

A transfer to the risk reserve is made based on the decision of the supervisory board after the audited annual report has been approved.

Events following the reporting date

The annual accounts reflect all the significant events affecting the valuation of assets and liabilities that be- came evident between the reporting date December 31, 2018 and the date on which the financial accounts were authorized for issue but are related to transactions carried out during the reporting period or earlier periods.

Events following the reporting date which will have a significant effect on the result of the next financial year, but which have not been taken into consideration upon assessing the assets and liabilities are disclosed in the notes to the annual accounts.

Note 2. Cash

In thousands of euros	*31.12.2018*	*31.12.2017*
Cash on bank accounts	148 602	120 991

The funds of EHIF are kept in current accounts that are part of the group account of the State Treasury of the Ministry of Finance. According to the deposit agreement between EHIF and the Republic of Estonia, EHIF has unlimited access to the money on the group account at one week's notice. The Republic of Estonia can apply a usage limit on the deposited amount but has not done so as at December 31, 2018.

The Ministry of Finance calculates for EHIF an interest on the balance of the moneys held on the accounts of the group account at the rate which equals the profitability of the state cash reserve. Interest income from balance in 2018 is 38 000 euros (in 2017: 42 000 euros).

Note 3. Receivables and prepayments

In thousands of euros	*31.12.2018*	*31.12.2017*
Social tax receivable*	122 466	113 874
Trade receivables	7 986	6 238
Doubtful receivables	-69	-53
Prepaid expenses of future periods	938	427
Receivables from policyholders pursuant to a contract	38	32
Government grant receivable**	0	53
Total	**131 359**	**120 571**

* Social tax receivable is a short-term receivable for the health insurance component of social tax calculated for the Tax and Customs Board.

Trade receivables do not include receivables from related parties (2000 euros in 2017), see Note 13.

Note 4. Tangible fixed assets

In thousands of euros	*Land*	*Construction works*	*Other fixtures and fittings*	*Total tangible fixed assets*
Acquisition cost				
31.12.2017	**1**	**451**	**2 565**	**3 017**
Acquired fixed assets	0	0	6	6
Write-off	0	0	678	678
31.12.2018	**1**	**451**	**3 249**	**3 701**
Accumulated depreciation				
31.12.2017	**0**	**363**	**1 587**	**1 950**
Calculated depreciation	0	24	330	354
Write-off	0	0	678	678
31.12.2018	**0**	**387**	**2 595**	**2 982**
Carrying amount				
31.12.2017	**1**	**88**	**978**	**1 067**
31.12.2018	**1**	**64**	**654**	**719**

Note 5. Leases

Operating leases

Reporting entity as a lessee

The economic outturn account of 2018 recognizes operating lease payments totalling 471 000 euros (in 2017: 473 000 euros), incl. 23 000 euros for leasing transport means and 448 000 euros for premises pursuant to lease agreements (in 2017: 26 000 euros and 447 000 euros, respectively).

There are no contingent liabilities arising from lease payments. The term for advance notice upon terminating lease agreements for premises is 3 to 6 months, depending on the agreement.

Operating lease expenses are covered in Note 11.

Note 6. Payables and prepayments

In thousands of euros	*31.12.2018*	*31.12.2017*
Trade payables	**82 836**	**67 295**
Payables to medical institutions for services	58 129	46 175
Payables for health insurance benefits to other suppliers	13 318	12 686
Payables to pharmacies for medicinal products distributed at a discount	9 787	8 093
Other trade payables	1 602	341
Tax arrears	**2 538**	**2 551**
Personal income tax	2 209	2 276
Social tax	305	250
Unemployment insurance premium	11	11
Statutory pension insurance contribution	6	7
Income tax on fringe benefits	5	6
Value added tax	2	1
Other payables	**3 942**	**586**
Payables to employees	521	323
Other payables	241	242
Prepayments received	3 180	21
Total	**89 316**	**70 432**

Trade payables include related party transactions in the amount of 3,746 thousand euros (2,929 thousand euros as at December 31, 2017), see Note 13.

Personal income tax liability includes personal income tax in the amount of 2,140 thousand euros (2,204 thousand euros as at December 31, 2017) withheld from incapacity benefits paid by EHIF to insured persons. Social security tax liability includes social security tax in the amount of 70 000 euros (68 000 euros as at December 31, 2017) accrued on outstanding holiday pay.

The tax authority has the right to check the tax records of EHIF within up to 5 years from the deadline for submission of the tax declaration and to determine the additional amount of tax, interest and fines upon detection of any errors. In 2017 and 2018, no controls were carried out by the tax authorities. According to the EHIF management, there are no circumstances that could lead the tax authority to impose a significant additional tax on EHIF.

Note 7. Reserves

In thousands of euros	*Legal reserve*	*Risk reserve*	*Total*
Balance at the start of the period January 1, 2018	66 971	22 126	89 097
Formation of the reserve 2018	2 058	3 210	5 268
Balance at the end of the period December 31, 2018	**69 029**	**25 336**	**94 365**
Size of the reserve pursuant to the law	69 029	25 336	94 365

Note 8. Health insurance component of social security tax and recoveries from other persons

In thousands of euros	*2018*	*2017*
Health insurance component of social tax	1 218 829	1 111 199
Recoveries from other persons	1 571	1 287
Total	**1 220 400**	**1 112 486**

Recoveries from other persons include related party transactions in the amount of 7000 euros (5000 euros in 2017), see Note 13.

