Estonian Health Insurance Fund Yearbook 2016

Eesti Haigekassa

Why does the turtle symbolize health insurance or the Health Insurance Fund? In many cultures, the turtle is a symbol of the creation of the Earth, which indicates longevity and sustainability in pursuing goals. The tutle is mocked for being slow, but health insurance is a sphere conservative in its essence. Progress is prudent and consistent, symbolizing the reliability of the Health Insurance Fund and the entire system. The shell protects the turtle against unexpected threats. This is the feeling of protection that the Health Insurance Fund seeks to offer the insured.

Estonian Health Insurance Fund The annual report 2016

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Main activity	State health insurance
Management Board	Tanel Ross (Chairman) Maivi Parv Pille Banhard
Auditor Association	KPMG Baltics OÜ

Table of Contents

Estonian Health Insurance Fund is managed on a daily basis by a three-member Management Board: the Head of the Management Board is Tanel Ross, and members of the Board are Maivi Parv and Pille Banhard.

Statement by the Management Board of the Health Insurance Fund

This year, the Estonian modern health insurance system will have its 25th anniversary. For a quarter of a century, the Estonian Health Insurance Fund has offered health insurance, ensuring the people with access to necessary and high-quality healthcare services, medicinal products, medical devices, and benefits.

The development of the health sector has been rapid, whereas the health insurance system has constantly been developing and changing. These 25 years have been a busy and innovative time for the Health Insurance Fund that has created a strong foundation for further development of the health insurance system. Knowing that the progress made is important gives us the inspiration to develop further. We place more and more importance in the contemporary and evidence-based nature of the insurance package, timely access to healthcare services, quality of care and the financial sustainability of health insurance.

The changing society and changing needs set a number of challenges to the modern healthcare system, but also provide opportunities for the future. We believe that now and in the future, Estonia needs a healthcare system that pays much attention to disease prevention and health promotion activities, where diseases are detected early, and the entire system provides timely, high-quality and patient-centered care. A prerequisite for this is a strong provision of primary care, focused specialized care, and a sufficient volume of nursing care services for the aging population with a growing number of chronic diseases. For achievement of these goals, we consider it important for the Health Insurance Fund to further

develop a holistic healthcare purchasing strategy with clear principles, and to support the development of the IT solutions of the healthcare system, which would improve the exchange of information and the user comfort of e-health. It is also vital, on improving the health of the population, to aim at the consistent cooperation of the healthcare system and the integration of health and social systems.

The year 2016 was challenging, but fruitful for the Health Insurance Fund. Our priority continues to be promoting a holistic approach to the patient, funding and continuous modernization of evidence-based and cost-effective medicinal products, medical devices and healthcare services.

The developments of the health insurance service package are our priority

The provision of effective healthcare is based on strong primary healthcare

To support a comprehensive approach to patients, and to enhance the role of primary care, in recent years we have implemented significant innovations in family healthcare. We extended the family care package of services and diagnostic capabilities, and we have also consistently invested in the accessibility of primary healthcare services to ensure that the family physician has the opportunity to employ another nurse and provide appointments outside of regular work hours.

With the new list of health services entering into force in the year 2017, we are able to move to a new level of quality, as in the service list will be fixed the first opportunities of the package of primary healthcare centers. In addition to the services of family physicians and family nurses, health care centers provide also physiotherapy, midwifery and home nursing services. The creation of new health centers improves access to and the quality of healthcare for people and expands the selection of healthcare services offered by the family physician.

New opportunities in specialized medical care

We modernized the specialized medical service package and updated the list of services by 24 new services. In the list of healthcare services, for example, we made significant upgrades to keep up with the modern treatment of serious diseases. Inter alia, an additional possibility of radiotherapy in the treatment of cancer and strokes was included among the healthcare services compensated for by the Health Insurance Fund. We also supplemented the opportunities for post-traumatic rehabilitation, rehabilitation after sickness, and mental health services for children. The list of medicinal products was supplemented by pharmaceuticals for breast tumors, melanoma, or a malignant tumor of the skin pigment cells, and Pompe's disease. New pharmaceuticals were also added for the treatment of severe asthma, heart failure, and leukemia.

A conscious and involved insured

We will seek to ensure that our insured are aware of all the possibilities of the healthcare system and use them for their health meaningfully.

Prevention and early diagnosis of diseases can help prolong healthy life years, and reduce morbidity and premature mortality.

A new preventive activity launched in 2016 for the first time was the screening for early detection of colon cancer, which is aimed at insured men and women of 60-69 years of age.

In 2016, we prepared the benefits in adult dental care, which will help to ensure the necessary dental services, encourages people to go to the primary dentist appointment, and motivates them to take care

of their oral health. The new dental benefits will be available from 1 July 2017.

In 2016, we conducted a number of major information campaigns in order to increase the awareness of the population. Among other things, we contributed to raising awareness on the subject of children's oral health in collaboration with the Estonian Dental Association, and educational institutions. In cooperation with the Cancer Screening Registry, we paid close attention to early detection and prevention of breast and cervical cancer.

The network of strategic partners provides the necessary assistance to the insured

An effective system of family physicians

For the purpose of ensuring the availability of healthcare services, development of a comprehensive system of primary healthcare centers is of paramount importance. In 2016, we worked in developing the financing model for primary healthcare centers. The key issue of the next period is thorough planning of the financing model.

On the gradual increase of the role of primary healthcare, it is important to monitor the quality of family healthcare. We are aiming at the development of a quality system of family physicians so that we would able to take more into account the results of high-quality treatment. In 2016, for the first time, we paid performance pay for the quality of healthcare providers.

We value greater responsibility for the primary care, both in case management of patients with chronic disease, as well as after active treatment. A two-year project launched in 2015, in cooperation with the World Bank, the framework of which is to develop a risk patient care coordination pilot project that will provide very important input to the development of the integrated care models.

Development of pricing in specialized medical care

The price of healthcare services has to ensure the provision of high-quality service delivery and expedient use of health insurance funds to enable offering healthcare services to more insured people in need of treatment. Every year, we modernize the contents, names, and prices of services so that they would be as consistent as possible with the principles of modern services. We continue to develop a pricing methodology and make efforts so that the pricing model would be more dynamic, more transparent, and to reduce the administrative burden. We have changed the number of agencies reporting the basic data for calculation of prices so that the result of better pricing would be better convertible to the entire system. Also, we found the optimum level of overhead, then, in accordance with the health insurance capabilities, shifted resources to the system to achieve the same level of funding. In order to keep the cost components at an optimal level, we will start to adjust the overhead costs annually according to the GDP deflator.

Continuous improvement of planning methods

In recent years, we have been extensively describing and implementing the methodology of evaluation of demand for health services, aiming to be based on the place of residence of the people with health insurance, and their use of health services by counties. This methodology has recently been adopted on the evaluation of the need for healthcare outside of the Health Insurance Fund. Various healthcare system partners have estimated that this methodology reflects the real situation and is reliable.

In 2016, the Supervisory Board approved the uniform principles for the planning of contracts in specialized medical care, nursing care, dental care, and prevention. In the planning of the contracts, we take into account the valued 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 making it possible to

take into account the actual practice.

At the same time, in 2016, we launched the project "The strategic purchasing analysis of the Estonian Health Insurance Fund," the purpose of which is, by way of the strengths of the existing strategic purchasing strategy, to develop it so that under conditions of limited resources we would move forward towards more efficient provisions of higher quality services for the insured party. The project includes an analysis of the selection of the principles for the treatment of financing contracts concluded with the selected partners, as well as to the need for further development of the purchasing strategy, in general, and specialized medical care, including more strongly the quality component, and an integrated approach to treatment.

Within the framework of cooperation of the Estonian Health Insurance Fund and the World Bank, the World Bank will give us suggestions on how to develop the financing model of primary medical care and to support greater integration of the primary and specialized medical care. Also, the World Bank will prepare for us an analysis of waiting times, to help us evaluate whether and how the waiting times affect the continuity of care across various levels of medical care, and to develop a model for monitoring waiting times.

On ensuring the availability of quality services, it is also necessary in the future to continue the improvement of ordering of specialized medical care and to create opportunities to differentiate the waiting times on the basis of the need for treatment. In the prospects of the next few years , our future development is very important for us, in relation to the hospital network development plan, because the choice of our strategic developments also depends on that.

Promotion and cooperation of the healthcare system

The solidary and sustainable health insurance is the strength of Estonia

The healthcare system, based on solidary health insurance of the society as a whole, is one of the most cost-effective ways for the provision of healthcare services, and organization of treatment. The system of a single health insurance fund has fully justified itself in Estonian conditions, ensuring transparent and efficient operation and low operating costs. The health system's financial sustainability is a priority issue in health policy in Estonia. If we want to improve the availability and the quality of the healthcare services for the Estonian insured and wish to provide cost-effective and evidence-based treatment services also in the long term, the country needs to gradually invest more money in healthcare.

We participated in the health system sustainability work group, whose aim was to draw up proposals to the Government of the Republic on the funding sources of the healthcare system, the financial sustainability forecast, the extension of the revenue base of health insurance, the extent of the insurance coverage, and the cost-sharing of people, improvement of the performance of the healthcare system, and the increase in its efficiency. In 2016, the working group prepared a corresponding memorandum for the Cabinet meeting. Discussions on the document are continuing, and the search for new solutions to improve the financing of healthcare will continue.

Quality as the most important criterion for assessing service

To ensure the uniformly good quality of healthcare services, it is important to develop a comprehensive quality system in Estonian healthcare, the implementation of which will benefit patients, healthcare providers and society as a whole.

Under the leadership of the Advisory Committee of Treatment Quality Indicators, we have continued the development of the national indicators characterizing the quality of the treatment, and implementation thereof in healthcare. In 2016 was published the first report of clinical indicators.

In the development of treatment quality, it is very important to continue consistent introduction treatment standards and the development of guidelines. In 2016, the handbook for drawing up clinical guidelines was updated according to the audit carried out by the experts of the World Health Organization, on the process of development of clinical guidelines in Estonia. In addition, last year we issued eight new clinical and patient guidelines which are included in the new web environment of clinical guidelines.

IT developments create a presumption for a more efficient healthcare system

For comprehensive health insurance, we consider it essential to develop IT solutions that link the different services into a whole, improve the information flow and increase user comfort. Modern and smoothly functioning, the information technology infrastructure will help to ensure a more efficient operation of the healthcare system, increase the quality of care, and allow for better access to medical care for people.

In 2016 was implemented a new interaction registry database, by which physicians can more easily assess the interactions of the pharmaceuticals used by patients. The evaluation of pharmaceuticals interaction aims at improving the quality of care and increasing the safety of medicines.

In collaboration with various partners of the healthcare system, we have commenced a clinical decision support project, the aim of which is to create a clinical decision support system applicable to different levels of medical care as a public e-service. With the help of this system, doctors and the healthcare workers will be able, on the basis of the patient's treatment and health information, to obtain recommendations for diagnostics and treatment.

We have continued to work on the development of an electronic certificate for incapacity to work and made preparations for the development of a partner management system.

In the IT sector, in the coming years, we plan significant developments in supporting patient safety, the quality of care, as well as the efficient organization of healthcare. There are plans to develop an e-medicines sheet as a public service, to support a large-scale deployment of e-Consultation, to contribute to a full application of the digital referrals, and launching of a nationwide digital registry.

International cooperation in the promotion of the health insurance

Solidary is the greatest value of the Estonian health insurance, which is considered to be our strength, and brought as an example around the world. We continue to deem important, international cooperation for sharing of experiences concerning the organization of health insurance and for strengthening the health insurance system.

Last year 20 foreign delegations visited the Health Insurance Fund, who were very interested in the organization of our health insurance system and wanted to learn from Estonia's experience. Moreover, in 2016 began the third cooperation project between the Estonian and Moldovan health insurance funds, aimed at supporting the development of health insurance in Moldova.

With the development of health insurance and international cooperation in view, we consider it important to strengthen the ties with the national health insurance institutions of the Baltic countries. Consequently, we want to create opportunities for the exchange of professional experience and practices, and, if necessary, arrange study tours and meetings between the three countries. To achieve the objectives, in 2016, we signed a Framework Agreement between the health insurance agencies of the three countries and participated in the Baltic policy dialogue.

We continue to be a member of the International Association of Mutual Benefit Societies (AIM - Association Internationale de la Mutualité) which brings together the inputs from different countries, and this gives its contribution to the European healthcare development, including strategies, such as Europe by 2020. In the Estonian Health Insurance Development Plan, we adhere to the AIM positions and actively participate in discussions on

important issues on the international level such as healthcare technology assessment, medicines, European cooperation on healthcare, prevention, and health promotion, chronic diseases, and others.

Organizational development

The organization must continually evolve in order to ensure good performance of solidary health insurance. In August last year, the Supervisory Board approved the principles of the planning of the four-year costs, and the sources for covering the costs, and the requirements for preparation of the 2017 draft budget of the Estonian Health Insurance Fund to ensure stable development of health system financing, and to provide a transparent overview of the financing of the health insurance system, and of the proportions of the benefits.

In the autumn of 2016, the Supervisory Board approved the Health Insurance Fund Development Plan, in which we set the more important strategic objectives for the activities of the year 2017 to 2020 as a starting point for further work.

We value keeping and the development of the competencies of our employees. To this end, we developed a competency model and competency assessment system, which was implemented last year in the development interviews of the entire organization. We also carried out an assessment of the posts of the Health Insurance Fund, which will help us to ensure both the internal balance, as well as the comparability of similar posts in the salary market.

The sustainability and the smooth functioning of the organization's main processes are ensured by a modern Business Continuity Plan. Currently, we are developing business continuity plans for the healthcare system for various crisis situations.

To better serve customers, and to create better working conditions for the employees, at the end of August the central departments of the Health Insurance Fund moved to Lastekodu street. Previously, the departments were located at the Department of Harju County of the Health Insurance Fund. The new legal address of the Health Insurance Fund is Lastekodu 48, Tallinn.

Management report

The health insurance system

In the central place of the Estonian health system is the solidary based health insurance system. The Estonian Health Insurance Fund pays for the healthcare services of all the people holding Estonian health insurance, finances medicinal products and medical devices, and pays a number of financial benefits. For the provision of healthcare services, agreements are concluded with family doctors and healthcare institutions. On the purchasing of services and entering into agreements, the needs of the insured and the rational use of the health insurance funds finances, are taken into account. The Health Insurance Fund does not intervene in the management of the healthcare institutions; it ensures the impartiality of the financing.

The health insurance system is financed by the social tax. In Estonia, the solidary health insurance system is in use: all the people with medical insurance will receive the same medical care, regardless of the size of their financial contributions, their personal health risk, or age.

The Estonian health insurance system complies with internationally accepted principles:

- the largest percentage as possible of the population must be covered with health insurance;
- the scope of health insurance has to be as large as possible, i.e., the solidarity of health insurance offers the most comprehensive and holistic, modern health services package as possible;
- health insurance should be as comprehensive as possible, i.e., the people's co-payments of the total treatment cost has to be at the optimal level and should not lead to a risk of poverty.

The health insurance system guaranteeing solidarity and equality has been in force since the year 2002 when the new Health Insurance Act was enacted.

The role of the Estonian Health Insurance Fund

The main objective of the Health Insurance Fund is to ensure for the insured parties, timely access to different health insurance benefits, including medical care, medicinal products, and medical devices, as well as temporary incapacity benefits, dental care, and other monetary benefits. In addition, the aim is to promote health and to develop the quality of healthcare services.

In the provision of the services meeting the needs of the insured persons and ensuring the equal access to care in each county, the Health Insurance Fund plays the role of the buyer, assuming the payment obligation of the insured person. Instead of a passive payer, the task of the Health Insurance Fund is to be a strategic buyer.

On the strategic buying, we proceed from the scope of the Health Insurance Act and in terms of healthcare services, we can talk about the following possibilities:

a) the range of healthcare services in the so-called service package;

b) price formation of healthcare services;

c) conditions for the treatment of financing agreements and the provision of legislation;

d) the choice of contractual partners and negotiation of contract volumes;

e) checking of the justification for financing.

The mission of the Health Insurance Fund is to organize health insurance in such a way as to ensure equal treatment for insured persons, and the timely availability of high-quality, cost-effective healthcare services, medical equipment, medicines, and monetary benefits according to need.

The vision of the Health Insurance Fund is to ensure people's sense of security in the emerging world and solving of possible health problems.

The core values of the Health Insurance Fund

PROGRESSIVENESS — We are aiming at continuous and sustainable development, the prerequisite of which is a competent, loyal staff committed to the outcome.

CARE — We are open and friendly. We make decisions taking into consideration all others, and in a transparent manner.

COOPERATION — We create an atmosphere of trust within the organization, and in relations with partners and customers.

Organization and management

The highest body of the Health Insurance Fund is the Supervisory Board consisting of 15 members. Five represent the employers' interests; five represent the interests of the insured, and five represent the interests of the state. The Chairman of the Supervisory Board is the Minister of Health and Labor. The Health Insurance Fund is managed by a three-member Board of Directors. As of 31.12.2016, the Health Insurance Fund employed 208 people.

The task of the Health Insurance Fund, for achieving all the health insurance objectives, is to assess both the need for healthcare, to modernize the health insurance package, to plan the budget and to enter into agreements with healthcare institutions to ensure the availability of necessary services to the insured. For the best use of resources in the interests of the insured, the Health Insurance Fund will cooperate with all partners in the healthcare system.

The Health Insurance Fund checks, on the basis of the law, the purposeful use of health insurance funds, including the quality and the reasonableness of the purchased services. On a daily basis are operating electronic controls to ensure the accuracy of the data and the invoices. In addition, with the help of health inspectors, we check the treatment bills and documents, during the year a total of about 8400 treatment cases. We support the drafting of clinical guidelines and order clinical audits. We have introduced a system of performance fees for family physicians with the aim of ensuring disease prevention and the quality of monitoring of chronic diseases on the primary care level by a family physician, and family nurses, on a uniform basis all across Estonia.

The Health Insurance Fund finances the promotion of health and prevention of illness on the basis of the Health Insurance Act through projects for specific purposes, being guided by the provisions of the National Health Development Plan approved by the government and by the provisions of the Health Insurance Fund Development Plan. According to the analysis of the years of life lost due to the burden of disease, the greatest loss of health is caused by cardiovascular diseases, malignant tumors, injuries, and poisoning. All these problems also affect the costs of the Health Insurance Fund related to healthcare services, medicinal products, and incapacity to work. Some of these illnesses can be prevented, or the resulting damage can be reduced by health promotion and prevention.

Each employee of the Health Insurance Fund must be aware, but also avoid situations in which his or her decisions and private interests could affect the performance of official duties and ethical behavior. The Management Board of the Estonian Health Insurance Fund has approved “The Code of Ethics” in order to provide guidelines for ethical behavior for the people working in the organization. In the Estonian Health Insurance Fund, the issue of the conflict of interest is governed by the procedure "Estonian Health Insurance Fund requirements on conflicts of interest” updated in early 2017. According to this procedure, the employees of the Health Insurance Fund must once a year review their declaration, and update it when necessary.

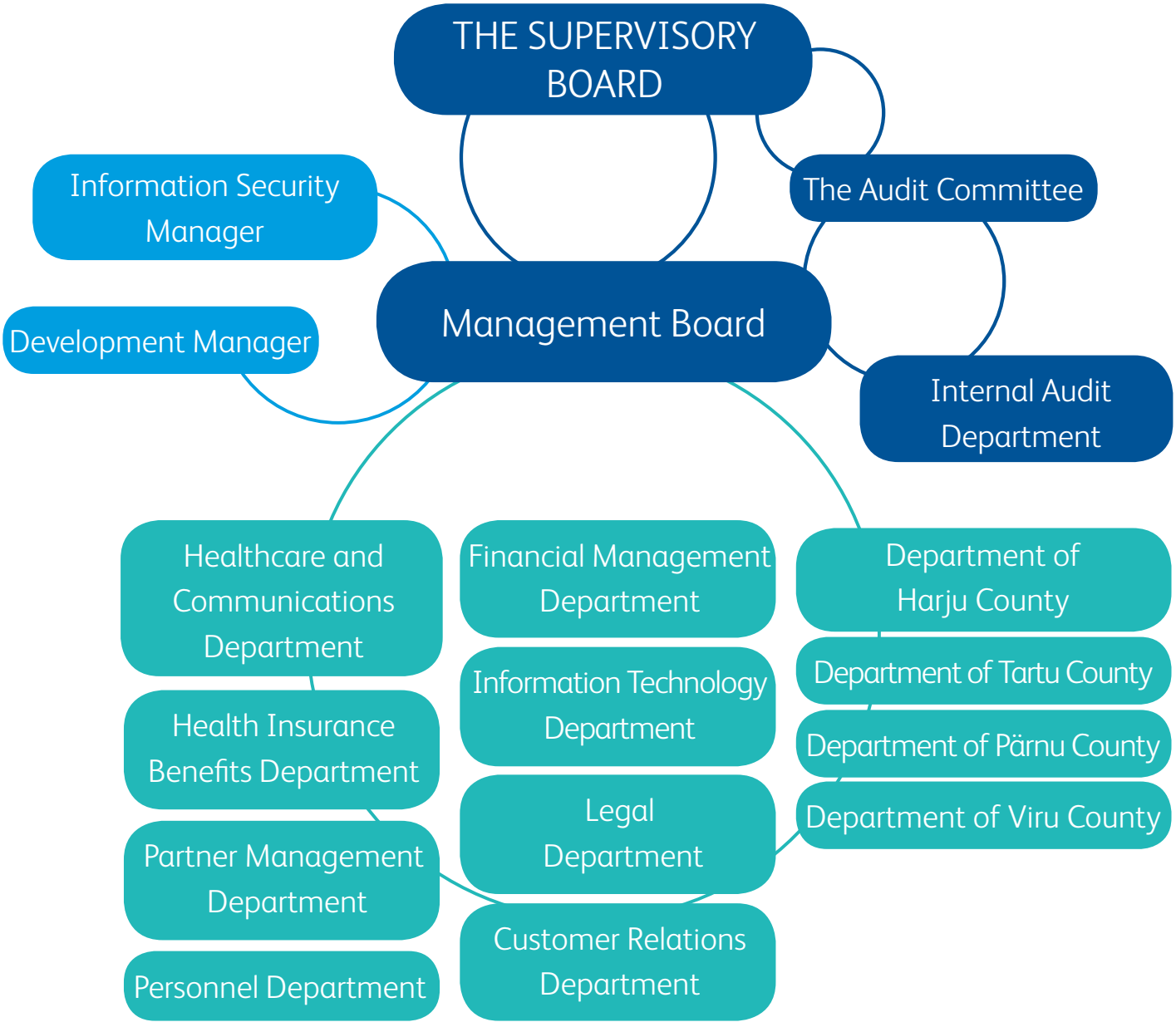


Figure 1. The structure of the Estonian Health Insurance Fund

Table 1. The most important indicators in the years 2011 - 2016

	2011	2012	2013	2014	2015	2016	The change compared to the year 2015
The number of the insured at the end of the year	1,245,469	1,237,104	1,231,203	1,232,819	1,237,336	1,237,277	0%
Revenue (in thousand euro)	735,112	783,131	836,892	900,209	964,353	1,028,962	7%
Health insurance costs (in thousand euro)	718,418	773,575	830,419	908,213	973,609	1,049,270	8%
Operating expenses of the Health Insurance Fund (in thousand euro)	7,080	7,331	7,937	8,502	9,284	9,288	0%
The percentage of health insurance expenditure from GDP (%)*	4.5	4.5	4.5	4.7	4.9	5.1	4%
The percentage of the total healthcare expenditure from GDP (%) **	5.8	5.8	6.0	6.2	6.5	-	-
Indicators of healthcare services							
The number of insured using specialized medical care	807,875	795,581	796,698	800,326	799,305	798,582	0%
Average inpatient hospitalization in days	6.0	6.1	6.0	5.9	5.9	5.9	0%
Percentage of emergency specialist medical care from the treatment expenditure (%)							
in outpatient care	18	17	17	17	17	17	0%
in day care	7	8	8	9	10	10	0%
in inpatient care	64	66	64	63	63	63	0%
Average cost of a specialized medical healthcare treatment case (in euro)							
in outpatient care	45	52	57	63	68	73	8%
in day care	371	435	456	481	503	549	9%
in inpatient care	1,008	1,124	1,178	1,289	1,376	1,455	6%
Structural appreciation of specialized medical care (%)	2.4	3.1	1.8	0.3	-0.3	0.2	1%
Referrals of an Estonian insured person abroad for treatment and benefits arising from the EU legislation (in thousands of euro)	7,011	5,965	6,648	8,764	8,519	9,105	7%
Indicators of medicinal product benefits							
The amount of discount prescriptions	6,945,735	7,438,670	7,625,135	7,883,659	8,046,298	8,146,879	1%
The number of insured using discount medicines	841,533	841,387	848,636	850,206	851,627	847,628	0%
The average cost of a discount prescriptions for the Health Insurance Fund (in euro)	13.2	13.3	13.6	13.9	14.0	16.1	15%
The average cost of a discount prescription for the patient (in euro)	7.0	6.6	6.4	6.5	6.7	6.7	0%
Indicators of the benefits for incapacity to work							
The number of the days of incapacity to work compensated for by the Health Insurance Fund	4,937,836	4,954,761	5,228,586	5,362,002	5,670,910	5,905,352	4%
The cost of the benefit for one day of incapacity to work (euro)	16.4	17.0	18.0	19.4	20.6	22.1	7%

* the figures of the years 2011 to 2015 have been amended on the basis of the GDP adjusted by the Statistical Office.
**The data of the year 2016 are published by The National Institute for Health Development at the end of the year 2017.

The strategic goals and their execution

	Weight	Indicator	Unit	Explanation
THE INSURED PERSON	**50%**			
	15%	Satisfaction of the insured with the healthcare system	%	The satisfaction with the healthcare system revealed by way of the general survey of the insured persons
	15%	Satisfaction with the access to medical care	%	One part of the general survey
	10%	Satisfaction with the quality of the medical care	%	One part of the general survey
	5%	Prevention coverage with treatment of children's dental diseases	%	The percent of children with the relevant years of birth who have participated in preventive dental examinations and/or dental treatment
	5%	Coverage of cancer prevention screening	%	The coverage is determined by all women receiving the service out of all the women of the entire age group to whom the screening has been performed in the last three years based on the health insurance database; cervical cancer/breast cancer.
PARTNER	**25%**			
	10%	To involve the insured in activities leading to improved monitoring of the health condition of people with chronic illnesses.	%	In the family doctor's quality system, coverage of the hypertension patients with all risk levels on the basis of the results calculated for the previous calendar year
	10%	Structural appreciation of a treatment case (all treatment types together)	%	The percentage of structural appreciation of the specialized medical care treatment cases compared to the previous period
	5%	Compilation of clinical and patient guidelines	amount	Four new clinical and/or patient guidelines have published on the www.ravijuhend.ee website
HEALTHCARE SYSTEM	**10%**			
	5%	Implementation of the interaction register	%	The services of interaction register are used by all family physicians and medical specialists on digital prescribing of medicines.
	5%	E-Consultation service capability	amount	Evaluation of the number of healthcare providers in Estonia (i.e., service capability is ensured in both regional and central hospitals)
ORGANIZATION	**15%**			
	5%	Quality management	yes/no	In the auditor's opinion, the quality management system of the Health Insurance Fund meets the requirements of ISO 9001:2008
	5%	The level of customer service	index	Evaluation of the indexed level of customer service using the*mystery shopping* method in the framework of an ESI study.
	5%	Reliability of information systems		Compliance with ISKE criteria in terms of the availability of critical services (insurance verification, digital prescription center)
TOTAL	**100%**			

2016 goal/ actual	2016 % of execution	Meeting of goals
	40.4%	
67/**51**	11.4	Compared to the previous year, the general satisfaction of insured persons has declined slightly. The reason may be the fact that when the survey was carried out, the current issue was overspending of the budget of the Health Insurance Fund - more specialized medical services than planned had been purchased, more discounted medicines had been prescribed, and more certificates for incapacity to work had been issued.
55/**38**	10.4	Compared with previous years, availability has stayed more or less at the same level. It is also known that the problems of waiting lists are predominantly expressed by patients who prefer to seek access to a particular doctor.
78/**68**	8.7	Satisfaction with quality has remained relatively at the same level as in previous years: thus, people's attitudes and opinions on the quality of medical care have not changed.
70/**71.6**	5.0	The coverage with prevention and treatment of children's dental disease among target groups achieved their objectives, but the coverage among all the 3-19-year-old children should increase. There are many reasons why children are not taken to visit a dentist, but mainly it is due to ignorance and/or assumption that dental service is not necessary for a child.
72/**70**	4.9	In the event of breast cancer, the coverage is insufficient. The reason may be the fact that the women who received an invitation at the end of the year have not yet been able to attend the procedure by the time of compilation of the Annual Report.
73/**73.5**		The target value of the coverage in the case of cervical cancer has been met, but in the future, certainly more contribution must be placed in increasing the awareness of the insured.
	25.0%	
68/**73**	10.0	73% of patients with patients with chronic illnesses in the list were monitored by means of activities which also belong to the family physicians' performance pay system.
<2/**0,2**	10.0	Structural appreciation of specialized medical care has, in 2016, remained below the maximum allowed limit, which testifies to the good cooperation between the Health Insurance Fund and the partners.
4/**8**	5.0	In 2016, one new treatment guideline, and seven patient guidelines were completed and published on the site ravijuhend.ee. The guidelines are available to all those interested.
	10.0%	
100/**100**	5.0	Physicians introduced the interaction evaluation data based in the second half of the year 2016. The database will help physicians to evaluate the interactions of the medicines prescribed to patients and thus make better treatment decisions.
7/**7**	5.0	As of the end of the year, e-Consultation service is provided by seven treatment facilities (Tartu University Hospital, North Estonian Regional Hospital, East Tallinn Central Hospital, West-Tallinn Central Hospital, East-Viru Central Hospital, Pärnu Hospital, and Tallinn Children's Hospital).
	15.0%	
yes	5.0	In early 2017, the auditor gave a positive assessment of the activities of the Health Insurance Fund in 2016, and thus the Health Insurance Fund meets the requirements set in the quality management system ISO 9000:2008.
3.7/**3.8**	5.0	According to the ESI study results, the customer service level of the Estonian Health Insurance Fund is 3.8. This is a very good result, considering that the maximum possible is 4.0. In order to achieve an even better level, in the following years, we will focus on the e-mail service and on-site communication.
K3/**K3**	5.0	During the year, the work of the critical services (digital prescription center and insurance verification) was ensured at the maximum possible level.
	90.4%	

The Division of the First Level Package Development manages the family physician's system and services.

Effective healthcare is based on strong primary healthcare

As a rule, a person's first contact with the healthcare system is his or her family physician, and family nurse. A family physician, as the family trustee, is a highly qualified and knowledgeable professional who diagnoses and treats most diseases. On the primary level, as large as a possible number of health issues is addressed, as the family knows the patients of his or her list the best. The family physician is available for people and close to home, access to medical care is free, and with a short waiting time. Primary healthcare is provided by, and the responsibility for the provision of services lies with the family physician with his or her team.

The development of the family physicians' system and services

The study "Assessments of the Estonian population on health and medical care 2015" shows that at the organization of family physician's care, people value highly the speed, the proximity to home, and free availability of medical care. People appreciate the list-based system, because of thanks to that, they know and trust their family physician and nurse, and vice versa. Also, people have considered it important that they have the chance to choose their family physician.

The healthcare system is facing a number of challenges: an aging population, more people are suffering from chronic diseases at the same time, an insufficient number of services and medical staff, appreciation of health technologies, etc. Therefore, the role of primary level healthcare, and the family physicians is becoming increasingly important. The population is aging, chronic diseases requiring continuous monitoring are becoming more frequent, and therefore it is increasingly more important that family physicians have the time, the necessary resources, the ability to consult and together to find solutions for the patients' health concerns, and thereby ensure people with the necessary high-quality medical care. Not to mention the fact that disease prevention, and the inclusion of healthy people into health examination and screening,

is an important and growing part of the healthcare services, where the primary level team's role is becoming increasingly important.

Considering the above, we emphasize the importance of support for the development of a strong primary level centered core system, and extension the services package to enhance the responsibility and opportunities of the primary level and thus ensure all the insured with the availability oftimely counseling and medical care, free of financial constraints, and in the proximity of the home.

As one important development, in 2018 family physicians will begin to be concentrated in the new healthcare centers. Last year, we gave a pre-eminent contribution to the development of the financial model of primary level healthcare centers. We support the further development of the current model in a way which takes into account the areas of activity of the centers, and the possibility of expanding the list of services and to ensure the resources and manpower necessary. The creation of new health centers improves access to and the quality of healthcare for the people and expands the selection of health-care services offered at the primary level. In the health centers will be concentrated, in addition to the family physicians and the family nurses, also physiotherapy, midwifery and home nursing services. The health center system helps to ensure the sustainability and development of the family health system, enables to cooperate, to exchange experiences and to organize work more flexibly. In addition to the means of a single practice, the basic allowance of the health center includes additional opportunities for larger spaces, management costs, the registrar work organization, and IT developments, which make it possible to serve people faster and with better quality. Joining a health center is voluntary for all family physicians.

The use of the family physicians' funds has increased

Family healthcare in 2016 totaled 103 million euro, which is 12% more compared to the year 2015. The growth was caused by the more extensive use of the Therapy and Fee for Services Fund.

The increase in the reference price of the capitation fee resulted in an increase in the funding of the Fee for Services Fund, compared with the previous year, by 14%. The implementation of the Fee for Services Fund among family physicians continues to vary, on average, in Estonia, it is 88.5%.

Also, increased use of the Therapy Fund providing additional opportunities for family physicians, where the service of physiotherapy was included, in addition to speech therapy, and psychology. In 2016, the Therapy Fund amounted to 3% of the family physicians' capitation fee.

A more detailed overview of the results of the use of the family physicians' funds is available in the Budget Implementation Report in the Chapter of Primary Medical Care (pages 46-47).

E-Consultation supports family physicians

In 2013, we began to finance the e-Consultation service to contribute to more effective cooperation between family physicians and medical specialists. E-Consultation improves the quality of care in both the diagnostics and treatment, saves time and money of the patients and healthcare workers, and reduces waiting times. Over the years, we have expanded the range of the specialties of e-Consultation and today the services operate on 16 specialties. In 2016, in cooperation with the Estonian Society of Family Doctors and the relevant professional associations, we developed the e-Consultation conditions in the specialties of nephrology, internal medicine, and psychiatry.

In 2016, the e-Consultation service orders totaled EUR 77,000. Last year, e-Consultation was used by 603 family physicians from 260 family health centers, most in Harju county. Doctors provided e-Consultation service in a total of 5597 cases, which is 123% more than in 2015. The most counseling is asked for in the specializations of neurology, endocrinology, otorhinolaryngology (ear, nose and throat diseases) and urology.

Since 2016, the e-Consultation services are provided in addition to the selected partners by seven HNDP hospitals: North

Estonia Regional Hospital, Tallinn Children's Hospital, Tartu University Hospital, East Tallinn Central Hospital, West-Tallinn Central Hospital, Ida-Viru Central Hospital, Pärnu Hospital.

Family physician's quality system has been successful

On the gradual increase of the role of primary healthcare, it is important to monitor the quality of family healthcare. One tool for this is the family physicians' quality system which allows family physicians to be remunerated depending on job performance. The main purpose of the quality system is to create an incentive for family physicians to actively deal with prevention of diseases and prevention of infectious diseases and more efficiently monitor chronic patients.

Development of the family physician's quality system is very important for the Health Insurance Fund. The number of participants in the family physician's quality system has increased steadily since 2007, and in the year 2016, has achieved the level of participation of 100% of family physicians. In 2016, for the first time, we paid performance pay for the quality of healthcare providers. We are carrying out auditing in cooperation with the Estonian Association of Family Doctors and the Health Board. A more detailed overview of the results of the quality assessment is available in the chapter of Budget Implementation Report (page 48).

As a result of the development of family physicians' quality system, a family physician has to be able to more clearly measure the health condition of the patients on their list, to prevent illnesses in an evidence-based manner, detect and treat them early and to receive performance pay for a good job of performance. We have taken aim at the development of the family physicians' quality system so that we would be able to take high-quality results more into account.

