Regionaalhaigla

Consolidated annual report of 2022



Regionaalhaigla

CONSOLIDATED ANNUAL REPORT OF 2022

North Estonia Medical Centre

Business name:

SA Põhja-Eesti Regionaalhaigla

(North Estonia Medical Centre Foundation)

Commercial registry code: 90006399

Legal address:

J. Sütiste tee 19

Tallinn, 13419

Republic of Estonia

Phone: +372 617 1300

Email:

info@regionaalhaigla.ee

Website:

www.regionaalhaigla.ee

Auditors:

KPMG Baltics OÜ

Address by the Chairman of the Management Board

Dear colleague and partner!

2022 is now successfully behind us, naturally, with its own problems, successes, and challenges.

The principal activity of the hospital, treating patients, was well-organised and the volume of healthcare services assigned by the Estonian Health Insurance Fund were excellently filled by our treatment teams. In the first six months of the year, we also worked overtime. On the one hand, it meant that we gave more than required by the contracts for financing medical treatment and managed to reduce waiting lists for treatment; on the other hand, the financial compensation was subjected to a coefficient because of the peculiarities of the financing system, meaning that the hospital suffered financial losses due to overtime. During the second half of the year, the volume of medical services assigned to us increased even more and we also managed to conquer that with excellence. The volumes of medical services are clearly returning to the pre-pandemic levels. The Health Insurance Fund has become an excellent partner over the years - it is more flexible and innovative. However, we are expecting even faster decisions regarding treatment costs and updates of general costs in the current economic environment.

Last year, the increased cost of electricity affected the expenses of the Medical Centre significantly. We reviewed our power consumption and found ways to be more efficient while not compromising on care. Electricity prices were not the only consideration in this; we also wanted to tackle our carbon footprint as a large organisation. In relation to power supply, we also focused heavily on ensuring the power supply continuity at the hospital last year. Managing crises is a priority for us as a major regional hospital, be it in a situation with mass casualties, national epidemics, or interruptions in power and water supply.

Last year, our economic results were affected by Euribor paid on our loans, and in 2023, its negative impact on the results will increase even more. Loans, however, have and will continue to have an important role in creating investment capability. The hospital is significantly impacted by

other increases in prices, such as of food, medical supplies, medical technology, and, naturally, construction materials. For this reason, we focused on cutting down on costs last year and will continue to do so in the coming years. Our results might surprise certain stakeholders, but I, as the head of the hospital, know that this is mostly reflected in accounting. The better financial performance of the financial year is affected by the accounting principle applicable to national foundations, according to which targeted finances (external funds used for construction projects) are reflected in the income of

a period, whereas acquired assets impact costs over a longer period, depending on their commissioning and depreciation. We have focused on the construction and reconstruction of various treatment units. The new Y-block of the Medical Centre was completed, which is an important step towards ensuring a better environment for patients, their families, and our employees for receiving and providing care. Our goal is never just concrete structures; instead, we want to develop care provided through implementing modern treatment paths, new treatment methods, and medical equipment as well as ensure patient safety. The Medical Centre is going to continue its development activities: we are reconstructing the largest medical unit in the Mustamäe medical campus by adding isolation rooms; we are also reconstructing the largest Blood Centre in Estonia, which is located on Ädala Street, to ensure better conditions for blood donors, modern solutions for obtaining blood products, and we are contributing to national security through the secure storage of blood products. The main challenge of 2023 is the construction of the new psychiatry clinic, and we sincerely hope that the mental health issues mentioned in election campaigns are going to be included in the coalition agreement of the new government because the patients of the psychiatry clinic deserve a contemporary environment for treatment.

As an organisation, we will persist and develop only if we have a strong and united team. The organisational culture of the Medical Centre is valued by its staff, which makes it our strength due to our shared contribution. To be able to guarantee high-level treatment in the coming years, we need new doctors and nurses in all groups of staff and all specialisations. We have worked on it for years. For example, we are the largest internship provider for healthcare colleges, and we teach healthcare lessons at the Arte Upper Secondary School. This work is never-ending and we must be smarter and more attractive as an organisation year after year, so that the Medical Centre can continue to hire new nurses, general practitioners, specialists, residents, students, and other top specialists. Residency presents another challenge because certain fields are still mainly represented in Tartu. This would naturally require decisions on a national level, because the organisation of the residency system will later affect the

> representation of medical specialists in North Estonia, where the number of patients is clearly the highest.

I would like to thank all my colleagues for their wonderful contribution and our partners for their cooperation in the spirit of trust!