Note 9. Other operating income

In thousands of euros	*2018*	*2017*
Operational support*	90 930	0
Government grants**	4 555	16 000
Services provided to European Union citizens	3 813	2 395
Voluntary insurance agreements	1 037	1 000
Insurance agreements with other countries	481	487
Other	41	72
Total other operating income	**100 857**	**19 954**

* In 2018, pursuant to section 51 (3) of the Health Services Organization Act, allocations to non-working pensioners are recognized under operational support. In 2018, the income rate is 7% of the average old-age pension.

** From the 2018 state budget 4.6 million euros were allocated as a grant for financing of ambulance service for uninsured persons. In 2017, 10 million euros were allocated to EHIF to improve availability of specialized medical care and 6 million euros for adult dental care benefit.

Note 10. Expenses related to health insurance

In thousands of euros	*2018*	*2017*
Health service benefits	956 919	812 272
specialized medical care	688 990	628 270
primary care	127 155	113 663
dental care	48 779	29 157
ambulance	45 020	0
nursing care	35 636	31 850
disease prevention	11 339	9 332
Costs of benefits for temporary incapacity benefits	157 570	141 297
Expenses related to benefits for pharmaceuticals	136 178	125 730
Other expenses of health insurance benefits	25 101	25 346
health service benefits arising from international agreements	15 024	15 838

benefits for medical devices	9 694	9 481
miscellaneous health insurance expenditure	383	27
Other financial benefits	10 301	9 661
Health promotion expenses	1 791	1 515
Total health insurance expenses	**1 287 860**	**1 115 821**

Health insurance expenditure includes related party transactions in the amount 50,745 thousand euros (42,853 thousand euros in 2017), see Note 13.

Health service benefits arising from international agreements include, among others, treatment costs of Estonian pensioners who hold health insurance with EHIF and permanently live in other European countries. Healthcare services are paid for either according to actual treatment costs or according to the respective average national treatment cost.

Average treatment cost per person by age groups is calculated based on specific criteria for each year and is submitted for approval to the audit board of the administrative commission for the coordination of social security systems at the European Commission by the end of the second year following the reporting year, at the latest.

According to the available information, among foreign countries, the greatest number of Estonian pensioners live in Finland.

EHIF's expenses for 2018 recognise treatment costs of Estonian pensioners living in Finland, based on the invoices submitted by the Finnish competent authority, which were 1 962 thousand euros in 2016 and 1 962 thousand euros in 2017.

From 2018, the Finnish competent authority invoices based on actual costs.

Note 11. Administrative expenses

In thousands of euros	*2018*	*2017*
Personnel and management expenses	6 735	6 018
Wages and salaries	5 039	4 502
incl. remuneration of management board members	327	237
incl. remuneration of employees working pursuant to a contract for services	23	58
Social tax	1 659	1 482
Unemployment insurance contribution	37	34
Information technology expenses	2 068	1 101
Management expenses	1 644	1 781
incl. operating lease payments*	471	473
Development expenses	187	133
Total administrative expenses	**10 634**	**9 033**

* see note 5

Average number of employees per full time equivalent as at the reporting date	*2018*	*2017*
Members of the management or control body of a legal person	4	3
Persons employed pursuant to an employment contract	177	200
Persons providing services pursuant to a contract under the law of obligations	4	1
Total	**185**	**204**

Management costs do not include related party transactions.

Remuneration of the members of the management board for 2018 includes 80 000 euros for performance pay on an accrual basis (42 000 euros in 2017), the payment of which will be decided by the supervisory board after the approval of the annual report. Upon expiry of the term of their contracts of service, members of the management board are entitled to benefits equal to their three months' remuneration.

Note 12. Other operating expenses

In thousands of euros	*2018*	*2017*
VAT on operating expenses	706	464
Expensed receivables	67	418
Other	44	12
Total other operating expenses	**817**	**894**

Note 13. Related party transactions

Related parties to the Estonian Health Insurance Fund include members of the supervisory board and members of the management board who have been employed during the current reporting year, close family members of the member of the supervisory or management board, and legal persons whom the specified natural persons have significant control or influence (for example, they are members of the supervisory or management board of such a legal person or hold at least 10% of the share capital of such a legal person

Health care services are purchased from related parties under the same conditions as from other providers.

Related party transactions

In thousands of euros	*2018*	*2017*	*Note*
Purchase of services	50 745	42 853	10
Sale of services	7	5	8
Liability at 31.12	3 746	2 929	6
Receivable at 31.12	0	2	3

No write-downs of receivables from related parties were made in 2017 or 2018. Medical services purchased from other health service providers where the party related to EHIF is the member of a management body are mostly recognised as the purchase of services.

For the remuneration of the members of the management board, see note 11.

Note 14. Government grants

Income from government grants:

In thousands of euros	*2018*	*2017*
Funding infertility treatment based on health services	0	862
Compensation to insured persons for medicine costs incurred on artificial insemination	0	509
Other	190	118
Total	**190**	**1 489**

Expenses related to government grants:

In thousands of euros	*2018*	*2017*
Funding infertility treatment based on health services	0	862
Compensation to insured persons for medicine costs incurred on artificial insemination	0	509
Other	63	48
Total	**63**	**1 419**

Pursuant to section 35[1](5) of the Artificial Insemination and Embryo Protection Act, medicine cost and health services related to in vitro fertilisation are compensated by the Ministry of Social Affairs pursuant to an agreement of government grant.

Signatures to the annual report

The Management Board of the Estonian Health Insurance Fund has prepared the 2018 annual report.

The annual report comprises the management report and the annual accounts, to which the independent auditor's report has been appended.

Management Board
28 March 2019

Rain Laane

Chairman of the Management Board

Pille Banhard

Member of the Management Board

Maivi Parv

Member of the Management Board

Karl-Henrik Peterson

Member of the Management Board

Eesti Haigekassa