Colon cancer screening launched

Colon cancer screening for early detection was launched in stages as of the second half of the year 2016. The launching of the screening was preceded by a thorough analysis and interdisciplinary development. Colon cancer screening is registry based similar to other screenings. For the first time, the study coordinated largely in primary care, but, if necessary, a person is referred to the medical specialist for further examination.

in the year 2016, the target group of colon cancer screening was the men and women born in the year 1956. The target group included 17,000 people, and the occult blood test analysis was conducted on 2,610 people, of whom 68 went on to a screening colonoscopy test. In connection with the gradual completion of the screening developments, the parties decided to extend the opportunity for participation of the last year's target until the end of 2017. In addition, as of the year 2017, the screening included men and women born in 1955 and 1957. In 2017, the primary analysis of the implementation of the new screening and planning of the possible development and follow-up actions will follow.

New adult dental benefits

At the end of 2016, the Riigikogu (Parliament) passed an amendment to the Health Insurance Act, according to which, in the second half of 2017, the adult insurance coverage will be supplemented by new dental benefits. In order for it to be possible to start paying the dental care benefit. First, the list and the prices of the dental services had to be updated.

In the second half of 2017, according to the list of health services, in addition to the target groups that received financial compensation so far, we reimbursed dental healthcare for all of the adult insured people. Moreover, people do not have to submit applications and documents to the Health Insurance Fund in arrears because the whole settlement will take place electronically between the Health Insurance Fund and contract partners.

Adult dental benefits will help to ensure the availability of the necessary dental services, encourages people to go to the primary dental appointment and motivates them to take better care of their oral health. Due to the compensation, it is also possible to better monitor the quality of treatment and of the service. Using the reimbursable services, the patient will have to cover the deductible, with the aim of shared responsibility to further motivate people to take care of their dental hygiene.

Planning and optimal allocation of health insurance resources is an annual process, coordinated by the Department of Financial Management, in cooperation with the Partner Management Department.

Continuous improvement of health insurance benefits planning methodologies is essential

Planning of the budget of the Health Insurance Fund, including the planning of healthcare services is an annual process that is based on sound methodology. Since 2002, the Health Insurance Fund budget planning has taken place systematically, and in recent years the forecasting methodologies have been very much advanced and made more precise. The budget of healthcare services and the planning of contracts is based on a methodical rated demand or the justified need of the insured for healthcare services.

Assessment of the demand for healthcare services

The planning is started with a compilation of the long-term forecast (30+ years) of health insurance benefits which describe the long-term financial sustainability of the health insurance in the situation where our current healthcare policy will continue in the coming years. This is followed by the shorter and more specific forecasts covering the four upcoming years, the aim of which is to ensure the stability and development of the financing of the healthcare system and to enable all parties to understand the financing principles of the health insurance system, and the types of benefits.

When planning for the next four years, we will take into account the age-related change of the population, their current state of health and the development of the quality of care. The drawing up of the forecast shall be based on the priority areas of the next four-year development plan renewed annually by the Health Insurance Fund, the development forecasts of health insur-

ance benefits (including healthcare services) and the Estonian macroeconomic indicators based on the economic forecasts of the drawn up by the Ministry of Finance.

In the annual budgeting process, we need to first find out the volume of the need of the insured for the healthcare services. We call this mapping of care needs and the assessment of the demand for healthcare services. We carry this out in all specialties and treatment types on the county level, based on the place of residence of the insured person. In assessing the demand, we first take into account all the treatment needs in Estonia and then we evaluate how great is the need of the insured people living in the country for specialized medical care services in the next year. We assess the demand only in terms of the healthcare services financed by the Health Insurance Fund, or for the services that are on the list of healthcare services. When analyzing the waiting lists, we can be based on the waiting lists information provided to the Healthcare Fund by the providers of healthcare services.

Demand for healthcare services is always higher than our financial possibilities. This means that the assessed demand obtained as a result of the assessment of the demand for healthcare services must be brought into line with the budgetary funds of the Health Insurance Fund. Thus, the assessed demand will become a financed demand. All materials related to the demand, and financing, will be published in the Health Insurance Fund website [1]. Funded demand ,or the possibilities of our budget in the financing of the services, is very important input in the planning of the contract offers of healthcare institutions. If the needs for healthcare services have been assessed and brought in line with the budget, the Health Insurance Fund will be able to draw up contracts with the providers of healthcare services. For this purpose, people's needs for medical care are accounted for by specialties, e.g., how big is the need for the services of orthopedics or dermatology. Strategic planning and purchasing are based on the competence of the services providers, i.e., their ability to provide the necessary service in a quality manner.

Specialized care purchasing strategy

We analyzed the increase in the volume of demand in a specific medical specialty and whether it is large enough to ensure that doctors and other service providers have a sufficient workload in the counties. This provides a basis for consideration of the merits of the signing of a contract for purchasing of the services of a specific specialty with a contract partner providing the service in the county. For the provision of medical services in other specialties, we conclude contracts with the central and regional hospitals and, if necessary, with other service providers: it will ensure the supply of services in the respective specialty in Estonia as a whole. In conclusion, we identify the places where purchasing of one or another specialty is optimal, sustainable and guaranteeing a high-quality result, taking into account the health policy framework.

In order to design an effective services purchasing strategy, tailored according to the needs of the insured, we have developed the geographic availability principles that define the principles for the purchase of specialized medical care by specialties and types of hospitals. This helps to ensure that in all counties, in addition to primary care services, also have equal access to high-quality specialized medical services, to all health insured people in Estonia, regardless of place of residence, while taking optimal advantage of the time of the doctors, the technology, and the budget funds of the Health Insurance Fund. The principles of geographic availability of specialized care, based on which we have planned the treatment financing contracts in 2015, 2016 and 2017, can be accessed at the website of the Health Insurance Fund [2].

By improving the availability of healthcare services, we will continue to pay significant attention to the development of family healthcare, and to achieving the optimal use of specialized medical care services. In the coming years achieving a more harmonized and more uniformly availability of specialized medical care services throughout Estonia is a very important objective. On ensuring the availability of quality services, it is also necessary for the future to continue the improvement of ordering of specialized medical care. It is important to create opportunities to differentiate waiting times on the basis of need, to ensure timely availability of treatment in the right place, and to support the competence center-based collaboration. We will continue the development of demand planning methodology, and consider it necessary to harmonize the average cost of a treatment case. In the prospects of the next few years, the selection of strategic partners and the future developments in relation to the hospital network development plan are very important for us.

[1] http://www.haigekassa.ee/et/partnerile/raviasutusele/ravi-rahastamise-lepingud/tervishoiuteenuste-noudluse-hindamisest-ja-ravi
[2] http://www.haigekassa.ee/et/eriarstiabi-ostustrateegia

An important priority of the Division of the Specialist Medical Care Package Development is continuing updating of the specialist medical care package.

New opportunities in the service package ensure modern treatment

Our priority is to keep up with progress in medicine and offer the insured modern, medically evidence-based and cost-effective healthcare services. The Health Insurance Fund is able to pay only for those healthcare services, under these conditions, and at maximum for the price, which is set by the Regulation of the Government of the Republic "The list of the Estonian Health Insurance Fund healthcare services" (hereinafter the list of healthcare services), thus constant Completion and modernization of the list is of paramount importance.

The list of healthcare services will be updated annually, according to need and the financial resources of health insurance, so that people could receive the best possible care, taking into account the evidence-based manner of the treatment, including medical efficacy) and cost-effectiveness. The list of healthcare services is always updated in co-operation with the doctors and the Health Insurance Fund. Proposals for the amendment of the list can be made by specialist associations, associations of healthcare providers and the Health Insurance Fund.

Last year, 127 applications were received for updating the list of health services for the year 2017, 61 of which were granted in part or in full, including 19 completely new services and five hospital medicines were added to the list. Decisions on inclusion in the list of services are always made on a uniform basis: it is assessed whether the benefits of the service are established (medical evidence based) and whether the extra cost involved in the service is in the balance with the benefit obtained from the service (cost-effectiveness). It is also important to follow the healthcare policy trends and take into account the opinion of the patients by asking through patients' organizations. The entire information taken into account in making the decisions has been disclosed in the Health Insurance Fund's website [3] in order to ensure the transparency of the choices and the system.

[3] http://www.haigekassa.ee/et/partnerile/raviasutusele/tervishoiuteenuste-loetelu/loetelu-muutmine-2013-2017

New services in specialized medical care

In the list of healthcare services, which took effect in 2017, upgrades have been made for diagnosing and modern treatment of severe diseases. In 2017, cerebral artery thrombus removal will be added to the list, which is an additional method for the treatment of stroke, in the case where the standard treatment has been shown to be ineffective or is contraindicated for the patient. The new service will provide patients with better treatment outcome and quality of life. The indications of intensity modulated radiotherapy for sparing of the patients, have also been extended.

In addition, the opportunities for post-traumatic rehabilitation and rehabilitation after sickness have been supplemented. When previously in the list of health services was included physical therapy at home, which was designed for people for whom access to a medical institution is difficult, it is now possible to also provide occupational therapy at home.

The list has also been supplemented by new services targeted at children, such as children's mental healthcare services, to make mental health services more accessible to children, and to bring them closer to those in need. Also, orthodontics will be made even more accessible to children. Namely, indications for the cases in which the Health Insurance Fund will pay for the treatment have been expanded.

Also, treatment of rare diseases for which there is no evidence-based treatment in Estonia and therefore the person is referred to a foreign country for treatment has been taken into account in the new list. The Health Insurance Fund is going to transport the patient in the case of a scheduled treatment performed abroad, mainly in the case when it comes to emergency care, and due to the patient's state of health, it is not possible to use other means of transport.

We also added parenteral nutrition at home to the list of healthcare services, in which case, the nutrients are taken directly to the patient's blood stream trough a catheter or a thin pipe placed in the patient's vein. Previously the Health Insurance Fund paid for the parenteral nutrition only in case of inpatient treatment. If patients wish to stay at home, they had to pay for the parenteral nutrition by themselves.

Optimal pricing

In addition to adding new services to the list of healthcare services, the Health Insurance Fund had an obligation to ensure the optimum price for all the services on the list. The price has to ensure the provision of high-quality service delivery and expedient use of health insurance funds in order for the same amount of money to enable offering healthcare services for more people insured, and in need of treatment. Each year we review the names and prices of the existing services so that they would reflect the provision of modern services. In general, the prices of the existing services will be reviewed as the specialty blocks, for example, in the year 2017 the lists of dentistry, orthodontics, and facial and jaw surgery lists, were renewed. Among other areas, the list of procedures, operations, and surgical accessories in gynecology, and the list of the doctor's and nurse's appointments, and of the bed days, was updated.

Pricing of services is formed on the basis of activity-based cost accounting (ABC methodology). According to this methodology, the activities necessary for the provision of a relevant healthcare service, and the resources necessary for carrying out of those activities, (e.g., the time consumed by the doctor and the nurse and the equipment used) must be described. The description of the services is based on the actual practice of the treatment facilities. In order for the prices to be optimal and more comparable to the entire system, in 2016 was also updated the methodology for calculating prices based on the external expert analysis performed in 2015. Consequently, the number of institutions reporting the basic data for pricing was changed, based on the principle that the data is provided by the institutions providing the largest volume of the services, and the number of institutions must also be well administrable. By the year 2017, was found the optimal level of overhead, in order for the health insurance options to reach the optimum level. Redistribution of resources by expenditure category is extremely important for the relative

prices to be correct and to create less tension in the system. When the cost components have been raised to the optimum level, it is important to keep the cost components at this level so that over the years there would not be significant differences between the actual cost and the cost components of the price model. For example, a new service is generally more expensive at the beginning, but the more it comes into common use, the more prices fall. Therefore, in addition to the pricing of new services, old prices must continually be reviewed. In cases where prices have fallen, this will provide an opportunity to redistribute resources. For the amount saved, new cost-effective services or investments in hospitals can be financed, which will contribute to a more efficient organization of work and quality of the work (for example, IT costs). When the cost components have achieved the optimum level, it is important to keep the cost components at this level so that over the years there would not be significant differences between the actual cost and the cost components of the price model. To this end, a principle was introduced to the methodology, according to which the overall cost is adjusted each year with a GDP deflator because it best reflects the change in the cost of the hospital.

The development of various methods of payment

In addition to fixing the prices and their services, it is important to determine the payment methods, how the medical institutions are paid for the diagnostics and treatment of people. In specialized medical care is used both services based and case-based remuneration. In the case of service based financing, all the services that were provided to the patient are paid for in accordance with the prices established for the services described above. In Estonia, in the case-based payment method, diagnosis-related groups are used, DRG-s, in the event of which a fixed amount is paid to service providers for the services provided in the course of the treatment case. The basis for DRG-based pricing are the prices of single services provided in the framework of one treatment case, on the basis of which, according to the methodology, a price is calculated for each DRG. The fee for services prices provided during one treatment case (DRG) is formed according to the fee for service costs of the medical bills of the patients with a similar clinical picture and clinical course of action, as a result of which the key issue of formation of the optimal DRG prices is formation of similar groups of treatment cases.

In 2015, the external expert gave an evaluation that the DRG-based pricing methodology used in the Health Insurance Fund is consistent with international practice. Also, the DRG pricing principles and methods provide a better adaptation to the cost of treatment services and treatment cases provided by medical institutions. At the same time, a number of proposals were made, the implementation of which would help to find out whether and how the methodology can be applied even more successfully.

In 2016, we continued the second phase of the DRG pricing analysis, the aim of which was to have practical input and suggestions to change the methodology for calculating the DRG prices. The external expert who performed the follow-up analysis submitted proposals for the improvement of DRG-based pricing methodology based on extensive data analysis. The expert proposed to change the methodology for calculating the reference price and price ranges. As a result of the introduction thereof ,the methodology is more understandable to all parties, the DRG price better reflects the reality, and the price ranges are narrower. This means that if the medical institution costs are significantly higher or significantly lower than the DRG price, the medical institution is paid to in accordance with the actually provided services and their prices. It was also proposed to increase the samples of the calculation of the DRG prices, in which case the previously used sample has been too low to obtain an appropriate result.

Based on the recommendations, it has been planned in the year 2017 to analyze the impact of the proposals, both in terms of financing as well as service providers, and to discuss the results in cooperation of all parties. Development of the DRG pricing methodology makes the DRG-based pricing and financing more compatible to the amendments in clinical practice and helps to maintain the prices of services optimal and fair.

The Division of Quality of Care helps to assess and improve the quality of the Estonian healthcare services.

Contributing together - for the best quality care

The development of the comprehensive system of quality of care is one the most important priorities for the Estonian healthcare system and health insurance, the implementation of which will benefit patients, healthcare providers and the community at large.The daily work of the Division of Treatment Quality is the development of treatment standards and quality indicators, and coordination of clinical audits. The Division works together with other departments of the Health Insurance Fund in order to assess and improve the quality of care in Estonia. In addition, the Health Insurance Fund contributes to a significant extent to the training of persons developing clinical guidelines, in which the physicians, nurses, and representatives of other professions are provided with the knowledge of searching and assessment of proof and of a compilation of treatment recommendations.

Clinical and patient guidelines ensure patient-centered approach

Since 2011, the Health Insurance Fund has supported the development of clinical guidelines compiled on the basis of a methodological guide prepared in cooperation with the World Health Organization, the Ministry of Social Affairs and the Faculty of Medicine of the University of Tartu and other parties from the healthcare system. A clinical guide is a document that establishes treatment standards and provides recommendations for the activities having an impact on the health. To this end, healthcare workers are provided with evidence-based guidelines for the methods of diagnosis and treatment of diseases, and it may also contain recommendations for disease prevention and patient education strategies, or the like. Clinical guidelines are generally accepted important tools for health professionals, the information provided in which helps make choices between different interventions that affect the health, quality of care and the use of healthcare resources.

We also develop patient guidelines,based on clinical guidelines that assist with counseling of the patient. Patient guidelines will help increase patient awareness and create a prerequisite for the active participation in the treatment process.

In 2016 were completed eight clinical guidelines and patient guidelines: treatment of pressure sores, acute perioperative pain treatment, treatment of a bariatric patient before and after the surgical procedure. In addition were approved patient guidelines for previously completed clinical guidelines: treatment of generalized anxiety disorder and panic disorder (with or without agoraphobia) and treatment of asthma in adults in primary care. The completed guidelines have been compiled in the web environment [4], which will be renewed in 2017.

According to the audit of the Estonian clinical guideline development process conducted by the experts of the World Health Organization, the manual of compilation of clinical guidelines was renewed in 2016, where on the proposal of the experts were added new chapters to the treatment and patient guideline methodology, updated aspects of assessment of the evidence etc. Resulting from to the assessment methodologies described in the updated manual, a training of the methodology for assessing the risk of bias in systematic reviews (ROBIS) and of the methodology for assessing the quality of evidence (GRADE) took places for the methodologists and educators of the guidelines.

Clinical quality indicators help to assess treatment activities

To ensure the uniformly high quality of healthcare services, it is necessary to continuously monitor the services provided and to assess the quality indicators on a regular basis. Different indicators as relatively quick tools for evaluation of treatment activities are used by the Health Insurance Fund also to provide feedback to their partners.

We are actively involved in the development of the clinical treatment activity quality indicators, provision of assessment to the results, and making improvements. To this end, in cooperation, the University of Tartu, the Advisory Board of the Quality Indicators, were set up. The Advisory Board has developed the principles of the selection of the indicators characterizing the quality of care, and by the end of the year 2016, 42 indicators characterizing the quality of care were approved on their basis of five specialties (oncology, intensive care, obstetrics, neurology, and surgery). The report of first clinical indicators was prepared by the end of 2016 and has also been published on the Health Insurance Fund's website [5] The aim of the introduction of clinical indicators is to establish a comprehensive system for regular assessment of the quality of healthcare services and for publication of the relevant information on both national and international level.

Clinical audit will help to analyze the treatment and outcome of treatment

Clinical audit assesses the patient treatment and the outcome of treatment based on specific criteria and will result in a compilation of a final audit report. Clinical audit results will be presented at a feedback event, and follow-up activities will be planned on the basis of the audit recommendations.

The Health Insurance Fund commissions from qualified professionals five clinical audits annually. In 2016 were completed the reports of the clinical audits “Treatment of low back pain in primary care," “Justification and quality of independent inpatient nursing care" and "Diagnosis of depression and quality of care.”

Estonian Health Insurance Fund decided to outsource clinical audit “Treatment of low back pain in primary care," because 84 to 90% of the people have experienced low back pain during their life. Thus it is a very common problem, and it was important to assess the treatment of low back pain patients in primary care.

We initiated a clinical audit on on topic “Justification and quality of independent inpatient nursing care," as the National Audit Office has recommended based on the results of its audit to assess the quality of the provision of

[4] http://www.ravijuhend.ee/juhendid/ravijuhendid/
[5] http://www.haigekassa.ee/sites/default/files/kvaliteet/hk_kvaliteediraport_2016_a4_web_200117.pdf

independent stationary nursing service. In addition to the above, the quality of independent inpatient nursing care was last assessed through a clinical audit in 2007. Thus, it was important to check whether, in comparison with 2007, the service quality has changed.

Since 2011, Estonia has used “Clinical guideline for depression for family physicians," and in 2016 we assessed for the first time how and to what extent this clinical guideline is used by family physicians for treating patients.

In 2016, we were also engaged in clinical audits "The diagnostics and primary level care of type 2 diabetes,” and “Quality of independent antenatal midwifery." The reports of these clinical audits will be completed in the first quarter of the year 2017.

The summaries of all clinical audits conducted can be accessed consulted on the website of the Health Insurance Fund[6].

Cooperation with the World Bank will contribute to a comprehensive approach to care.

The care quality team of the Health Insurance Fund is actively working with the World Bank, whose analysis conducted in 2015 highlighted the need to further describe the movement of patients between different healthcare levels. It is necessary to define with which types of complaints the family physician must refer the patient to a medical ‘specialist, and when must the medical specialist refer the same patient back to the family physician for a regular surveillance.

The more specific goals of the stage II of the World Bank study is to develop a model that would help to identify the patients in case of whom the implementation of the preventive, advisory and monitoring activities by the family physician and the family nurse would benefit the patient's health and quality of life the most, and at the same time would also support the optimal use of health insurance resources. To this end, ten Estonian family physicians together with World Bank experts and representatives of the Estonian Health Insurance Fund have developed an evidence-based model for risk patients aimed at family physicians. Development of the model utilized evidence-based studies and the international expert experience linking it to the Estonian studies and the experience of the family physicians participating in the pilot project. The aim of the model is to create a tool for primary healthcare workers (family physician and a family nurse) to identify better and manage the treatment process of chronically ill patients, integrating it with specialist medical care and the social system. On the basis of the risk patients’ model, a pilot project will be conducted in 2017. The pilot project involves a total of ten family physicians from different family health centers all over Estonia.

The second part of the World Bank study analyses whether and how the waiting times affect the continuity of care across various levels of healthcare and the plan is to develop the model of differentiation of the waiting times and monitoring of their impact. It also analyzes the remuneration methodologies of the Health Insurance Fund and propositions of the Health Insurance Fund for the further development of the purchasing strategy. The work has already begun, and the results are expected in the autumn of 2017.

[6] http://www.haigekassa.ee/et/partnerile/raviasutusele/tervishoiuteenuste-kvaliteet/kliinilised-auditid

Department of Customer Relations helps to ensure the satisfaction of the customers of the Health Insurance Fund.

Customer satisfaction and protection of the interests of the insured is in the foreground

Increasing of customer focus and customer satisfaction is one of the main objectives of the everyday work of the customer service of the Health Insurance Fund. Our goal is to provide all people with fast, high quality and professional service communication channels appropriate for the customer.

For the provision of first-class customer service, in 2016 we drew up the Health Insurance Fund customer relations strategy for the years 2016-2019. In the customer relations strategy, we set goals and directions in which we want to develop, taking into account customer feedback and mapping of their needs. Our goal is to stay among organizations providing the best service. We regularly attend the Estonian Service Index (ETI) study to compare the level of the service of the Health Insurance Fund to other organizations in Estonia, and in 2016 our customer service was assessed on a four-point scale with the summary rating of 3.8 and the work of the information telephone with the rating of 4.0. We started with the modernization of the customer relations principles of the Health Insurance Fund, and during the innovation, we have made structural reorganization in the organization.

Customer-centered services

Our goal is to enhance the user convenience of the services offered to the customers by the Health Insurance Fund. We will improve the electronic processing of the temporary incapacity benefit for work for the healthcare providers, employers, as well as for the Health Insurance Fund. In 2016, we analyzed the redesign of the process

of an electronic certificate of incapacity for work. By 2018, our goal is to achieve a situation where the moment a certificate of incapacity for work is opened, it will be known simultaneously by the Health Insurance Fund as well as the employer, while respecting the user's convenience and creation of further opportunities for analysis for the use of benefits of temporary incapacity for work. Last year we also improved our data quality in cooperation with the data exchange partners and started upgrading our customer management system in order to get better acquainted with our customers and their needs. In addition, we participate in working groups of cross-border services which prepare the European Union's internal data exchange between the competent authorities.

On the development of the integrated customer relations, we adhere to the person-centered approach. By person-centered customer communications we mean finding the best solution to the customer and in more difficult situations, if necessary, we can offer personalized counseling. It is important for us to find a positive and satisfactory final solution for the customer and to provide reassurance. Our daily work is to increase the awareness of the insured of the availability of the care and of the health insurance benefits in Estonia as well as abroad.

The Contact Point is a gateway to the European Union

From 1 June 2016, the Estonian Health Insurance Fund has been operating as a national contact point. The contact point is the information gateway for people living in Estonia who want to get information about healthcare opportunities in the other EU Member States or elsewhere, and to receive information on the covering of the costs of cross-border health services. In addition, the contact point can be used for receiving information from the citizens of other Member States who want to come to Estonia to receive scheduled treatment or need medical care when temporarily staying in Estonia. On the contact point website you can find cross-border healthcare reimbursement conditions, presentation of the systems of application for prior authorization to receive scheduled treatment in a foreign country, presentation of patients' rights on the receipt of the required medical care, referrals to other Member States' contact points, and in addition a lot of other important information related to provision of healthcare services, if the person is outside their country of insurance.

In conclusion, we wish to emphasize that we adhere to the basic values of the Health Insurance Fund in our daily communication with customers, colleagues, and partners. We will continue to work on behalf of comity and cooperation, and on the provision of the medical insurance services we are open and reliable.

Pharmaceuticals interaction database was created in cooperation with the Health Insurance Benefit Department and the IT Department.

Deployment of the pharmaceuticals interaction database has been successful

Aging of societies is also conducive to the increasing use of medicines. It is no longer rare for a person's treatment regimen to include ten or more medicines, which have been prescribed by different physicians. The problem arises from the fact that the patient may not remember to inform every physician of already existing medicines. The interaction of unadjusted treatment regimens and incompatible pharmaceuticals can have negative consequences.

In order for the physicians to be able to assess better the interaction of the medicines used by the patients, we have made it possible, since 2016, for everybody prescribing medicines to use the pharmaceuticals interaction database SFINX-PHARAO for free. The evaluation of drug interaction aims at improving the quality of care and increasing patient safety.

The interaction project is led by a working group headed by the Department of Medicines and Medical Equipment of the Health Insurance Fund. Involved in the work are also the IT Department, Legal Department and Healthcare and Communications Department. Complex developments of the Digital Prescription Center were implemented by the beginning of the year 2016 by the Health Insurance Fund development team, followed by IT systems developments of hospitals and family physicians in cooperation with software companies in the first half of last year. In order to help the physicians become familiar with the new system, and to facilitate a smooth transition, we planned a month-long transition period into the work. In the first half of 2016, we were in constant contact with physicians in regard to the software developments, provided advice and supported the introduction of the developments. In May and June, we conducted nearly 30 training courses introducing the database. We visited all all the Hospital Network Development Plan hospitals of Estonia and organized in major cities separate workshops for family physicians where a representative from the State Agency of Medi-

cines spoke about the necessity of assessment of interaction. As of July 14, 2016, use of the database became mandatory.

The pharmaceuticals interaction database is connected to the digital prescription system.

In order to achieve maximum benefit, we integrated the database into the existing digital prescription system, which has been successfully used, and which can be regarded as one of Estonia's most successful e-health solutions. On prescribing a medicines, the system checks the patient's prescriptions, and in the case of a pharmaceuticals interaction, automatically displays the clinical consequence and instructions on how to change the treatment regimen. For analyzing the treatment regimen, physicians can also use the web-based database, which also shows the side effects of the pharmaceuticals.

In connection with the introduction of the interaction database, also the prescription form was changed - from now on, the physician will indicate on the prescription the dosing regimen according to an established structure. This change will improve the unambiguity of the dosing regimen, gives pharmacists the opportunity to better advise patients on the use of medicines and allows to carry out even more detailed statistics on medicines.

The first results

The statistics of the first few months of use showed that in one month there were about 2200 different pairs of pharmaceuticals with serious interactions in Estonia, and according to the experience of the Nordic Countries we can say that physicians change about 15-17% of the prescriptions which will receive notifications of interactions from the database. The fact that the application has already benefited the physicians in Estonia is illustrated by the study of the Tallinn Society of Family Doctors - in 2016. The family physicians consider the application of the interaction and adverse effect database as one of the top five positive acts that most affected the healthcare system.

From mid-July to mid-December, prescriptions with interactions amounted to 36% of all the digital prescription issued in Estonia. The share of C-level interactions (severe interactions in which the adverse effects can be reduced, e.g., by the adjustment of the dose) was 32%, the share of D-level (more severe forms of interaction that should be avoided) was 4%.

Based on the experience of the year 2016, we can say that the introduction of the developments in the physicians' information systems went smoothly, and the all the software was updated on time. In order to make the use of the database as convenient for the doctors as possible, we have gathered ongoing feedback regarding the first experiences.

Implementation of the interaction database was a priority project for use, which will undoubtedly benefit the patients the most whose treatment regimens can now be better evaluated by the doctors and pharmacists using the solution provided by the Health Insurance Fund and possibly be replaced with safer alternatives. The important innovation was also recognized by the Estonian Quality Association, who in 2016 declared the pharmaceuticals interactions project of the Health Insurance Fund, the winner of the annual quality competition.

What next?

In collaboration with the State Agency of Medicines, we continue to analyze the interactions occurring, and the State Agency of Medicines will continue to be drafting guidelines for replacement of pharmaceuticals with severe interactions. In the first half of 2017, the interaction database will be available for pharmacists, who will evaluate the reciprocal interactions of the prescription pharmaceuticals, non-prescription medicines, and dietary supplements used. This is undoubtedly an important addition to the use of the database because it allows pharmacists to advise patients on the selection and purchase of non-prescription medicines.

Budget execution report

Table 2. Budget execution in thousands of euro

	2015 actual	2016 budget	2016 actual	Budget execution	The change compared to the year 2015
REVENUE OF THE ESTONIAN HEALTH INSURANCE FUND					
Health insurance part of the social security tax	958,599	997,177	1,021,266	102%	7%
Revenue from insurance contracts	1,317	1,500	1,399	93%	6%
Recoveries and revenues from health insurance benefits	1,026	1,250	1,016	81%	-1%
Financial revenue	262	200	161	81%	-39%
Other revenue	3,149	4,273	5,120	120%	63%
TOTAL BUDGET REVENUE	**964,353**	**1,004,400**	**1,028,962**	**102%**	**7%**
HEALTH INSURANCE COSTS					
Costs of healthcare services	713,587	740,978	755,895	102%	6%
Disease prevention costs	7,650	8,384	8,371	100%	9%
Costs of primary medical care	92,460	100,303	103,199	103%	12%
Costs of specialized medical care	562,428	577,377	590,917	102%	5%
Costs of nursing care	28,450	30,258	30,103	99%	6%
Costs of dental care	22,599	24,656	23,305	95%	3%
Health promotion costs	1,088	1,249	1,193	96%	10%
The costs of the medicinal products compensated for insured persons	112,801	114,450	131,246	115%	16%
Costs of the benefits for temporary incapacity for work	116,977	118,270	130,269	110%	11%
Costs of benefits of medical devices	9,076	9,302	9,533	102%	5%
The treatment of Estonian insured persons abroad	8,519	8,269	9,105	110%	7%
Costs of dental care and denture benefits	9,362	9,632	9,494	99%	1%
Other expenses	2,199	2,298	2,535	110%	15%
TOTAL HEALTH INSURANCE COSTS	**973,609**	**1,004,448**	**1,049,270**	**104%**	**8%**
OPERATING EXPENSES OF THE HEALTH INSURANCE FUND					
Labor costs	5,554	5,902	5,778	98%	4%
Management costs	1,579	1,513	1,464	97%	-7%
Information technology costs	932	847	1,109	131%	19%
Development costs	277	225	186	83%	-33%
Other operating costs	942	583	751	129%	-20%
Total operating expenses of the Health Insurance Fund	**9,284**	**9,070**	**9,288**	**102%**	**0%**
TOTAL BUDGET COSTS	**982,893**	**1,013,518**	**1,058,558**	**104%**	**8%**
Budget year net gain	**-18,540**	**-9,118**	**-29,596**	**-**	**-**
RESERVE					
Change in reserve capital	2,774	3,651	3,651	-	-
Change in risk reserve	921	1,217	1,217	-	-
Change in the retained earnings	-22,235	-13,986	-34,464	-	-
Total change in reserves	**-18,540**	**-9,118**	**-29,596**	**-**	**-**

The Health Insurance Fund planned EUR 1 billion for the budget of the year 2016, the execution of which was 104%. The annual revenue of the Health Insurance Fund in the fiscal year 2016 was minus 29.6 million euro, which is 20.5 million more negative than projected.

The year 2016 budget implementation was influenced by:

- receipts of the health insurance part of the social tax over the planned budget - in 2016, the Health Insurance Fund received 2%, or 24.1 million euro more revenue from the the health insurance part of the social tax than what was planned for the budget;
- The over-implementation of the budget of health services, which is mainly due to ensure stable availability of the services rendered to the insured - submission of work to the Health Insurance Fund for payment exceeding the contract amount by the healthcare providers, structural appreciation of treatment cases;
- medicines of effective drugs made available to the insured - in 2016 January, compensation of new pharmaceuticals for hepatitis C was initiated, which enables more than 90% of patients to be cleared of the virus;
- over-implementation of the budget for benefits of temporary incapacity for work resulting from higher than expected use of certificates of sick leave, care leave and maternity leave, and the higher than expected daily average benefit rate.

Insured people of Estonia

Permanent residents of Estonia, people living in Estonia under a temporary residence permit or right of residence for who is paid or who pay their own social insurance tax, as well as the people considered equal to those people on the basis of the Health Insurance Act or a relevant agreement, are entitled to health insurance.

In the health insurance statistics, persons insured on different grounds have been divided into five groups:

- **the employed insured** - persons insured by the employer, sole proprietors (including their spouses participating in their activities), governance body members, persons entered into contract under the law of obligations;
- **persons considered equal to the insured** - pensioners, children, students, pregnant women, dependent spouses;
- **insured by the state** - unemployed, persons on parental leave, caregivers for disabled persons, conscripts;
- **persons insured under a foreign contract** - pensioners from European Union (EU) Member State settling in Estonia, employees posted in Estonia from another EU Member State, Estonian pensioners leaving for another EU Member State, military pensioners of the Russian Federation;
- **people considered equal to the insured under a voluntary contract** - persons insured on the basis of the contract are considered equal to insured persons pursuant to the Health Insurance Act.

Statistically essential is the category of the employed, insured persons. This means that if a person has more than one valid insurance, the health insurance statistics do not show double data. Therefore, for example, the data of the persons insured as pensioners as well as a working person are reflected only as the employed, insured persons.

Table 3. The number of the insured

	31.12. 2014	31.12. 2015	31.12. 2016	The change compared to the year per year (persons)	The change compared to the year 2015
Employed insured persons	600,998	615,333	604,781	-10,552	-2%
Persons considered equal to the insured persons	583,101	587,459	586,512	-947	0%
Other insured persons	48,720	34,544	45,984	11,440	33%
State insured persons	46,275	31,918	43,073	11,155	35%
Persons insured under a foreign contract	1,993	2,100	2,356	256	12%
Persons considered equal to the insured persons under a voluntary contract	452	526	555	29	6%
TOTAL	**1,232,819**	**1,237,336**	**1,237,277**	**-59**	**0%**

In the year 2016, the proportion of employed persons among the persons with health insurance has increased, accounting for as much as 48.9% of the total number of the insured persons. The number of people insured by the state has increased by the same magnitude by which the number of the employed insured was reduced. In 2016, 65.6% of the working age population were employed, and the unemployment rate was 6.8%, which was by 0.6% higher than the data of the year 2015. The number of unemployed increased due to a decrease in the number of inactive people, which is partly caused by the reform of the ability to work.

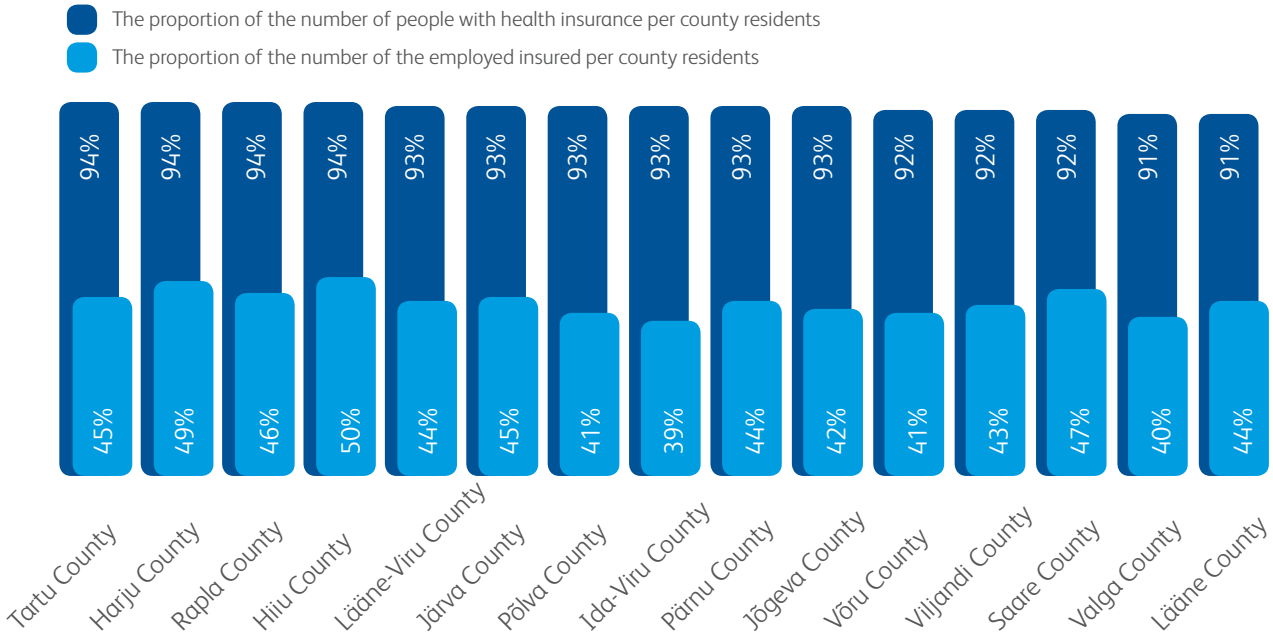


Figure 2. The proportion of the number of the insured and the employed insured per county residents

Revenue

Table 4. Revenue budget execution in thousands of euro

	2015 actual	2016 budget	2016 actual	Budget execution
Health insurance part of the social security tax	958,599	997,177	1,021,266	102%
Revenue from insurance contracts	1,317	1,500	1,399	93%
Recoveries and revenues from health insurance benefits	1,026	1,250	1,016	81%
Financial revenue	262	200	161	81%
Other revenue	3,149	4,273	5,120	120%
TOTAL	**964,353**	**1,004,400**	**1,028,962**	**102%**

Health insurance part of the social security tax

The execution of the revenue budget of the Health Insurance Fund is most affected by the revenue of the health insurance part of the social tax. In the year 2016, the revenue of the health insurance part of the social tax was EUR 1021.3 million, which exceeded the budget planned for the year 2016 by 24.1 million euro (budget execution 102.4%). Compared to the year 2015, the revenue of the health insurance part of the social tax has increased by 6.5%.