Agris Peedu

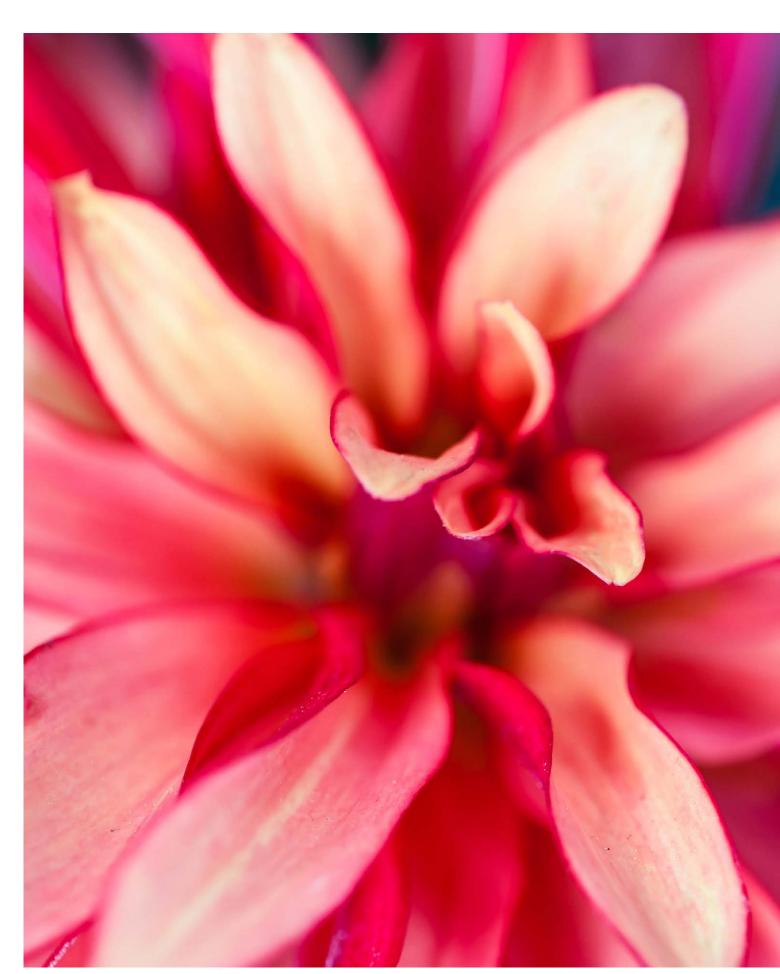


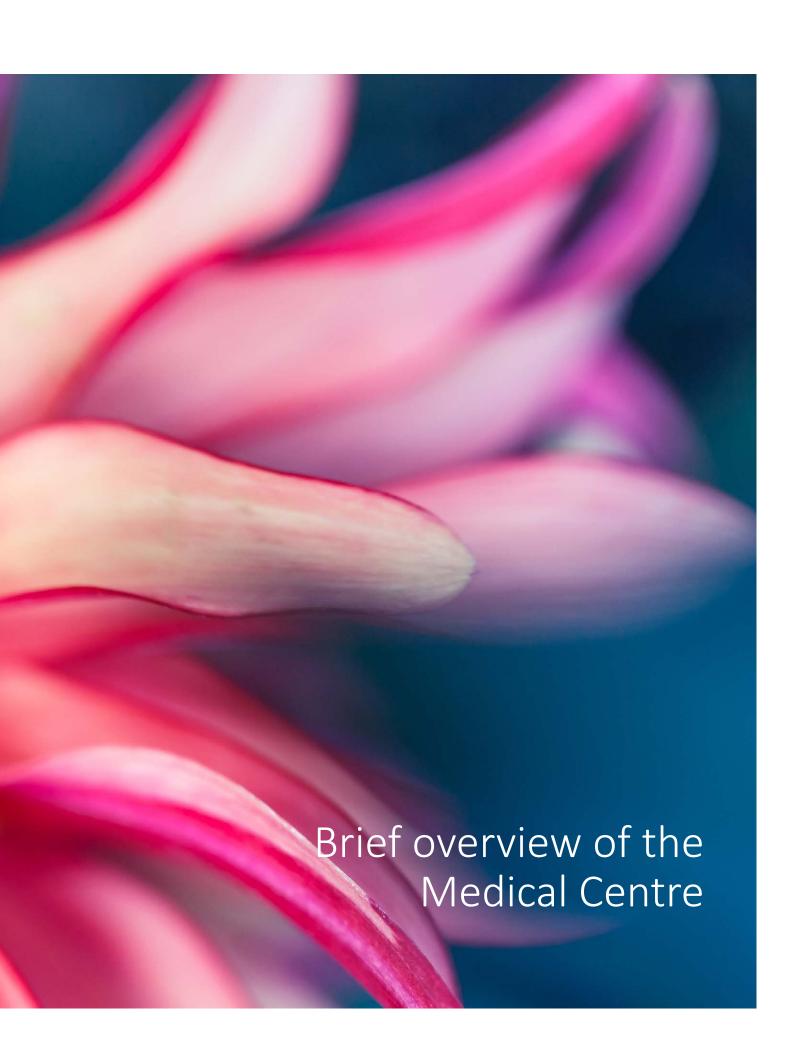
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Regionaalhaigla





Medical Centre group

SA Põhja-Eesti Regionaalhaigla (hereinafter, 'North Estonia Medical Centre' or 'Medical Centre') is a leading healthcare facility in Estonia and a champion of innovation in the healthcare sector. The Medical Centre is a state-owned foundation founded by the Ministry of Social Affairs of the Republic of Estonia. The Medical Centre operates as a legal person governed by private law which is guided by its statutes and the laws of the Republic of Estonia. Similarly to European university hospitals, the Medical Centre provides treatment in all medical specialities except paediatrics and obstetrics. In addition, the Medical Centre is the largest cancer, trauma, cardiac, and psychiatric treatment centre in Estonia.

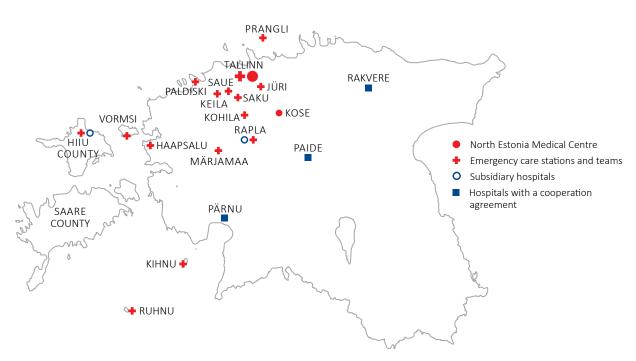
The consolidation group of the Medical Centre (hereinafter, the 'Medical Centre group') includes SA Läänemaa Haigla (hereinafter 'Läänemaa Hospital'), SA Hiiumaa Haigla (hereinafter 'Hiiumaa Hospital'), and SA Raplamaa Haigla (hereinafter 'Raplamaa Hospital'), which are general hospitals that mostly serve patients in their respective counties.

The Medical Centre provides the most complex medical care to all insured persons mostly in Tallinn and Harju County as well as Central, Western, and Northern Estonia. Urgent medical care is provided to all who need it. The Medical Centre consists of seven clinics with 33 specialist centres.

The Medical Centre concluded partnership agreements with the Rakvere, Järvamaa, and Pärnu hospitals regarding chemotherapy in 2014 and haematology in 2017.

The Medical Centre is the largest treatment provider with the most complex services in Estonia:

The average case mix index or CMI is 1.47 (2021: 1.54). The average CMI of Estonian hospitals is 1.11 (2021: 1.15).



The Medical Centre provides ambulance services in Harju County, Rapla County, Hiiu County, Lääne County, and the small islands of Estonia, and basic life support ambulance service in Northern Estonia.

Vision, mission, and core values of the Medical Centre



VISION:

to be a recognised and innovative medical centre, a pioneer in Estonian health care.



MISSION:

we invest in people's health.



CORE VALUES:

Dedication and professionalism, caring attitude and responsibility, openness and cooperativeness.

Development plan of the Medical Centre

In 2021, the Medical Centre approved its 10-year development plan, which was prepared with the help of staff, patients, and partners in the healthcare system. This is our roadmap for great strides in the coming decade.

We see the following as the most important trends affecting our activities:

- the continued ageing and decline of the population;
- the fast development of technology and increasing digitalisation;
- growing environmental awareness in the light of continuing climate change and worsening environmental conditions.

We must find our constants in the changing circumstances, the most important among them is our mission: we invest in people's health. This is our guiding star in any situation. We invest our time, knowledge, dedication, and care because we know that every second spent on listening and including patients, seeking and finding solutions, will be worthwhile. We pay equal attention to ourselves and our colleagues. We contribute to the healthcare system in general so that it will continue to support the patients and our staff.

The three main principles of the development plan of the Medical Centre:



It must be easy for the patient to receive the best possible treatment and the treatment must respect their dignity.





Working at the Medical Centre must be good for development, motivating, and safe.





The Medical Centre contributes to the steady and sustainable development of the Estonian healthcare system.

The development plan of the Medical Centre contains six strategies for achieving our vision:

- satisfied patients and safe treatment paths how to offer patients what they would value the most;
- a twenty-first-century hospital how to implement advances in medicine and technology in the best manner for our patients and staff;
- the best environment for work and development how to ensure that the Medical Centre will remain a great place of employment;
- a teaching and learning hospital how to promote medical science and ensure a new generation of medical staff corresponding to our needs;
- an open and cooperative organisation how to use the limited resources of the healthcare system the best to create the most value for our patients and staff;
- sustainable development of the hospital how to keep developing while remaining sustainable.

Implementation of the development plan

We have created an operational programme for the implementation of the objectives of the development plan of the Medical Centre; the programme lasts until 2025 and includes 89 defined long-term projects.

The implementation of the development plan of the Medical Centre was a clear priority for the hospital in 2022. A total of 55 projects have been launched (68%), covering all six strategies, and one project (1%) has been completed.

The highest number of projects of the operational programme focuses on the strategy 'Satisfied patients, safe treatment paths' (32), of which 26 have been launched. The strategy 'An open and cooperative organisation' has the least number of projects; however, most of these had been launched by the end of the financial year.

The implementation of the projects in the operational programme takes place in stages because these are long-term activities. In the first two years of the operational programme, 103 phased projects have been launched and 25 of these have been fully completed, whereas others are proceeding as planned despite the restrictions imposed by the COVID-19 crisis.

Examples of some of the projects we have completed:

- analysis of establishing a molecular imaging and personalised radioisotope therapy centre;
- developing a concept for establishing a competence centre of addiction treatment;
- conducting a work satisfaction survey among the nursing and care staff;
- completing a new patient safety information system;
- measuring the carbon footprint of the Medical Centre group and preparing an action plan for carbon neutrality.

In addition, we have launched other projects in the last two years that were not defined in the operational programme but supported the implementation of the objectives of the development plan directly. As no plan is good enough to predict all possible future needs, launching additional actions is imperative for the implementation of the development plan.

In the 2022 action plan of the hospital, which includes all of the actions of the hospital with the highest priority (40), 83% of the projects are directly related to the development plan. In two years, we have launched 49 additional projects to support the development plan, 25 of which have been fully completed.

The completed projects include:

- analysis of the centralisation of the services of the hospital pharmacy of the Medical Centre group;
- approval of the scientific and development strategy of the Medical Centre;
- creating a plan for psychological first aid for the units of the Medical Centre;
- establishing an independent ophthalmology capability;
- adapting services based on the requirements of patients with special needs.