An overview of the revenue of the health insurance part of the social tax and on the growth and the shrinkage is provided in figure 3.

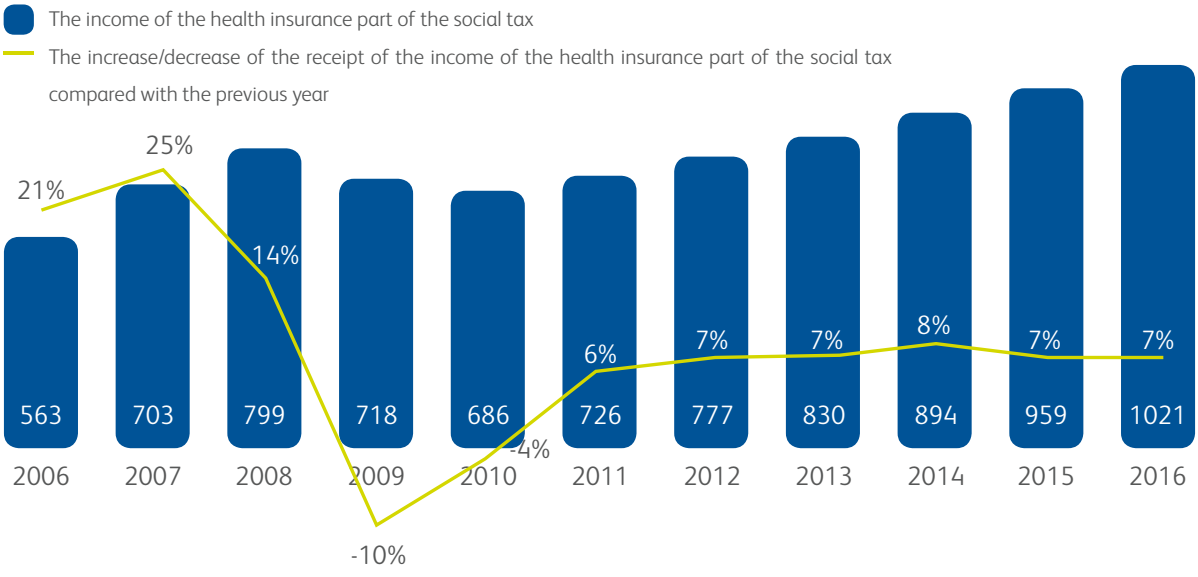


Figure 3. The revenue of the health insurance part of the social tax and the growth and shrinkage in the years 2006-2016

Revenue from insurance contracts

Revenue under the insurance contract is the revenue received from the contract of equalization with the insured person, and from the insuring of the military pensioners of the Russian Federation living in Estonia.

Pursuant to the Health Insurance Act §22, a person without insurance can obtain insurance for themselves by entering into the contract with the Health Insurance Fund and paying the monthly insurance premiums. The insurance premium is calculated based on the Estonian average monthly gross wages for the previous calendar year last published by the Statistical Office, multiplied with 0.13. The premium amount changes every year after Statistical Office publishes the Estonian average gross monthly wage of the previous calendar year. The premium amount per calendar month in the year 2016 was 130.70 euro. As of December 31,555 persons were insured under the contracts and considered equal to an insured person, and during the year 2016, revenues of 883,000 thousand euro were received.

In 2016, insurance of the non-working pensioners of the Armed Forces of the Russian Federation yielded revenues of 516,000 euro. As of December 31, 359 persons had been insured. In 2016, the Russian Federation paid 114.17 euro per month for each military pensioner. The health insurance payment monthly fee is calculated on the basis of the average annual cost of treatment for the year 2015 for the age group of 70-79 years.

Recoveries and revenues from health insurance benefits

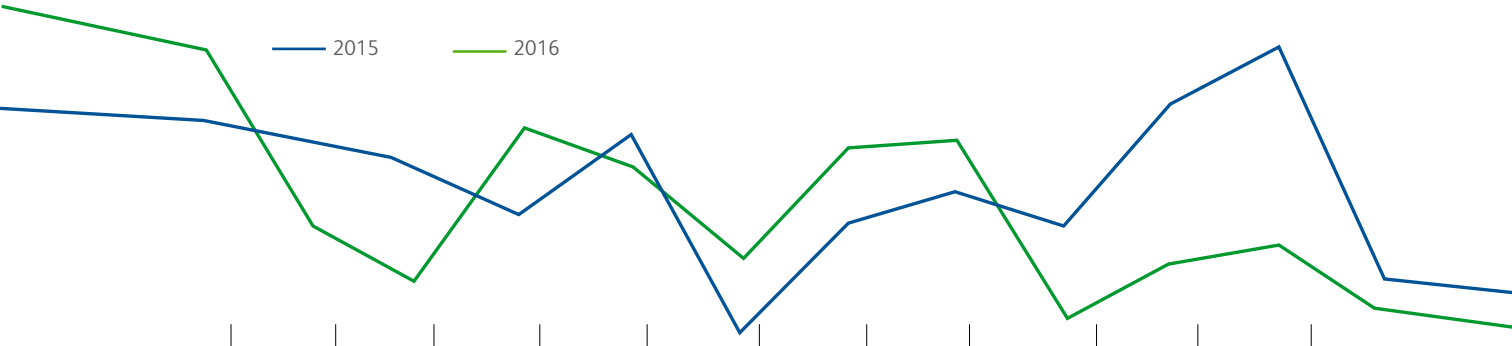
Recorded as recoveries are the claims for payment of health insurance benefits paid as a result of road traffic injuries submitted to the insurance company, claims for payment of the damages caused to the Health Insurance Fund with unfounded insurance claims submitted to employers, and claims for payment submitted by the healthcare service providers, pharmacists, the insured persons and employers as a result of inspections.

Compared to the year 2015, income from recoveries has remained at the same level. 53% of the recoveries of the year 2016 accounts for the claims for payment of traffic damages submitted to the insurance companies. Claims for wrongly paid amounts were submitted to healthcare providers and pharmacies for 332,000 euro.

Financial revenue

The Health Insurance Fund will receive interest from the balance of the cash held on the national group account based on the deposit contract concluded with the Ministry of Finance, the amount of which is equal to the return of the cash reserves. Profitability depends on the events influencing the price movements of the bond market and the interest rates on the short-term deposits.

In the current financial year, the Health Insurance Fund received financial revenue of 161,000 euro. The annual results of the liquidity reserve amounted to 0.13%. Figure 4 provides an overview of the profitability of the cash reserves from month to month.



	January	February	March	April	May	June	July	August	September	October	November	December
2015	0.25%	0.22%	0.19%	0.13%	0.23%	-0.02%	0.12%	0.16%	0.11%	0.27%	0.34%	0.04%
2016	0.35%	0.12%	0.04%	0.23%	0.19%	0.07%	0.21%	0.22%	0.00%	0.07%	0.09%	0.00%

Figure 4. Profitability of the cash reserves from month-to-month for the years 2015–2016.

Other revenue

In other revenue, the most important types of revenue are the revenue from government grants and claims submitted to the competent authorities of other Member States by the Health Insurance Fund for the medical services provided in Estonia to insured persons of the EU Member States. Other income also reflects income from the processing of medical invoices and the currency exchange gains related to the operating costs and health insurance costs.

In 2016, the Health Insurance Fund received 1.5 million euro income from government grants, mostly constituting the funds received for the financing of medicines and healthcare services according to the Artificial Insemination and Embryo Protection Act. For operating expenses was received 1,000-euro worth of government grants for writing off students loans on the basis of Government Regulations.

In 2016, the Health Insurance Fund submitted claims for 3.5 million euro to the competent authorities of the other Member States for medical services provided in Estonia to the insured persons of other EU Member States.

Expenditures

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

On planning of the health insurance budget for the year 2016, the Health Insurance Fund was based on the following principles:

- to provide the insured with an expanded selection of evidence-based health services, medicines, and medical equipment;
- to keep the number of treatment cases of specialized medical care and inpatient nursing care stable;
- to ensure access to health services at the current level, following the principles of ensuring good quality care, and the rated justified demand;
- the healthcare workers' wage agreement.

The overruns of the year 2016 health insurance budget are caused by:

- over-implementation of the budget of the specialized medical care in health services;
- greater use of the pharmaceuticals compensated for the insured;
- greater use of the means of the benefits of temporary incapacity for work.

Implementation of the specialized medical care budget

For the budget of the year, 2016 were planned 3.2 million treatment cases in the amount of 577 million euro, the budget implementation in terms of treatment cases was 103%, and in terms of the amount it was 102%.

The over-implementation of the budget has been affected by ensuring stable access to health services, and the work exceeding the contract volume submitted to the Health Insurance Fund for payment by providers of healthcare services. In 2016, providers of healthcare services submitted work exceeding the contract volume for 13.2 million euro - in the first half of the year. providers of healthcare services submitted work is exceeding the contract volume for of 8.3 million euro and in the second half of the year for 4.9 million euro.

Implementation of the budget for the pharmaceuticals compensated for insured persons

In 2016, the Health Insurance Fund compensated for 8 million prescriptions in the amount of 131 million euro. In terms of amount, the budget of the year was implemented by 115%. The main over-implementation was caused by the significantly higher than estimated number of the patients using the hepatitis C drug subject to compensation since January 2016. in 2016, 360 patients were scheduled for treatment, but in fact, 598 patients were treated in 2016 for a total amount of 13.3 million euro. In 2016, patients who were left untreated in previous periods, and who were waiting for upcoming treatment options were admitted to treatment. Moderate increases have also occurred in the average cost for the Health Insurance Fund of the discount prescriptions of the drugs compensated for with the discount rate of 50%, 75%, and 90%, in the case of all of the above discount rates, it is principally due to a wider use of the new anticoagulants.

Implementation of the budget of the benefits for temporary incapacity for work

In 2016, the Health Insurance Fund reimbursed 130 million euro for 6 million days of temporary incapacity for work. The benefits of temporary incapacity for work were by 12 million euro higher than planned. Over-implemen-

tation is caused by higher than expected use of certificates of sick leave, care leave, and maternity leave, and the higher than expected average benefit rate for one day.

The average cost per an insured person

The average costs are calculated on the basis of the services and benefits provided to the Estonian insured persons financed by the Health Insurance Fund. The average expenditure per an insured person has increased from year to year. Compared to the previous year, in 2016 the average cost per insured person per month increased by 8%. By the age of insured persons, the average costs have increased the most in the age group 70-79 years of age.

Figure 5 gives an overview of the services provided by an Estonian insured person financed by the Estonian Health Insurance Fund and benefits per insured person per year.

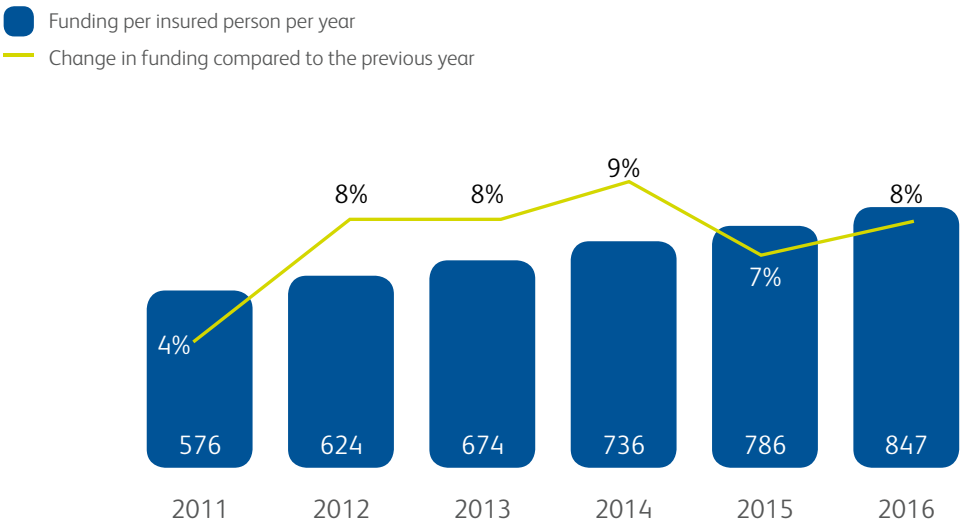


Figure 5. The average funding per insured person per year, in euro

Health insurance costs

1. Healthcare services

Healthcare budget planning is based on the treatment need of the insured assessed by the Health Insurance Fund, or the demand for healthcare services. Every year, the next year's demand for services of the insured is assessed, i.e., the number of treatment cases is projected. Demand assessments are carried out in all specialties and treatment types on the county level, based on the place of residence of the insured person. The demand for healthcare services will change over the years, due to the change in age and gender composition of the insured population, the development of medical technology and changes in the legislation, but is not directly related to the financial constraints in health insurance. By adjusting the assessed demand with our budgetary funds, the result is the funded demand or the budget.

Table 5. Implementation of the medical services budget in thousands of euro

	2015 actual	2016 budget	2016 actual	Budget execution
Disease prevention costs	7,650	8,384	8,371	100%
Costs of primary medical care	92,460	100,303	103,199	103%
Costs of specialized medical care	562,428	577,377	590,917	102%
Costs of nursing care	28,450	30,258	30,103	99%
Costs of dental care	22,599	24,656	23,305	95%
TOTAL	**713,587**	**740,978**	**755,895**	**102%**

Compared to the previous year, the healthcare funding of the year 2016 has been affected by:

- the increase of the wage component in the price of the service;
- modernization of specialized healthcare services - adding new services and drugs, increases of overhead and modernization of the service structure;
- ensuring the stable availability of services and medicines included in the list in the previous years;
- the increase of the work exceeding the contract volume submitted to the Health Insurance Fund for payment by providers of healthcare services;
- structural appreciation of the treatment cases in specialized medical care.

1.1 Disease prevention

Disease prevention is defined as actions that are in direct relation to the state of the National Health Development Plan and the strategic objectives of the Health Insurance Fund, and which, in an evidence-based manner, contributes to early detection of illnesses: health checks, screening of pregnant women, and newborns. As well as actions aimed at the reduction or prevention of exacerbations of chronic diseases, and complications caused by them: chronic disease management through the implementation of the family physician's quality system to avoid further major cost in relation to the treatment of these diseases, and early loss of working capacity, disability or death of people. The Health Insurance Fund also compensates to its insured, to a large extent, for pharmaceuticals and medical devices dispensed for preventative purposes. Thus, the prevention of diseases takes place in healthcare at all levels.

The resources of the disease prevention budget are used to support only a mall part of the preventive activities financed by the Health Insurance Fund - one reason for this being the need to provide more targeted support to new development activities in the prevention phase, and to monitor their application to ensure detailed analysis of the activities and sufficient coverage of the target audience. On the achievement of these goals, the developed prevention activities can be integrated into specialized medical care or family healthcare.

Table 6. Implementation of disease prevention budget in thousands of euro and the number of participants in the projects

	2015 actual		2016 budget		2016 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	4,338	152,081	4,604	154,192	4,844	155,211	105%	101%
Development of reproductive health of young people	1,043	29,361	1,176	34,000	1,110	28,669	94%	84%
Early detection of breast cancer	1,045	38,269	1,166	36,000	904	32,836	78%	91%
Early detection of cervical cancer	269	15,475	348	18,500	310	15,994	89%	86%
Young athletes' health check	706	9,400	760	10,000	752	9,045	99%	90%
Early detection of colorectal cancer	37	0	130	5,000	122	2,610	94%	52%
Analyses to improve disease prevention and development of the healthcare system	200	0	200	0	100	0	50%	-
Other preventions	12	0	0	0	229	0	-	-
TOTAL	**7,650**	**244,586**	**8,384**	**257,692**	**8,371**	**244,365**	**100%**	**95%**

School healthcare service is the healthcare sector, which engages in students' health promotion, disease prevention, health surveillance and the provision of first aid, and the development of self-help skills, they form the largest part of the budget for the prevention of diseases. The assessment of the need for school health services is based on the statistics of the number of students provided by the Ministry of Education and Research. The primary goal of the school healthcare service is to ensure the welfare of the students and to support their normal development and growth. But, the service does not include the treatment of diseases. The Health Insurance Fund finances the school healthcare service on common grounds in all day schools. The school healthcare team collaborates with the school management, the board of trustees, the student councils, and the local governments.

Within the next three years, the main activities of the Health Insurance Fund are related to the implementation of school healthcare reporting developments, using e-health opportunities - the external partner in this process is the Ministry of Social Affairs. In addition, we will deal with carrying out development activities according to the proposals of the audit of the National Audit Office: performing the purchasing model analysis of school healthcare services, developing policies for monitoring of the availability of services through financing agreements, doing preliminary work for including a new vaccine (HPV, the human papillomavirus vaccine) in the service consumption model as of the year 2018, and initiating the development of a clinical guideline for the treatment of obese children. As the organization of children's health checks is divided between primary care (family physician, family nurse) and school healthcare, we will make the necessary amendments in the organization of health checks in accordance with innovations that have been introduced to the health checks guidelines of the children up to 18 years of age, and develop the concept of integrated services on monitoring and treatment of children's health.

In 2016, school healthcare services were provided in 536 schools, by 173 service providers. In 2016, services were provided to 3070 students in the schools for students with special needs.

The target group of the screening of early detection of breast cancer includes women of 50–62 years of age. In 2016, the women born in the years 1956, 1958, 1960, 1962, 1964 and 1966, who had health insurance were invited for screening. Development activities are aimed at enhancing national cooperation and at the modernization of national codes of conduct, the goal of which is to bring the Estonia screening arrangement into compliance with the recommendations of the European Commission. We also want to introduce measures that will allow increasing the screening coverage of the target groups of the population to the recommended level (70-75%), starting from which evidence-based positive effect on all-cause mortality starts to manifest itself.

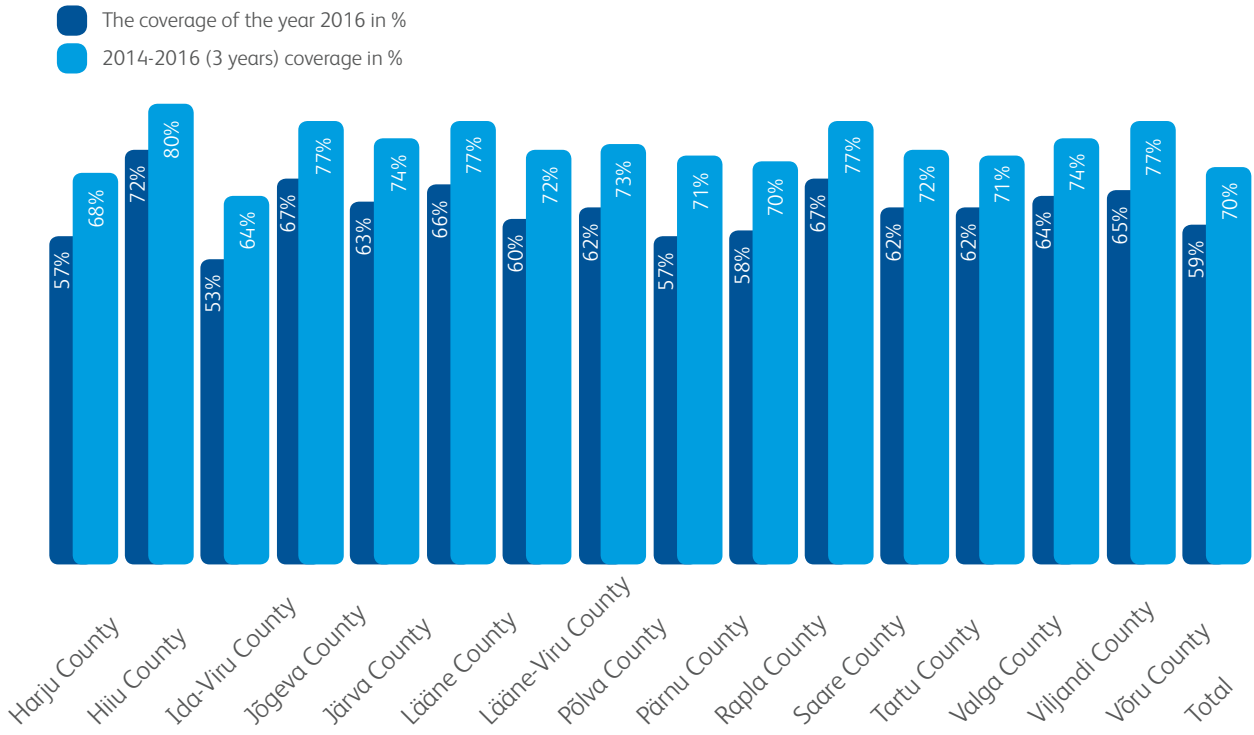


Figure 6. Breast cancer screening coverage from county-to-county

The target group of the screening of early detection of cervical cancer includes women of 30–55 years of age. In 2016, the women born in the years 1961, 1966, 1971, 1976, 1981 and 1986, who had health insurance, were invited for screening. The main preventive action for cervical cancer is the outreach work and the regular participation of the target group in

the well-organized screening. Development activities are aimed at enhancing national cooperation and modernizing of the screening guidelines.

Early detection screening of colon cancer is launched in stages from the second half of 2016, the launch of which is preceded by thorough analysis and interdisciplinary development. Screening is register-based, and for the first time largely coordinated at a primary level. in the year 2016, the target group of colon cancer screening was the men and women born in the year 1956. The initial size of the target group was approximately 17,000 persons, and the expected coverage of the target group in the initial period was 30% or 5,000 persons. Starting from 2017, we will follow the primary analysis of the implementation of the new screening and planning for possible follow-up actions.

The project of counseling of reproductive health of young people and of the prevention of sexually transmitted diseases is a service with long-term funding by the Health Insurance Fund, one part of which has also been funding of the project management activities. The target group is young people aged up to 24 (inclusive) years.

The services promoting young people's sexual health financed by the Estonian Health Insurance Fund have helped to improve the sexual health indicators of our young people. It is expressed in the decline of the fertility rate of the young people of 15-19 years of age and of the abortion rate of the legally induced abortions among the young people of 15-24 years of age, as well as the in the decline of the frequency of primary morbidity in sexually transmitted infections. At the same time, we as a country have internationally excelled in many fields related to this topic.

Development needs are related to the activities that will help to reach a consensus on what would be the future of young people's reproductive health related services in conditions when there is no longer a project-based coordination, and what could be the future content of the service, the competence of service providers and the infrastructure of the provision of the service. In 2017, the Health Insurance Fund, in cooperation with the Union of Sexual Health of Estonia, will review the content of the service, and the purchasing principles, including the range of services offered, and the proportions prevention and treatment.

Health checks for young athletes to prevent sports-related health risks, is directed to up to 19-year-olds, who are engaged in sports on a regular basis at least three times a week, in addition to physical education at school. Young athletes' health checks are carried out in accordance with the health checks guidelines for young athletes compiled by the Estonian Federation of Sports Medicine. Last year, the services targeted to young athletes underwent renovation: in addition to the detection of cardiovascular disorders, the direction was taken to trauma prevention, and the lower age limit of the target group was removed so as not to restrict access to the services of children involved in sports which require an early start. As health insurance has to bear a narrow part of the whole field, with regard to the financing of health checks for young athletes, and modernization of the service, we have launched a nationwide cooperation to define and realize the development needs. Development objectives are linked to the achievement of more broad-based coverage. One possibility is to bind the primary health checks of young athletes with the school-age child's health checks in primary care, and to enter an amendment to the Health Check Guideline of the children up to 18 years of age. Nationwide cooperation must result in improved coach training, increased import and deployment of evidence-based trauma prevention programs, as well as improved service based communication between the parents, sports clubs and municipal levels, including awareness activities targeted at recreational athletes promoting involvement in sports that are harmless to health.

In 2016, **Phase II of the World Bank cooperation project "Holistic approach to treatment and cooperation between the parties in the Estonian healthcare system"** continued, in the course of which the World Bank gives the Health Insurance Fund recommendations on how to develop the financing model for primary care, and through further development of the funding models of primary and specialized care to support higher level integration between different levels of medical care. Also was continued the analysis for the purposes of disease prevention and improving access to health services and the development of the healthcare system.

Under other prevention, are recorded the development costs of the interactions database implemented in July. The interaction database is an application by which physicians can more easily assess the interactions of the 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 medical care

Timely primary contact with the healthcare system is a prerequisite for achieving high-quality treatment outcomes. Therefore, the Health Insurance Fund considers it important to strengthen and expand the role of family physicians as the treatment coordinator and health counselor. For the year 2016 budget planning, the reference prices of the primary healthcare services were modernized, and the primary healthcare service package was expanded to ensure a sustainable primary care system. The total volume of funding of the primary healthcare for the year 2016 was EUR 103 million.

Implementation of the primary care budget increased, compared to 2015, by a total of 11.6%. The use of the funds has increased. In addition to the Fee for Services Fund, the use of the Therapy Fund, to which, in addition to speech therapy and psychology services, was included physiotherapy services, also increased.

Table 7. Implementation of the primary healthcare budget in thousands of euro

	2015 actual	2016 budget	2016 actual	Budget execution
Basic allowance	9,722	9,829	9,816	100%
Distance allowance	474	473	464	98%
Second family nurse allowance	4,072	4,600	5,259	114%
Total capitation fee	55,667	61,449	61,144	100%
The capitation fee for the insured of up to 3 years of age	3,057	3,370	3,386	100%
The capitation fee for the insured between 3 to 6 years of age	3,563	3,949	3,804	96%
The capitation fee for the insured between 7 to 49 years of age	23,047	25,268	25,148	100%
The capitation fee for the insured of 50 to 49 years of age	15,419	17,203	17,164	100%
The capitation fee for the insured of over 70 years of age	10,581	11,659	11,642	100%
Fee for Services fund	19,458	19,826	22,091	111%
Operations fund	430	400	529	132%
Therapy fund	208	770	716	93%
Performance pay	1,666	2,100	2,237	107%
Allowance for appointments during non-working hours	209	251	341	136%
Family physician advisory line	554	605	602	100%
TOTAL	**92,460**	**100,303**	**103,199**	**103%**

The total number of the lists is 802, which has grown by one list compared to the previous year. In the year 2016, the Health Insurance Fund had an agreement with 458 providers of primary care services. The average number of people in a list of a family physician is 1,541. In 2016, the family physician lists that are smaller than the standard size (where less than 1200 people live in a service area, but the Health Insurance Fund will pay the capitation fee for 1200 people) was 17. The number of people for whom, in the lists of fewer than 1,200 people, additional capitation fee has been paid, is 9767.

The reference price of the basic allowance rose because of the wage agreement since the basic allowance includes the cost of the work time for the replacement of the family physician and the family nurse during training. In 2016, the basic allowance was paid to 61 lists with the factor of 1.5 to the family physicians with multiple reception offices.

A 10% increase in the capitation fee, compared to the same period last year, is caused by the change of the reference price of the capitation fee from January 1, 2016. The reference price of the basic allowance increased due to the healthcare workers' wage agreement.

The total number of lists receiving distance allowance is 186, of which 130 are located 20–40 km away from the nearest hospital, and 56 farther than 40 kilometers from the nearest hospital.

Implementation of the service of the second family nurse has been launched successfully. Each year, the lists receiving the second family nurse allowance has increased. In 2016, a second nurse was funded in 360 lists. Compared to the year 2015, the number of lists receiving the allowance of a second family nurse has increased by 27%. Successful implementation of the second family nurse service is an important factor in the improvement of the availability and the quality of primary healthcare.

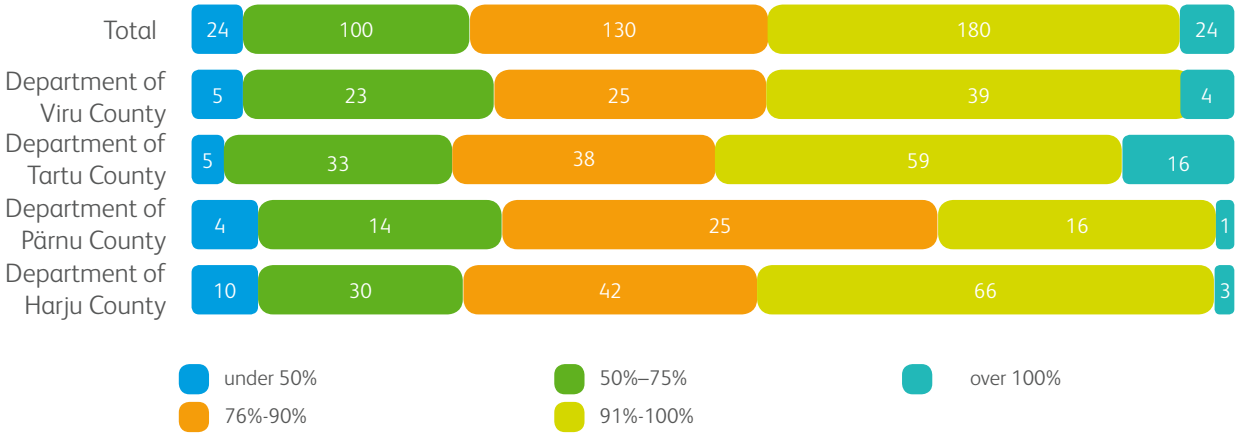


Figure 7. The number of family physicians according to the implementation of the Fee for Services Fund in 2016 by the regions of the Health Insurance Fund

The Fee for Services Fund is allocated to the family physicians for conducting of the necessary examinations and procedures for patients. The funding of the Fee for Services increased by 14% compared to the previous year. The growth of the volume of the Fee for Services is primarily due to the increase of the reference price of the capitation fee, as the Fee for Services Fund is calculated as a percentage of the capitation fee. The implementation of the Fee for Services Fund among family physicians continues to vary. The average implementation of the Fee for Services Fund by family physicians in Estonia totaled 88.5%.

The services of the Operations Fund (microsurgery and gynecology) were provided in 2016 by 391 primary healthcare providers, which accounts for 85% of all service providers. The total volume of the Operations Fund used was EUR 529,000, which is 23% more than in 2015.

During the year 2016, **the services of e-Consultation** were used by 603 family physicians from 260 family health centers, mainly in the Harju region. The service was provided in a total of 5597 cases, which has grown by 123% in comparison with the year 2015. The Health Insurance Fund financed the e-Consultation services to a total of 77,000 euro.

Since 2016, the e-Consultation services are provided in addition to the selected partners of the Health Insurance Fund by seven Hospital Network Development Plan (HNDP) hospitals: North Estonia Regional Hospital, Tallinn Children's Hospital, Tartu University Hospital, East Tallinn Central Hospital, West-Tallinn Central Hospital, Ida-Viru Central Hospital and Pärnu Hospital.

In 2016, conditions were developed for providing e-Consultation services in the specialties of nephrology, internal medicine, and psychiatry. Thus, since 1 January 2017, the family physicians have the opportunity to consult in three additional spe-

cialties. The most counseling is requested in the specialties of neurology, endocrinology, otorhinolaryngology and urology.

The aim of the Therapy Fund is to increase the role of family physicians as a case manager. The Therapy Fund is an additional option for the family physician to ensure the availability of the services of a clinical speech therapist, psychologist, and physiotherapy for the patients on their list. In 2016, the Therapy Fund amounted to 3% of the family physicians' capitation fee. In 2016, the option of the Therapy Fund has been used by 401 service providers. The service of the Therapy Fund has been provided in 41,000 cases to 8825 people. The number of people has increased by 2902 compared to the same period last year.

Table 8. The number of the lists of family physicians, the number of the insured persons in the list and the number of appointments during non-working time.

	2015 actual	2016 actual	The change compared to the year 2015
THE NUMBER OF LISTS			
The number of lists	801	802	0%
The number of lists receiving the additional remuneration for distance	188	186	-1%
The number of lists receiving the second family nurse allowance	283	360	27%
The average size of the list (the number of insured persons)	1,543	1,541	0%
THE NUMBER OF PEOPLE			
The total number of persons for whom capitation fee has been paid	1,235,817	1,236,012	0%
Insured persons under 3 years of age (the reference price of the capitation fee 7.16 euro per month)	39,130	39,408	1%
Insured persons 3 - 6 years of age (the reference price of the capitation fee 5.33 euro per month)	61,225	59,482	-3%
Insured persons 7 - 49 years of age (the reference price of the capitation fee 3.27 euro per month)	642,354	640,866	0%
Insured persons 50 - 69 years of age (the reference price of the capitation fee 4.55 euro per month)	315,698	318,563	1%
Insured persons 70 years of age and older (the reference price of the capitation fee 5.46 euro per month)	177,410	177,693	0%
THE NUMBER OF NON-WORKING TIME APPOINTMENTS			
The number of non-working time appointments of the family doctor	5,014	7,962	59%
The number of non-working time appointments of the family nurse	6,307	8,475	34%
THE NUMBER OF CALLS TO THE ADVISORY LINE			
The advisory line (the number of calls per year)	233,638	238,304	2%

Non-working time appointments were introduced as of the year 2014. The population satisfaction survey commissioned by the Health Insurance Fund has revealed that people have the expectation of getting access to the doctor's appointment also in the evening time. Consequently, in the list of the healthcare services of the Estonian Health Insurance Fund were added new services, allowing to pay the family physician and family nurse for the appointments performed during non-working hours. Compared to the year 2015, the service has grown in terms of the family physician appointments by 59% and in terms of family nurse appointments by 34%. The upward trend of the appointments of the family nurse can be seen; one reason is the implementation of the additional remuneration of the second family nurse. The proportion of the insured persons visiting family physicians has in recent years been between 75% and 82% respectively.

Table 9. The number of the appointment of the family physician and the family nurse in the period 2010–2016

	2010	2011	2012	2013	2014	2015	2016
Appointments of the family physician	3,994,334	4,411,214	4,523,318	4,425,781	4,472,867	4,559,726	4,595,989
Appointments of the family nurse	480,269	535,240	592,690	892,307	1,077,126	1,180,296	1,336,312
Prophylactic appointments	394,360	363,182	326,747	301,812	297,241	343,737	342,310
TOTAL APPOINTMENTS	**4,868,963**	**5,309,636**	**5,442,755**	**5,619,900**	**5,847,234**	**6,083,759**	**6,274,611**
Number of persons who had appointments	957,090	981,575	973,882	986,213	987,635	1,006,406	1,013,727
The number of people on the lists of family physicians	1,271,082	1,255,971	1,247,223	1,251,810	1,237,832	1,235,817	1,236,012
The proportion of the people who visited a family physician of all the people on the lists of the family physician	75%	78%	78%	79%	80%	81%	82%

The number of participants in the family physicians' quality system has increased steadily year after year. The results of the family physician quality system are summarized once a year on the basis of last year's activities. On the basis of the results of the family physician quality system, in 2016, the maximum performance fee was paid for efficient performance of disease prevention and monitoring of patients with chronic diseases to 471 family physicians, performance fee for additional professional competence was paid to 244 family physicians, which is an increase by 58 family physicians compared to last year.

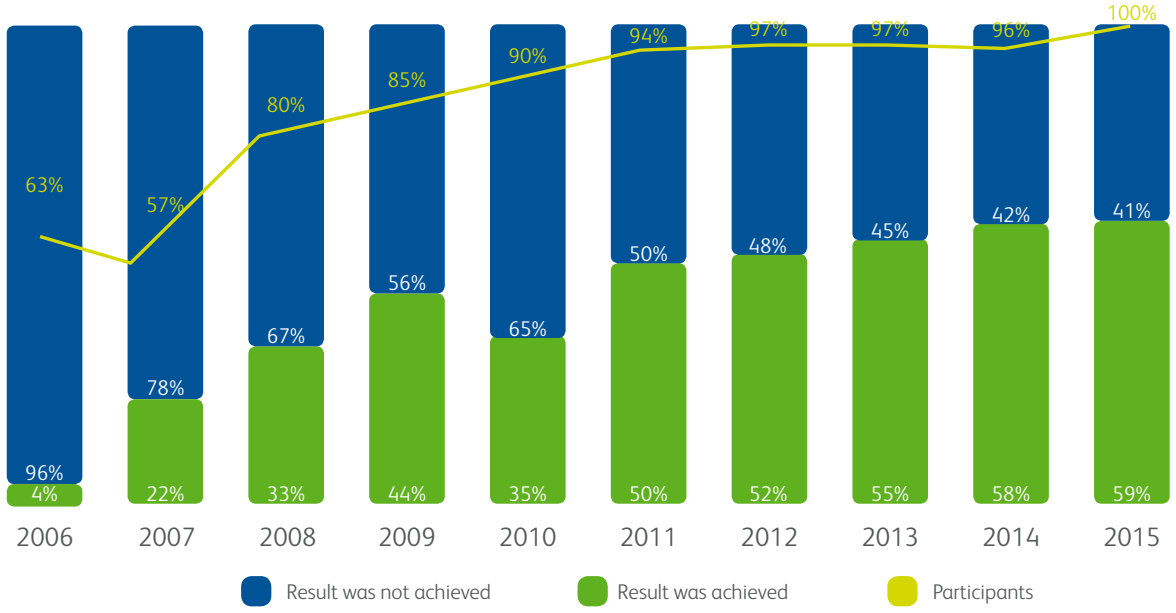
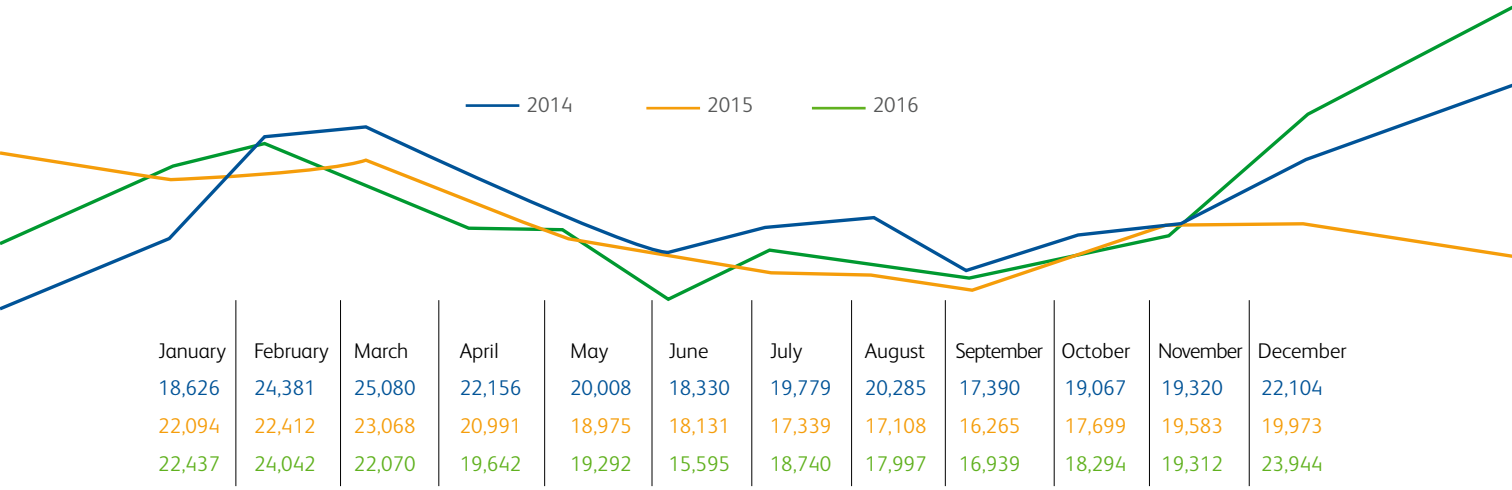


Figure 8. The proportions of the lists participating in the quality system which achieved the result in the years 2006–2015

The allowance for the results of the evaluation of the performance of the healthcare provider with a primary care treatment financing agreement per list was paid in a lump sum to 51 practices with 143 lists that achieved an A-level in the IV quarter. A-levels has been achieved by a family healthcare center in 2015 as of 31 December, as the year of evaluation for which allowance was sought was 2015. The allowance in the amount of EUR 18,000 was paid to 115 legal entities who attained the A-level, an allowance of EUR 159.78 was paid up to six lists.

The countrywide family physician advisory line 1220 In 2016, the Health Insurance Fund conducted an extensive campaign to raise awareness of the advisory line. The campaign has a positive impact on the use of the service. The advisory line serviced more than 238,000 calls, which compared to the year 2015 was a little more. Figure 9 provides an overview of a number of the calls on the advisory line from month to month.



	January	February	March	April	May	June	July	August	September	October	November	December
2014	18,626	24,381	25,080	22,156	20,008	18,330	19,779	20,285	17,390	19,067	19,320	22,104
2015	22,094	22,412	23,068	20,991	18,975	18,131	17,339	17,108	16,265	17,699	19,583	19,973
2016	22,437	24,042	22,070	19,642	19,292	15,595	18,740	17,997	16,939	18,294	19,312	23,944

Figure 9. The number of calls to the family physician's advisory line in the years 2014–2016

Availability of primary medical care

The Health Insurance Fund regularly checks the availability of primary healthcare based on family physician's job description. According to the job description, a patient with an acute health condition should have access to the appointment on the day of application, while other patients should have the appointment within five working days. Availability of primary healthcare is monitored by visiting healthcare centers. The family physician's list is checked at least once every three years, so in one calendar year, there will be visits to approximately one-third of all the family physicians and the conditions for obtaining access to the appointment is examined.

In the year 2016, the availability of the primary healthcare was assessed in 368 lists, which accounted for 46% of all the lists. In the same period of the last year, 270 lists were checked.

All patients with an acute disorder had access to the family physician's appointment on the day of application in most locations checked. In three locations (less than 1% of the visits) patients with acute disorders were not ensured with an appointment on the day of application. Patients with non-acute disorders were not able to get an appointment on time in six locations (i.e., in 1.6% of the locations visited). In all other cases, the patients were able to get an appointment within five working days.

The opening hours of the locations met the requirements in most cases, in 18 cases a proper appointment was not ensured until 18.00 on at least one day a week.

On the checking of the display of office hours and other information, shortcomings were identified in 121 locations (in 32.1% of the locations visited). In 61 cases shortcomings in communicating the changes in the organization of work were found.

Follow-up activities were indicated in case of 66 locations (i.e., in 18% of the locations visited). Follow-up activities include to a large part checking of the compliance with the requirement of the publication of information. If necessary, a repeat visit at the location of the family physician may also be conducted.

1.3 Specialized medical care

Specialized medical care budget planning was based on the treatment need of the insured or the demand for specialized medical care services assessed by the Health Insurance Fund. The assessed demand has been aligned with the financial capabilities of the budget for specialized medical care services, the amount of which is approved by the Supervisory Board of the Health Insurance Fund.

In addition, planning of the budget for the year 2016 was based on the updated list of healthcare services, and with the aim to ensure the salary increases of the healthcare workers according to the agreement entered in 19.12.2014 between the Estonian Medical Association, the Union of Estonian Healthcare Professionals, the Estonian Nurses Association, the Estonian Ambulance Association and the Estonian Hospitals Association.

The budget was executed by 102% in terms of finance and by 103% in terms of the number of treatment cases. Compared with the previous year, funding for specialized medical care rose to 28.5 million euro and the number of treatment cases by 14,000.

In the specialist medical care budget for the year 2016, additional funds were planned for ensuring the year 2015 level of inpatient treatment cases, which in early 2016, on the basis of the decision of the Management Board of the Health Insurance Fund, was allocated to the main specialties of specialized medical care.

Table 10. Implementation of the specialized healthcare budget in thousands of euro and the number of treatment cases by types of treatment

	2015 actual		2016 budget		2016 actual		Budget execution	
	Amount	Number of treatment cases	Amount	Number of treatment cases	Amount	Number of treatment cases	Amount	Number of treatment cases
Specialized medical care total	**550,749**	**3,289,241**	**565,003**	**3,213,054**	**578,543**	**3,302,944**	**102%**	**103%**
outpatient treatment total	203,491	2,988,966	216,290	2,922,264	220,542	3,007,626	102%	103%
day treatment total	37,960	75,490	41,381	77,960	43,357	79,026	105%	101%
inpatient treatment total	309,298	224,785	307,332	212,830	314,644	216,292	102%	102%
Preparedness fee	11,679	380	12,374	364	12,374	364	100%	100%
TOTAL	562,428	3,289,621	577,377	3,213,418	590,917	3,303,308	102%	103%

Structural appreciation of the treatment cases of specialized medical care (the change of the use of services provided in the framework of one treatment case which will be assessed in comparable prices) in the specialized medical care was the total of 0.2%, i.e., structural depreciation of treatment cases occurred. Including the structural appreciation of the outpatient treatment took place by 2.0%, in day treatment by 5.4%, and in inpatient treatment by 1.8%. The structural appreciation of treatment cases was affected by the movement of treatment between types of treatment, and the number of treatment cases submitted per one person. In the year 2016, per one person who received treatment, have, in specialized medical care, submitted treatment invoices by 0.5% more than last year.

Taking over the obligation of the payment for the provided medical services which exceed the contract volume. Since 2014, the Health Insurance Fund took over the obligation to pay for the treatment services exceeding the contract volume from the Hospital Network Development Plan (HVA) hospitals and the selection partners. Treatment invoices submitted for treatment services provided in excess of the contract volume are paid in the

outpatient treatment and day treatment in terms of the amount which does not exceed 5% of the total financial volume, with the factor of 0.7. In the inpatient treatment, the invoices submitted for the treatment services provided in excess of the contract volume are paid with the factor of 0.3. The Health Insurance Fund pays the fee for the medical service exceeding the contract volume twice a year.

The percentage of the medical services in excess of the contract volume in the financing of the specialized medical care was 3.7%, as regards to the treatment cases, and 2.3% as regards to the amount. 122,000 thousand treatment cases were remunerated with the factor, with a total cost of 13.2 million euro. In outpatient treatment, 6.2 million euro were paid for 104,500 treatment cases as treatment services provided in excess of the contract volume, in the day treatment, 1.2 million euro for 3,700 treatment cases, and in inpatient treatment, 5.8 million euro for nearly 14,000 treatment cases. The increase of the work in excess of the contract volume compared to the previous year is mostly related to the increase in inpatient treatment.

Hospital Network Development Plan hospitals submitted treatment bills for 12.7 million euro, and the selection partners submitted the bills for 0.5 million euro for the treatment cases exceeding the contractual volume.

Financing of the persons registered on the waiting lists after the selection contest. In March of 2014, in addition to the HVA hospitals, also the contracts of the selection partners in specialized medical care were terminated. Health Insurance Fund conducted a selection competition. The funding of the ongoing treatment, and of the treatment of the patients registered in the treatment waiting lists, was agreed upon by healthcare institutions with whom the contract for the new period was not entered. For purchasing of the waiting lists on the basis of the contracts entered into in the year 2014, in the year 2016 were paid 152,000 euro for 296 treatment cases.

Availability of specialized medical care

Healthcare institutions provide regular reports to the Health Insurance Fund for monitoring the waiting lists for specialized medical care, nursing care, and dental care. The hospitals of the Hospital Network Development Plan (HVA) submit a monthly overview of the actual waiting time of the scheduled outpatient visits of specialized medical care in the previous month (retrospective report of waiting lists) and the projection report of waiting lists: The number of appointments waiting on the waiting lists for specialized medical care, nursing care, and dental care as of the first day of the month and the waiting time until the available time of appointment. The selection partners provide a quarterly projection report of the waiting lists. When assessing the waiting times of the appointments waiting on the 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 - in this context, the projected report does not provide a comprehensive overview of the actual waiting times.

Table 11. Appointments registered in specialized medical care waiting lists

	01.01.2016		01.01.2017		The change compared to the year 2016
	The number of appointments in waiting lists	Within the maximum length of the waiting list	The number of appointments in waiting lists	Within the maximum length of the waiting list	The number of appointments in waiting lists
Outpatient	158,134	52%	142,300	53%	-15,834
Day treatment	7,951	93%	9,154	89%	1,203
Inpatient	17,642	88%	17,024	85%	-618
TOTAL	**183,727**	**57%**	**168,478**	**58%**	**-15,249**

As of January 1, 2017, nearly 168,500 appointments have been registered for all the waiting lists of the specialist medical care contractual partners of the Health Insurance Fund, 72% of these in HNDP hospitals and 28% of the selection partners. Compared to the same period last year, the total number of appointments registered in the specialist medical care waiting lists has decreased by 8%, and especially in outpatient care.

In HNDP hospitals, the total number of appointments registered for outpatient waiting list has decreased by 10%, predominantly due to the reduction in the outpatient waiting list of regional and central hospitals (the largest impact in East Tallinn Central Hospital).

The proportion of outpatient appointments within the maximum allowable length of waiting lists in HNDP hospitals has remained the same (both on 01.01.2016 and on 01.01.2017 it was 45%).

The total number of scheduled appointments registered into the day treatment of HNDP hospitals has increased by 12%, in inpatient treatment, it has decreased by 4%. The number of appointments in the day treatment waiting list has increased the most in central hospitals. The number of registrations for inpatient treatment, out of the HNDP hospitals, has decreased to the largest extent in the North Estonian Regional Hospital.

The total number of appointments registered for outpatient waiting lists of selection partners has decreased by 5% or nearly 2,300 by appointments. Not taking into consideration the reduction in the waiting list of Nõmme Eye Clinic (2300 reception waiting less), it can be said that at the selection partners, the number of appointments in the outpatient specialist medical care has remained the same.

Table 12. The actual waiting time of the scheduled outpatient appointments of specialized medical care in the Hospital Network Development Plan hospitals.

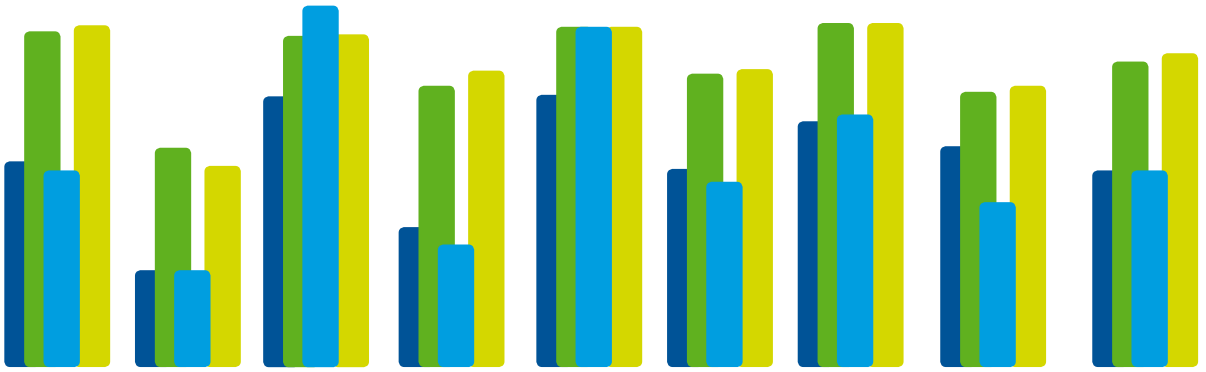
	2015		2016		The change compared to the year 2015
	The number of appointments	Within the maximum length of the waiting list	The number of appointments	Within the maximum length of the waiting list	The number of appointments
Total regional hospitals	314,261	60%	313,467	57%	-794
Total central hospitals	446,350	70%	437,122	71%	-9,228
Total general hospitals	271,909	86%	261,246	86%	-10,663
TOTAL	**1,032,520**	**71%**	**1,011,835**	**70%**	**-20,685**

In terms of outpatient treatment waiting lists, the Hospital Network Development Plan hospitals also submit the retrospective report of waiting times.

The information about the actual waiting times of the last month's primary scheduled outpatient appointments. During the 12 months of the year 2016, 70% of the primary scheduled outpatient specialist medical care appointments of the Hospital Network Development Plan took place during the maximum allowed the length of the waiting list (of up to 42 calendar days). The proportion of the appointments within the limit of the permitted length of the waiting lists has remained the same compared to the same period last year.

Compared to the same period last year the number of primary scheduled appointments in the Hospital Network Development Plan has decreased by the total of 20,000 thousand appointments. However, the number of the appointments of two hospitals increased (Tartu University Hospital and East Tallinn Central Hospital).

The different proportion of the appointments within the maximum permitted length of the waiting list in the outpatient waiting lists of HNDP hospitals (45% according to the reports submitted on the 1st day of the month) and of the actual data (70% according to the data of the already held appointments) is due to appointments with a very short waiting period, which are not reflected in the reports submitted on the waiting lists as of the 1st day of the reporting month. The data of different reports, however, correlate and refer to similar problems.



	Surgery	Ophthalmology	Oncology	Pediatrics	Psychiatry	Internal diseases	Obstetrics and gynecology	Rehabilitation	Total
	47%	21%	61%	31%	62%	45%	56%	50%	45%
	76%	50%	76%	64%	78%	67%	77%	63%	70%
	45%	21%	82%	28%	78%	42%	57%	38%	45%
	77%	46%	76%	68%	78%	69%	77%	64%	71%

- The proportion of the appointments within the limit of the maximum waiting time - the data of 01.01.2017 per appointments registered on the waiting lists of HNDP hospitals
- The proportion of the appointments within the limit of the maximum waiting time - the data of the actual appointments of HNDP hospitals of the 12 months of the year 2016.
- The proportion of the appointments within the limit of the maximum waiting time - the data of 01.01.2016 per appointments registered on the waiting lists of HNDP hospitals
- The proportion of the appointments within the limit of the maximum waiting time - the data of the actual appointments of HNDP hospitals of the 12 months of the year 2015.

Figure 10. The outpatient waiting lists of specialized medical care and the actual waiting period in the Hospital Network Development Plan hospitals.

Across healthcare institutions, the proportion of the waiting times in excess of the maximum waiting time according to the retrospective reporting data the highest in Tartu University Hospital and East Tallinn Central Hospital.

By specialties, on the basis of projective reports submitted about waiting lists the proportion of the appointments within the permitted maximum length of the waiting list in the outpatient treatment of the HNDP hospitals is the smallest in the specialties of ophthalmology and pediatrics.

The main use indicators of specialized medical care

An overview of the main use indicators of specialized medical care in 2016, including comparison with previous years, is provided in Table 13.

Table 13. The most important indicators of the use of specialized medical care in the years 2012–2016

	2012 actual	2013 actual	2014 actual	2015 actual	2016 actual	2013/ 2012	2014/ 2013	2015/ 2014	2016/ 2015
Average cost of a treatment case in euro	138	147	158	167	175	7%	7%	6%	5%
outpatient	52	57	63	68	73	10%	11%	8%	8%
day treatment	435	456	481	503	549	5%	5%	5%	9%
inpatient	1,124	1,178	1,289	1,376	1,455	5%	9%	7%	6%
Structural appreciation (%)	3.1	1.8	0.3	-0.3	0.2	-1%	-2%	-1%	1%
The number of inpatient bed days	1,412,328	1,385,260	1,356,592	1,330,068	1,285,101	-2%	-2%	-2%	-3%
Average inpatient hospitalization in days	6.1	6.0	5.9	5.9	5.9	-2%	-2%	0%	0%
The number of outpatient appointments	3,785,111	3,796,893	3,888,729	4,055,968	4,093,624	0%	2%	4%	1%
Outpatient appointments per treatment case	1.29	1.29	1.31	1.36	1.36	0%	2%	4%	0%
The number of persons using the services of specialized medical care	795,581	796,698	800,326	799,305	798,582	0%	0%	0%	0%
outpatient	774,661	775,566	780,302	779,593	779,316	0%	1%	0%	0%
day treatment	51,549	52,554	54,870	56,901	57,705	2%	4%	4%	1%
inpatient	155,653	155,982	153,032	150,154	145,568	0%	-2%	-2%	-3%
The number of treatment cases per a treated person	3.97	3.99	4.08	4.12	4.14	1%	2%	1%	0%
outpatient	3.70	3.72	3.81	3.83	3.86	1%	2%	1%	1%
day treatment	1.26	1.29	1.31	1.33	1.37	2%	2%	2%	3%
inpatient	1.49	1.48	1.50	1.50	1.49	-1%	1%	0%	-1%
The number of treatment cases per an insured person	2.56	2.58	2.65	2.66	2.67	1%	3%	0%	0%
outpatient	2.32	2.34	2.41	2.42	2.43	1%	3%	0%	0%
day treatment	0.05	0.06	0.06	0.06	0.06	20%	0%	0%	0%
inpatient	0.19	0.19	0.19	0.18	0.17	0%	0%	-5%	-6%
Percentage of emergency medical care from the treatment expenditure (%)									
outpatient	17	17	17	17	17	0%	0%	0%	0%
day treatment	8	8	9	10	10	0%	1%	1%	0%
inpatient	66	64	63	63	63	-2%	-1%	0%	0%
Percentage of emergency medical care from the treatment cases (%)									
outpatient	17	17	17	17	16	0%	0%	0%	-1%
day treatment	10	10	11	11	11	0%	1%	0%	0%
inpatient	64	63	61	60	61	-1%	-2%	-1%	1%
Number of surgeries:	154,969	155,289	157,691	159,261	153,919	0%	2%	1%	-3%
outpatient	18,345	17,719	18,459	18,674	17,876	-3%	4%	1%	-4%
day treatment	50,479	51,609	53,926	55,358	54,035	2%	4%	3%	-2%
inpatient	86,145	85,961	85,306	85,229	82,009	0%	-1%	0%	-4%

The average cost of a treatment case has grown in all treatment types. The list of healthcare services entered into force since January 1, 2016, also includes a general increase in prices resulting from the wage agreement of healthcare workers. In addition to the price rise, the average cost of a treatment case has increased due to the structural appreciation of a treatment case (change of the structure of the service reflected in one treatment invoice compared to the same period of the previous year). In 2016, the structural appreciation of the outpatient treatment was 2.0%, in day treatment 5.4%, and in inpatient treatment 1.8%. In specialized medical, the total structural appreciation of treatment cases was 0.2%.

The number of treatment cases per person using the healthcare services of specialized medical care has slightly increased in 2016 compared to the previous year, **the number of treatment cases per an insured person** has remained at the same level compared to the previous year. Partially, the increase of the treatment cases provided per person is caused by the change in the age division of the insured. The highest proportion of the service users are made up of those who are elderly and have multiple diseases, and thus use a variety of specialized services.

In outpatient treatment the number of appointments have increased by 1%, compared to the previous year. The overall growth of the number of appointments is affected by the modernization of the services of the Emergency Medicine Department. From 1 January 2016, the list of healthcare services was supplemented by new Emergency Medicine Department services, funded for the North Estonia Regional Hospital and Tartu University Hospital. 41% of the outpatient specialist medical care appointments were made up by primary medical specialist appointments and 33% by repeat appointments. The number of primary medical specialist appointments has decreased by 6% compared to the previous year, and the number of repeat appointments has decreased by 1%. In 2016, 15% of all outpatient appointments were provided in the Emergency Medicine Department.

In inpatient treatment the number of people using inpatient services has decreased by 3%, and the number of treatment cases per person treated has decreased by 1%. In inpatient treatment, the average cost of a treatment case has increased by 6% compared with the previous year. The average cost of a treatment case has increased both as a result of the rise in prices of healthcare services, as well as due to the fact that the treatment of lighter conditions has moved over to outpatient and day treatment. In addition, the appreciation of the average cost of a treatment case has been affected by very expensive treatment cases - all very expensive treatment cases are in the inpatient treatment type.

The movement between the types of healthcare is also shown by the decrease in the number of inpatient treatment cases submitted about the people who have received treatment, and an increase in the number of treatment cases submitted about the people who have received the services of outpatient treatment and day treatment.

The use of specialized medical health services by the main diagnosis groups reflected on treatment invoices.

Main diagnosis groups[7] where both the number of people who received treatment and the number of treatment cases has increased during the reporting period, compared to the previous year, is cancer, not elsewhere classified symptoms and endocrine, nutritional and metabolic diseases. The biggest increase in funding compared to last year has also been in the main diagnosis group of cancer and factors influencing health status. The number of people treated and the number of treatment cases, has, however, decreased in the main diagnosis group of urinary and genital disorders and diseases of the skin and subcutaneous tissue. Compared to the previous year funding has decreased most in the cardiovascular disease diagnosis group.

Healthcare services indicated in specialized medical care bills

The most important part in the specialized medical services bills in 2016 constituted tests and procedures and bed days (23%).

Funding for tests and procedures grew by 5% in 2016, the number of uses has not increased. The main cause of the increase in the number of tests and procedures is a modernization of the specialty of speech therapy and intensive care, and in addition, changes in medical practice for some of the more expensive procedures.

The number of users of bed days has fallen by 5%, but funding has grown by 4% compared to the previous year, resulting from growth in the reference price of bed days due to the healthcare workers' wage agreement.

By percentage rate, the fastest growing is the funding of anesthesia as a result of modernization of the services of the specialty of anesthesia and intensive care.

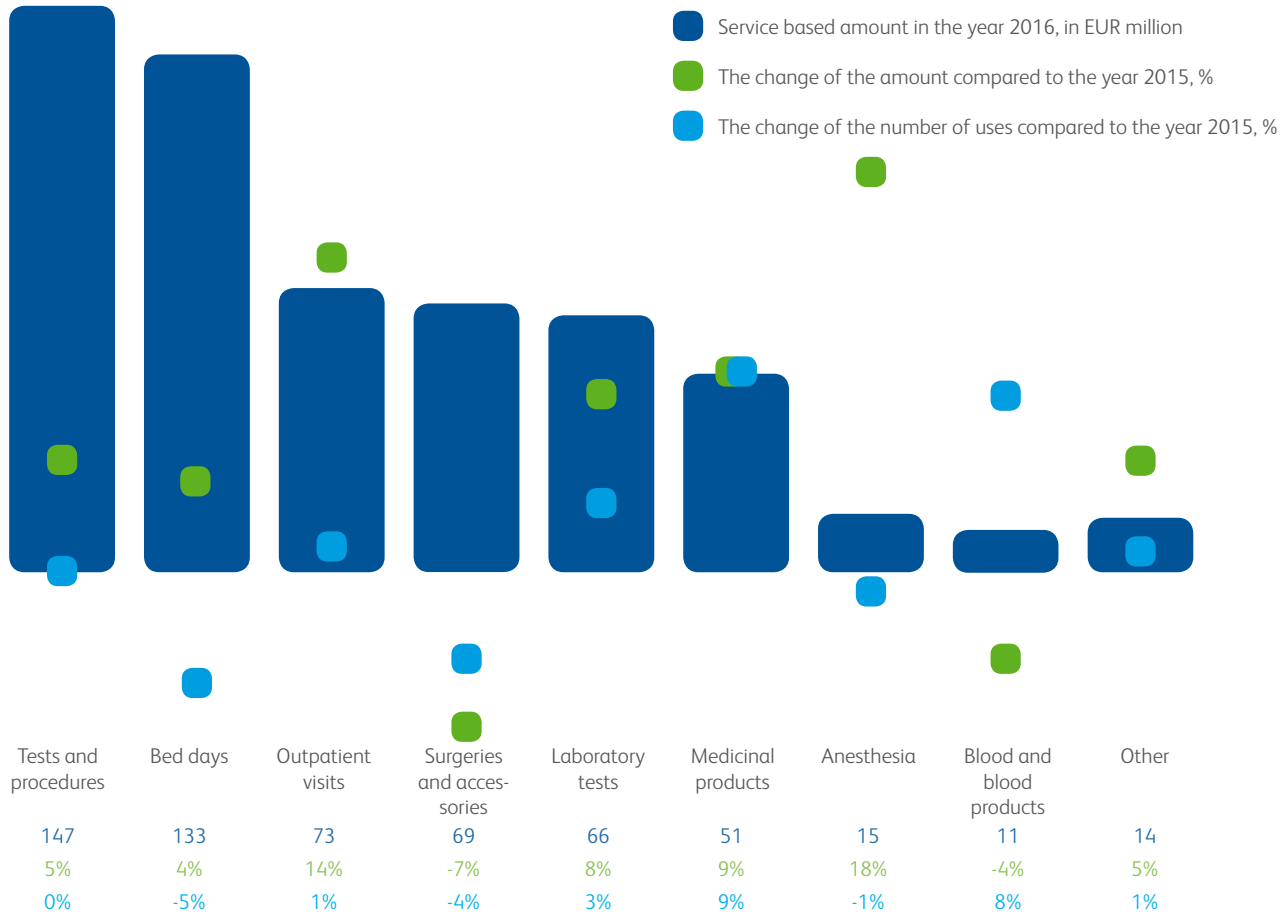


Figure 11. The services reflected in the treatment bills of specialized medical care in 2016, reflected by the types of service

[7] The main diagnosis groups reflected in the treatment bills under the International Classification of Diseases ICD 10.

Exorbitant specialized medical care treatment cases

An exorbitant treatment case is deemed when the treatment invoice is at least, EUR 65,000. Planning of exorbitant medical bills is based on the figures of the same period of the previous year. In 2015, 58 exorbitant treatment cases were submitted to the Health Insurance Fund for payment, with the total cost of 5.2 million euro. In 2016, the Health Insurance Fund financed 62 treatment cases in the amount of 5.8 million euro.

The exorbitant treatment cases impact inpatient specialist medical care the most since all the treatment cases submitted in 2016 are in inpatient treatment. By specialties, the effect of exorbitant treatment cases was most important in the pediatric specialties, accounting for 8% of the execution of the inpatient treatment budget. Most of the exorbitant treatment cases are in the age group of 0-4 years of age, which is linked to the treatment of children born prematurely.

Most exorbitant cases occurred in Tartu University Hospital and in North Estonian Regional Hospital.

Table 14. Exorbitant treatment cases in in thousands of euro and the number of treatment cases

	2015 actual		2016 actual		The change compared to the year 2015	
	Amount	Number of treatment cases	Amount	Number of treatment cases	Amount	Number of treatment cases
Surgery	1,801	22	2,636	26	46%	18%
Oncology	945	10	407	5	-57%	-50%
Pediatrics	1,219	13	1,074	12	-12%	-8%
Internal diseases	1,153	12	1,721	19	49%	58%
Obstetrics and gynecology	66	1	0	0	-	-
TOTAL	**5,184**	**58**	**5,838**	**62**	**13%**	**7%**

Budget execution and treatment cases by specialties.

In the budget for the specialized medical care of the Health Insurance Fund in 2016, was primary follow-up treatment, surgery, ophthalmology, oncology, pediatrics, psychiatry, internal medicine, obstetrics and gynecology, and rehabilitation. An overview of the performance of the basic specialties is presented below, in alphabetical order.

Primary follow-up treatment

Table 15. Execution of the primary follow-up treatment budget in thousands of euro and the number of treatment cases

	2015 actual		2016 budget		2016 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	2,432	2,850	2,852	3,085	2,850	3,100	100%	100%
inpatient	2,432	2,850	2,852	3,085	2,850	3,100	100%	100%

Primary follow-up treatment is not a medical specialty, but rather a treatment organizational special case of funding in which case the service provider is funded. The patients are referred to the primary inpatient follow-up treatment when at the end of the active inpatient treatment, the outpatient treatment is not yet possible. In the context of primary follow-up treatment at general hospitals and the selection partners, it generally means a situation in which patients are hospitalized in higher stage hospitals are sent to the medical institution of their place of residence for follow-up treatment.

Compared to last year, both the number of people receiving follow-up treatment as well as the number of treatment cases has increased. In 2016, a total of 2,700 persons received follow-up treatment; compared with the previous year, the number of persons who received follow-up treatment grew by 9%. The number of treatment cases per a treated person has not changed. The structural appreciation of follow-up treatment was 1.2%.

The availability of primary follow-up treatment

In the specialty of primary follow-up treatment typically no waiting lists are kept. A patient is referred to the primary follow-up treatment from the acute treatment department, as appropriate, on the agreement with the providers of acute and follow-up treatment.

Surgery

Table 16. Execution of the surgery budget in thousands of euro and the number of treatment cases

	2015 actual		2016 budget		2016 actual		Budget execution	
	Amount	Number of treatment cases	Amount	Number of treatment cases	Amount	Number of treatment cases	Amount	Number of treatment cases
Surgery	149,300	894,534	154,415	876,624	157,252	890,686	102%	102%
outpatient	40,871	805,499	44,724	791,491	45,612	804,759	102%	102%
day treatment	9,715	25,582	10,098	25,071	10,400	25,743	103%	103%
inpatient	98,714	63,453	99,593	60,062	101,240	60,184	102%	100%

The specialty of surgery aggregates the treatment services of cardiac surgery, pediatric surgery, neurosurgery, face and jaw surgery, orthopedics, otorhinolaryngology, thoracic surgery, urology, vascular surgery and general surgery. The contracts recognize the service based special cases of surgery for the endoprosthetic of joints, installation of hearing implants and organ transfers.

Compared to last year, the number of people receiving treatment has decreased by 800, resulting from a decrease in the use of services of outpatient general surgery, otorhinolaryngology, and orthopedics. The number of treatment invoices submitted for one person receiving treatment has not changed since last year: 2.19 treatment invoices have been submitted per one person treated. The structural appreciation of a specialty in 2016 was 0,1%, including in the outpatient treatment by 4.6% in day treatment by 1.0%, and in inpatient treatment by 2.6%.

As for surgical sub-specialties, the use of services, or the numbers of treatment cases, was higher than planned in orthopedics, urology, and general surgery. The most underspent are cardiac surgery and neurosurgery. By groups of services, the over-implementation of the 2016 budget was affected most by the growth in the funding of outpatient appointments, medicinal products, and anesthesia.

The over-implementation of the year 2016 is affected the most by funding of general surgery and orthopedics.

In general surgery, treatment of 155,000 people was funded, and compared to the same period last year, the number of people receiving treatment has decreased by 2%. Use of services is affected the most by inpatient general surgery, where compared to the same period last year, financing has increased by 5%. In inpatient general surgery, treatment of 20,000 people was funded in 2016, and compared to the same period last year, the number of people receiving treatment has decreased by 6%. The number of people receiving treatment is connected with the movement between the types of service in case of surgical treatment services (most services are provided in outpatient settings). In inpatient general surgery, the growth in the use of the service, compared to the previous year, was affected the most by treatment of people diagnosed with digestive disorders.

In 2016, the Health Insurance Fund financed the treatment of 168,000 people in the specialty of orthopedics. Compared to the same period last year, funding of the specialty has increased by 8% or 2.5 million euro. Compared to the previous year, funding of the specialty has been affected the most by the increase in the funding of the treatment of people with diagnosed injuries, poisonings and other external causes. As for the use of services, the proportion of outpatient appointments in financing has increased, and the proportion of financing of surgeries, surgical accessories and bed days has decreased.

The number of organ transplants funded by the Health Insurance Fund 2015 has increased compared to the year 2015. In 2016, the Health Insurance Fund financed 52 organ transplants: 43 renal transplants, 7 liver transplants, 2 lung transplants. During the reporting period, the Health Insurance Fund financed implanting of the Cochlear implant for 6 people. The number of joint replacement surgeries has fallen by 4% in comparison of two periods. In 2016, the Health Insurance Fund financed joint replacement surgeries of 2830 people.

Availability of the specialty of surgery

In the specialty of surgery, the summarized amount (76%) of the proportion of the appointments within the maximum permitted the length of waiting time is higher than the average (70%) in the outpatient medical specialist care. In some narrower surgical specialties (e.g., cardiac surgery, neurosurgery, vascular surgery) the waiting times are longer than the average (the proportion of the appointments with a maximum allowed length is lower) on the basis of both retrospective (the actual waiting times of the appointments that have taken place) and the projective report.