Important figures of the Medical Centre group in 2022









427,164

Number of outpatient appointments with doctors (2021: 424,036)



146,155

Number of outpatient appointments with nurses (2021: 150,982)



83,742

Surgical procedures and operations (2021: 82,570)



94,698

Number of patients received by the emergency care department (2021: 87,783)



30,885

Number of ambulance (2021: 32,060)



€33m

and upgrades (buildings, facilities, medical technology, IT) (2021: 27.5 million)



The financial volume of services provided (2021: 260 million)



5,158

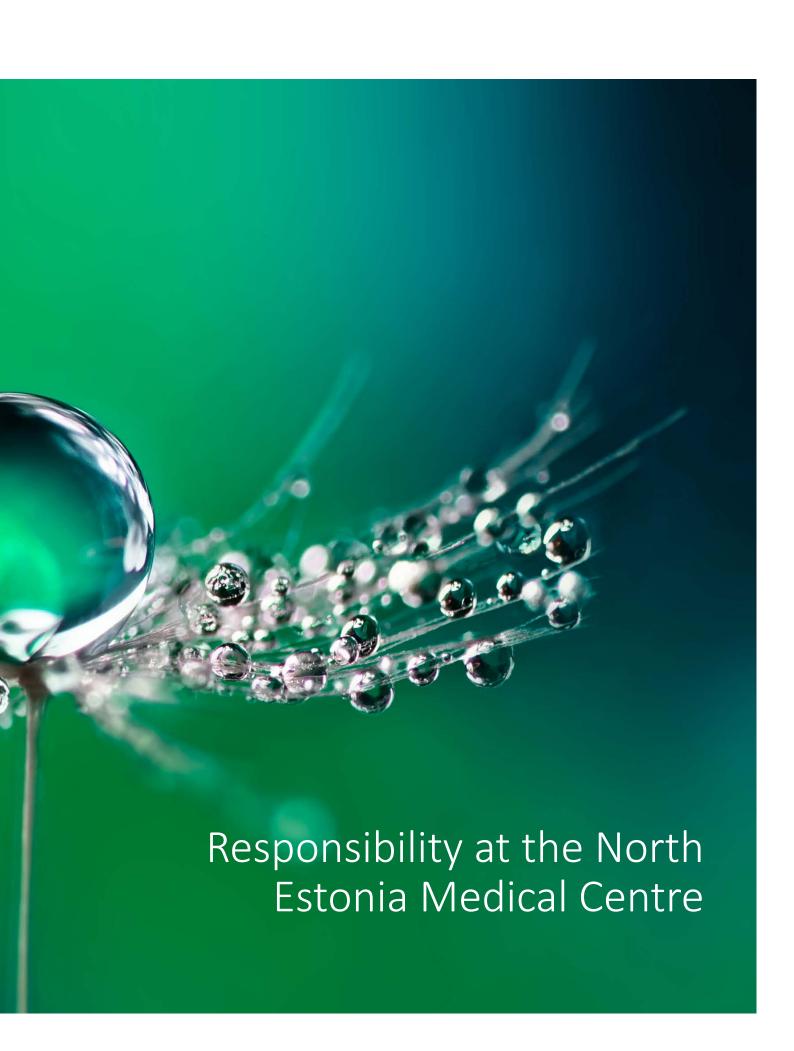
Number of people employed by the centre (2021: 4,999)



593

Expressions of gratitude from patients
(2021: 602)



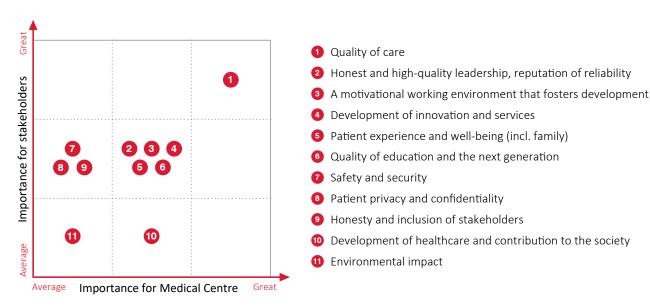


Important aspects of responsibility

The management report is based on the analysis of interpreting social responsibility that was conducted in 2018 with the help of external experts. The purpose of the analysis was to describe the main aspects of responsibility in which the Medical Centre has made a significant contribution and the evaluation of success and communication, which are necessary for the Medical Centre and external parties. The process of identifying important responsibility topics included mapping the current solutions of similar organisations, an online survey and workshop for the management, and an online survey and workshop on the expectations of stakeholders.

The main stakeholders of the Medical Centre are patients, employees, partners, professional unions and clusters, suppliers, public sector institutions and authorities, educational establishments, the supervisory board, and the representatives of the owner and the media.

As a result of the analysis, a matrix of focus issues was completed, reflecting the level of importance of the topics for the Medical Centre and stakeholders:



The areas of responsibility of the Medical Centre can be classified into five categories:

1. Management of medical services

The impact of the main activities of the Medical Centre can be seen as the availability of treatment, its quality, and patient satisfaction with the service. The management of medical services is the main process of the Medical Centre, and therefore, the constant improvement of the service is a daily priority for the hospital and the management of the related risks is integrated into the risk management system of the hospital. Every year, we conduct patient satisfaction surveys; moreover, patients can constantly provide feedback on the services. High-quality care also requires guaranteeing the privacy and safety of patients.

2. Development of the healthcare sector

As one of two top-level hospitals in Estonia, the Medical Centre has an important role in shaping the health-care sector and tackling its issues. We cooperate actively with the Ministry of Social Affairs, the Estonian Health Insurance Fund, and other healthcare authorities, associations, and unions. We promote research and



education in clinical specialities to ensure the next generation of specialists in the field. Our doctors participate actively in pharmaceutical and clinical trials and joint projects for service development with international medical centres as well as domestic partners, healthcare facilities, start-ups, and universities.

3. Honest and transparent management of the organisation

The treatment services of the Medical Centre are funded by the taxpayers through the Health Insurance Fund. Therefore, we aim to provide a sense of security so that the use of public funds would be honest, transparent, and purposeful, and that the management of the hospital would be based on the expectations of the patients and the public. We communicate with various interest groups in an open and inclusive manner.

4. Responsible management of human resources

The availability of treatment and its quality directly depend on the people employed by the hospital. In turn, the working environment and working conditions affect all the employees of the Group. For this reason, creating a working environment that values each staff member is one of our strategic goals.

5. Management of the environmental impact of the activities of the organisation

We have decided to focus on sustainable development while reducing the negative environmental impact of our principal activity as much as possible without sacrificing the quality of treatment. In 2021, we mapped the carbon footprint of the hospital and identified the main points of impact to focus on so we could move towards carbon neutrality.

The various chapters of the management report contain descriptions of important aspects of responsibility of both the Medical Centre as well as stakeholders by dividing them into aspects of environmental and social impact and responsible governance (ESG).

Value and impact of the Medical Centre group in 2022

The main value created through the activities of the Medical Centre is the treatment outcomes of patients or investing in the health of people. The most important component of the value chain is the staff of the Medical Centre, whose work directly affects the treatment outcomes of patients and their satisfaction with the treatment. Various support processes back the therapeutic activities to ensure sustainable operation. Management processes, infrastructure, and technology are part of value creation, just like in all other organisations.



HUMAN CAPITAL

■ 5,158 employees

INTELLECTUAL CAPITAL

- 158 ongoing scientific studies
- 13.9 years of experience on average for a doctor and 11.4 years for a nurse

COOPERATION NETWORK

■ 1,606 suppliers and membership in professional cooperation groups

SITES AND ASSETS

- 261 million euros worth of assets
- 3 subsidiary hospitals
- 7 clinics and 33 centres

INVESTMENTS

33 million euros (2022)

NATURAL RESOURCES (MEDICAL CENTRE)

 39 GWh energy (electricity and heating) and 1 thousand m³ of water

Process:

CARE:

- Prevention and awareness
- Diagnosis and treatment
- Aftercare and recovery

SUPPORT ACTIVITIES:

- Training and research
- HR management
- Infrastructure management
- Material handling
- Administrative and economic functioning



euros worth of medical services



the average number of patients treated



euros paid as remuneration and benefits



164
published research



147.6 million

euros worth of services, equipment, and goods purchased



34,000 tonnes of CO₂ equivalent





most popular in the attractive employer study among medical students

> Value created and impact:

FOR PATIENTS*:

- 280 million euros worth of medical services provided
- 35,707 average number of patients treated

FOR EMPLOYEES:

- 152 million euros paid as remuneration and benefits
- 71,000 euros for the staff as support for research and development
- 3rd most popular in the attractive employer study among medical students
- Psychological counselling
- Promotion of healthy habits

FOR PARTNERS:

■ 147,6 million euros worth of services, equipment, and goods purchased

FOR NATURAL ENVIRONMENT:

- 34,000 tonnes of CO₂ equivalent**
- 223 tonnes of hazardous waste***
- 1,051 tonnes of non-hazardous waste***

FOR THE SOCIETY IN GENERAL:

- 59 million euros paid in taxes
- 0,5 million euros worth of prevention programmes completed
- 164 published research articles
- 153 residents, 116 medical students,
 541 nursing care interns,
 and 137 job shadows

^{*}This has been discussed in greater detail in the chapter 'Important figures of the Medical Centre Group' on page 11

^{**} Based on the data of 2021.