Ophthalmology (eye diseases)

Table 17. Execution of the ophthalmology budget in thousands of euro and the number of treatment cases

	2015 actual		2016 budget		2016 actual		Budget execution	
	Amount	Number of treatment cases	Amount	Number of treatment cases	Amount	Number of treatment cases	Amount	Number of treatment cases
Ophthalmology	21,691	371,815	22,378	365,103	22,712	370,062	101%	101%
outpatient	12,371	355,097	13,124	348,955	13,410	353,690	102%	101%
day treatment	7,508	14,857	7,413	14,389	7,528	14,610	102%	102%
inpatient	1,812	1,861	1,841	1,759	1,774	1,762	96%	100%

In ophthalmology, the number of people who were provided health services funded by the Health Insurance Fund has decreased by 1,546 persons compared with the previous year. The structural depreciation of the specialty of ophthalmology was 0,2% including 1.3% in outpatient treatment and 0.4% in day treatment, and 0.5% in inpatient treatment. By service groups, compared to the same period last year, the funding of outpatient appointments, tests and and procedures and anesthesia has increased.

An important part of the day treatment in ophthalmology is constituted of the order for cataract surgeries. In 2016, cataract surgeries were performed on over 10,000 people. Compared to the same period last year, the number of people has decreased by 2%.

Availability of the specialty of ophthalmology

The waiting times in the specialty of ophthalmology are among the longest, in the 12-month period, the proportion of appointments within the permitted maximum waiting time was 50%. The family physician's referral is not necessary for contacting an ophthalmologist. However, the establishment of the requirement for a referral could contribute to the shortening of the waiting times - it is important to ensure the availability of the medical care for the patients who need it sooner for medical reasons. The waiting times at the selection partners may be shorter than at the HNDP hospitals.

Oncology

Table 18. Execution of the oncology budget in thousands of euro and the number of treatment cases

	2015 actual		2016 budget		2016 actual		Budget execution	
	Amount	Number of treatment cases	Amount	Number of treatment cases	Amount	Number of treatment cases	Amount	Number of treatment cases
Oncology	76,172	152,406	81,789	154,201	82,612	157,362	101%	102%
outpatient	38,482	131,605	41,350	133,362	40,203	134,546	97%	101%
day treatment	2,640	4,620	3,570	5,061	3,997	6,221	112%	123%
inpatient	35,050	16,181	36,869	15,778	38,412	16,595	104%	105%

In the main specialty of oncology is also reflected the use of the treatment services of hematology. In contracts, treatment services related to bone marrow transplantation have been recognized as a special, service based case of the specialty.

In the oncology budget planning, the need to keep the availability of treatment stable was taken into account, despite the increasing occurrence of the illness. The increase of the need for treatment of oncological diseases is linked both to the aging of the population, as well as to the development of the treatment and diagnostic opportunities.

In the specialty of oncology, in the year 2016, treatment was provided to a total of 49,000 thousand insured individuals; compared to last year, the number of persons receiving treatment has remained at the same level. The growth of the funding of the specialty compared to the same period last year is primarily related to adding new services to the list of health services. By service groups, the funding of medicinal products and tests and procedures has increased the most. The increase in funding of tests and procedures is due to the growth in the occasions of the provision of services; compared to the previous year, 98,000 more tests have been carried out. However, funding of blood and blood products has decreased.

The structural depreciation of an oncological treatment case in 2016 was 0.9%, including 2.6% and 0.3% in inpatient treatment. In day treatment, structural appreciation by 5.7% of treatment cases occurred.

Availability of the specialty of oncology

In the specialty of oncology, the proportion of the appointments within the maximum waiting time is also higher than the average. In the case of oncology, when assessing the proportion of appointments within the maximum waiting time, it must be further considered that under the definition, routine follow-up examinations held even just once a year qualify as the primary appointment. The main service providers are regional hospitals.

Pediatrics

Table 19. Execution of the pediatric budget in thousands of euro and the number of treatment cases

	2015 actual		2016 budget		2016 actual		Budget execution	
	Amount	Number of treatment cases	Amount	Number of treatment cases	Amount	Number of treatment cases	Amount	Number of treatment cases
Pediatrics	22,548	150,553	22,119	141,376	23,240	147,413	105%	104%
outpatient	7,322	120,411	7,775	114,767	7,862	120,465	101%	105%
day treatment	1,226	3,024	1,257	3,052	1,286	3,079	102%	101%
inpatient	14,000	27,118	13,087	23,557	14,092	23,869	108%	101%

In the pediatrics specialty, a decrease of treatment cases was planned due to the decrease in the number of children. In 2016, however, use of the service compared to the same period last year increased by 0.7 million euro, and the number of treatment cases fell by 3,000. The average cost of a treatment case as compared with the year 2015, has increased the most in inpatient treatment.

The increase in the average cost and financing of a treatment case is affected the most by neonatal intensive care. The average cost of a treatment case of the pediatrics specialty has also been affected by exorbitant treatment cases. During the reporting period, in the specialty of pediatrics, there were 12 exorbitant treatment cases amounting to 1.1 million euro, which is also related to the neonatal intensive care.

By groups of services, the implementation of the 2016 budget was affected by the growth in the funding of tests and pro-

cedures, as well as of medicinal products. In 2016, in the specialty of pediatrics, the Health Insurance Fund financed the treatment of 72,000 children. Compared to the previous year, the number of children receiving treatment has declined by 3%. More treatment invoices, by 1%, were submitted per one person receiving treatment.

In the specialty of pediatrics, structural depreciation of treatment cases by 1.4% took place, whereas the structural appreciation of treatment cases in the outpatient treatment was by 1.7%, in the day treatment by 1.4%, and in inpatient treatment by 6.0%.

Availability of the specialty of pediatrics

The longer than average waiting times of the pediatric specialty are mainly related to the Tallinn Children's Hospital and Tartu University Hospital. The longer waiting periods of the medical professionals with a narrower specialization, such as children's cardiologist, children's gastroenterologist) have not been separately highlighted in the reports of these healthcare facilities. Overall, the waiting time of general pediatrics in these hospitals is within the permitted limits.

Psychiatry

Table 20. Execution of the budget of psychiatry in thousands of euro and the number of treatment cases

	2015 actual		2016 budget		2016 actual		Budget execution	
	Amount	Number of treatment cases	Amount	Number of treatment cases	Amount	Number of treatment cases	Amount	Number of treatment cases
Psychiatry	29,157	246,390	30,629	238,854	30,422	250,806	99%	105%
outpatient	8,334	235,570	8,946	228,105	9,057	240,382	101%	105%
day treatment	669	741	965	1,484	702	751	73%	51%
inpatient	20,154	10,079	20,718	9,265	20,663	9,673	100%	104%

The Therapy Fund added to the financing of primary medical care, since 2015, enabling family physicians to refer patients to the psychologist' and speech therapist' for appointments. This reduces the need for contacting a medical specialist and increases the role of a family physician. Given the possibilities of primary medical care, the decline of treatment cases was planned into the 2016 budget of the specialty of psychiatry.

Compared to the previous year, funding of the specialty of psychiatry increased by 1.3 million euro, the number of treatment cases increased by 4416. The average cost of a treatment case was cheaper than planned. The structural depreciation of the specialty was 4.1%, whereas in outpatient treatment 0.4%, in day treatment 1.3% and inpatient treatment 0.3%.

In 2016, in the specialty of psychiatry, the Health Insurance Fund financed the treatment of 66,000 - the number of people receiving treatment grew by 386, compared to the previous year. The number of medical invoices submitted per one person receiving treatment has risen by 1.2%. In view of the structural depreciation of treatment cases, it can be estimated that the treatment cases of less severe conditions were included in the specialty of psychiatry.

By groups of services, the growth of funding for the 2016 budget compared to the previous years was affected by the growth in the funding of outpatient appointments, tests, and procedures as well as of bed days.

Availability of the specialty of psychiatry

In the specialty of psychiatry, the proportion of appointments within the maximum length waiting time is above average both on the basis of the projective report (as of the first date of the month) as well as of the retrospective report. The waiting times are shorter in general hospitals, and at the selection partners.

Internal diseases

Table 21. Execution of the budget of internal diseases in thousands of euro and the number of treatment cases

	2015 actual		2016 budget		2016 actual		Budget execution	
	Amount	Number of treatment cases	Amount	Number of treatment cases	Amount	Number of treatment cases	Amount	Number of treatment cases
Internal diseases	183,850	886,727	183,040	868,023	190,609	898,392	104%	103%
outpatient	62,866	810,036	65,982	791,815	69,245	821,067	105%	104%
day treatment	13,097	9,299	14,562	10,482	16,113	10,988	111%	105%
inpatient	107,887	67,392	102,496	65,726	105,251	66,337	103%	101%

The specialty of internal medicine covers the treatment 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 medicine. As service-based special cases in the specialty of internal medicine, the dialysis is recognized (hemodialysis and peritoneal dialysis).

Compared to the previous year, funding of the specialty of internal diseases increased by 6.8 million euro, and the number of treatment cases increased by 12,000 thousand. In 2016, in the specialty of internal medicine, the Health Insurance Fund financed the treatment of 371,000 people. The number of people receiving treatment has increased compared to the previous year by 2%, or 5,500 people, which is linked to the growing number of people receiving outpatient treatment.

The structural appreciation of the specialty in 2016 was 0.8%, including in outpatient treatment by 3.8%, and in day treatment by 2.0%. Inpatient treatment cases have structurally cheapened by 0.6%.

On the basis of the main diagnoses indicated on the treatment invoices, most of the increasing numbers of these medical invoices of the diagnosis belong to the groups of nervous system diseases, respiratory diseases, and factors affecting health status. On the other hand, funding for the treatment with the diagnosis of the people with cardiovascular diseases has decreased. As for the services marked on treatment bills, in particular, the proportion of inpatient appointments and laboratory tests in funding of the specialty of internal medicine has increased. In the case of internal medicine, the growth in the use of bed days has been influenced by both health workers' wage increases (71% of the reference price of a bed day represents labor costs) as well as by the modernization of intensive care bed days.

In terms of internal medicine sub-specialties, the use of the services is higher than planned in almost all sub-specialties, the budget of rheumatology and peritoneal dialysis has been under-implemented. As for subspecialties, the over-implementation of the internal medicine is affected the most by the specialties of neurology, internal medicine, and cardiology.

In 2016, the Health Insurance Fund financed the neurological treatment of 85,000 people. Compared to the same period last year, the number of people receiving treatment has decreased by 2%. In neurology, the services groups of the largest volume are tests and procedures, bed days and outpatient appointments. Compared to last year, the fastest-growing has been the cost of pharmaceuticals resulting from the treatment of *sclerosis multiplex*

The specialty of cardiology has the largest proportion of funding out of the internal medicine sub-specialties. The more expensive service groups in cardiology are tests and procedures, bed days and surgical accessories. Funding

of these service groups in 2015 amounted to 88%, and in 2016, 85% of the cardiology budget. In the specialty of cardiology, the Health Insurance Fund financed in 2016 the treatment of more than 61,000 people. The number of people receiving treatment has declined compared to the previous year by 2%, or by over 1000 people. Funding of cardiology, in turn, has decreased by 11% as a result of the modernization of the cardiology service. By service groups, the funding of surgeries and accessories as well as tests and procedures has decreased. More costly services in cardiology are percutaneous cardiovascular surgeries, coronary angioplasty, and coronary stent.

In 2016, in the subspecialty of internal medicine, the Health Insurance Fund financed the treatment of 84,000 people - the number of people receiving treatment has grown by 14%, or by 10,000 persons compared to the previous year. The more resource-intensive diagnosis groups of the sub-specialty of internal medicine are treatment of the circulatory system and respiratory system diseases, accounting for 49% of the total volume of the sub-specialty of internal medicine. By service groups, the most resource-intensive are internal medicine bed days, laboratory tests and procedures.

Availability of the specialty of internal medicine

In the specialty of internal medicine, the longer than average outpatient waiting times over the last year have been in rheumatology and dermatovenerology, especially in general and central hospitals. In general hospitals, problems with waiting times occur in the specialties where there are not a lot of doctors, or where treatment is provided by the attending physicians of regional and central hospitals receiving patients in a general hospital a couple of times a month.

Obstetrics and gynecology

Table 22. Execution of the budget of obstetrics and gynecology in thousands of euro and the number of treatment cases

	2015 actual		2016 budget		2016 actual		Budget execution	
	Amount	Number of treatment cases	Amount	Number of treatment cases	Amount	Number of treatment cases	Amount	Number of treatment cases
Obstetrics and gynecology	51,506	501,454	53,466	485,796	54,284	502,497	102%	103%
outpatient	26,433	455,738	27,309	440,788	27,967	457,210	102%	104%
day treatment	3,105	17,367	3,496	18,221	3,326	17,584	95%	97%
inpatient	21,968	28,349	22,661	26,787	22,991	27,703	101%	103%

In the main specialty of obstetrics and gynecology, births and treatment cases related to artificial insemination are recognized as service based special cases.

In 2016, in the specialty of gynecology, the Health Insurance Fund financed the treatment of 190,000 people. The number of people who were provided treatment has decreased by 1,546 persons compared with the previous year. The reason for over implementation of the budget of treatment cases is the growth of the treatment invoices submitted per treated person (an increase of 2.4% over the previous year). In 2016, the Health Insurance Fund financed 13,563 births, of which 26% were delivered by caesarean section. The number of births has not changed compared to the previous year.

The structural depreciation of the specialty in 2016 was 1.2%, including 0.7% in outpatient treatment and 1.1% in day treatment; in inpatient treatment, treatment cases appreciated structurally by 0.5%.

Since 2016, in the implementation of the budget of obstetrics and gynecology are also recognized. The health services were financed under the Artificial Insemination and Embryo Protection Act, which were previously included in the implementation of the budget of other expenses. In 2016, the treatment of 1353 people in the amount of 938,000 was financed from the state budget. The service was provided to these people in 2495 cases.

Availability of the specialty of obstetrics and gynecology

In the specialty of obstetrics and gynecology, the proportion of appointments within the maximum length of waiting time is above average, both on the basis of the projective report as well as of the retrospective report. The waiting times are generally shorter in general hospitals and at the selection partners.

Rehabilitation

Table 23. Execution of the budget of rehabilitation in thousands of euro and the number of treatment cases

	2015 actual		2016 budget		2016 actual		Budget execution	
	Amount	Number of treatment cases	Amount	Number of treatment cases	Amount	Number of treatment cases	Amount	Number of treatment cases
Rehabilitation	14,093	82,512	14,315	79,992	14,562	82,626	102%	103%
outpatient	6,812	75,010	7,080	72,981	7,186	75,507	101%	103%
day treatment	0	0	20	200	5	50	25%	25%
inpatient	7,281	7,502	7,215	6,811	7,371	7,069	102%	104%

Rehabilitation budget of the year 2016 budget was planned at the level comparable to the previous year. The structural depreciation of the treatment cases of the specialty was 0.6%, whereas structural appreciation of treatment cases in the outpatient treatment was by 1.6%, and in inpatient treatment by 2.9%. In the specialty of rehabilitation, the Health Insurance Fund financed, in the year 2016, the treatment of 54,000 people - an increase of 1.2%, i.e., 618 people, compared to the previous year.

By service groups, the implementation of the budget for the year 2016 was influenced the most by tests and procedures. The number of people receiving tests and procedures has grown by 2%; the funding has increased by 293,000 euro. Of the services, the implementation of the budget was influenced the most by occupational therapy and physiotherapy services, which was due mainly to the increase in the number of people receiving services.

Availability of the specialty of rehabilitation

On the specialty of rehabilitation, the waiting times for specialized medical care are longer than average. Compared with the previous period, the proportion of the appointments within the maximum allowable length has increased slightly. In reports, many healthcare institutions highlight the low capacity as the cause for long waiting times.

Execution of the contracts of specialized medical care

Since 2014, the financial volumes of the contracts in specialized medical care are no longer concluded on a quarterly basis, but for the first and the second half of the year, the unfulfilled contract volume of the first half of the year is not automatically transferred to the second half of the year. Within the half-year, the fulfilling of the contract is a significant part dependent on the work execution of the health care institution; a healthcare institution has an obligation to ensure the uniform availability of medical care. For the Health Insurance Fund, it is important that the availability of healthcare would not worsen.

In the second half of the year of 2016, the Health Insurance Fund paid to medical institutions the total of 290 million euro for about 1.6 million treatment cases of specialized medical care. The treatment cases of the Hospital Network Development Plan amounted to 82% in 2015, and the amount was 93% of the total performance of specialised medical care contracts.

Table 24 shows the aggregated data of the fulfilling of the contract concluded with the Hospital Network Development Plan hospitals and the selection of partners in the first and the second half of the year 2016.

Table 24. Execution of the contracts of specialized medical care in thousands of euro

	The contract for the first half of 2016		Execution of the contract for the first half of 2016		The contract for the second half of 2016		Execution of the contract for the second half of 2016		Execution of the contract for the second half of the year	
	Amount	Number of treatment cases	Amount	Number of treatment cases	Amount	Number of treatment cases	Amount	Number of treatment cases	Amount	Number of treatment cases
HNDP hospitals	**273,151**	**1,325,841**	**280,360**	**1,395,683**	**265,500**	**1,281,290**	**268,703**	**1,307,394**	**101%**	**102%**
Regional hospitals	153,569	524,660	156,820	543,791	149,016	507,857	150,007	516,510	101%	102%
Central hospitals	84,856	554,872	88,249	600,121	83,080	539,065	85,379	557,270	103%	103%
General hospitals and local hospital	34,726	246,309	35,291	251,771	33,404	234,368	33,317	233,614	100%	100%
Selection partners	**20,790**	**296,599**	**20,954**	**306,427**	**20,908**	**294,111**	**20,748**	**293,508**	**99%**	**100%**
Total contracts of financing of treatment	**293,941**	**1,622,440**	**301,314**	**1,702,110**	**286,408**	**1,575,401**	**289,451**	**1,600,902**	**101%**	102%
Buyout of treatment waiting lists	76	150	76	147	76	150	76	149	100%	99%
TOTAL	**294,017**	**1,622,590**	**301,390**	**1,702,257**	**286,484**	**1,575,551**	**289,527**	**1,601,051**	**101%**	**102%**

Compared with the year 2015, the amount paid to HNDP hospitals increased by 5%, in the case of selection partners (together with the execution of the contracts entered into by buying out the waiting lists) by 5.7%. The number of treatment cases in the Hospital Network Development Plan hospitals increased by 0.8%, compared to the year 2016 the number of treatment cases provided by the selection partners decreased by 1.2% compared to the previous year.

Zero-cost treatment invoices that allow submitting overtime were presented in a total of 2,940 cases; proportionally more by general hospitals, less by regional hospitals and selection partners. Overtime was submitted for a total of 122,000 treatment cases for a total amount of 13.2 million euro.

The amounts paid to Regional hospitals, (North-Estonian Regional Hospital, Tallinn Children's Hospital and the Hospital of the University of Tartu) increased by 5.3% in 2016 compared to the previous year, 2.1% more treatment cases than in 2015 were provided in regional hospitals. Similarly to the previous year, the treatment cases of the year 2016 of regional hospitals amounted to 32%, and the amount was 52% of the total performance of specialized medical care contracts.

Regional hospitals provided both in the 1st and the 2nd half of the year more treatment cases than had been agreed on. Overtime work was paid for 31 000 treatment cases for a total amount of 5.6 million euro. Overtime work was paid for to the North Estonian Regional Hospital for 3.1 million euro for approximately 9000 treatment cases (financially more in the specialties of inpatient cardiology, oncology, neurology, general surgery and internal medicine), to Tartu University Hospital 2.4 million euro for 18,000 treatment cases (proportionately most in the inpatient pediatrics and pulmonology specialties), Tallinn Children's Hospital almost 212,000 euro for 3700 treatment cases (primarily in the inpatient pediatrics specialty).

The amounts paid to **central hospitals** (East Tallinn Central Hospital, Ida-Viru Central Hospital, West-Tallinn Central Hospital, Pärnu Hospital), in 2016 increased by 5.3% compared to the previous year, the number of treatment cases provided in central hospitals was less by 1.1% than in 2015. Similarly to the previous years, the treatment cases of central hospitals amounted to 35% in 2016, and the amount was 29% of the performance of specialized medical care contracts.

All central hospitals provided outpatient treatment cases both in the 1st and also the 2nd half of the year at least to the extent agreed upon in the contract. In both halves of the year, all central hospitals submitted treatment invoices for payment of overtime work. In 2016, in total, 2.6 million euro were paid to East Tallinn Central Hospital for overtime work for 33,000 treatment cases, 1,1 million euro were paid to Ida-Viru Central Hospital for 6000 treatment cases, 1.5 million euro were paid to West Tallinn Central Hospital for 17,300 treatment cases, 694,000 euro were paid to Pärnu Hospital for 10,800 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, in the year 2016, 2.8% less treatment cases than in the year 2015. The amount paid to those healthcare institutions increased by 2,8% compared to the previous year. In 2016, the share of general hospitals and local hospitals, in the performance of specialist medical care contracts, continued to be approximately 15% in terms of treatment cases and nearly 12% in terms of the amount. In both half years, most general hospitals fulfilled the number of the agreed outpatient treatment cases and submitted part of the bills as overtime work. 12 general hospitals (except Rapla and Narva Hospitals) were paid 1.1 million euro for overtime work for a total of nearly 10,500 treatment cases.

In 2016,**selection partners** provided by 1.2%, less treatment cases than in 2015. For these treatment cases, however, 5.7% more was paid compared to the previous year. For purchasing of the waiting lists on the basis of the contracts entered into in the year 2014, 152,000 euro were paid in the year 2016 for 296 cataract treatment cases. Overtime work was paid to the selection partners, in 2016 ,a total of 13,200 treatment cases for 492,000 euro.

The table below provides information on the fulfillment of specialized medical care contracts by HNDP hospitals in 2016 by healthcare institutions.

Table 25. Execution of the contracts of specialized medical care of the Hospital Network Development Plan, hospitals in thousands of euro

	Execution of the contract for the first half of 2016		Execution of the contract for the first half of 2016		The contract for the second half of 2016		The execution of the contract for the second half of 2016	
	Amount	Number of treatment cases	Amount	Number of treatment cases	Amount	Number of treatment cases	Amount	Number of treatment cases
REGIONAL HOSPITALS								
Foundation Tallinn Children's Hospital	**11,492**	**88,613**	**11,581**	**90,075**	**10,910**	**81,510**	**11,032**	**83,153**
Outpatient	4,349	76,975	4,349	77,947	4,000	70,373	4,046	72,360
Day treatment	948	2,181	948	2,295	895	2,054	904	2,047
Inpatient	6,195	9,457	6,284	9,833	6,015	9,083	6,082	8,746
Foundation Tartu University Hospital	**70,409**	**258,287**	**71,417**	**268,391**	**66,450**	**243,704**	**67,049**	**250,561**
Outpatient	23,642	227,985	23,855	237,499	21,986	215,500	22,506	222,593
Day treatment	4,434	7,915	4,596	8,262	4,287	7,438	4,354	7,772
Inpatient	42,333	22,387	42,966	22,630	40,177	20,766	40,189	20,196
Foundation North Estonian Regional Hospital	**71,668**	**177,760**	**73,822**	**185,325**	**71,656**	**182,643**	**71,925**	**182,796**
Outpatient	22,606	156,932	23,349	163,130	22,795	161,684	23,119	162,765
Day treatment	3,298	3,936	3,481	4,537	3,440	4,027	3,301	3,781
Inpatient	45,764	16,892	46,992	17,658	45,421	16,932	45,505	16,250
CENTRAL HOSPITALS								
East Tallinn Central Hospital	**37,503**	**228,230**	**39,023**	**253,233**	**36,875**	**224,505**	**37,919**	**231,447**
Outpatient	15,490	206,921	16,482	230,907	15,228	203,504	15,895	210,150
Day treatment	3,853	7,771	3,935	8,019	3,779	7,620	3,886	7,641
Inpatient	18,160	13,538	18,606	14,307	17,868	13,381	18,138	13,656
West Tallinn Central Hospital	**20,634**	**151,365**	**21,525**	**162,386**	**20,366**	**145,668**	**20,804**	**149,941**
Outpatient	8,511	138,798	8,972	149,255	8,193	133,363	8,486	137,774
Day treatment	2,023	2,803	2,095	2,957	2,022	2,731	2,077	2,835
Inpatient	10,100	9,764	10,458	10,174	10,151	9,574	10,241	9,332
Foundation Ida-Viru Central Hospital	**13,186**	**81,052**	**13,775**	**85,150**	**13,088**	**80,300**	**13,614**	**81,856**
Outpatient	4,583	73,334	4,824	76,865	4,515	72,513	4,688	73,874
Day treatment	1,056	1,791	1,089	1,945	1,113	1,814	1,162	1,874
Inpatient	7,547	5,927	7,862	6,340	7,460	5,973	7,764	6,108
Foundation Pärnu Hospital	**13,533**	**94,225**	**13,925**	**99,352**	**12,751**	**88,592**	**13,042**	**94,026**
Outpatient	4,813	84,988	4,961	89,475	4,536	79,955	4,663	85,119
Day treatment	873	2,700	971	3,181	821	2,542	917	2,830
Inpatient	7,847	6,537	7,993	6,696	7,394	6,095	7,462	6,077

	Execution of the contract for the first half of 2016		Execution of the contract for the first half of 2016		The contract for the second half of 2016		The execution of the contract for the second half of 2016	
	Amount	Number of treatment cases	Amount	Number of treatment cases	Amount	Number of treatment cases	Amount	Number of treatment cases
GENERAL HOSPITALS AND LOCAL HOSPITALS								
Järva County Hospital	**2,559**	**21,222**	**2,607**	**22,023**	**2,489**	**20,210**	**2,455**	**19,823**
Outpatient	1,157	19,504	1,193	20,241	1,118	18,537	1,085	18,093
Day treatment	121	374	124	392	121	372	125	389
Inpatient	1,281	1,344	1,290	1,390	1,250	1,301	1,245	1,341
Foundation Kuressaare Hospital	**3,415**	**24,421**	**3,431**	**25,103**	**3,339**	**23,745**	**3,379**	**24,399**
Outpatient	1,102	22,080	1,110	22,712	1,058	21,420	1,078	22,209
Day treatment	189	338	174	311	199	385	176	305
Inpatient	2,124	2,003	2,147	2,080	2,082	1,940	2,125	1,885
Foundation West County Hospital	**1,937**	**16,355**	**2,004**	**17,248**	**1,877**	**15,392**	**1,879**	**15,381**
Outpatient	675	15,037	705	15,786	627	14,107	629	14,142
Day treatment	73	287	74	300	72	270	65	269
Inpatient	1,189	1,031	1,225	1,162	1,178	1,015	1,185	970
Rakvere Hospital	**3,916**	**25,160**	**4,099**	**26,386**	**3,785**	**22,343**	**3,730**	**21,402**
Outpatient	1,326	22,063	1,396	23,148	1,187	19,083	1,181	18,655
Day treatment	160	621	169	675	201	861	177	630
Inpatient	2,430	2,476	2,534	2,563	2,397	2,399	2,372	2,117
South Estonian Hospital	**2,970**	**18,944**	**3,150**	**19,549**	**2,876**	**18,389**	**3,086**	**20,085**
Outpatient	922	16,436	932	16,640	895	15,907	970	17,503
Day treatment	215	618	246	752	224	676	210	642
Inpatient	1,833	1,890	1,972	2,157	1,757	1,806	1,906	1,940
Foundation Narva Hospital:	**6,620**	**45,704**	**6,549**	**45,244**	**6,153**	**43,519**	**6,050**	**42,846**
Outpatient	2,214	39,839	2,207	39,408	2,056	38,084	2,015	37,587
Day treatment	319	782	288	666	332	755	308	632
Inpatient	4,087	5,083	4,054	5,170	3,765	4,680	3,727	4,627
Foundation Viljandi Hospital:	**5,374**	**33,063**	**5,463**	**34,898**	**5,178**	**32,696**	**5,126**	**31,101**
Outpatient	1,550	29,779	1,626	31,524	1,535	29,468	1,543	28,098
Day treatment	197	603	197	614	212	694	200	608
Inpatient	3,627	2,681	3,640	2,760	3,431	2,534	3,383	2,395

	Execution of the contract for the first half of 2016		Execution of the contract for the first half of 2016		The contract for the second half of 2016		The execution of the contract for the second half of 2016	
	Amount	Number of treatment cases	Amount	Number of treatment cases	Amount	Number of treatment cases	Amount	Number of treatment cases
Valga Hospital	**1,922**	**15,832**	**1,957**	**16,568**	**1,769**	**13,783**	**1,783**	**14,867**
Outpatient	691	14,325	708	14,920	554	12,323	583	13,356
Day treatment	165	487	174	521	159	458	165	472
Inpatient	1,066	1,020	1,075	1,127	1,056	1,002	1,035	1,039
Foundation Hiiu County Hospital:	**747**	**5,549**	**745**	**5,061**	**762**	**5,386**	**740**	**5,627**
Outpatient	201	4,952	200	4,493	196	4,812	192	5,104
Day treatment	37	151	35	142	33	135	29	121
Inpatient	509	446	510	426	533	439	519	402
Põlva Hospital	**2,001**	**13,917**	**2,010**	**14,117**	**1,965**	**13,373**	**1,965**	**13,913**
Outpatient	643	12,160	646	12,287	607	11,542	622	12,135
Day treatment	133	552	122	587	142	635	127	624
Inpatient	1,225	1,205	1,242	1,243	1,216	1,196	1,216	1,154
Foundation Rapla County Hospital	**1,919**	**17,388**	**1,894**	**16,422**	**1,883**	**17,051**	**1,784**	**15,500**
Outpatient	846	16,013	849	15,129	804	15,669	776	14,323
Day treatment	162	421	137	380	173	437	154	377
Inpatient	911	954	908	913	906	945	854	800
Foundation Jõgeva Hospital:	**1,346**	**8,754**	**1,383**	**9,152**	**1,328**	**8,481**	**1,341**	**8,670**
Outpatient	467	7,844	485	8,173	451	7,573	470	7,765
Day treatment	34	100	33	104	33	99	28	84
Inpatient	845	810	865	875	844	809	843	821
Total HNDP hospitals	**273,151**	**1,325,841**	**280,360**	**1,395,683**	**265,500**	**1,281,290**	**268,703**	**1,307,394**
Outpatient	95,788	1,185,965	98,849	1,249,539	92,341	1,145,417	94,547	1,173,605
Day treatment	18,290	34,431	18,888	36,640	18,258	34,003	18,365	33,933
Inpatient	159,073	105,445	162,623	109,504	154,901	101,870	155,791	99,856

1.4 Nursing care

Planning of the nursing care budget was based on the treatment need of the insured or assessed by the Health Insurance Fund, i.e., on the demand for nursing care services As financial resources are limited, the assessed demand was brought into line with the financial possibilities.

From 1 January 2016, the prices of healthcare services rose by the healthcare wage agreement. The modernization of the reference prices of nursing care led to the increase of reference price of the inpatient independent nursing care bed day. As the follow-up activity of home nursing, the transportation cost included in-home nursing service was changed.

In the year 2016 , the estimated financial volume of nursing care was 30 million euro, which was 6,4% higher than the funding of nursing care services in the year 2015.

Table 26. Execution of the budget of nursing care in thousands of euro and the number of treatment cases

	2015 actual		2016 budget		2016 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	22,395	18,078	23,594	18,361	23,450	18,520	99%	101%
Home nursing	6,055	36,945	6,664	36,580	6,653	37,477	100%	102%
TOTAL	**28,450**	**55,023**	**30,258**	**54,941**	**30,103**	**55,997**	**99%**	**102%**

In 2016, inpatient nursing care services were rendered to 12,000 people, the number of people receiving the service in comparison to the same period has decreased by 1%. The growth of the financial volume growth compared to the year 2015 is caused by the increase of the reference price of bed days. 95% of the extent of the use of inpatient nursing care is composed of bed days. Compared to the same period last year, the average cost of a bed day has increased by 5%.

In 2016, home nursing service was provided to 8045 people, the number of people receiving the service has not changed compared to the previous year. The growth of funding, compared to the year 2015, is caused by the increase of the reference price of home nursing.

Table 27. The nursing care visits and the number of persons receiving the service

	2015 actual		2016 actual		The change compared to the year 2015	
	Visits	Persons	Visits	Persons	Visits	Persons
The number of visits and persons	262,339	8,060	262,868	8,023	0%	0%

The availability of nursing care

As of January 1, 2017, there were nearly 2,100 appointments registered in the nursing care waiting lists. Compared to the last year, the number of accesses to services registered in the treatment waiting lists, both in home nursing and also inpatient nursing care, has grown. 95% of the appointments registered in the nursing care waiting lists takes place within the maximum permitted the length of the waiting list - waiting times are generally within the maximum permitted the length of the waiting list.

Table 28. The number of appointments registered in nursing care waiting lists

	01.01.2016		01.01.2017		The change compared to the year 2016
	The number of appointments in waiting lists	Within the maximum length of the waiting list	The number of appointments in waiting lists	Within the maximum length of the waiting list	The number of appointments in waiting lists
Home nursing	530	91%	611	90%	81
Inpatient nursing care	1,184	97%	1,486	97%	302
TOTAL	**1,714**	**95%**	**2,097**	**95%**	**383**

Execution of the contracts for nursing care

In 2016, the Health Insurance Fund paid the medical institutions a little over 30 million euro for almost 56 ,00 thousand treatment cases. The treatment cases of the Hospital Network Development Plan amounted to 40% in 2015, and the amount was 57% of the total performance of nursing care contracts.

The table below provides information on the performance of nursing care contracts in the first and the second half of the year 2016. The contracts of the first half of the year have been fulfilled financially to the extent of 99.5%, fulfillment of treatment cases is 101%. The fulfillment of the second half-year contracts is 100% and and the fulfillment of treatment cases is 103%. The depreciation of the average cost of a treatment case is affected in some healthcare institutions by the decrease of the average cost of inpatient nursing care and the growth of the home nursing services. The result is as expected since the objective of the Health Insurance Fund is to harmonize the cost of a treatment case and to improve the accessibility of the home nursing care.

Table 29. Execution of the contracts of nursing care in thousands of euro

	The contract for the first half of 2016		Execution of the contract for the first half of 2016		The contract for the second half of 2016		Execution of the contract for the second half of 2016		Execution of the contract for the second half of the year	
	Amount	Number of treatment cases	Amount	Number of treatment cases	Amount	Number of treatment cases	Amount	Number of treatment cases	Amount	Number of treatment cases
HNDP hospitals	**8,637**	**11,071**	**8,569**	**11,015**	**8,639**	**11,109**	**8,616**	**11,496**	**100%**	**103%**
Regional hospitals	1,134	1,252	1,075	1,278	1,132	1,250	1,132	1,268	100%	101%
Central hospitals	3,753	3,983	3,745	3,697	3,762	4,038	3,761	4,245	100%	105%
General hospitals and local hospitals	3,750	5,836	3,749	6,040	3,745	5,821	3,723	5,983	99%	103%
Selection partners	**6,502**	**16,449**	**6,494**	**16,858**	**6,452**	**16,303**	**6,424**	**16,628**	**100%**	**102%**
TOTAL	**15,139**	**27,520**	**15,063**	**27,873**	**15,091**	**27,412**	**15,040**	**28,124**	**100%**	**103%**

Table 30 provides information on the performance of nursing care contracts of the Hospital Network Development Plan hospitals concluded for the first and the second half of the year.

Table 30 Execution of the contracts of the Hospital Network Development Plan hospitals in thousands of euro

	The contract for the first half of 2016		Execution of the contract for the first half of 2016		The contract for the second half of 2016		Execution of the contract for the second half of 2016		Execution of the contract for the second half of the year	
	Amount	Number of treatment cases	Amount	Number of treatment cases	Amount	Number of treatment cases	Amount	Number of treatment cases	Amount	Number of treatment cases
REGIONAL HOSPITALS										
Foundation Tartu University Hospital	872	1,062	813	1,073	870	1,060	871	1,078	100%	102%
Foundation North Estonian Regional Hospital	262	190	262	205	262	190	261	190	100%	100%
CENTRAL HOSPITALS										
East Tallinn Central Hospital	1,351	1,703	1,346	1,716	1,361	1,762	1,360	1,713	100%	97%
West Tallinn Central Hospital	1,278	858	1,278	647	1,276	857	1,276	1,025	100%	120%
Foundation Ida-Viru Central Hospital	427	675	427	624	428	676	428	752	100%	111%
Foundation Pärnu Hospital	697	747	695	710	697	743	697	755	100%	102%
GENERAL HOSPITALS AND LOCAL HOSPITAL										
Järva County Hospital	269	448	269	447	270	449	270	460	100%	102%
Foundation Kuressaare Hospital	390	688	390	685	388	687	388	700	100%	102%
Foundation Lääne County Hospital	228	351	228	342	228	349	228	324	100%	93%
Rakvere Hospital	387	979	387	1,032	387	974	371	995	96%	102%
South Estonian Hospital	452	621	452	664	451	619	451	653	100%	105%
Foundation Narva Hospital:	671	899	671	921	671	899	671	935	100%	104%
Foundation Viljandi Hospital:	406	753	406	816	405	751	405	804	100%	107%
Valga Hospital	250	333	249	340	250	333	244	335	98%	101%
Foundation Hiiu County Hospital:	78	67	78	84	77	66	77	66	100%	100%
Põlva Hospital	256	329	255	322	254	326	254	355	100%	109%
Foundation Rapla County Hospital	188	147	188	168	189	148	189	151	100%	102%
Foundation Jõgeva Hospital	175	221	175	219	175	220	175	205	100%	93%
Total HNDP hospitals	**8,637**	**11,071**	**8,569**	**11,015**	**8,639**	**11,109**	**8,616**	**11,496**	**100%**	**103%**

The nursing care contracts were filled in terms of the amount by 99.6% and in terms of treatment cases by almost 102%. Financial execution in inpatient nursing care was 99.5%, execution of treatment cases 101%, in home nursing the financial execution was 100%, and the execution of treatment cases was 102%. Compared with the year 2015, the amount paid to HNDP hospitals increased by 5.4%, in the case of selection partners by 6.4%. The number of treatment cases provided in nursing care increased by 3.2% in the HNDP hospitals, at the selection of partners it increased by 0.6%

The amounts paid to regional hospitals (North-Estonian Regional Hospital, Tallinn Children's Hospital and the Hospital of the University of Tartu) in 2016 increased by 28% compared to the previous year, 17% more nursing care cases than in 2015 were provided in regional hospitals. The contracts of the year 2016 were executed in terms of financial volume by 97%, and in terms of treatment cases, they were exceeded by nearly by 102%. The North Estonian Regional Hospital provides inpatient nursing care, in both half-years, the medical institution executed the amount of the contract at 100%, and the average cost of a treatment case was more than 3% lower than in agreed contract for the whole year. Tartu University Hospital provides both inpatient nursing care and home nursing services. Execution of the contract amount was 97%, execution of the treatment cases was 101%. In Tallinn Children's Hospital nursing care services are not provided.

The amounts paid to **central hospitals** (East Tallinn Central Hospital, Ida-Viru Central Hospital, West-Tallinn Central Hospital, Pärnu Hospital), in 2016 increased by 2.3% compared to the previous year. The number of treatment cases provided in central hospitals was less by 3.4% than in 2015. The contracts were executed in terms of financial volume by 100% and in terms of treatment cases by 99%.

General hospitals and local hospitals (Hiiu County Hospital, Järva County Hospital, Kuressaare Hospital, South Estonian Hospital, West County Hospital, Narva Hospital, Põlva Hospital, Rakvere Hospital, Rapla County Hospital, Valga Hospital, Viljandi Hospital and Jõgeva Hospital) provided in the year 2016, 0.4% less treatment cases than in the year 2015. The amount paid to general hospitals for nursing care services increased a little over 3% compared to the previous year. The contracts for the year 2016 were executed in terms of financial volume by more than 99%, and in terms of treatment cases by 103%.

Compared to the year 2015, the provision of nursing care services has grown the most in West County Hospital and Rapla County.

The number of treatment cases in nursing care at the **selection partners** in the year 2016 remained at the same level compared to the year 2015. The amount paid to selection partners for nursing care services increased by 6.3% compared to the previous year. The cases of the year 2016 contracts were filled by 102%, for the amount of nearly 100%.

An overview of the execution of nursing care contracts by healthcare institutions has been published on the website [8] of the Health Insurance Fund.

[8] http://www.haigekassa.ee/et/partnerile/raviasutusele/ravi-rahastamise-lepingud

1.5 Dental care

The largest part of the dental services financed by the Health Insurance Fund is made up by the dental care of children up to 19 years of age. The obligation of payment to the healthcare institutions for adult dental services is assumed by the Health Insurance Fund only in case of provision of emergency care services. The financial benefits for dental care (denture benefits, dental care benefits) is viewed separately in the report - an overview of the financial benefits will be provided by Chapter 7 of this report.

On drawing up a dental care budget for the year 2016, an increase for the financing was planned compared to the previous year. The dental care budget was executed by 100% in terms of treatment cases; the amount remained under executed.

Table 31. Execution of the budget of dental care in thousands of euro and the number of treatment cases

	2015 actual		2016 budget		2016 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	17,534	377,403	19,430	373,578	17,749	370,173	91%	99%
Orthodontics	4,047	50,139	4,126	50,646	4,444	54,504	108%	108%
Adult emergency dental care	1,018	22,581	1,100	22,891	1,112	22,413	101%	98%
TOTAL	**22,599**	**450,123**	**24,656**	**447,115**	**23,305**	**447,090**	**95%**	**100%**

Prevention and treatment of children's dental diseases

In 2016, there was the total of more than 236,000 children aged 3-19, of whom almost 150,000 children or 62.9% of the target group visited the dentist. Compared to the year 2015, the number of children visiting a dentist remained almost unchanged.

In the year 2016, the coverage was the highest in Saare County (74%), in Jõgeva County (73%) and in Tartu County (71%). The coverage was the lowest in Ida-Viru County (57%) and Valga County (59%).

The fulfillment of the contract volume and the presence of contractual partners in the county have a significant impact on the results of the coverage. In the first case, the volumes are quickly filled, and not all who wish to get to see the dentist. In the second case, there is no possibility to choose a dentist because there are few, or no service providers.

On filling the volumes, we have asked the contract managers to inform the contractual partners of their area of the possibility to ask to have the contract volume increased, which would be one solution to enable access to a dentist.

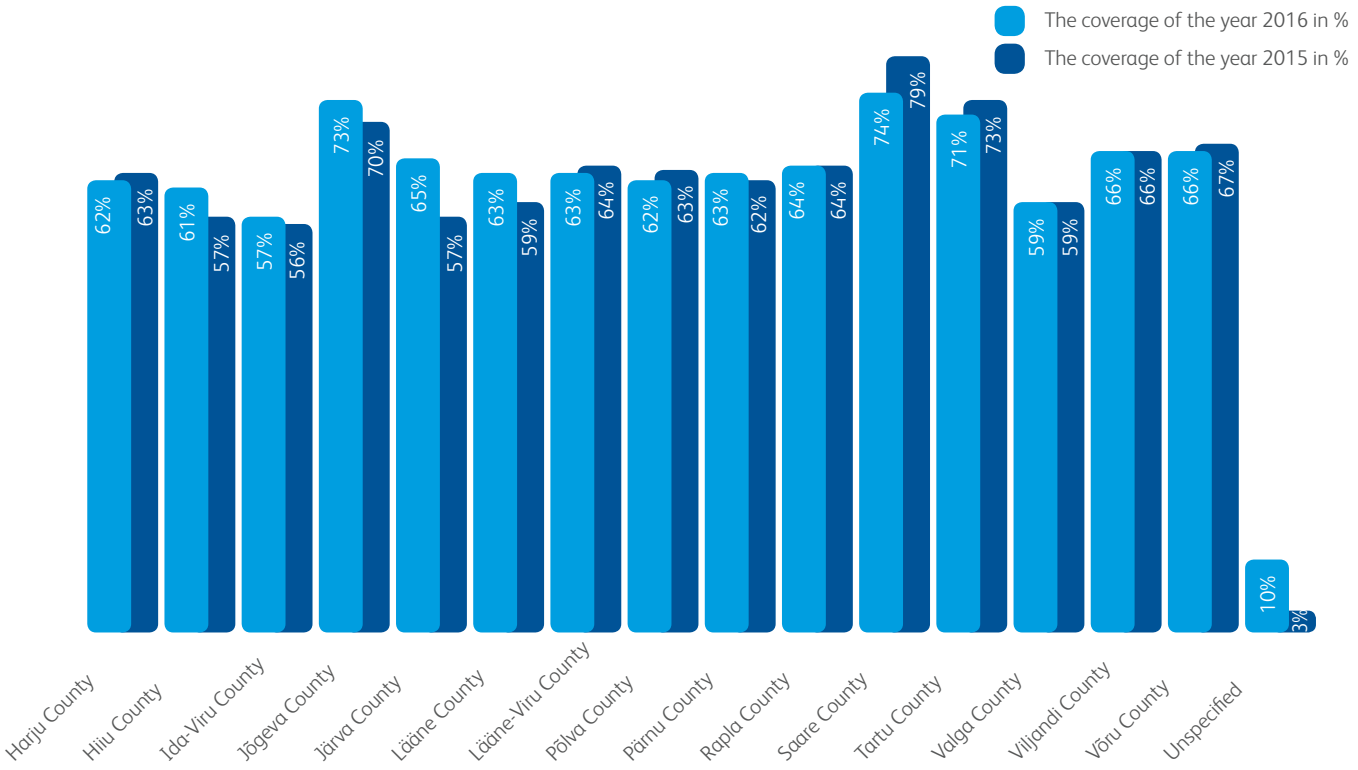


Figure 12. The coverage with children's dental services by counties for the years 2015–2016

On the basis of age, the coverage of children of the total target group (3-19) is the highest among the children of 6-10 years of age (70%). This number clearly shows that in the first years of school, parents are quite diligent in taking children to the dentist. However, the coverage drops among the young people of 17-19 years of age. This is a period where young people are free to decide over their own doings, and going to the dentist is not a priority. We have focused our main campaign activities to this target audience. The place of concern is also the children of 3 years of age, of whom only 40% have visited a dentist. To improve this situation, we have made outreach work in family schools and have created and improved information materials on infant health.

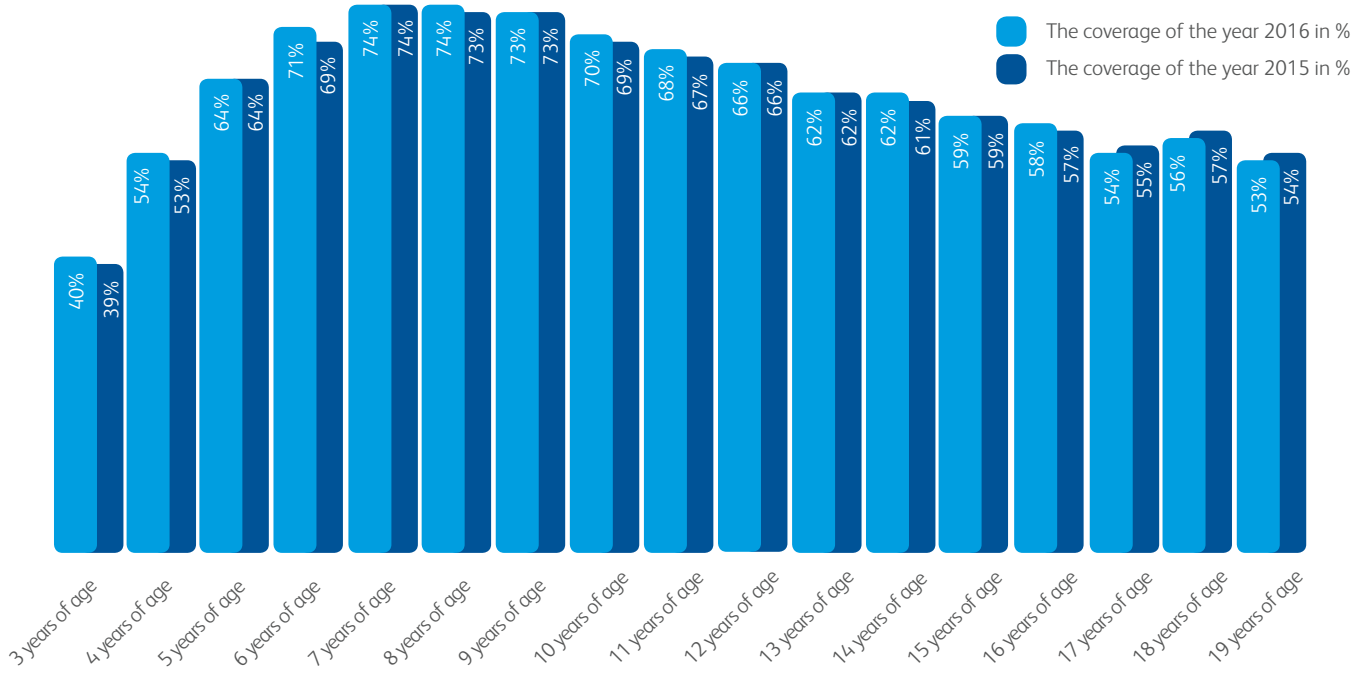


Figure 13. The coverage with children's dental services by ages in the years 2015–2016

In addition, in 2016 the children who were born in 2004, 2007, 2009 and 2010 were checked separately. In this age group, the family nurses and school nurses have an obligation to refer children to a preventive dentist appointment. Among the children born in this year, the coverage was the highest in Saare County (83%), in Jõgeva County (83%) and in Tartu County (81%). The coverage was the lowest in Valga County (65%) and Ida-Viru County (66%). In the latter two counties, the general coverage of children with dental care is lower than elsewhere in Estonia.

Orthodontics

The funding of orthodontia services was planned to stay at the last year's level of use. At the same time, the demand for the service of orthodontics in 2016 was much higher. Compared to the same period last year, the funding of orthodontia services grew over EUR 4 million. The growth in the financing of the orthodontia service has been influenced by the selection of contractual partners carried out at the beginning of 2015, and the new treatment financing contracts that came into force on July 1, 2015. During the selection process, the contracting partners changed, and patients had to move to another healthcare provider. As the movement of patients to another healthcare provider takes time, to improve the availability of treatment for the insured, the orthodontia service contracts were increased at the expense of the under-execution of the children's dental care.

In 2016, the Health Insurance Fund financed the orthodontia service of 21,000 children. Compared to the previous year, the number of children receiving treatment has increased by 5%.

Adult emergency dental care

The funding of adult emergency dental care was planned to stay at the previous year's level. The budget was executed by 101% in terms of finance, and by 98% in terms of the number of treatment cases. Compared to the previous year, funding of adult emergency dental care increased by 94,000 thousand euro, the number of treatment cases remained at the level of the year 2015. During the reporting period, adult emergency dental services have been provided to nearly 17,000 people. Compared to the same period last year, the number of people receiving treatment has decreased by 4%. Out of emergency care services, removal of a deeply fractured tooth or a broken tooth and the opening and treatment of abscess have increased the most, compared to the same period last year.

Availability of dental care

As of 01.01.2017, nearly 18,200 appointments have been registered for the dental care waiting lists. The number of appointments registered to waiting lists has increased in dental care, mainly due to the reduction of the appointments registered to the orthodontia waiting lists. However, in 2016 more cases of treatment than in 2015 were provided in orthodontia.

93% of the appointments registered in the children's dental care waiting lists takes place within the maximum permitted length of the waiting list, in orthodontia, the respective proportion is 99%. One of the priorities of the Health Insurance Fund is increasing the coverage of children in the prevention of dental diseases.

Table 32. The number of appointments registered in dental care waiting lists

	01.01.2016		01.01.2017		The change compared to the year 2016
	The number of appointments in waiting lists	Within the maximum length of the waiting time	The number of appointments in waiting lists	Within the maximum length of the waiting time	The number of appointments in waiting lists
Children's dental care	15,976	95%	15,416	93%	-560
Orthodontics	3,710	99%	2,782	99%	-928
TOTAL	**19,686**	**95%**	**18,198**	**94%**	**-1,488**

2. Health promotion

Being guided by the Health Insurance Fund Development Plan, the Health Insurance Fund finances health promotion in order to achieve the objectives set out in the National Health Plan. Promotion of people's health and welfare will be more effective if it is subject to an active contribution of a number of institutions who collaborate to achieve a joint goal. Health promotion activities are financed, in addition to the Estonian Health Insurance Fund, also by the Ministry of Social Affairs and the Health Development Institute.

By the year 2016, in the budget of the Health Insurance Fund 1.2 million euro is planned for health promotion. 96% of the budget planned for the year 2016 have been used.

Table 33. Execution of the health promotion budget in thousands of euro

	2015 actual	2016 budget	2016 actual	Budget execution
Activity aimed at the development of the children's health	359	405	435	107%
Activities aimed at the patient awareness	435	545	457	84%
Empowering of the primary level	26	80	22	28%
Development of the health system	268	219	279	127%
TOTAL	**1,088**	**1,249**	**1,193**	**96%**

For the purpose of supporting the development of children's health, we compiled and distributed through family physicians, **publications aimed at children** Publications "Child's Health Diary" and "Student's Health Diary" had to be reprinted in 2016 due to the high demand. Under completion is also the publication "We are expecting a baby" which has been edited and designed and will be published in 2017.

Out of activities for children, in the middle of 2016, 16 **youth camps on safety** „Protect yourself and help the others" and a nationwide „Rescue field youth camp" were held. The aim of the camp is to develop the way of thinking that would support and promote the health of children. In the camps, specialists in their fields teach how to foresee risks and cope with emergency situations. In the camps, children were also taught oral hygiene.

In 2016, one of the biggest projects for children was **children's dental health.** The goal was to increase both children's and their parents' awareness of dental health and thus increase dental care coverage in counties. In September, we started a social campaign to raise awareness of oral health, and of the free dental care opportunities provided by the Health Insurance Fund. The Estonian Health Insurance Fund project partner Estonian Dental Association carried out training on oral hygiene all over Estonia and designed and printed a variety of teaching materials. In cooperation with the Institute for Health Development was prepared a methodological guide for oral health for employees of educational institutions.

The aim of the project **"Health promotion in schools and nursery schools"** is to develop a health-promoting environment in kindergartens and schools, and to raise the capacity of the implementation of the activities aimed at children's healthy development. During the project, Estonian and Russian language training days in four different topics were carried out all over Estonia. First aid course materials have been completed and coping of diabetic children in educational institutions has been improved through the development of a support network. In addition, the coping of the educational staff in supporting a child with diabetes was evaluated and analyzed.

The aim of the **Pregnancy Crisis Counseling** is to ensure the availability of appropriate counseling for pregnant women and their loved ones. In 2016, the primary goal of the project was to provide pregnancy crisis counseling

through a referral of a healthcare professional in at least 3500 cases. On the basis of a referral, a total of 3,630 people in 1,597 different case were counseled in the framework of the project.

One of the priorities of the Health Insurance Fund is raising the patient awareness on the purchase of pharmaceuticals and thereby keeping the cost-sharing stable. The primary target audience of the **Sensible medicines use campaign** is the residents of Estonia aged 50 or more. the second target group is all residents of Estonia. Indirect target groups are healthcare workers, pharmacists, and the media. The campaign ran from July to September. The visibility study showed that the population is increasingly aware of sensible medicines use. We will continue the campaign also in 2017.

The aim of the **cancer screening outreach activities** was in 2016 to inform the insured of the benefits and necessity of participation in screening. The cervical cancer screening awareness campaign reached the women invited to screening through radio, outdoor media, and social media in February. In breast cancer month in May, we invited the women of the target group through articles, radio ads, outdoor media posters and social media to acknowledge the importance of participation in screening. At the end of the year, from October to December we performed re-notification to reach these women, who have not yet been to a screening. As outreach channels, we used city buses all over Estonia, internal radio, social media, and both the national and local newspapers and radio. In the second half of the year, we introduced to the target audience, the media and the general public, new colon cancer screening.

The Health PagesHealth Insurance themes reflect appeared in 2016 starting from February in major daily and weekly newspapers.

In the first quarter of 2016, we posted to the Estonian residents the updated "Health Insurance Fund Information Guide" with the purpose **to increase public awareness** of the the possibilities offered by the health insurance in Estonia.

Four guidelines were completed. Six patient guidelines both in Estonian and Russian languages have been prepared. At the end of September, the annual clinical guideline training was held, with the aim to explain to the future authors of the guidelines the process of development of clinical guidelines and to introduce the environments necessary for the work.

We continued with the notification of the **family physician's advisory line 1220** in the spring and in the fall, during the major period of illnesses. At the end of the year, we distributed to the family physicians the materials that they can provide to the people on their list in order to remind them of the option of calling the advisory line.

3. The medicinal products compensated for to the insured persons

The medicines compensated for by the Health Insurance Fund that the patient will be able to use independently are issued from the pharmacy on the basis of a prescription prepared by a healthcare worker. Part of the cost of the prescription will be paid by the Health Insurance Fund, and the appropriate amount will be deducted in the pharmacy. Thus, the patient can immediately buy discount medications and need not apply for reimbursement afterward. With a certain periodicity, the pharmacy, in turn, presents invoices for payment to the Health Insurance Fund. With regard to various diseases and medical products, different discount rates apply that are established by the Government, Minister of Social Affairs and Health and the Minister of Labor regulations, which in turn are based on the Health Insurance Act.

Reimbursement of the medicinal products meant for ambulatory use to patients is an open commitment to the Health Insurance Fund. This means that the Health Insurance Fund is obliged to compensate for need-based medicinal products to the extent determined by law and cannot be refused due to the lack of funds.

Table 34. Execution of the budget of medicinal products compensated for the insured in thousands of euro

	2015 actual	2016 budget	2016 actual	Budget execution
100% compensated medicinal products	55,168	56,100	70,706	126%
90% compensated medicinal products	34,050	34,300	35,691	104%
75% compensated medicinal products	5,849	5,850	6,004	103%
50% compensated medicinal products	17,734	18,200	18,845	104%
TOTAL	**112,801**	**114,450**	**131,246**	**115%**

Financing of the pharmaceuticals benefits grew compared to the year 2015 by 16.4%, or by 18.4 million euro. The growth has been most pronounced in the case of the pharmaceuticals compensated for 100%, in other discount types the growth has been more modest. The general growth of the budget, on the one hand, is affected by the number of discount prescriptions purchased, and on the other hand, the average cost of a discount prescription. The number of discount prescriptions has increased by 1% compared to last year; this reflects an expected increase in pharmaceuticals use, which has been most pronounced in the case of 100% discount rate. The cost of an average discount prescription has increased for the Health Insurance Fund by 15%; the growth has been most pronounced in the case of the pharmaceuticals compensated at 100% discount rate.

The abrupt increase in the average cost of discount prescriptions for the Health Insurance Fund and the related over implementation of the pharmaceuticals budget is mainly due to the fact that the number of users of the new hepatitis C medicines, that as of January 2016 was included among the pharmaceuticals to be compensated for with a 100% discount rate, significantly exceeded the projected volume. For the year 2016, 360 patients were scheduled for treatment, but in fact, 598 patients were treated for a total amount of 13.3 million euro. During the year treatment began there were many patients who were left untreated from the previous periods and were waiting for the treatment possibility. At the beginning of the year, the number of the people beginning with the treatment was therefore substantially higher than in the second half of the year. The average cost of the pharmaceuticals compensated for with a 100% discount rate without the hepatitis C drugs as compared to the same period last year has not grown.

The moderate increase has also occurred in the average cost for the Health Insurance Fund of the discount prescriptions of the pharmaceuticals compensated for with the discount rate of 50%, and 90%. In the case of both discount rates, it is primarily the result of the wider use of the new anticoagulants (blood clotting hindering pharmaceuticals, which are used mainly for prevention of stroke). New anticoagulants have quickly become the preferred pharmaceuticals for patients with cardiac arrhythmia for stroke prophylaxis.

Table 35. The number of discount prescriptions and their average cost for the Health Insurance Fund

	2015 actual		2016 actual		The change compared to the year 2015	
	The number of discount prescriptions	The average cost of discount prescription for the Health Insurance Fund	The number of discount prescriptions	The average cost of discount prescription for the Health Insurance Fund	The number of discount prescriptions	The average cost of discount prescription for the Health Insurance Fund
100% compensated medicinal products	919,389	60.01	951,685	74.30	4%	24%
90% compensated medicinal products	2,916,353	11.68	2,967,071	12.03	2%	3%
75% compensated medicinal products	572,052	10.22	575,580	10.43	1%	2%
50% compensated medicinal products	3,638,504	4.87	3,652,543	5.16	0%	6%
TOTAL	**8,046,298**	**14.02**	**8,146,879**	**16.11**	**1%**	**15%**

In total, the Health Insurance Fund financed discount medicines per one insured patient in 2016, for an average of 106 euro and this amount has increased by 16,5% compared to the previous year.

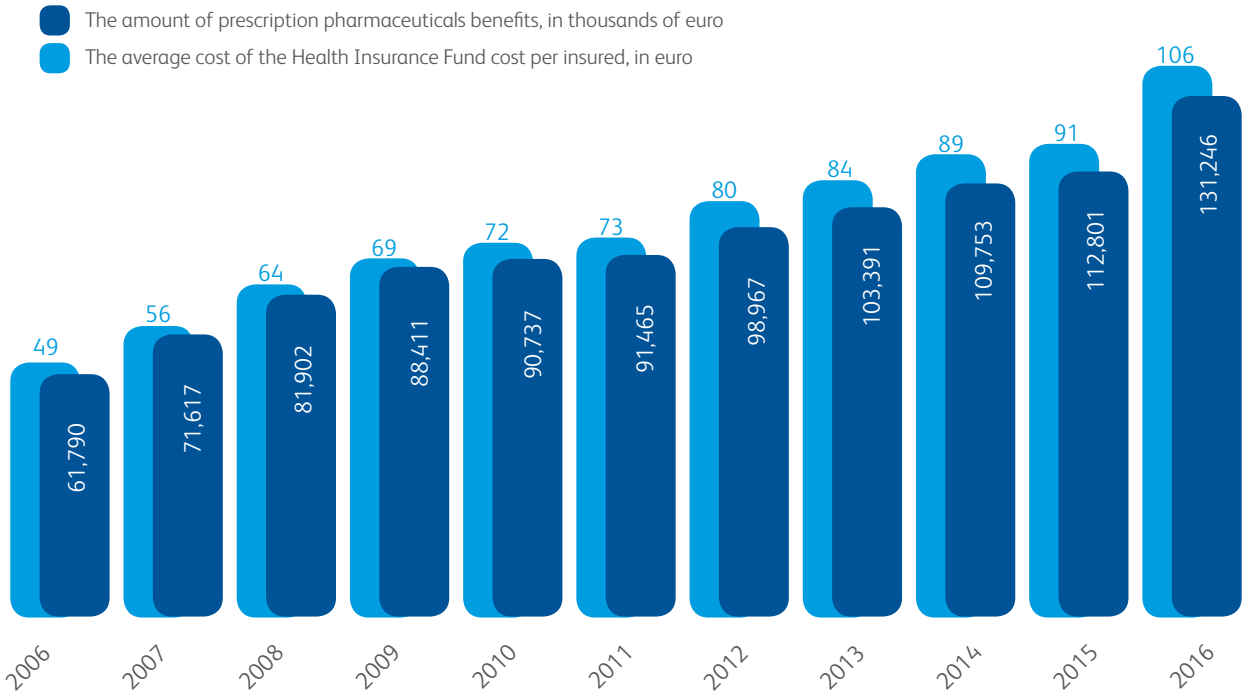
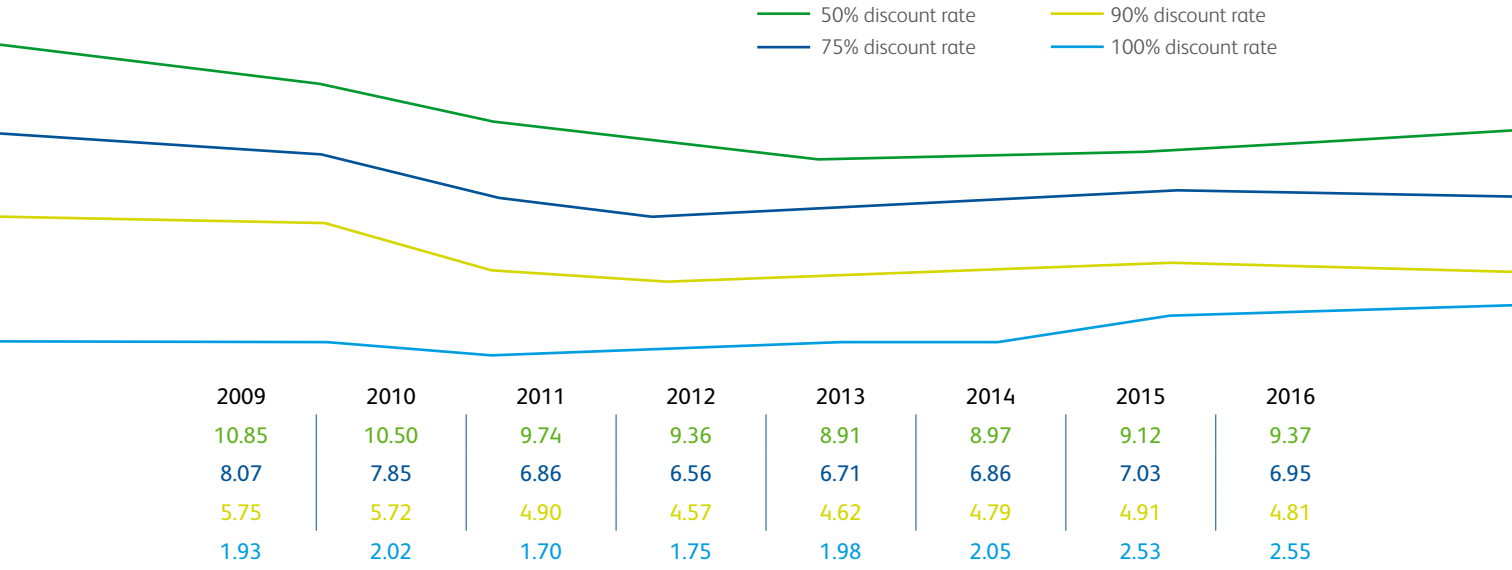


Figure 14. The total cost of the pharmaceuticals benefit and the cost per insured in 2006-2016

The relative cost sharing of the insured person in purchasing of prescription pharmaceuticals has decreased in the past year from 32.3% to 29.4%, the average cost of a prescription for the patient was 6.73 euro instead of the earlier 6.69 euro. Since the cost of an average prescription has increased for the Health Insurance Fund, the patient's relative cost-sharing has decreased, while the prescription has become slightly more expensive for the patient. Prescription appreciation has taken place, in particular in the case of pharmaceuticals compensated for at 50% discount rate and it is mainly caused by the wider use of new anticoagulants.

Table 36. Cost-sharing of the insured in a percentage

	2015 actual	2016 actual	The change compared to the year 2015
100% discount prescriptions	4.04	3.30	-0.7%
90% discount prescriptions	29.60	28.56	-1.0%
75% discount prescriptions	40.76	39.99	-0.8%
50% discount prescriptions	65.17	64.44	-0.7%
TOTAL	**32.31**	**29.43**	**-2.9%**



2009	2010	2011	2012	2013	2014	2015	2016
10.85	10.50	9.74	9.36	8.91	8.97	9.12	9.37
8.07	7.85	6.86	6.56	6.71	6.86	7.03	6.95
5.75	5.72	4.90	4.57	4.62	4.79	4.91	4.81
1.93	2.02	1.70	1.75	1.98	2.05	2.53	2.55

Figure 15. The average cost of prescriptions for patients in the period 2009-2016, in EUR

During the year 2016, compensation of nine new active substances, and one special food were started. The range of pharmaceuticals extended by a large number of cost-effective and efficient medicines for management of various diseases (advanced melanoma, hepatitis C, hepatitis B, idiopathic pulmonary fibrosis, myelofibrosis, myelodysplastic syndrome, pulmonary arterial hypertension, Parkinson's disease, chronic myeloid leukemia, multiple sclerosis, chronic obstructive pulmonary disease, atopic dermatitis and increased frequency of urination).

In some cases, the Health Insurance Fund also exceptionally compensates for medicinal products on the patient's individual request. Such an arrangement is applied mostly in cases where in Estonia there is no marketing authorization for the medicinal products needed for the patient and used on an outpatient basis, and, therefore, the medicinal products cannot be included in the pharmaceuticals list of the Health Insurance Fund. Compensation, by way of exception, also allows pharmaceuticals to be made available in the case of a number of rare diseases. In 2016, 2032 persons received compensation by way of exception in the total amount of 1.25 million euro.

Most of the health insurance funds are used for the discount medicines compensated for the treatment of diabetes mellitus, of which insulin preparations are most commonly used. The amount spent on the latter has declined over the year because the use of the more expensive insulins (aspart, detemir) has declined and the use of a more

affordable insulin (glargine) has increased. During the year, the amount spent on oral diabetes preparations has risen, whereas this is mainly due to the increase in the number of patients. The biggest leap has been made by the volume of compensation of hepatitis C pharmaceuticals, which is caused by the fact that the projected number of users of the new preparation has significantly exceeded the expectations. The volume of compensation for cancer pharmaceuticals from the budget of preferential pharmaceuticals has increased slightly; the latter is primarily due to new active substances compensated for by the Health Insurance Fund (dabrafenib, ruxolitinib, abiraterone). The increase could have been even higher, but the addition of the generic preparation to the widely-used cancer pharmaceuticals, capecitabine brought along significant savings. In fourth place has fallen the cost of hypertension pharmaceuticals, which has been reduced due to the addition of new generic preparations into the groups of widely used active substances (telmisartan, telmisartan + amlodipine, enalapril + hydrochlorothiazide). The cost of asthma medications has reduced, and the reason for this is the addition of generic analogs to combination products (salmeterol + fluticasone, formoterol + budesonide). The cost of glaucoma pharmaceuticals has increased somewhat, as the consumption volume and the price of some combination products, for which there are no generic preparations, increased.

An overview of the diagnoses related to major pharmaceutical benefits is provided in Table 37.

Table 37. The diagnoses related to major pharmaceuticals benefit in thousands of euro

	2015 actual		2016 actual	
	Compensated for by the Health Insurance Fund	% of the total cost of the pharmaceuticals benefits	Compensated for by the Health Insurance Fund	% of the total cost of the pharmaceuticals benefits
Diabetes in total, including	18,285	16%	18,946	14%
insulins	10,845	10%	10,693	8%
oral preparations	7,440	7%	8,253	6%
Hypertension	13,853	12%	13,783	10%
Cancer	14,285	13%	14,629	11%
Bronchial asthma	5,655	5%	5,485	4%
Glaucoma	4,055	4%	4,322	3%
Chronic hepatitis C virus infection	3,015	3%	14,725	11%
Mental disorders	2,612	2%	2,191	2%
Hypercholesterolemia	2,298	2%	2,232	2%
TOTAL	**64,058**	**57%**	**76,312**	**58%**

Compensation for hospital medication in the budget of healthcare services

In addition to the discount pharmaceuticals compensated for in an outpatient setting, the health insurance means are also used for the payment of the pharmaceuticals used in hospitals. In 2016, the amount of the pharmaceuticals component within healthcare services was 14 million euro, which is 11% less than the year before. This decrease was primarily due to the decrease in the price of the pharmaceuticals component in the anesthesia services resulting from the modernization of the specialty, as well as due to the decrease in the number of bed days. Pharmaceutical costs are accounted for in the cost of various bed days, as well as in the limit prices of surgeries and in anesthesia services.