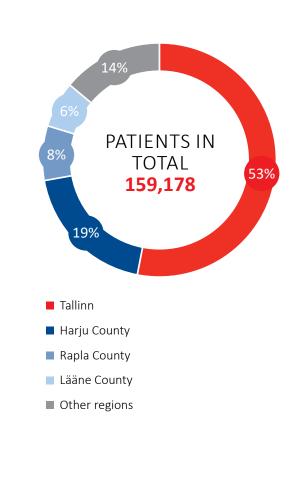
^{***}Results of the Medical Centre.

Social impact

Patients and treatment services

Patients by regions (2022)

Area	Number of patients
Tallinn	84,421
Harju County	30,478
Rapla County	12,006
Lääne County	10,145
Ida-Viru County	4,313
Lääne-Viru County	4,244
Pärnu County	3,501
Hiiu County	3,083
Järva County	2,039
Foreign	1,540
Saare County	1,197
Tartu County	897
Viljandi County	488
Jõgeva County	264
Võru County	187
Valga County	174
Unknown	102
Põlva County	99
TOTAL	159,178



In total, the North Estonia Medical Centre Foundation treated 159,178 patients in 2022.

Tallinn and Harju County make up the main portion of all patients who were served. From one year to the next, the numbers of patients by counties are very similar.

The Medical Centre always focuses on the individual – the quality and availability of care and the satisfaction of a patient with the treatment. Whenever discussing the need for changes in the structure, infrastructure, processes or some other aspects, we should primarily consider its impact on the patients as well as employees.

We continue to value our cooperation with the Patient Council of the North Estonia Medical Centre, which includes the Estonian Chamber of Disabled People, the Estonian Rheumatism Association, the Estonian Inflammatory Bowel Disease Association, the Estonian Coeliac Society, the Estonian Psoriasis Association, the Estonian Hemophilia Society, Tallinn City's Board of Disabled People, Saaremaa Vähiühing (Saaremaa Cancer Association), the Estonian Stroke Patients Society, and Läänemaa Vähiühing (Lääne County Cancer Association).



The responsibility of the Patient Council is to advise the management board of the Medical Centre in the following issues:

- protecting the health of patients and designing treatment paths;
- planning patient journeys;
- designing patient-centred processes;
- the role of patients and their loved ones in the treatment process;
- the role of patient organisations in empowering patients in cooperation with the Medical Centre;
- communication for the patient and family members, incl. patient information leaflets;
- new plans from the point of view of patients;
- additional services provided by the hospital.

The most important activities of the Patient Council in its three years of operation have been the following:

- development plan discussions, recommendations, and comments;
- establishing and curating Patsiendikool (School for Patients);
- analysis of mobility within the hospital for patients with special needs.

The council has advised on various topics, including:

- information materials, websites;
- good communication practice of the hospital;
- customer service and registration desks;
- patient journey, treatment close to home;
- digital skills;
- handling feedback at the Medical Centre.



Availability of treatment

In 2022, the availability of treatment was affected positively by an increase in the volume of online consultations between family physicians and specialists and launching online consultations between specialists. The online consultations allow for a more efficient and clear division of tasks between primary care and specialised medical care and help patients who need specialised medical care to see a specialist in a timely manner.

The new centre of eye surgery of the Medical Centre significantly improved the availability of ophthalmic therapy. The merger of the former Diaconal Hospital (Diakooniahaigla) with the Rehabilitation and Palliative Care Clinic of the Medical Centre in March 2022 allowed the centre to open departments for memory disorders and a hospice department at the Hiiu Unit. The availability of both stationary and ambulatory rehabilitation improved thanks to the opening of the rehabilitation centre in the renovated premises at 16 Sõle Street.

External factors that had a negative effect on the availability of medical care in 2022 were COVID-19 and staff shortages, primarily of nurses but also of several specialists.

On average, a patient had to wait 33.1 days to see a specialist (2021: 31.2; 2020: 34.1).

The number of people in the waiting list: 200,533 (2021: 220,468; 2020: 253,610).

The number of outpatients seen: 427,164 (2021: 424,036; 2020: 424,041), of whom about 83% were seen at the North Estonia Medical Centre.

The percentage of remote appointments: 5.8% (2021: 6.6%; 2020: 9.5%).

33.1

days – the length of an average wait to see a specialist

The main developments related to the availability of medical care in 2022:

- we participated in the Time Finder pilot project focusing on waiting lists, which helped 1,346 patients find a suitable time for an appointment with a specialist;
- we included 177 patients with diagnosed breast or colorectal cancer in the OnKontakt project, where patients with breast and colorectal cancer could communicate with their medical team through the Kaiku digital solution for better availability of treatment and a greater inclusion of patients;
- we opened an external storage of the Blood Centre at the Läänemaa Hospital to improve the availability of blood components and optimise the use of donated blood in the Medical Centre Group.

Goals for 2023 to improve the availability of care:

- we are going to extend the practice of holding oncological consultations, which we started
 with the Pärnu Hospital, to all medical facilities that provide oncological care in the service
 area of the Medical Centre to make all initial decisions for oncospecific treatment at the
 oncological consultation meetings of the Medical Centre;
- we are going to extend independent nurse appointments to new fields;
- we are going to continue to improve the availability of emergency care.

Taking healthcare closer to patients

Contractual cooperation with external hospitals, i.e. functional networking, allows the extensive professional expertise of the Medical Centre to reach patients outside the service areas of the subsidiary hospitals.

In 2022:

- we launched systemic treatments at Hijumaa Hospital to bring care closer to patients;
- we trained specialists of subsidiary hospitals in using the reporting systems of the Medical Centre;
- we trained nurses to offer consultations at the Rapla and Narva Hospitals to cancer patients undergoing chemotherapy.

In 2023, we are planning to continue to add oncological treatment options close to home, including for patients in Narva, and prepare for the takeover of the Läänemaa Hospital Pharmacy.

Quality of treatment

he purpose of the Medical Centre is to provide a high-quality service that is efficient, safe, and patient-centred, while being integrated, employee-friendly, and sustainable (incl. envi-

ronmentally).

The Medical Centre conducts many activities which help to ensure the desired quality. They are divided into three categories: **planning, improvement, and monitoring.**

Planning – we determine the needs of our patients and staff and create a plan for providing what they require (incl. preparing and reviewing a development plan, preparing an annual action plan, and collecting regular feedback).

Improvement – we take steps that help us to increase the quality of care to the intended level and develop competencies for conducting these activities



at every level of the organisation (quality improvement projects as well as developing knowledge and skill for carrying out these projects).

Monitoring – we monitor our activities regularly to make sure that they would correspond to the required level, that the established guidelines would ensure a high level of care and patient safety, and that we have minimised any variations in the services we provide. We have established the criteria that characterise quality and a reporting system that allows the assessment of results and identification of possibilities for improvement at every organisational level.

Activities included in inspection:

- regular reviews and discussions of quality of care indicators, treatment complications, and incidents related to patient safety (incl. hospital-acquired infections) in quality committees, the patient safety steering group, and the network of quality improvement experts;
- clinical audits;
- inspections of medical records;
- regular inspections of handling medicinal products and compliance with hygiene requirements.