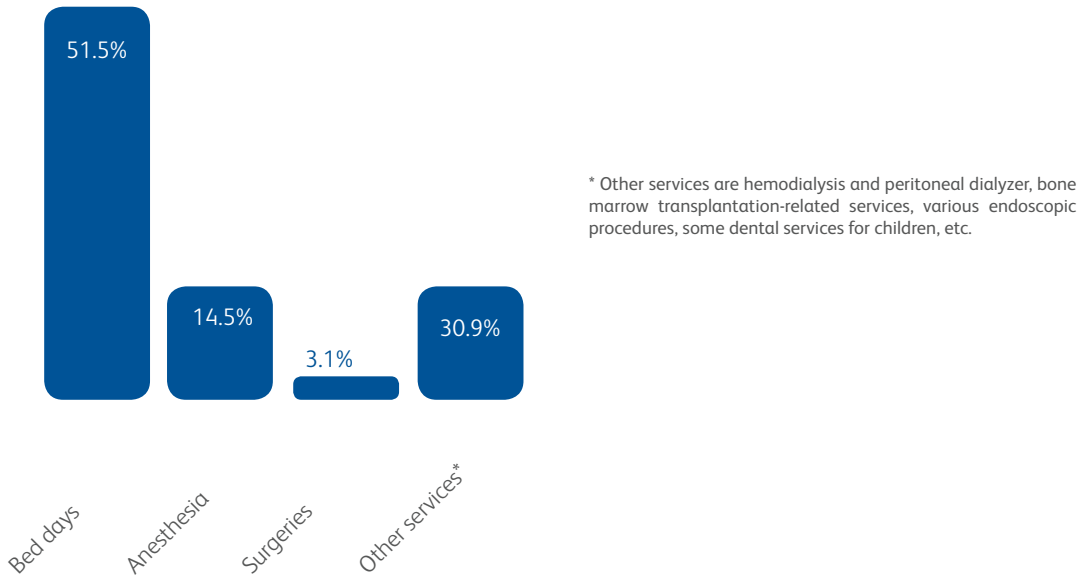


Figure 16. Distribution of medicinal products in healthcare services

In addition, the Health Insurance Fund assumes the payment obligation also for the so-called pharmaceutical services referred to separately in the list of services (services with R-codes). It mainly means chemotherapy in hematology and oncology, bio- logical treatment, and other use of specific expensive medicinal products (e.g., antibiotics used in the treatment of sepsis or medicinal products used in organ transfer).

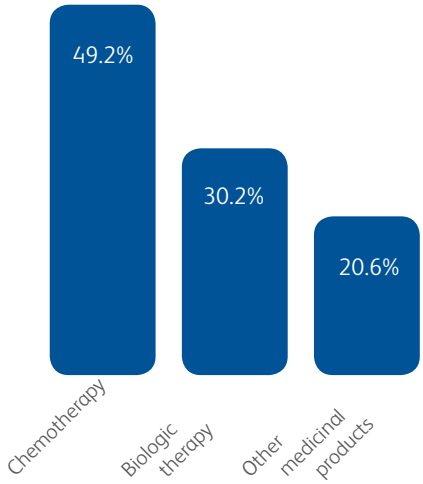


Figure 17. The share of medicinal products funded through the list of health services

In 2016, the share of pharmaceuticals services in the list of health services was 50.2 million euro, which has increased by 8% compared to last year. Most of the growth of the cost has been caused by the chemotherapy used in cancer treatment, in the case of which compensation of new active substances has started within the framework of the services, but also by biologic therapy.

In total, the Health Insurance Fund financed medicinal products for EUR 196 million from the budget of the healthcare services and from the budget of the outpatient pharmaceuticals benefit and the supplementary benefit for medicinal products, which accounted for 18,7% of health insurance costs.

Table 38. Funding of medicinal products from the budget of the Health Insurance Fund in thousands of euro

	2015 actual	2016 actual	The change compared to the year 2015
The medicinal products compensated for insured persons	112,801	131,246	16%
The use of the pharmaceutical codes in the list of healthcare services	46,592	50,240	8%
The cost of medicinal products in healthcare services	15,723	13,956	-11%
Additional benefit for medicinal products	349	391	12%
TOTAL COST OF MEDICINAL PRODUCTS	**175,465**	**195,833**	**12%**

4. Benefits for temporary incapacity to work

Benefits for temporary incapacity to work is a financial compensation paid based on a certificate of incapacity to work to an employed person who, due to a temporary leave from work, loses the income subject to social tax.

Benefits for temporary incapacity for work paid in 2016 amounted to 130 million euro, which is 13.3 million euro more than in the previous year.

Table 39. Execution of benefits for incapacity to work in thousands of euro

	2015 actual	2016 budget	2016 actual	Budget execution
Sickness benefits	52,743	52,165	58,354	112%
Care allowances	18,367	18,394	21,210	115%
Maternity benefits	42,264	44,160	46,695	106%
Occupational accident benefits	3,603	3,551	4,010	113%
TOTAL	**116,977**	**118,270**	**130,269**	**110%**

The procedure for the payment of the benefit for temporary incapacity to work depends on the type of the certificate and on the cause of the incapacity. (see the Health Insurance Fund website [9]) The source documents for the payment of benefits are for sick leave certificates, care leave certificates, maternity leave certificates, and adoption leave certificates.

Table 40. Comparison of the benefits for the incapacity to work

	2015 actual	2016 actual	The change compared to the year 2015
SICKNESS BENEFITS			
The number of the leaves compensated for by the Health Insurance Fund	229,201	251,266	10%
The number of days compensated for by the Health Insurance Fund	3,193,910	3,327,132	4%
The amount of benefit paid by the Health Insurance Fund (EUR thousand)	52,743	58,354	11%
Average benefit per one day (EUR)	16.5	17.5	6%
CARE ALLOWANCES			
The number of the leaves compensated for by the Health Insurance Fund	112,963	122,844	9%
The number of days compensated for by the Health Insurance Fund	895,948	961,035	7%
The amount of benefits paid by the Health Insurance Fund (EUR thousand)	18,367	21,210	15%
Average benefit per one day (EUR)	20.5	22.1	8%
Average length of leave	7.8	7.8	0%

[9] https://www.haigekassa.ee/et/inimesele/rahalised-huvitised/toovoimetushuvitised

MATERNITY BENEFITS			
The number of the leaves compensated for by the Health Insurance Fund	10,383	10,602	2%
The number of days compensated for by the Health Insurance Fund	1,443,956	1,477,337	2%
The amount of benefits paid by the Health Insurance Fund (EUR thousand)	42,264	46,695	10%
Average benefit per one day (EUR)	29.3	31.6	8%
Average length of the leave	139.1	139.3	0%
OCCUPATIONAL ACCIDENT BENEFITS			
The number of the leaves compensated for by the Health Insurance Fund	6,158	7,037	14%
The number of days compensated for by the Health Insurance Fund	137,096	139,848	2%
The amount of benefits paid by the Health Insurance Fund (EUR thousand)	3,603	4,010	11%
Average benefit per one day (EUR)	26.3	28.7	9%
Average length of the leave	22.3	19.9	-11%
TOTAL BENEFITS			
The number of the leaves compensated for by the Health Insurance Fund	358,705	391,749	9%
The number of days compensated for by the Health Insurance Fund	5,670,910	5,905,352	4%
The benefits paid by the Health Insurance Fund (EUR thousand)	116,977	130,269	11%
Average benefit per one day (EUR)	20.6	22.1	7%

In the last year has risen both the number of the compensated sick leave certificates as well as the number of days of incapacity for work together with the average rate of benefit per day. These indicators have increased in spite of a decrease in the number of employed, insured persons. In 2016, compared to the previous year, the number of employed, insured persons decreased by 1.7%, to the amount of 48.9% of the total number of the insured. However, the number of sick leave certificates per an employed insured has increased: In 2015, 0.37 and in 2016, 0.42 sick leave certificates issued for one employed, insured person. The average benefit paid per day is linked to the increase in the average wage. On the calculation of the benefit, the Health Insurance Fund is based on the previous year's income tax with social tax. In 2015, the average salary increased by 6%, and in 2016, the average benefit paid per day increased by 7%.

Sickness benefits

Sickness benefits are the benefits that are paid to the person with health insurance 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 doing so, during the period of incapacity to work caused by illness, domestic injury, traffic injury, and quarantine, no benefits are paid during 1-3 days, the benefit for days 4-8 is paid by the employer , and from the 9th day, the payment of the benefit is assumed by the Health Insurance Fund. For other reasons, the Health Insurance Fund will pay the benefit from the second day of illness.

In 2016, the Health Insurance Fund compensated for the sickness benefit of 221,000 insured persons, which compared with the previous year has increased by 13,000 persons. Sick leave certificates were used in 2016 mostly for the reasons of illness and domestic injury, 78%, and 14%, respectively. Compared to the previous year, the use of sick leave certificates by reasons remained unchanged.

To compare the length of sick leave, the Health Insurance Fund compensates the most for eight-day sick-leaves, followed by 5 and 7-day sick leaves. Most sick leaves were compensated for in February and less from June to September. This figure is particularly affected by the spread of viral diseases. The average length of sick leave compensated for by the Health Insurance Fund has decreased: In 2015, it was 13.9 days, and in 2016, it was 13.2 days. However, the number of sick leave certificates per an employed, insured person has increased: In 2015, 0.37 and in 2016, 0.42 sick leave certificates issued for one employed, insured person.

The major diagnostic groups of sickness benefits are musculoskeletal and connective tissue diseases, injuries, poisoning and certain other consequences of external causes, respiratory diseases, cardiovascular diseases, and cancer. Compared to last year, the greatest increase occurred in the sick leave certificates of the persons with the diagnosis of musculoskeletal and connective tissue diseases. In 2015, 51,000 sick leave certificates for 47,000 people with the diagnosis of musculoskeletal and connective tissue diseases were compensated for in the amount of 13 million euro. In 2016, 59,000 sick leave certificates for 51,000 people were compensated for in the amount of 15 million euro. The number of people with the diagnosis of musculoskeletal and connective tissue diseases has grown mainly in the age group of people of 50-69 years of age.

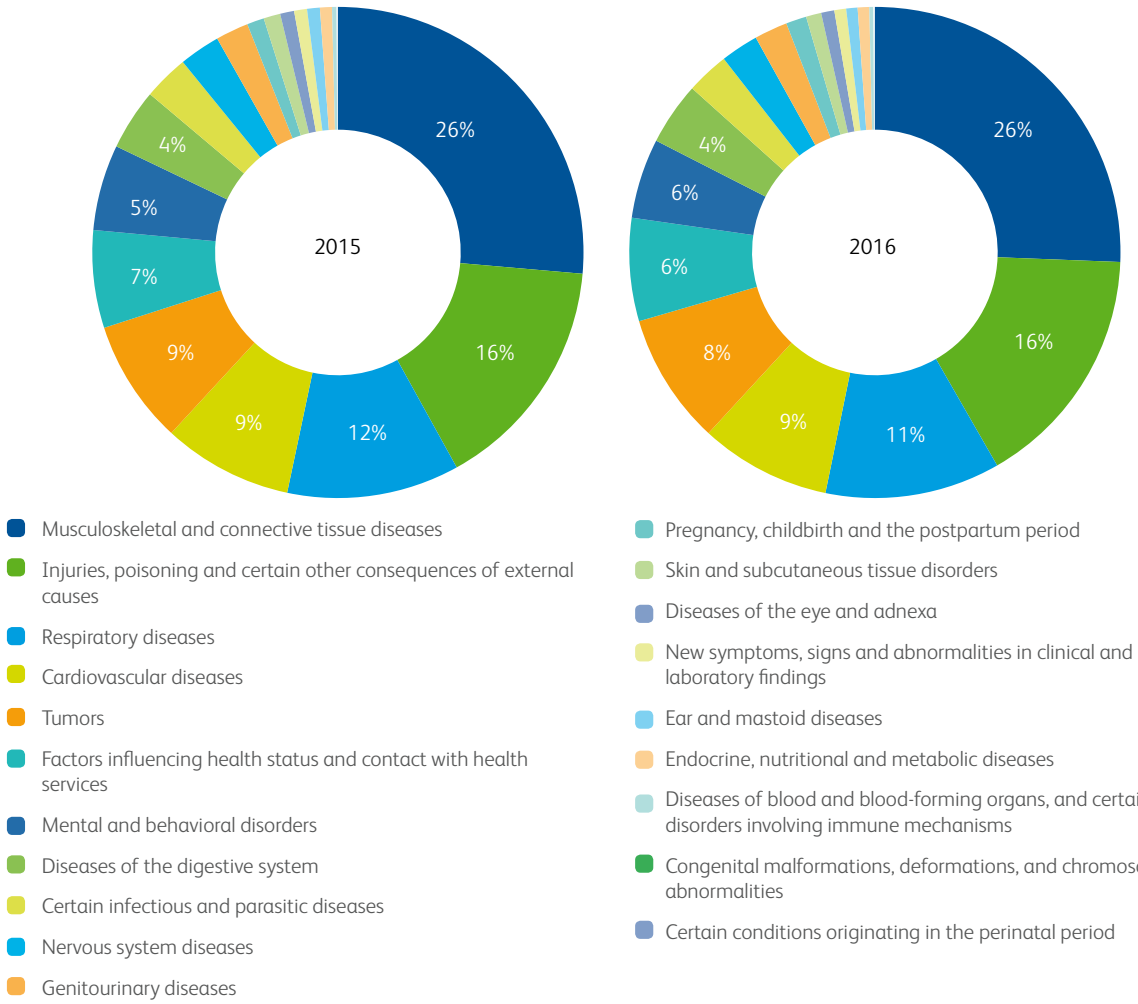


Figure 18. Distribution of sickness benefits according to diagnosis groups

Care allowances

Care allowances are benefits paid to the person with health insurance who takes care of a sick child or family member. The use of care allowances by reasons has not changed significantly compared to the previous year. The care allowance for taking care of an under 12-year-old child accounted for 97% of all the care allowances. The care leave certificates for caring for a child less than three years of age, or a disabled child under 16 years of age, accounted for a total of 3% of all the certificates.

In 2016, the Health Insurance Fund compensated for the care allowance of 120,000 persons. The number of people has grown by 10% or by 11,000 persons compared to the previous year. The growth of care allowances has been affected mostly by the growth of the number of children diagnosed with respiratory diseases and certain infectious and parasitic diseases. In both diagnosis groups, the number of people receiving care allowance has increased by over 5,000 people.

Maternity benefits

Maternity benefits are benefits paid to the employed person with health insurance during pregnancy and maternity leave.

In the year 2016, the number of maternity leaves increased by 2% compared to the same period in the previous year. The most significant increase in the number of maternity leave certificates has occurred in the age group 30 to 39 years of age.

Table 41. The use of maternity benefit usage by age groups

	People	Days compensated for	Days Average cost	The average length of the certificate
10–19 years old	72	10,058	13.7	139.7
20-29 years old	4,759	663,425	27.5	139.4
30-39 years old	5,291	737,203	35.0	139.3
40-49 years old	479	66,511	38.1	138.9

Occupational accident benefits

Occupational accident benefits are paid from the second day of the sick leave.

Breakdown of the certificates of incapacity to work, issued due to occupational accidents by reasons, has not significantly changed compared to the previous year. The reasons for leave in the sick leave certificates of occupational accidents submitted to the Health Insurance Fund in 2016 were classified as follows: accidents at work 95%, complications resulting from an accident at work 3%, and occupational injuries in traffic, 2%.

In 2016, the Health Insurance Fund compensated for the benefit for accidents at work for nearly 6000 people. The number of people who received the benefit has grown by 8% compared to the previous year, and the number of sick leave certificates issued due to an accident at work has increased by 14%. The number of people receiving benefits and the number of sick leave certificates issued due to an accident at work has increased the most in the age group of people of 50-59 years of age, and in the diagnosis group of injuries, poisonings and certain other consequences of external causes.

Benefits paid under the certificate issued on the basis of a foreign physician.

The Health Insurance Fund pays insured persons a benefit for temporary incapacity to work on the basis of the leave certificate issued by a foreign physician. In 2016, foreign physicians issued to the Estonian insured people 640 primary certificates of leave. Compared to the previous year, the number of certificates increased by 12%, but benefits were paid by more than 6%. In 2015, a foreign medical certificate was used to apply for sickness benefits in 90% of the cases, for care allowance in 6% of the cases, occupational accident benefit in 3% of the cases, and maternity benefits in 1% of the cases. The percentages of the benefits have changed significantly by the types of certificate for incapacity to work. In 2016, the proportions were respectively sickness benefits71%, care allowance 6%, occupational accident benefits 6% and maternity benefit 17%. Figure 19 shows that compared to the year 2015, issuing of certificates for incapacity to work by age groups has not significantly changed. Most of the 2016 certificates for incapacity to work were issued to people from 30 to 59 years of age.

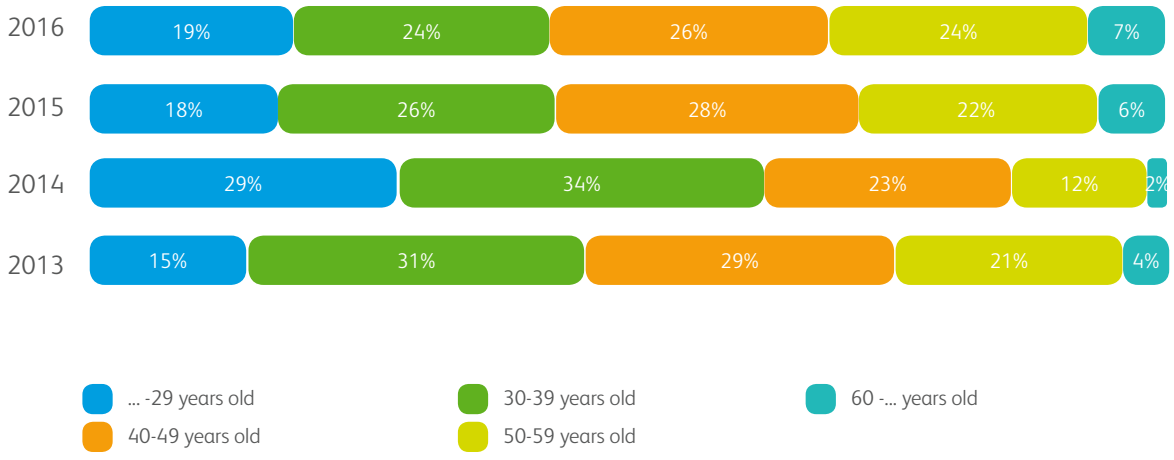


Figure 19. Foreign medical certificates by age groups in the years 2013-2016

5. Benefits for medical devices

The Health Insurance Fund will reimburse the insured persons with the necessary medical device, with the help of which it is possible to treat illnesses and injuries, or the use of which prevents the progression of the disease. The exact list of reimbursable medical devices and reimbursement conditions are established by the Regulation of the Minister of Health and Labor.

The benefit of a medical device is an open commitment to the Health Insurance Fund similarly to the medicinal products to be compensated for. The Health Insurance Fund compensates for the medical devices to all the insured persons to whom the doctor has prescribed its use, taking into account the conditions provided in the list of medical devices.

Compared to the year 2015, the volume of the benefits of medical devices has increased by 5%, and the number of users of medical devices has increased by 3.8%. The annual budget has been executed at 102%.

Table 42. Execution of the budget for medical devices in thousands of euro and the number of people

	2015 actual		2016 budget	2016 actual		Budget execution
	Amount	The number of people*	Amount	Amount	The number of people*	Amount
Primary early prostheses and orthoses	1,911	19,465	2,095	1,656	19,285	79%
Blood glucose meter test strips	3,838	42,828	4,200	3,954	44,688	94%
Stoma care devices	1,343	1,824	1,255	1,459	1,903	116%
Insulin pumps and insulin pump supplies	537	315	434	623	350	144%
Disposable needles of insulin pens	308	10,604	301	324	10,859	108%
Wound dressings and patches;	59	1,713	51	62	1,694	122%
Permanent positive pressure apparatus and masks	960	2,425	855	1,280	3,243	150%
Lancets	78	7,562	49	97	8,771	198%
Other medical devices	42	228	62	78	514	126%
TOTAL	**9,076**	**67,849**	**9,302**	**9,533**	**70,458**	**102%**

* Total number of people has been counted and not summarized, as one person may use multiple medical devices.

At the beginning of 2016, a number of new medical devices were included in the list of medical devices: compression products for treatment of lymphedema patients, skin care products for the treatment of patients with ichthyosis, and neck orthoses for the treatment of neck trauma patients. Also, the range of the stoma care products compensated for to stoma patients was extended and the amounts to be compensated for per half a year were increased. The growth in the volume of the benefits for medical devices resulting from the above changes was taken into account in drawing up the year 2016 budget. Compensation for compression products and skin care products in the larger than projected volumes is explained by the faster than expected introduction of new compensation possibilities by the insured suffering from either lymphedema or ichthyosis.

Compared to the same period last year, more than 13% less orthopedic products have been compensated for, while the number of users thereof has increased by nearly 1%. The result is probably related to the target selection performed by the Health Insurance Fund in the second half of the year 2015, in the course of which the merits and

the correctness of the prescription of the orthopedic products included in the list the medical devices on preferential terms were checked. Target selection has resulted in an increased awareness of doctors, and closer monitoring of the merits for prescribing orthopedic products.

Compared to the estimate, lancets were most frequently used. In previous years, a very little use of lancets was a problem. Despite the fact that the use of lancets is still small, the increase in the awareness of the insured is extremely positive, as a result of which the use of lancets grew in 2016 more than projected.

Permanent positive pressure apparatuses and masks, and insulin pumps and pump accessories have been compensated for more than planned. The latter reflects the rapid growth of the number of patients using the devices.

In 2016, 108 proposals were presented for supplementing or changing of the list of medical devices of the Health Insurance Fund, 60 of them found a positive solution. In total, on the list of medical devices were added 141 new medical devices, including two new medical device groups. Also, the compensation conditions for glucose sensors of insulin pumps, insulin needles and and tracheostomy patches were extended. Thus, since 2015, a number of new opportunities were added to the list for the insured.

6. The treatment of an Estonian insured person abroad

Treatment abroad consists of scheduled treatment provided to the insured under the Health Insurance Act and of the benefits under the European Union legislation. The recipient of the benefit is the person insured by the Estonian Health Insurance Fund. The provision of health services and payment, is regulated by the European Parliament and Council Regulation which is coordinating the social security systems of the EU countries, pursuant to which the healthcare benefits are an open commitment to the Estonian Health Insurance Fund.

In Estonia, at the end of the year 2013, came into force the Directive "European Parliament and Council Directive on patients' rights in cross-border healthcare." The conditions of compensation for the cross-border healthcare have been provided in the Health Insurance Act - patients may go to another Member State in order to receive, in addition to the necessary treatment, also scheduled treatment. Reimbursement of the cost from the Health Insurance Fund budget will take place on the basis of the limit prices of healthcare services currently existing in Estonia.

Table 43. The treatment of an Estonian insured person abroad in thousands of euro

	2012 actual	2013 actual	2014 actual	2015 actual	2016 budget	2016 actual	Budget execution
Planned treatment abroad	2,035	2,168	3,882	3,303	2,703	3,676	136%
The cost of the healthcare benefit of an Estonian insured person in another Member State	3,930	4,480	4,781	5,118	5,399	5,312	98%
The costs on the basis of the European Parliament and the Council Directive	0	0	101	98	167	117	70%
TOTAL	**5,965**	**6,648**	**8,764**	**8,519**	**8,269**	**9,105**	**110%**

Planned treatment abroad

The free cross-border movement of the insured is regulated by European Union legislation, the Health Insurance Act Insurance Fund, and the Finnish Red Cross agreement on finding bone marrow to non related donors. The insured will be referred to a planned treatment or examination in a foreign country if the healthcare service applied for, and its alternatives, are not provided in Estonia. The healthcare services must be indicated for the patient, and it must have a proven medical efficacy, and the average probability of achieving its goal must be at least 50%. An assessment of compliance with the criteria will be provided by a medical council consisting of at least two medical specialists.

During the year 2016, with the decision of the Management Board, the Health Insurance Fund has taken over the obligation of payment for scheduled healthcare services provided abroad in 244 cases. Of these, 64 decisions were made on planned treatment abroad, 141 for examinations, and in the case of 39 insured persons, the bone marrow non-related donor was sought by the Finnish Red Cross Blood Service.

Decisions to refuse were made during the reporting period in 23 cases, which is by 18 cases more than in the year 2015. In the case of decisions to refuse, mainly the services that are available on the list of healthcare services of the Estonian Health Insurance Fund, or the services list of health services, or the services for which there is no proven medical efficacy were applied for.

Table 44. Countries where the insured went to scheduled treatment or for tests*

Countries	Total	Treatment	Examination
Germany	59	7	52
Finland	56	31	25
The Netherlands	23	0	23
Sweden	20	8	12
Denmark	19	0	19
United Kingdom	10	6	4
Latvia	7	7	0
Belgium	5	0	5
Russia	2	2	0
The United States of America	1	1	0
Spain	1	0	1
Italy	1	1	0
Czech Republic	1	1	0
TOTAL	205	64	141

* The number of favorable decisions taken the same year does not match the number of people who received treatment in a foreign country, because the invoices do not always arrive in the year of submission of the application, as the treatment or the examination can be carried out later.

In 2016, treatment invoices were received from other countries for 258 persons. 92 insured of these went to seek treatment abroad, 118 went for tests, and 48 persons had expenses related to the search for a bone marrow donor. In 2015, treatment invoices were received from other countries for 283 persons.

The most expensive services of scheduled treatment are related to neonatal cardiac surgery.

The cost of the healthcare benefit of an Estonian insured person in another Member State

The insured of the Estonian Health Insurance Fund have the right to the European Parliament and the Council Regulation:

- while staying temporarily in another Member State to receive necessary healthcare;
- to receive any medical care while living in another Member State.

For the year 2016, 5.4 million euro were planned for the budget of the healthcare services of the persons temporarily staying in other Member States of the EU, of the posted employees and pensioners residing there, and the budget was implemented to the extent of 98%. Compared to the year 2015, the healthcare benefit of an Estonian insured person in another Member State has increased by 4%.

In 2016, a total of 96 aggregate invoices were received by the Health Insurance Fund from the other Member States, the individual invoices totaled 6500. Most invoices were submitted by Germany: - 2262 invoices totaling 1.8 million euro, followed by Finland (1151 invoices totaling 1.5 million euro), Spain - 540 invoices (164,000 euro),

Sweden - 452 invoices (595,000 thousand euro) and Belgium 357 invoices (125,000 thousand euro). Fewer invoices were received from the remaining countries and amounts were also lower.

Benefits under the Patients' Rights Directive

According to the Patients' Rights Directive 2011/24 / EU (hereinafter the Directive), patients can go to another EU Member State in order to receive treatment and after receiving the healthcare services, to seek financial compensation from the Health Insurance Fund for the services, which they are entitled to at the expense of the Health Insurance Fund, also in Estonia, in accordance with the prices provided in the list of healthcare services of the Health Insurance Fund. In 2016, 80 applications were granted, and 117,000 euro were compensated to the persons for healthcare services provided in foreign countries.

Most applications were submitted for compensation of health services provided for testing and treatment of neoplastic diseases, a total of 23 cases, or 26% of the applications submitted. In nine cases, patients went to seek treatment abroad for bone and joint diseases. These were followed by cardiac and vascular diseases, neurology, surgical diseases, eye diseases, ear, nose and throat diseases, various consultations, tests, and analyzes. In two cases, applicants sought compensation for carrying out in vitro fertilization treatment (IVF).

In 2016, under the Directive, patients went to 15 different EU Member States. The most preferred place to receive healthcare was Germany, which was visited by 26 people, followed by Finland with 13 cases, in Bulgaria, Spain, and Latvia, treatment was sought in 11 cases. In the remaining countries, patients sought treatment on single occasions.

In 2016, the Health Insurance Fund received nine requests for information prior to going to planned treatment, in order to find out the estimated recoverable amount of the planned healthcare service, on the basis of the healthcare service list of the Estonian Health Insurance Fund. In 2015, five queries were made for such information.

7. Dental care and denture benefits

The dental care benefit is a monetary compensation to be paid to the target groups provided by the Minister of Social Affairs regulation to improve the availability of dental care.

Monetary benefits of dental care are divided into:

- denture benefits;
- dental care benefits.

The monetary benefits of dental care were, in 2016, 9,5 million euro, which is 132,000 euro more than in the previous year, whereas the budget remained under executed. Denture benefits were paid by 34,000 euro more than in the previous year.

The average benefit was 190.63 euro, which is 2 euro higher than the average denture benefit of the previous year. Dental care benefits were paid in the same volume as in the previous year. The average payment for dental treatment was 19.93 euro and compared to the previous year; it has been left unchanged.

Table 45. Execution of the budget of dental care in thousands of euro, and the number of applications

	2015 actual		2016 budget		2016 actual		Budget execution	
	Amount	The number of applications	Amount	The number of applications	Amount	The number of applications	Amount	The number of applications
Denture benefit	7,444	39,461	7,562	42,750	7,581	39,768	100%	93%
Dental care benefit	1,918	96,251	2,070	96,000	1,913	95,970	92%	100%
TOTAL	**9,362**	**135,712**	**9,632**	**138,750**	**9,494**	**135,738**	**99%**	**98%**

The use of dental benefits in the year 2016 decreased by types among pregnant women, mothers of children less than 1 year of age, and people with an increased need for dental care. In the case of old-age or disability pensioners, it has remained virtually at the same level. The total number of submitted applications was less by 281 applications compared to the year 2015.

Table 46. The number of applications for dental care benefits by types

	2015 actual	2016 actual	The change compared to the year 2015
A pregnant woman	4,755	4,573	-4%
A mother of a child less than 1-year-old	5,266	5,201	-1%
A person with an increased need for dental care	143	134	-6%
Old age pensioner or a person receiving pension for incapacity to work	86,087	86,062	0%
TOTAL	**96,251**	**95,970**	**0%**

The Health Insurance Fund compensates for an insured person per year as follows:

- for a pregnant woman, for a person with an increased need for dental care, and for a mother of a child less than one-year-old, 28.77 euro;
- for an insured person of at least 63 years of age, an old-age pensioner, or person receiving a pension for incapacity to work, and as of the 2nd half of the year, for a person with a partial workability, or with no workability, under the State Pension Insurance Act 19.18 euro.

Denture services are compensated for to an insured person receiving an old-age pension or a pension for incapacity to work under the State Pension Insurance Act and an insured person over 63 years of age up to 255,65 EUR over 3 years.

For receiving dental care benefits, the insured must submit an application and a document certifying payment for the service to the Health Insurance Fund.

Denture benefits can be applied for in the Health Insurance Fund ex-post facto. By submitting an application directly to the doctor, a person can apply for the service immediately for a price more favorable to the amount of the benefit. The insured then pays to the service provider for the denture only the part in excess of the benefit; the Health Insurance Fund will pay the rest. Pensioners prefer an application for the benefit through the healthcare institutions, because they do not need to pay separately to the Health Insurance Fund, and the invoice to be paid is smaller by the amount of the benefit.

8. Other expenses

Other expenses reflect

- additional benefits for medicinal products
- Healthcare services of a European insured person
- Various health insurance benefits.

Table 47. Budget execution of other expenditures in thousands of euro

	2015 actual	2016 budget	2016 actual	Budget execution
Additional benefit for medicinal products	945	720	977	136%
Additional benefit for medicinal products	349	280	391	140%
Target-financed health insurance costs	596	440	586	133%
Healthcare services of a European Union insured	1,249	1,578	1,557	99%
Miscellaneous health insurance benefits	5	0	1	-
TOTAL	**2,199**	**2,298**	**2,535**	**110%**

8.1 Additional benefit for medicinal products

Since 2016, in the implementation of the budget of additional benefit for medicinal products, is also recognized the benefit for medicinal products financed under the Artificial Insemination and Embryo Protection Act.

8.1.1 Additional benefit for medicinal products

The insured person will receive an additional benefit for medicinal products if his or her expenses on the medicinal products of the pharmaceutical list exceed 300 euro per the calendar year (not considering the statutory co-payment or the prescription fee, and the amount more than the limit price). In 2016, both the number of persons receiving the benefits, as well as the average amount of benefits has grown. In 2016, the budget for supplementary benefits for medicinal products has been executed to the extent of 140%.

8.1.2 Benefit for medicinal products with targeted financing

The benefit for medicinal products with targeted financing is the medicines financed under the Artificial Insemination and Embryo Protection Act. Pharmaceuticals benefits can be applied for by a woman with health insurance who is up to 40 years of age (inclusive), who has a medical indication for the in vitro fertilization and/or embryo transfer.

In 2016, medicinal products were financed from the state budget for 586,000 euro.

8.2 Healthcare services of a European insured

The persons insured in the other EU Member States are entitled to:

- the necessary healthcare during a temporary stay in Estonia;
- any medical assistance while living in Estonia.

The necessary healthcare of the insured person of the EU Member States will be first be paid for by the Health Insurance Fund, but the final cost of healthcare services will be borne by the state providing insurance to the person.

For the healthcare services of the patients from the other Member States, who received treatment in Estonia, and for the discount pharmaceuticals issued, the total of 1.6 million euro was paid.

Table 48. Execution of the budget of healthcare services and medicinal products compensated for to the European insured in thousands of euro

	2011 actual	2012 actual	2013 actual	2014 actual	2015 actual	2016 budget	2016 actual	Budget execution
Healthcare services	1,149	1,170	1,106	1,214	1,207	1,525	1,527	100%
Medicinal products	50	58	93	44	42	53	30	57%
TOTAL	**1,199**	**1,228**	**1,199**	**1,258**	**1,249**	**1,578**	**1,557**	**99%**

8.3 Miscellaneous health insurance benefits

In the implementation of the budget of miscellaneous health insurance benefits are recognized the health insurance costs exceptionally compensated for on the decision of the Management Board of the Health Insurance Fund. In 2016, health insurance benefits in the amount of 1,000 euro were compensated for on the decision of the Management Board of the Health Insurance Board.

Operating expenses of the Health Insurance Fund

The operating expenses of administration of the health insurance benefits of the Health Insurance Fund, for the year 2016, 9.1 million euro were planned. In fact, 0.2 million euro more than planned, a total of EUR 9.3 million were spent on the administration activities. Over implementation of the budget resulted from the higher than planned information technology costs, value added tax costs, and one-time costs in connection with the write-off of claims.

The Health Insurance Fund proceeds in the planning of its activities and operating costs from the development plan approved by the Supervisory Board, and the scorecard objectives for the current year. The Health Insurance Fund uses activity-based planning, during which the processes/functions necessary for achieving the aims of the organization are reviewed, and the resource required for the performance of these functions is planned.

Table 49. Execution of the operating costs budget of the Health Insurance Fund in thousands of euro

	2015 actual	2016 budget	2016 actual	Budget execution
Labor costs	5,554	5,902	5,778	98%
Management costs	1,579	1,513	1,464	97%
Information technology costs	932	847	1,109	131%
Development costs	277	225	186	83%
Other operating costs	942	583	751	129%
TOTAL	**9,284**	**9,070**	**9,288**	**102%**

The operating expenses of the Health Insurance Fund in 2016, amounted to 0.88% of the total cost, which is the smaller percentage of all the years of operation. In the years 2004 and 2005, the proportion of the operating costs of the total cost was 1.3%, and in the year 2006, it fell to 1.1%. Since 2007, the percentage of the operating costs of the Health Insurance Fund has not exceeded 1% of the total cost.

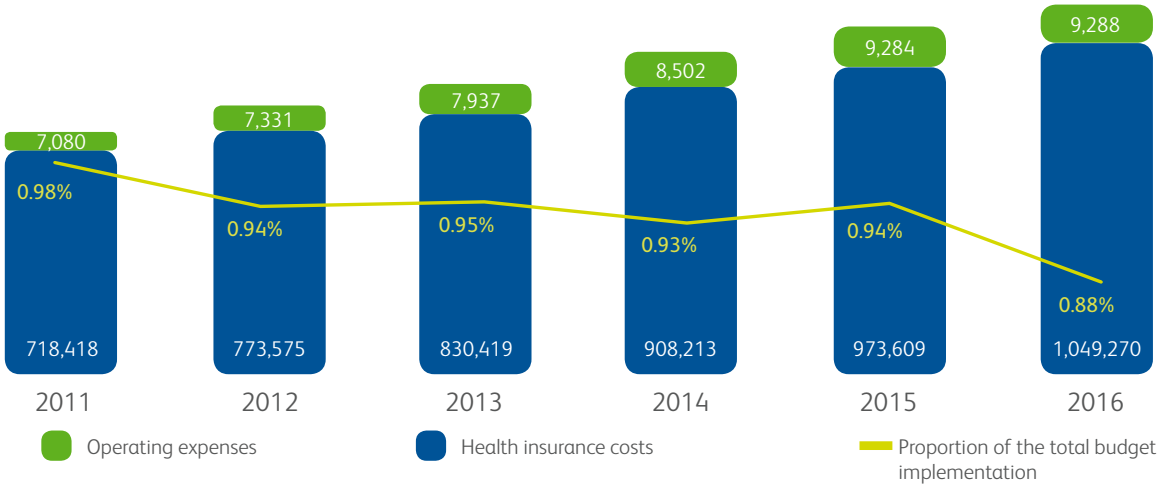


Figure 20. The percentage of the operating expenses of the total budget expenditure in the years 2011-2016

Labor costs

Planning of the resource needs of the personnel of the Health Insurance Fund is based on activity-based need matrix where through measurable activities (based on statistical key figures), and assessment activities (based on the assessments of managers and specialists), the number of posts is found for achieving the goals set for the budget period. The activity-based resources to the year 2016 was on drafting the budget deemed to be 215.6 posts. After the structural changes that took place over the year, the approved composition of the Health Insurance Fund is 207.6 posts, of which 208 posts were filled as of 31 December.

Management costs

In the management, expenses are recorded daily operating expenses, health insurance personnel training costs, consultancy (including auditing), research costs and internal communication costs. The total management costs were executed in 2016 at 97%.

The biggest part of the management costs is formed of the space management-related costs, which in 2016 were the total of 623,000 euro. The space management costs increased in 2016 compared to the previous year, slightly more in connection with the relocation. To better serve customers, and to create better working conditions for the employees, at the end of August the central departments of the Health Insurance Fund moved to Lastekodu street, where earlier was located the office of Harju Department of the Health Insurance Fund. The move will help to reduce the future office space rental costs of the Health Insurance Fund, because instead of the the former two office buildings, the Health Insurance Fund will, in the future, be renting premises in Tallinn in one office building.

In early 2016, we introduced a new document management system Web desktop, as a development of which we were able to enter some of the personnel documents for electronic processing into the document management system.

In 2015, we developed a competency model, and competency assessment system. In the first quarter of 2016, supervisor competency assessments were held on the basis of the model as a pilot project. On the basis of the competency model, the procedure of conducting development interviews taking place at the end of the year 2016 was prepared.

During the year 2016, in cooperation with KPMG Baltics OÜ, we were engaged in the development of the business continuity plans of the healthcare system for a variety of emergencies.

In the fourth quarter of the year 2016, the Health Insurance Fund participated in a study conducted by Kantar Emor "Estonian Customer Service Index (ETI) in the public sector in 2016", which was designed to provide an objective intersectoral overview of the level of service among providers of public services in Estonia. The survey assessed the level of service of the agencies in three service channels: direct service, telephone service, and email service. The survey showed that the Estonian Health Insurance Fund received a total average score of 3.8 points, whereas in 2016 in telephone service we achieved the maximum score of 4.0.

In 2016, continued the conducting of the quarterly survey, in cooperation with Turu-uuringute AS. On the basis of the results of an Image survey, in terms of confidence, we continue to be among the top ten among the Estonian public sector institutions - the Estonian Health Insurance Fund is trusted by 68% of the total population.

Since 2012, the Health Insurance Fund holds an ISO 9001: 2008 management system certificate. The management system certificate audit carried out at the beginning of 2016 assessed the effectiveness of the management system of the Health Insurance Fund on performance of the legislative, regulatory and contractual requirements as very high, and confirmed that the management of the Health Insurance Fund is clearly oriented to continuous improvement of the enterprise and the processes.

Information technology costs

IT expenses reflect the costs related to the acquisition of information technology equipment, software, and the development and maintenance of information technology systems of the Health Insurance Fund.

272,000 euro out of the information technology costs of the year 2016, accounted for the depreciation of the information technology fixed assets, and 837,000 euro accounted for the development, maintenance and licensing fees of the information technology systems. Over implementation of the information technology expenses results of the higher maintenance and license fees of the IT systems.

The Estonian Health Insurance Fund supports the development and maintenance of the healthcare information system of entire Estonia. The major information technology projects of the Health Insurance Fund, in the development of which funds are constantly being allocated, are the Digital Prescription Information System, further developments of electronic certificates for incapacity to work, (e-TVL2) and the launch of the digital registry.

In 2016, we were engaged in the development work necessary for introduction of the e-invoicing center. An agreement is signed with AS Eesti Post for the provision of the operator service of the e-invoicing center. From February 1, 2017, processing of submission and confirmation of administrative invoices, and of the accounting of the Health Insurance Fund, takes place electronically in the e-invoicing center.

Development costs

Under the development costs are recorded the costs of auditing and consultancy of the health insurance benefits and the costs related to informing the public (including the development of the Health Insurance Fund website).

Of the year 2016 development costs, the costs of the development and auditing of the health insurance system make up 153,000 euro, and the external communication costs make up 33,000 euro. The most important health insurance system development projects for the Health Insurance Fund, into the development of which continually funds are allocated, are the development of a uniform partner management system, and the development of the partner quality system.

Other operating costs

In addition to the value added tax accounted for the operating costs, the implementation of the budget of other operating expenses also reflects the targeted financing of the operating costs, and the losses resulting from the change in the currency exchange rate related to the operating costs, and the health insurance costs. Over implementation of other operating costs results from higher value added tax costs, and higher claims written off than projected. Over implementation of the VAT budget is related to major information technology and development expenditures.

Capital reserve

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

- The capital reserve of the Health Insurance Fund means the reserve formed for the budget funds for the health insurance fund for the reduction of the risk which macroeconomic changes may cause to the health insurance system.
- The capital reserve amounts to 6% of the budget.
- The capital reserve may only be used exceptionally on a Government Order on the proposal of the Minister responsible for the field. Before submitting the proposal to the Government, the Minister responsible for the field shall hear the opinion of the Supervisory Board of the Health Insurance Fund.

By the end of the year 2015, the legal reserve of the Health Insurance Fund was 57.2 million euro. According to the Estonian Health Insurance Act, § 38, the required amount of the capital reserves in 2016 was 60.8 million euro. In order to achieve the statutory level, the legal reserve was increased by 3.6 million euro in 2016.

In 2017, the required amount of the capital reserve was 67 million euro. In order to meet the legally required level, in 2017 the reserve capital has to be increased by 6.2 million euro.

Risk reserve

Formation of risk reserve is governed by the Estonian Health Insurance Fund Act § 39^1 as follows:

- The risk reserve of the Health Insurance Fund is the reserve formed from the budget funds of the Health Insurance Fund for the reduction of the risks caused by the taken obligations to the health insurance system.
- The capital reserve amounts to 2% of the volume of the Health Insurance Fund budget.
- The risk reserve can be introduced by the decision of the Supervisory Board of the Health Insurance Board.

By the end of the year 2015, the amount of the risk reserve of the Health Insurance Fund was EUR 18.9 million. According to the Estonian Health Insurance Act, § 38, the required amount of the risk reserves in 2016 was 20.1

million euro. In order to achieve the statutory level, the risk reserve was increased by 1.2 million euro in 2016.

In 2017, the required amount of the risk reserve was 22.1 million euro. In order to meet the legally required level, in 2017 the risk reserve must be increased by 2 million euro.

Retained earnings

The introduction of the retained earnings of the Estonian Health Insurance Fund from the previous periods is governed by the Health Insurance Fund Act §36[1] as follows

- The retained earnings of the Estonian Health Insurance Fund from the previous periods has been permitted to be introduced during a financial year to the extent of up to 30%, but not more than 7% of the healthcare costs provided in the Heath Insurance Fund Budget in the previous calendar year.
- The introduction of the retained earnings of the Estonian Health Insurance Fund from the previous period is decided by the Supervisory Board on the basis of a proposal of the Management Board.

At the beginning of the year 2016, the retained earnings of the Estonian Health Insurance Fund from the previous periods was 119 million euro.

In 2016, EUR 3.6 million was transferred from the retained earnings of the previous period to the capital reserve and EUR 1.2 million to the risk reserve, to bring the reserves to the level required by law.

By 2016, the planned total net gain was to be minus 9.1 million euro. As in the reporting year, funding of healthcare benefits exceeding the planned amount, the total net gain of the year 2016 was minus 29.6 million euro.

As of 31 December 2016, the total retained earnings were 84.5 million euro.

The Management Board of the Health Insurance Fund will make a proposal to the Supervisory Board to transfer EUR 6.2 million from the retained earnings of the previous period to the capital reserve and EUR 2 million to the risk reserve, to bring the reserves to the level required by law.

Annual accounts

Balance sheet

In thousands of euro	31.12.2016	31.12.2015	Annex
ASSETS			
Current assets			
Cash and cash equivalents	119,620	152,881	2
Receivables and prepayments	106,699	96,549	3
Inventories	3	4	4
Total current assets	**226,322**	**249,434**	
Fixed assets			
Long-term receivables	343	345	5
Tangible assets	1,127	897	6
Intangible assets	0	39	6
Total fixed assets	**1,470**	**1,281**	
Total assets	**227,792**	**250,715**	
LIABILITIES			
Obligations			
Short-term obligations			
Payables and prepayments	62,395	55,722	8
Total short-term obligations	62,395	55,722	
Total obligations	**62,395**	**55,722**	
Net assets			
Reserves	80,900	76,032	9
Earnings from previous periods	114,093	137,501	
Earnings from the accounting period	-29,596	-18,540	
Total net assets	**165,397**	**194,993**	
Total liabilities	**227,792**	**250,715**	

Profit and loss statement

In thousands of euro	2016	2015	Annex
Health insurance part of the social security tax and recoveries from other parties	1,022,282	959,625	10
Revenues from targeted financing	1,548	1,560	17
Expenses of targeted financing	-1,567	-1,585	17
Health insurance costs	-1,047,746	-972,118	13
Gross result	**-25,483**	**-12,518**	
General administrative expenses	-8,537	-8,342	14
Other operating revenues	4,971	2,906	11
Other operating costs	-708	-848	15
Operating profit	**-29,757**	**-18,802**	
Financial and interest income	161	262	12
Earnings from the accounting period	**-29,596**	**-18,540**	

Cash flows

In thousands of euro	2016	2015	Annex
Cash flows from the principal activity			
Proceeds from social tax	1,013,785	952,146	
Invoices paid to suppliers	-1,045,761	-975,399	
Fees paid to employees	-4,507	-4,314	
Taxes paid on labor costs	-1,517	-1,448	
Other revenues	5,356	6,168	
Total cash flow from the principal activity	**-32,644**	**-22,847**	
Cash flow from investing activities			
Paid for fixed assets	-617	-618	
Total cash flow from investing activities	**-617**	**-618**	
Net change in cash and bank accounts	**-33,261**	**-23,465**	
Bank accounts and cash equivalents at the beginning of the period	152,881	176,346	2
The change of cash	-33,261	-23,465	
Bank accounts and cash equivalents at the end of the period	119,620	152,881	2

Report of changes in net assets

In thousands of euro	2016	2015	Annex
Reserves			
Reserves at the beginning of the year	**76,032**	**72,337**	
Separation into reserves	4,868	3,695	
Reserves at the end of the year	**80,900**	**76,032**	9
Earnings from previous periods			
At the beginning of the year	**118,961**	**141,196**	
Separation into reserves	-4,868	-3,695	
Earnings from the accounting period	-29,596	-18,540	
At the end of the year	**84,497**	**118,961**	
Net assets at the beginning of the year	**194,993**	**213,533**	
Net assets at the end of the year	**165,397**	**194,993**	

Annexes to the annual accounts

Annex 1 The accounting policies used in preparing the annual accounts

The annual accounts of the Estonian Health Insurance Fund (hereinafter the Health Insurance Fund) for the year 2016 have been prepared in accordance with generally accepted accounting policies of Estonia. Generally accepted accounting policies of Estonia is the accounting policies based on internationally accepted accounting and reporting principles, the basic requirements of which have been established by the Estonian Accounting Act and supplemented by the guidelines of the Accounting Standards Board. The annual accounts have been prepared under the general rules of state accounting.

In 01.01.2017 entered into force the public sector financial accounting and reporting manual, which introduced new fixed asset cost limits. Tangible fixed assets are the assets of a more than a one-year useful life whose acquisition cost exceeds EUR 5,000. The assets with a shorter useful life and lower acquisition costs are expensed on the acquisition of assets.

In connection with the raising of the cost limit of tangible and intangible fixed assets to 5,000 euro, the asset objects with the smaller cost were removed from the balance sheet as at 31.12.2016, reflecting the residual value as depreciation costs (see Annex 6).

The financial year started on 1 January 2016 and ended on 31 December 2016. The figures of the annual accounts are presented in thousands of euro.

Reporting formats

As a profit report, the statutory income statement format 2 is used, the structure of the records of which are modified on the basis of the specific nature of the activities of the Health Insurance Fund.

Financial assets and liabilities

Financial assets include cash, accounts receivable and other short-term and long-term receivables. Financial liabilities include trade and other payables, accrued expenses and other short and long-term debt obligations.

Financial assets and liabilities are initially recognized at acquisition cost, being the fair value paid or received for the financial asset or liability. Initial acquisition costs include all the related transaction costs directly related to all financial assets and liabilities.

Purchases and sales of financial assets are consistently recognized at the value date, i.e., at the date when the Health Insurance Fund becomes the owner of the purchased financial assets or loses its ownership of the sold financial asset.

Financial liabilities are recognized on the balance sheet at amortized acquisition cost.

Financial assets are removed from the balance sheet when the Heath Insurance Fund loses the right to receive cash flows from the financial asset or transfers the cash flows from the financial assets and the majority of the risks and rewards associated with financial assets to a third party. A financial liability is derecognised in the balance sheet when it is discharged, canceled or expired.

Cash and cash equivalents

Cash and cash equivalents include cash in the bank. The cash flow statement has been prepared using the direct method.

Recognition of foreign currency transactions

Recognition of foreign currency transactions is based on the European Central Bank's currency exchange rates at the transaction date. The monetary assets and liabilities and non-monetary assets and liabilities that are recorded in foreign currency measured at a fair value option are translated into euro at the balance sheet date at the exchange rates of the European Central Bank, at the balance sheet date. Gains and losses from foreign exchange transactions are recognized in the income statement as income or expenses in the period.

Accounting for receivables

Trade receivables include claims for goods sold and services rendered, and the requirements in respect of health insurance benefits, which are due within the next financial year. Receivables, whose due date is longer than one year, including the rescheduled tax claims of the Tax and Customs Board and, are recorded as long-term receivables.

Requirements for sales of goods and services include requirements for prescription forms sold to medical care institutions and family physicians, the requirements to the Ministry of Social Affairs for the services of processing medical invoices and the requirements to the competent authority of the insuring Member State for healthcare services of the patients from the other EU Member States treated in Estonia.

The probability of collecting receivables is assessed at least once a year at the balance sheet date. Receivables are individually assessed and recognized in the balance sheet on the basis of conservative principles in view of the amounts collectible. Receivables whose collection is improbable are expensed for the accounting period. Previously expensed receivables that have been received during the accounting period are reflected as a reduction of the cost of improbable claims.

Receivables, whose collection is not possible or economically justified, are considered uncollectible and written off.

Inventory accounting

Inventories are recorded at acquisition cost and expensed using the FIFO method. Inventories are measured on the balance sheet, based on whichever is lower - the acquisition cost or net realizable value.

Tangible assets

Tangible fixed assets are recorded at acquisition cost and depreciated on a straight-line basis in accordance with their expected useful life. The land is not subject to depreciation.

The used depreciation periods (in years) are as follows:

- Buildings 10-20
- Inventory 2-4
- Machinery and equipment 3-5

The expenses made on the tangible assets after the acquisition are generally expensed as incurred. Additional expenses are added to the cost of tangible fixed assets when it is probable that this expenditure allows the asset to generate more economic benefits than the initial estimate, and these costs can be reliably estimated and attributed to the asset.

Intangible assets

Intangible assets are identifiable assets with no physical substance, that have more than one year of useful life and that are used in the operations and whose acquisition cost exceeds EUR 5,000.

Intangible fixed assets are recorded at acquisition cost and depreciated on a straight-line basis within 2 to 5 years.

The expenses made on the intangible assets after the acquisition are generally expensed as incurred. Additional expenses are added to the cost of intangible fixed assets when it is probable that this expenditure allows the asset to generate more economic benefits than the initial estimate, and these costs can be reliably estimated and attributed to the asset.

Targeted financing

The targeted financing is the grants provided and received for intended purposes, subject to certain conditions in which case the grantor supervises the targeted use of the grant. Targeted financing is not recognized as revenue or expenses until the conditions related to targeted financing are met.

Targeted financing is recognized as income when the targeting financing becomes collectible.

Accounting of revenues and expenditures

Revenues and expenses are recognized on an accrual basis. Interest income is recognized on an accrual basis.

The most important types of revenue of the Health Insurance Fund are the health insurance part of the social tax and recoveries from other parties. The health insurance part of the social tax is received by the Tax and Customs Board in the form of weekly transfers. On a monthly basis, the Tax and Customs Board forwards to the Health Insurance Fund the notification of forwarding of tax balances under which revenue is recognized in the accounts. Amounts due from other parties are recognized on submitting a claim to legal persons for compensation for financial damages caused to the Health Insurance Fund under the law or the contract. The claims submitted to natural persons are taken up at the receipt of the claim.

Accounting for operating and finance lease

A financial lease is a lease, in the case of which all substantially risks and rewards related to ownership are transferred to the lessee. The remaining lease contracts are treated as operating leases. On the classification of leases into financial and operating leases, the public sector entities consider a criterion referring to the financial lease also the situations provided in IPSAS 13 (Leases) section 15, where leased assets cannot easily be replaced by another asset.

The assets leased under the financial lease are recognized on the balance sheet as assets and liabilities at fair value of the leased property. The lease payments to be paid are divided into financial costs and reduction of liabilities. Financial costs are recognized during the lease period.

Operating lease payments are recognized during the lease period as linear expenses.

Provisions and contingent liabilities

The Health Insurance Fund establishes provisions for liabilities with uncertain due dates or amounts. Determining the amount and the due date of the provisions takes place on the basis of the assessment of the management or the experts of the relevant field.

A provision is recognized when a legal or constructive obligation has emerged for the Health Insurance Fund before the balance sheet date, the likelihood of realization of the provision in the form of expenses of the resources is more than 50%, and the amount of the provision can be reliably determined.

Contingent liabilities are liabilities whose settlement probability is less than 50% ,or the amount of which cannot be reliably estimated. Contingent liabilities are disclosed and are kept off the statement of financial position.

Risk reserves

Formation of risk reserves of the Health Insurance Fund is governed by the Estonian Health Insurance Fund Act § 39^1 as follows:

- The risk reserves of the Health Insurance Fund are the reserves formed of the budget funds of the Health Insurance Fund for the reduction of the risks caused by the taken obligations to the health insurance system.
- The capital reserves amount to 2% of the volume of the Health Insurance Fund budget.
- The risk reserves can be introduced by the decision of the Supervisory Board of the Health Insurance Board.

The Health Insurance Fund has an obligation to establish risk reserves as of 1 October 2002, relating to the entering into force of the Health Insurance Act. With the said Act, the Estonian Health Insurance Act was amended by supplementing the said Act by § 39[1].

A provision to the risk reserves is formed by a decision of the Supervisory Board after the approval of the audited annual report.

Capital reserves

Formation of the legal reserves of the Health Insurance Fund is governed by the Estonian Health Insurance Fund Act § 38 as follows:

- The capital reserve of the Health Insurance Fund means the reserves formed of the budget funds for the health insurance fund for the reduction of the risk which macroeconomic changes may cause to the health insurance system.
- The size of the legal reserves are 6% of the budget volume. Each year, at least one-fiftieth of the total budget of the health insurance fund and revenue from the social tax revenue prescribed for the payment of health insurance benefits, which is higher than prescribed in the state budget, shall be transferred to the legal reserves, until the amount of the legal reserves provided by this Act are reached or restored.
- The capital reserves may only be used as an exception by order of the Government of the Republic of 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 provision to the capital reserves is formed by a decision of the Supervisory Board after the approval of the audited annual report.

Post-balance-sheet date events

The annual accounts reflect the significant facts affecting the assessment of assets and liabilities which occurred between the balance sheet date, December 31, 2016, and the date of preparing the annual accounts, but is related to the transactions taking place in the accounting period or prior periods.

The post-balance sheet events that have not been taken into account in the assessment of the assets and liabilities, but which significantly affect the outcome of the next financial year, are disclosed in the annexes of the annual accounts.

Annex 2 Cash and cash equivalents

In thousands of euro	31.12.2016	31.12.2015
Cash in the bank	119,620	152,881

The means of the Health Insurance Fund are held on the current account belonging to the composition of the group account of the Treasury of the Ministry of Finance. According to the deposit agreement concluded between the Estonian Health Insurance Fund and the Republic of Estonia, the Health Insurance Fund has unrestricted access to the money on the group account with a weeks' notice. The Republic of Estonia has the right to determine the usage limit to the deposited amount, but as of 31.12.2016, this has not been done.

Annex 3 Receivables and prepayments

In thousands of euro	31.12.2016	31.12.2015
Trade receivables	5,231	2,665
Uncollectible receivables	-112	-144
Targeted financing requirement*	25	22
Operating expenses reimbursement requirements**	0	26
The requirements to the policyholders under the contract	30	24
Interest receivables	0	5
The social tax requirement**	101,020	93,539
Prepaid future expenses	505	412
Total	**106,699**	**96,549**

* Targeted financing requirement is to the Ministry of Social Affairs for funding of artificial insemination treatments.
*** The social tax requirement in the amount of 101,020 thousand euro consists of short-term requirements against the Tax and Customs Board for the calculated healthcare insurance part of the social tax.

Annex 4 Inventories

The Health Insurance Fund as of 31.12.2016, in its inventory of unused prescriptions, forms an amount of EUR 3 thousand (as of 31.12.2015, 4 thousand euro).

Annex 5 Long-term receivables

Various long-term receivables

Under long-term receivables is recorded the long-term part of the amount paid to the Estonian National Social Insurance Board for the renovation of Pärnu Department and the former Rapla office. As of 31.12.2016, it is 343 thousand euro (as of 31.12.2015, 345 thousand euro).

Annex 6 Fixed assets

In connection with the raising of the cost limit of tangible and intangible fixed assets to 5,000 euro, the asset objects with the smaller cost were removed from the balance sheet as of 31.12.2016, reflecting the residual value as depreciation costs in the amount of 11 thousand euro. Raising the cost limit results from the requirements of the public sector financial accounting and reporting guidelines § 58 clause 15 entered into force on 01.01.2017.

6.1. Tangible assets

In thousands of euro	Country	Buildings	Other inventory	Total tangible fixed assets
Acquisition cost				
31.12.2015	**1**	**411**	**1,897**	**2,309**
Acquired fixed assets	0	0	533	533
Written-off	0	0	-153	-153
31.12.2016	**1**	**411**	**2,277**	**2,689**
Accumulated depreciation				
31.12.2015	**0**	**319**	**1,093**	**1,412**
Calculated depreciation	0	22	270	292
Written-off	0	0	-142	-142
31.12.2016	**0**	**341**	**1,221**	**1,562**
Residual value				
31.12.2015	**1**	**92**	**804**	**897**
31.12.2016	**1**	**70**	**1,056**	**1,127**

6.2. Intangible assets

In thousands of euro	Purchased licenses
Acquisition cost	
31.12.2015	**616**
Acquired fixed assets	0
Written-off	0
31.12.2016	**616**
Accumulated depreciation	
31.12.2015	**577**
Calculated depreciation	39
Written-off	0
31.12.2016	**616**
Residual value	
31.12.2015	**39**
31.12.2016	**0**

Annex 7 Rental charge

Operating lease

The accounting entity as the lessee

The year 2016 income statement reflects the operating lease payments in a total amount of 437 thousand euro. Of this amount, 28 thousand euro were recognized in the expenditures for the lease of vehicles, and the amount recognized under the rental contracts of premises is 409 thousand euro.

The operating lease payments were recognized in 2015 in a total amount of 365 thousand euro. Of this amount, 29 thousand euro were for the lease of vehicles, and 336 thousand euro was spent on the rental contracts.

There are no contingent liabilities related to lease payments. The lease contracts of premises can be terminated with the prior notification term of two months to one year, depending on the contract.

Operating lease expenses are recognized in Annex 14.

Annex 8 Payables and prepayments

As of 31.12.2016, the arrears and advance payments total 62,395 thousand euro, and as at 31.12.2015, they were 55,722 thousand euro. The balance consists of the debts to suppliers, tax debts, and other debts.

8.1. Debts to suppliers

In thousands of euro	31.12.2016	31.12.2015
Unpaid invoices for services to medical institutions	46,714	40,437
Unpaid invoices for the medicinal products issued to pharmacies on preferential terms	7,041	6,648
Unpaid invoices for the health insurance benefits to other suppliers	5,321	5,535
Other payables to suppliers	289	316
Total	**59,365**	**52,936**

Debts to suppliers include transactions with related parties in the amount of 3,015 thousand euro (as at 31.12.2015, 2,882 thousand euro), see Annex 16

8.2. Tax arrears

In thousands of euro	31.12.2016	31.12.2015
Personal income tax	2,253	2,030
Social tax	217	235
Fringe benefit tax	3	5
Unemployment insurance tax	10	11
Compulsory pension payments	6	7
Value added tax	0	1
Total	**2,489**	**2,289**

Personal income tax arrears include the personal income tax withheld from the benefit of incapacity for work calculated for the insured by the Health Insurance Fund in the amount of 2,189 thousand euro (as at 31.12.2015, 1,952 thousand euro).

The social tax arrears include the social tax calculated from the holiday pay not paid to the employees in the amount of 66 thousand euro (57 thousand euro as of 31.12.2015).

8.3. Other debts

In thousands of euro	31.12.2016	31.12.2015
Payables to employees	281	315
Other debts	224	182
Advance payments received	36	0
Total	**541**	**497**

Advances received reflect the remaining amount of the advance payment of the Moldova project funded by the Ministry of Foreign Affairs, in the amount of 36 thousand euro.

As a contingent liability, we disclose liability existing for the Estonian Health Insurance Fund, the realization of which is probable but the amount of the liability cannot be measured with sufficient reliability.

Estonian pensioners who are residing permanently in other EU countries are insured by the Estonian Health Insurance Fund. The healthcare services of these persons are paid for by the Health Insurance Find, according to the average cost of treatment of the respective country. As it is known, the largest number of Estonian pensions are in Finland.

The average treatment cost per person by age group is calculated on the basis of the established criteria for each year separately and is submitted for approval to the Audit Board of the Administrative Committee located at the European Commission and coordinating Social Security Systems. According to the European Parliament and Council Regulation (EC) No 987/2009 Act. The average cost per person for a particular year shall be notified by the Audit Board by the end of the second year following the reporting year.

The average treatment cost estimate of the year 2013 submitted by Finland was published in 2016, and on the basis of a statement submitted by a competent authority of Finland, the cost of the year 2013 accounted for as a cost of the year of 2016. These costs are reflected in Annex 13 “Healthcare benefits arising from international agreements in the amount of 894 thousand euro.

At the moment of preparation of the report, the information regarding the year 2014 is insufficient. The data of the year 2015 is not available. Probably the cost will increase from year to year because the average treatment cost per person has a rising trend. For the year 2016 Finland no longer submits the invoices for the average treatment cost, as it will start submitting invoices for the actual cost of treatment.

Annex 9 Reserves

In thousands of euro	31.12.2016	31.12.2015
Capital reserve	60,811	57,160
Risk reserve	20,089	18,872
Total reserves	**80,900**	**76,032**

As of the end of 2015, the capital reserves of the Health Insurance Fund amounted to 57,160 thousand euro. In 2016, the required size of the capital reserve was 60,811 thousand euro. In order to meet the statutory level, in 2016, 3,651 million euro were transferred to the capital reserves.

By the end of the year 2015, the amount of the risk reserves of the Health Insurance Fund was 18,872 thousand euro. In 2016, the required size of the risk reserve was 20,089 thousand euro. In order to meet the statutory level, in 2016, 1,217 million euro were transferred to the risk reserves.

Due to the covering of the negative result of 2016 from the retained earnings, and for the proper increase of the capital reserves, and the risk reserves, by the year 2017, the maximum allowable use of the retained earnings in 2017, was 25.3 million euro, out of which to cover the negative result, 17.1 million euro.

Financial sustainability of health insurance is ensured through methodical financial planning, which is based on clear principles of strategic purchasing and on adequate reserves. In order to guarantee the stability of the budgetary position, the Supervisory Board of the Health Insurance Fund has submitted an overview of the potential financial risks and their mitigation measures.

Annex 10 Revenue from principal activities

In thousands of euro	2016	2015
Health insurance part of the social security tax	1,021,266	958,599
Amounts due from other parties	1,016	1,026
Total	**1,022,282**	**959,625**

Amounts due from other parties includes requirements to related parties in the amount of two thousand euro (in 2015, 8 thousand euro), see Annex 16.

Annex 11 Other operating revenues

In thousands of euro	2016	2015
Voluntary insurance contracts	883	787
Transnational insurance contracts	516	530
Services rendered to the European Union citizens	3,511	1,519
Medical invoices processing fees	56	45
Foreign exchange gains	5	25
Total other operating revenues	**4,971**	**2,906**

Annex 12 Financial and interest income

The Ministry of Finance calculates for the Health Insurance Fund, interest from the cash deposited in the current accounts belonging to the group account of the state, the amount of which is equal to the return of national cash reserves, see Annex 2.

Interest on cash balances in 2016 was 161 thousand euro (in 2015, 262 thousand euro).

Annex 13 Health insurance costs

In thousands of euro	2016	2015
Healthcare services benefits	754,957	712,692
including disease prevention	8,371	7,650
Primary medical care	103,199	92,460
Specialized medical care	589,979	561,533
Nursing care	30,103	28,450
Dentistry	23,305	22,599
Health promotion costs	1,193	1,088
Expenses on pharmaceuticals benefit	131,246	112,801
Costs of the benefits for temporary incapacity for work	130,269	116,977
Other cash benefits	9,885	9,711
Other health insurance benefit costs	20,196	18,849
including healthcare benefits arising from international agreements	10,662	9,768
medical device benefits	9,533	9,076
Various health insurance costs	1	5
Total health insurance costs	**1,047,746**	**972,118**

Within the health insurance costs are recognized transactions with related parties in the amount of 38,909 thousand euro (in 2015, 43,000 thousand euro), see Annex 16.

Annex 14 General administrative expenses

In thousands of euro	2016	2015
Personnel and administrative expenses	5,778	5,554
Wages	4,321	4,154
including the remuneration of the members of the Management Board	147	147
including the remuneration of the employees with the contract of employment	50	75
Unemployment insurance	33	31
Social tax	1,424	1,369
Management costs	1,464	1,579
including operating lease payments*	437	365
Information technology costs	1,109	932
Development costs	186	277
Total general administrative expenses	**8,537**	**8,342**

*see Annex 7.

Within the economic expenses, no transactions are recognized with related parties (in 2015, four thousand euro), see Annex 16.

Among the remuneration of the Management Board members has been recognized 11 thousand euro of performance pay, the payment of which shall be decided by the Supervisory Board after the approval of the annual report.

The number of employees of the Estonian Health Insurance Fund	2016	2015
Members of the Management Board	3	3
Leaders	12	16
Top level specialists	78	62
Mid-level specialists	115	119
Support staff	0	5
The total number of employees	**208**	**205**

Annex 15 Other operating costs

In thousands of euro	2016	2015
Foreign exchange losses	15	44
Requirements written off	111	148
VAT cost from the operating expenses	526	591
Health insurance forms	54	52
State fees	2	1
Notary fees, bailiff fees, and court fees	0	11
Compensation of health services by way of exception	0	1
Total other operating expenses	**708**	**848**

Annex 16 Transactions with related parties

Related parties are the members of the Management Board and the Supervisory Board of the Health Insurance Fund and companies, and healthcare providers with whom the Health Insurance Fund is linked by the Management Board or Supervisory Board members. Health services are purchased from related parties under the same conditions as applying to other healthcare providers.

Transactions with related parties in the year 2016

In thousands of euro	Amount	Annex
Purchase of services	38,909	13, 14
Sale of services	2	10
Obligation 31.12.2016	3,015	8
Claim 31.12.2016	0	

In 2016, no discounts of claims were made with related parties As purchases of services, the treatment services purchased from healthcare providers are mainly reflected, where the related person of the institution is a member of the Supervisory Board.

Transactions with related parties in the year 2015

In thousands of euro	Amount	Annex
Purchase of services	43,831	13, 14
Sale of services	8	10
Obligation 31.12.2015	2,882	8
Claim 31.12.2015	0	

On the expiration of the contract of service of the Management Board members, compensation paid to them to the extent of three months' remuneration.

The remuneration calculated for the members of the Management Board are shown in Annex 14.

Annex 17 Targeted financing

Under the Artificial Insemination and Embryo Protection Act, § 35^1 paragraph 5, compensation for medicinal product expenses related to the IVF procedure and payment for the infertility treatment to the healthcare providers for the insured persons takes place on the basis of a contract subject to targeted financing.

Ministry of Foreign Affairs has, on the basis of the Government Regulation No. 8 of January 21, 2010 "Conditions and Procedures for the provision of development and humanitarian aid" § 25 section 8 entered into a contract with the Health Insurance Board, to support the health insurance system of Moldova.

24.11.2015 a one-year cooperation agreement was signed by the Health Insurance Fund and the Software Technology and Applications Development Center. This cooperation agreement has been concluded for the conducting of the project EU48684 subprojects 4.1 „Technologies for Information Extraction, data integration and management (Health-IE)“ and 4.2 „Health Data Analysis“ funded by EAS.

With this target-financed project (STACC project) it is possible through the Software Technology and Applications Development Center to use the means of Enterprise Estonia for solving analytical challenges significant for the Health Insurance Fund.

According to the agreement concluded with the Ministry of Social Affairs, and on the basis of mutual interest to ensure that all children have equal opportunity to protect their health, the project was done for automatic registration of all neonatal data in the family physician's list.

Expenses of targeted financing

In thousands of euro	2016	2015
Artificial insemination pharmaceuticals benefits to insured persons	586	596
Infertility treatment in accordance with the healthcare services	938	895
Moldova project	6	47
Student loan reimbursement	1	4
Quality Indicators Project	0	36
STACC project	36	7
Total	**1,567**	**1,585**

The expenses related to the Moldova project, to the STACC project, and to the reimbursement of student loans, and to automatic registration of the neonatal data are recognized in the operating expenses of the Health Insurance Fund.

Revenues from targeted financing

In thousands of euro	2016	2015
Artificial insemination pharmaceuticals benefits to insured persons	586	596
Infertility treatment in accordance with the healthcare services	938	895
The national cancer prevention strategy tools	0	12
Moldova project	6	19
Student loan reimbursement	1	4
Quality Indicators Project	0	34
Newborn automatic data recording	17	0
Total	**1,548**	**1,560**

Signatures of the annual report

The Management Board of the Estonian Health Insurance Fund has prepared the annual report of the year 2016.

The annual report consists of the management report and the annual accounts, accompanied by the independent sworn auditor's report.

Management Board

28. 03 2017

Tanel Ross

Chairman of the Management Board

Maivi Parv

Member of the Management Board

Pille Banhard

Member of the Management Board

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Independent Auditors' Report

(Translation of the Estonian original)

To the Supervisory Board of Eesti Haigekassa *(Estonian Health Insurance Fund)*

Opinion

We have audited the financial statements of Eesti Haigekassa, which comprise the balance sheet as at 31 December 2016, the income statement, the statements of cash flows and changes in net assets for the year then ended, and notes, comprising significant accounting policies and other explanatory information.

In our opinion, the above mentioned financial statements give a true and fair view of the financial position of the Company as at 31 December 2016, and of its financial performance and its cash flows for the year then ended in accordance with the accounting principles generally accepted in Estonia.

Basis for Opinion

We conducted our audit in accordance with International Standards on Auditing (Estonia). Our responsibilities under those standards are further described in the Auditors' Responsibilities for the Audit of the Financial Statements section of our report. We are independent of the Company in accordance with the ethical requirements that are relevant to our audit of the financial statements in Estonia, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Other Information

Management is responsible for the other information. The other information comprises the Statement by the Management Board of Eesti Haigekassa, the activity report and Budget Execution Report, but does not include the financial statements and our auditors' report thereon.

Our opinion on the financial statements does not cover the other information and we do not express any form of assurance conclusion thereon.

In connection with our audit of the financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Responsibilities of Management and Those Charged with Governance for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with the accounting principles generally accepted in Estonia, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing Eesti Haigekassa's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Company or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Company's financial reporting process.

KPMG

Auditors' Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Standards on Auditing (Estonia) will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with Standards on Auditing (Estonia), we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditors' report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditors' report. However, future events or conditions may cause the Eesti Haigekassa to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

Tallinn, 31 March 2017

/ signed /

Andris Jegers

Certified Public Accountant, Licence No 171

KPMG Baltics OÜ
Licence No 17