Quality management at the Medical Centre

At the North Estonia Medical Centre, quality is managed in cooperation between various stakeholders. Patients, front-line staff, quality management staff, the managerial staff, and the supervisory board of the Medical Centre all contribute to quality management. Improving quality is a team effort; however, each of the aforementioned parties is also individually responsible for quality. We promote a non-accusatory culture that is open to dialogue and discussion at the Medical Centre. The Medical Centre shares new knowledge with other hospitals constantly. For example, we shared our radiology guidelines for emergency care patients with the West Tallinn Central Hospital last year.

Main steps taken in 2022 for improving the quality of care:

- we promoted our quality improvement skills by providing trainings and workshops for doctors, nurses, and managers of support services;
- we continued to work on creating a more intuitive reporting system on the Tableau platform which would help the management obtain a better understanding of the quality of care;
- we continued with the networking and harmonised development of the quality experts of the Medical Centre; among all else, we approved the competency model of the quality experts of the Medical Centre;
- we reformed the audit system of the Medical Centre by making it more transparent and consistent. Among other things, we approved the new additional remuneration fund for conducting priority audits of care in the entire centre;
- we continued with the implementation of the Magnet® quality standard, including a satisfaction survey among the nursing care staff;
- We participated in the pilot project of endoprosthetic treatment for increasing the quality of life of individuals who require an endoprosthesis at optimal costs through improving the integrity of the treatment path and focusing more on the patients as well as optimising work processes. The main activities were aimed at preparing a shared standard; we also planned to tidy the waiting list system.

Main steps taken in 2022 to improve patient safety:

- we promoted the patient safety culture at the Medical Centre with specialists and the management. We conducted regular patient safety trainings and discussed the importance of establishing a psychologically safe culture during visits to departments and at larger conferences;
- we conducted a patient safety study among patients based on the OECD standard;
- we created an information brochure for patients to ensure patient safety during hospitalisation;
- to promote patient safety, we changed the organisation of work in regard to patient identification and prevention of falls;
- in summer, we launched the CPR training Basic Life Support (BLS) that had been planned for a long time to ensure safe the hospitalisation of patients.



Over 2,000 patient safety reports submitted to the voluntary patient safety system testify of the strength of the patient safety culture.

Plans to improve the quality of care in 2023:

- we will create an online course for quality improvement;
- we will create guidelines for handling critical incidents for a smoother and more inclusive resolution of such incidents;
- we will conduct a pilot project in three clinics and support units for testing an information system for transparent workflow planning and performance management;
- we will open the Y-block at Mustamäe, which is going to increase the quality of care
 of oncological and internal medicine patients and create the required conditions for
 developing precision oncology and haematology;
- we will take steps to have the Neurology Centre of the Medical Centre be certified as a European stroke centre by the ESO.

Plans for improving patient safety in 2023:

- we are going to organise another patient safety culture study among the staff of the Medical Centre based on the SOPS standard of the Agency for Healthcare Research to evaluate the progress of the patient safety culture;
- we are going to implement patient safety basic training as an online course;
- to ensure patient safety and good response to treatment, we are going to carry out a pilot project for a more efficient diagnosis and treatment of preoperative anaemia.

PATIENT JOURNEY PROJECTS

The Medical Centre is developing its specialised care with a focus on the patients and in a multidisciplinary manner because cohesion and cooperation between various fields ensure optimal treatment paths and outcomes. This way, we can achieve our goal of making the best possible care easily accessible for the patients

while maintaining respect for their dignity. The Medical Centre fosters and develops narrower specialisations within the fields of specialised care to achieve a higher level of competence and better treatment outcomes.



Journey-based thinking helps us ensure that the patient journey is comprehensive regardless of narrower specialisation.

We collaborate with renowned European medical centres to bring cutting-edge knowledge to Estonia and make an increasing number of treatment options available for patients.

In 2022, working groups of six development programmes of patient journeys were launched, which mapped the areas of care in need of improvement to ensure better patient journeys and availability of care. The mapped journeys were:

1. Patient journey of a patient with chronic obstructive pulmonary disease (COPD)

The focus was on the patient journey, which was unclear until that time, and on the uncertainty regarding the roles of healthcare workers. We mapped various problems based on the vision of the working group. The solution is twofold – the patient journey and the work of the medical team. To validate the issues, we conducted patient interviews and shadowed the medical team in the Pulmonology Centre. We are working on several aspects – creating information materials for patients, creating additional information materials for COPD patients, offering appointments with a COPD nurse advisor, trainings and materials for the staff of the centre, etc.

2. Patient journey of a patient with colorectal cancer

An audit conducted by the Health Insurance Fund in 2021 indicated that about 30% of patients with colorectal cancer had to wait over 42 days to begin treatment at the North Estonian Medical Centre instead of the 28-day maximum required by the Health Insurance Fund. In addition, about 14% of patients slip through the cracks and never get to surgery. To solve this problem, we are applying for an IT solution that would provide a real-time overview of patients on the waiting list based on the treatment path determined at the medical consultation meetings.

3. Patient journey of an emergency psychiatric care patient

People who come to the Psychiatry Clinic as outpatients have to complete a difficult journey to be admitted to the hospital – triage nurses, psychiatrist of the clinic, and the psychiatrist on call – each start from



the beginning of the medical history. In addition, the dispersion of the buildings creates issues because emergency reception takes place in several different buildings and there are no clear signs guiding the visitors. We looked for a solution to this situation so we could make the process more efficient as well as improve the safety and well-being of patients and employees.

4. Rehabilitation journey of an orthopaedic surgery patient

Patients whose surgery takes place at the Medical Centre do not always reach outpatient rehabilitation services quickly enough. Another issue seems to be that discharged patients are not sufficiently aware of the need for physiotherapy and the options for receiving it (except in the private sector). With the help of the master's students of the Estonian Academy of Arts and TalTech, we mapped the current patient journey, interviewed various parties, and will try to prepare proposals for improvement by the end of 2023.

5. Endoscopy patient journey

Colonoscopy is a procedure that is fairly unclear for patients and this uncertainty has a significant impact on the subsequent patient experience during the procedure. Unfortunately, the provision of a comfortable and patient-centred service is hindered by the current lack of support staff and premises. We mapped the timeline of the current procedure and interviewed various parties with the help of master's students of the Estonian Academy of Arts and TalTech, and by the end of 2023, we will prepare proposals for improvement based on co-creation methods, and ideally, also test some of them. We want to use the Roche tool for mapping treatment paths when launching the project.

6. TAVI (transcatheter aortic valve implantation) journey

We focused on understanding the entire journey. We mapped the patient journey and documented the responsibilities of a TAVI nurse.

The prerequisite for completing the treatment path project was the willingness of clinicians to admit that we have a problem and their desire to improve the processes. Our goal was to create maximum impact with minimal effort. Therefore, we only focused on the processes within units or between units and journeys involving various hospitals. To make progress as fast as possible, it is important to divide issues related to the journey into smaller problems and then solve them one after another, starting with internal processes.

In the short term, we are not planning to embark on journeys that require cooperation with external partners (such as family physicians or amendments to the list of health services of the Health Insurance Fund) for successful implementation, relying only on internal resources. In the case of projects with separate funding and teams, the number of stakeholders involved depends on the goals of the project.

Possible future priorities of patient journeys:

- journeys related to the teams that are going to move to the Y-block and tower B, such as the possibility to provide outpatient rehabilitation services much better than before;
- psychiatry a national priority; in 2026, a new building will be completed, which means that we have to review our work processes;
- Blood Centre and donors stage I reconstruction of the Blood Centre will be completed by the end of 2023.

PATIENT SATISFACTION

For the constant improvement of patient experience and satisfaction, it is important to understand the ever-changing needs and expectations of patients and take them into consideration when designing services. The Medical Centre has gathered patient feedback for nearly 20 years in the course of a joint satisfaction survey of the six largest hospitals in Estonia. Patients, family members of patients, and partners of the Medical

Centre can provide proactive feedback to the centre in various ways: by mail or email, using the online form on the website of the hospital, and on paper forms in departments and at registration desks.

In 2022, we organised and updated the entire patient feedback system by emphasising the operative collection of feedback and monitoring the improvement measures based on feedback more than before.

Satisfaction survey of outpatients

Compared to online surveys, the main merit of a satisfaction survey is the readiness of patients to devote more time to providing feedback, which helps the hospital to collect more detailed results for a higher number of satisfaction components.

In 2022, as a novel move, we collected qualitative data by interviewing the patients in the course of the joint satisfaction survey of outpatients of six hospitals. The purpose of the qualitative survey was to understand the expectations of the patients for being informed and included so we could state the questions of the future satisfaction surveys in a clearer manner for the patients.

Proactive feedback from the patients: expressing gratitude, complaints, and suggestions

Total in 2022:

- 593 expressions of gratitude (2021: 602);
- 367 complaints (2021: 244). The majority were complaints regarding communication
 196 (2021: 165); the number of complaints regarding care dropped to 73 (2021: 89);
- 15 suggestions (2021: 14).

Despite the high average scores awarded by the patients to the communication skills of the staff based on the online survey and expressions of gratitude, we also received more complaints about communication issues than in previous years. The communication culture of the employees of the Medical Centre is usually pleasant for the patients, but there are also employees who need constant support in developing their communication skills.

Steps taken in 2022 to increase patient satisfaction:

- we simplified the process of issuing medical history to patients and for submitting expressions of gratitude and complaints;
- we reorganised the Mustamäe unit to be more accessible and safer for people with special needs, added bannisters, and replaced the regular doors of the clinics with automatic ones.

'Good communication practice of the Medical Centre'

In 2022, we focused on developing the working environment and communication culture at the hospital towards more supportive and empathetic communication. We formed a working group that developed good communication practice, which describes the desired manner of communication within the organisation and with patients based on the values of the North Estonia Medical Centre. We gathered extensive feedback to the document from various parties and the final version will be completed in the first quarter of 2023.

The introduction of the adopted communication standard and the implementation of its principles is one of the most important goals of 2023, in the course of which, we are going to prepare trainings introducing the good practice to our staff. We will also develop a training programme and a course for teachers based on actual situations involving communication.

Plans of 2023 for improving patient satisfaction:

- we are going to continue to customise the Mustamäe unit for patients with special needs;
 we are going to update the lighting system and install a hearing loop for the hearing-impaired at the main information desk;
- we are implementing a new signpost system in the Mustamäe Y-block and the main lobby;
- we are going to conduct the online survey of outpatient feedback, piloted in 2022, regularly in all the clinics.

Protection of health-related data

We value the protection of confidentiality, integrity, and availability when processing the data of patients. Compliance with information and data security requirements is the responsibility of all employees.

The information and data security working group, established in 2018, is monitoring the systematic creation and implementation of the information and data protection principles of the Medical Centre and compliance with them. Since the end of 2021, law office Hedman Partnerid ja Co., which provides data protection specialist services, has offered consultations to the Medical Centre and monitored compliance with data protection requirements. Every patient can contact the Medical Centre if they suspect a misuse of their personal data. We investigate each reported incident to determine whether the rights of a patient have been violated or not.

To increase awareness among our employees, we are preparing an online course on data protection for the entire organisation that would help various groups of staff receive information that corresponds to the nature of their tasks. The online course is going to have three versions, depending on the role of employees and the extent of contact with (sensitive personal) data.

When ensuring the data protection rights of patients, guaranteeing the security of information systems and the transparency of processing the data for data subjects is important. The new procurement for a hospital information system focuses heavily on both of these aspects. The new system must support the main processes better than the current one as well as comply with stricter security requirements and guarantee that patients have the currently required option for reviewing their own data and the way it is processed.



Working environment

Employees

The Medical Centre group has 5,158 employees.

In 2022, the number of employees of the Foundation increased by 137 people, partly due to the merger with SA EELK Tallinna Diakooniahaigla (Tallinn Diaconal Hospital Foundation of the Estonian Evangelical Lutheran Church). 62 people transferred from the Diaconal Hospital, of whom 9 people joined various service units and 53 were added to the staff of the Rehabilitation and Palliative Care Clinic. In addition, we opened a Clinical Nutrition Department at the Rehabilitation and Palliative Care Clinic and hired 8 people to fill the new



Ukrainian refugees were hired by the Medical Centre in 2022, for whom we created the new positions of nurse assistants.

positions. In other clinics, the highest number of new employees took up positions at the Surgery Clinic, where 42 new employees filled 23 positions. In addition, new staff was hired to fill the previously open positions at the Diagnostics Division and Anaesthesiology Clinic.

		l	
	2022	2021	2020
No. of employees at the end of the year*	5,158	4,999	5,036
Medical Centre	4,619	4,482	4,472
Läänemaa Hospital	254	239	262
Raplamaa Hospital	196	197	212
Hiiumaa Hospital	89	81	90
Employee data of the group			
Employees with an employment contract			
Permanent staff	4,976	4,853	4,861
incl. women	4,105	3,989	4,018
incl. men	871	864	843
Temporary staff	171	160	170
incl. women	148	133	156
incl. men	23	27	14
Full-time staff	3,634	3,631	3,678
incl. women	3,004	2,997	3,064
incl. men	630	634	614
Part-time staff	1,336	1,213	1,169
incl. women	1,095	983	940
incl. men	241	230	229
Variable hours staff**	11	24	13
incl. women	7	17	11
incl. men	4	7	2

^{*}The total number of employees includes staff on maternity and parental leave. It also includes partners working under authorisation agreements and contracts for services, but it is perhaps not necessary to list them separately.

^{**}Only employees of the North Estonian Medical Centre; they are also included in the number of part-time employees.



Equal opportunities and non-discrimination

The North Estonia Medical Centre does not select its staff based on gender, nationality, or race. No cases of discrimination have been registered in the North Estonia Medical Centre Foundation. The number of women is usually higher than that of men in the healthcare sector and this ratio is also reflected in the gender composition of the staff of the Foundation.

	2022	2021	2020	
The average age of employees (years):	45	45	45	
doctors, dispensing chemists	48	47	46	
nurses, laboratory staff	41	41	41	
carers	47	47	47	
support staff	47	47	47	
Distribution of employees by age groups:				
< 30, incl.	732	689	696	
30–50	2,034	2,047	2,064	
> 50	1,654	1,543	1,527	

The distribution of employees by age groups does not include the age groups of residents.

The North Estonia Medical Centre Foundation employs 163 staff members with special needs, i.e. with a reduced capacity for work (149 women and 14 men).

When considering distribution by gender, there are more women in the management positions of the Medical Centre than men:

MEDICAL CENTRE	2022		2021		2020			
The composition of the supervisory board (number)		6 7		7		8		
incl. women	2	33,3%	1	14,3%	1	12,5%		
incl. men	4	66,7%	6	85,7%	7	87,5%		
30–50	3	50%	4	57,1%	3	37,5%		
> 50	3	50%	3	42,9%	5	62,5%		
The composition of the management board (number)	3		3		3			3
incl. women	1	33,3%	1	33,3%	1	33,3%		
incl. men	2	66,7%	2	66,7%	2	66,7%		
30–50	1	33,3%	1	33,3%	1	33,3%		
> 50	2	66,7%	2	66,7%	2	66,7%		
Managers (heads of clinics/ chief nurses, heads of services, directors) (number)	32		32 31		31	27		
incl. women	23	71,9%	21	67,7%	19	70,4%		
incl. men	9	28,1%	10	32,3%	8	29,6%		
30–50	18	56,3%	20	64,5%	17	63%		
> 50	14	43,7%	11	35,5%	10	37%		



The representation of genders in the administration of the Medical Centre in 2022.

Fair and equal pay

The remuneration system of the medical staff of the Medical Centre is based on the laws in force in the Republic of Estonia and the collective agreement between trade unions and the Estonian Hospitals Association. The remuneration of the employees is based on the remuneration guideline that describes the principles of remuneration of the staff. When deciding salaries, we consider the employee's level of training, the nature of their position, the national average salary for similar positions and professions, and the intensity

of work at the Medical Centre. Through this, we guarantee that the remuneration of an employee does not depend and or is not affected by the gender, nationality, or race of the employee. In addition, we conduct an annual analysis to evaluate whether employees receive equal pay regardless of gender and to guarantee that this principle continues to be followed.

As components of variable pay, we have implemented principles of additional remuneration based on performance management and intensity indicators in addition to the laws in force in the Republic of Estonia and the stipulations of the current collective agreement.

In 2022, the average total salary of the employees of the Medical Centre was 2,299 euros, whereas the average total salary of female employees was 2,137 euros and of male employees 2,991 euros. The main reason for the difference in the salaries of male and female employees is the higher representation of men in professions with higher pay. This is illustrated by the proportion of male and female employees in various positions:

Profession	Total	Number of female staff / proportion	Number of male staff / proportion
Doctors, dispensing chemists	667	430 / 64%	237 / 36%
Nurses, lab staff	1,737	1,625 / 94%	112 / 6%
Care staff	968	798 / 82%	170 / 18%
Residents	153	105 / 69%	48 / 31%
Total	3,525	2,958 / 84%	567 / 16%

HR management and inclusion of employees

The most important asset and resource of the Medical Centre are the people who work at the hospital. The ultimate goal of the HR strategy is a competent and motivated staff because the quality of the healthcare services depends directly on them.

The HR policy of the Medical Centre focuses on our employees – in addition to monitoring the efficiency of fulfilling tasks, we also protect the well-being and health of our staff while working. Standardisation of the workload, regulation of the intensity of work, handling issues related to the working environment and occupational safety, as well as steps for protecting the health of the employees and recognising their efforts – all of this supports our goal of creating a working environment focused on people and valuing each employee.

The motivational packages offered to the staff of the Medical Centre

- Supporting personal development:
 - various training programmes, numerous internal courses, seminars, and hospital conferences;
 - annual interviews for setting career goals;
 - 360-degree reviews for the managers;
 - possibility of student loan repayment;
 - onboarding trainings and programmes.
- Valuing a work-life balance:
 - Christmas presents for children;
 - bonus when a child starts first grade and providing a day off for the parent;
 - funeral subsidy in the case of a loss of a family member and allowing a day off;
 - a day off for the father in the case of the birth of a child;
 - lunch included in the working hours.

- Taking care of the health of the employees:
 - sports club of the Medical Centre;
 - all staff members have 7 extra vacation days per year;
 - regular thorough medical check-up for all employees;
 - vaccinations of employees;
 - massage chairs for the employees;
 - Kõnnikliinik internal health track;
 - psychological and psychiatric care, if necessary;
 - online trainings on mental health;
 - we support participation in public races and other sports events (LHV Women's Run, Rimi 10k, etc.);
 - discounts at sports clubs.

Conducting annual staff interviews

Annual staff interviews have always had an important place in the HR policy of the Medical Centre. In May 2022, we adopted the new Planpro software and started to implement an interview module to transfer all annual staff interviews to the same environment and to identical forms based on positions as well as to use it as an archive.

Due to the size of the group, we do not conduct annual satisfaction surveys in the entire organisation. Instead, we organise surveys in individual structural units. We also prepare regular risk assessments which focus on psychosocial risk factors, the management of structural units, and job satisfaction.



of employees have completed their regular interviews in the new Planpro environment

Collective agreements and membership in trade unions

As a member of the Estonian Hospitals Association, the Medical Centre group is a party to a collective agreement between the following:

- Estonian Hospitals Association (representative of the employers);
- Union of Estonian Medical Emergency (representative of the employers);
- Estonian Medical Association (representative of the employees);
- Estonian Union of Healthcare Professionals (Eesti Tervishoiutöötajate Kutseliit) (representative of the employees);
- Estonian Nurses Union (representative of the employees);
- Estonian Association of Clinical Psychologists (Eesti Kliiniliste Psühholoogide Kutseliit) (representative of the employees).

The collective agreement includes the following positions: doctor, resident, specialist physician, nurse, midwife, healthcare support specialist, ambulance technician, emergency medical technician (EMT), care worker.

Employees under collective agreements: 78% (2021 and 2020: 78%).

Percentage of employees who belong in trade unions: 11%.

Protection of the personal data of employees

We collect data on our employees and their contracts during recruitment and the conclusion of contracts and store the data in a HR software with restricted access. We collect the data based on the principle of minimality; i.e. we only gather the least amount of data necessary for performing contracts and complying with the law. The Medical Centre group has no documented incidents of leaks of the personal data of the staff.

HR management and inclusion of employees in 2022

In the first half of the year, we continued with the temporary reassignment of employees, caused by the COVID-19 pandemic, to ensure the continuation of regular care in a difficult situation. We focused heavily on recruiting, reviewing the remuneration system, and supporting the staff.

- We improved the quality of management and continued to develop processes for replacing administrative staff we held about 100 job competitions related to this area in 2022.
- We organised a thorough training programme for the managers, developed onboarding programmes, and approved the principles of management.
- We developed HR processes related to digital systems to simplify the work processes of all employees in addition to Planpro, we adopted a recruitment software called Talendipark.
- We updated the good practice of employee recognition of the Medical Centre.
- We successfully piloted a supervision programme for nurse managers and employees of the Oncology and Haematology Clinic in two groups of nurses.

Plans for improving HR management and the inclusion of employees in 2023

- We will carry out a zero-bureaucracy project to minimise the load of bureaucratic operations that do not create value for the hospital staff.
- We will continue the supervision project of nurse managers and employees of the Oncology and Haematology Clinic.
- We will continue developing our management culture and introduce employee expectation forms in the Planpro software in addition to conducting annual interviews.
- We will conduct an analysis of employee resignation forms of 2022 and refine the respective recruitment and employee retention decisions.
- We will update our brand as an employer together with the Communications Department.
- We will develop job analytics and remuneration systems further (such as a more precise calculation of work volumes and intensity and a review of remuneration for being on call at home).

A safe and healthy working environment

The North Estonia Medical Centre values the health and healthy lifestyle of its employees and complies with occupational safety requirements by constantly updating its working environment, work equipment, and medical instruments, informing and training its employees regularly about occupational health and safety issues and organising events for promoting healthy habits.

The activities related to occupational health and safety are organised and coordinated by the Human Resources Department. The working environment council supports the efforts of the staff and the employer. Risk managers (biological risk manager, chemical risk manager, radiation safety specialist, ergonomics instructors), working environment representatives, and heads of structural units along with all employees play a significant role in organising the activities in this domain.

We identify work-related risks through risk assessments and evaluate the health risks they cause. We monitor compliance with the occupational health and safety requirements through the internal inspection of the working environment. All employees can contribute towards the risk assessment of the working environment at their unit. The survey used for gathering initial data provides feedback on the psychosocial working environment, the management of the structural unit, and job satisfaction in addition to the state of the physical working environment.

Risks related to work and occupational health and safety requirements are explained to the staff through various guidelines and trainings that are prepared according to the nature of the work. An occupational health medical practitioner (OHMP) evaluates the health of the employees regularly based on the risks in the working environment. According to the results of the risk analysis, we ensure vaccinations for all employees and guarantee the necessary personal protective equipment. We make sure that the exposed workers are constantly monitored regarding radiation doses. We pay additional remuneration to the employees in the case of an injury caused by an aggressive patient.

Steps taken in 2022 to ensure occupational safety

- We conducted risk assessments at the Internal Medicine Clinic, Psychiatry Clinic, and some of the units of the Surgery Clinic. Due to some departments relocating, some of the risk assessments at the Psychiatry Clinic were postponed until 2023.
- We continued to educate our employees regarding chemical safety. For this, we are preparing a registry of chemicals for the entire Medical Centre and an online course for the staff.
- We implemented training in digital occupational safety and created respective options in the document management system and the intranet.

ACCIDENTS AT WORK AND OCCUPATIONAL DISEASES

	2022	2021	2020
Fatal	0	0	0
Severe	7	6	6
Minor	39	33	26
Total	46	39	32
Incidence of accidents at work per 1,000 employees	10	9	7

Accidents at work by the level of severity between 2020 and 2022.

The number of days lost due to accidents at work or occupational diseases: 1,406 days.

In 2022, no occupational diseases were diagnosed.

The number of accidents at work has increased compared to previous years. The main reasons for occupational accidents, incl. serious accidents, were stumbling and falling due to slippery surfaces or moving too fast. The number of accidents at work related to tripping and falling decreased compared to the year before, but the number of accidents caused by aggressive patients, use of work equipment, and incorrect work techniques increased. The number of accidents at work related to transporting patients remained the same as in the previous year. In 2021, the number of burns caused by hot water increased sharply. Due to reviewing the processes and safety of handling hot water, we managed to mitigate the risks.

To prevent tripping and falling, we have encouraged our staff to be careful and pay attention. The reasons for attacks by aggressive patients are analysed within the departments and we are going to contribute more resources to the training of the security staff and guaranteeing security within the departments. We have analysed occupational accidents caused by incorrect techniques and motions as well as working equipment, and re-trained our staff.

IMPROVING THE PSYCHOSOCIAL WORKING ENVIRONMENT

To improve the psychosocial working environment, we have created a psychological counselling service, which is increasingly popular among the employees. In addition, we provide various trainings to our staff on mitigating health risks caused by psychosocial risk factors. As psychosocial risks are largely created by inferior





organisation of work and management, we are working on improving the quality of management through training our administrative staff. We also discuss psychosocial issues during development programmes and special internal training for the leadership.

Development programme for the managerial staff

The Medical Centre appoints its managers for a 5-year period and we conduct regular 360-degree performance reviews. In June 2022, the second development programme for the managerial staff was completed. We announced a new tender to train the next group, which failed, but we will continue training managerial staff in 2023. For the first time, we prepared a training programme with the help of an external partner. Considering the current situation, the content is significantly impacted by the series of upheavals in Estonia, meaning that crisis preparedness is important. The third development programme for managerial staff with two groups begins in March 2023.

Units with repeated incidents of psychosocial issues use a special HSE mapper for precise identification. It measures seven types of important work-related stressors (work demands, monitoring, support from col-

leagues, support from the manager, role, relationships at work, managing changes). If necessary, we include psychologists in solving the problems or organise trainings.

In addition, we have prepared a guideline for documenting and processing work-related violence so that our employees could report possible violent incidents at work with ease if necessary. The managers help a lot with solving the incidents, but if necessary, we will also involve the psychologists of the Palliative Care Centre.

The working group for preventing risks related to psychosocial risk factors continues to meet to evaluate the impact of the current measures and develop new measures

In our code of ethics, we have described the general behavioural norms that we expect from all employees of the Medical Centre: ethical, honest, and dignified in any situation.

for preventing and reducing health risks related to psychosocial risk factors. As one of the measures, we have planned to have an employee trained in psychological first aid in every department, who would be able to identify critical incidents and people in need of help.

Support for the mental health of the employees

In 2022, the mental health of employees was impacted by the war in Ukraine and anxiety about coping in the economic crisis in addition to the COVID-19 pandemic spanning the last few years. The need for psychological counselling and support has increased in strides. Our employees are supported by the psychologists and spiritual counsellors of the Palliative Care Centre, who will refer people to a psychiatrist if necessary. In addition, we offer our staff an opportunity to see specialists who do not work at the hospital.

During the year, we trained a total of 13 persons to provide psychological first aid to be able to notice and prevent potential mental health issues in various units. In addition, we developed video trainings on mental health, shared video clips created by Peaasi.ee, and updated our staff on mental health issues regularly. Every year in October, we hold a mental health month, during which we focus primarily on raising awareness among the employees about how to protect their mental health.

One of the goals for 2023 is to begin the creation of an online training on psychosocial risk factors that consists of five modules. The modules of the online training will be compatible with each other and the training will include both a theoretical and a practical part. We will also continue training staff for providing psychological first aid and develop video courses on preventative measures.

PROMOTING HEALTHY HABITS

We offer affordable options for exercise or services that promote health, provided by our partners, as well as the use of massage chairs, a gym, and group exercise facilities to alleviate the physical and mental stress of Medical centre employees.

'Cycle to work' campaign

The campaign that lasted from June until September encouraged all employees of the hospital to select a healthier and more environmentally friendly option as their daily means of transport instead of a car — the bicycle. We shared important information regarding cycling with our employees: how to adjust the bicycle so that it is ready for use, explained safe cycling in city traffic, organised a bicycle maintenance day, and forwarded discounts offered by our partners.

We support our staff who want to participate in various sporting events. We hold information days and organise lectures to promote and advocate for healthy habits, such as during April as the fitness month and October as the mental health month. In 2022, we also held competitions for the most steps counted when walking and kilometres when cycling, went on night-time hikes and orienteering, offered swimming lessons, etc. 220 employees participated in various events of the fitness month; the most active structural unit of the hospital was the IT Department.

Training employees

In 2022, our training focused on development. The total number of hours spent on training was about 137,000 – almost double the number of the year before and only 7% less than in 2019, the year before COVID-19. This is a significant achievement, considering the circumstances, because the hospital halted trainings for two months in January 2022, when a high number of employees fell ill to ensure sufficient numbers of staff for providing medical care.

Job category	Hours of training in 2022 per filled position
Doctor	62
Resident	58
Care	13
Lab assistant	19
Other	25
Dispensing chemist	62
Nurses	46
Total	36



The most important courses in 2022

- Due to implementing a new patient safety information system (POI), we held courses on how to use the system.
- We launched refresher courses on intensive care for general nurses.
- We started to train 60 nurses so they would have the qualification required for independent appointments.
- We prepared new integrated and online courses which help to improve the efficiency of learning and teaching:
 - 13 various online courses;
 - 7 integrated courses combining online learning with contact learning;
 - 2 recordings of conference seminars with an option to watch later.

Basic Life Support CPR training

In the summer, we piloted a CPR training called *Basic Life Support* (BLS). By the end of the year, the online course was completed by over 600 and the practical training by about 500 employees. In 2023, we are planning to offer practical training to the 2,000 employees of the hospital who work with patients daily. This is an important step in the development plan of the Medical Centre for ensuring the safe hospitalisation of the patients.

Plans for 2023

- We will launch a new online course on cyber hygiene in our online learning environment.
- We will launch an important online course on data protection for the entire Medical Centre.
- We will launch new extensive training modules for care staff and clinical assistants.
- We will create an online course on patient safety and additional materials on the subject.

Social impact

Ensuring a future pool of medical staff

One strategic goal of the Medical Centre is to teach and develop options for learning, teaching, and research and to find opportunities for implementing new solutions. In Estonia, we are in a leading role in ensuring a pool of future healthcare workers who are qualified and motivated and in sufficient numbers to cover every hospital and specialisation. Every year, residents from the University of Tartu acquire professional knowledge and skills and the students of many universities complete their internship at the Medical Centre, incl. sixth-year medical students.

Performance indicators of 2022:

- The number of residents: 153.
- The number of internship cycles for sixth-year students (of the medical faculty): 116.
- The number students and interns of nursing and care: 541.
- The number of job shadows: 137.

Another IT development is currently underway for the creation of an electronic internship information system, which is necessary for a better organisation of practical training in cooperation with other hospitals in Tallinn and helthcare colleges. The new system will be fully launched at the end of 2023.

In 2022, we continued with the student projects of service design. For this, we included students in the ongoing development programmes for improving patient journeys. In addition, the students worked on analysing the processes of admitting patients and transferring patients from acute treatment units to aftercare and preparing proposals for improvements in close cooperation with clinicians.

Last year, student Regina Tagger from the Design and Technology Futures programme of TalTech completed her master's thesis on service design that includes patients and multi-layer support networks for heart transplant patient journeys. The master's thesis focused on patients undergoing heart transplant surgery and designing better services for them by involving the patients. The thesis looks at the situation through the lens of the parties involved and brings social and service design practices to the context of a medical facility. The solution focuses on empowering patients to improve the patient journey experience after a heart transplant.

In 2022, the Medical Centre organised seven conferences for a total of about 2,000 people:

- Interdisciplinary Conference 'Geen' ('Gene')
- Cooperation Conference of the North Estonia Medical Centre and TalTech
- Nurses' Day Scientific Conference (a hybrid conference)
- IV Research and Development Conference of the North Estonia Medical Centre
- Hybrid Conference 'Hinga' ('Breathe') held by the Internal Medicine Clinic
- XIV Autumn Conference (hybrid) of the Psychiatry Clinic
- IV Nursing Management Conference

Developing research and innovation

The North Estonia Medical Centre is a pioneer of medical innovation in Estonia. Our purpose is to implement the newest treatment options, and to achieve this, comprehensive support to research and clinical studies is extremely important. The key areas are furthering scientific cooperation domestically and internationally, increasing the number of clinical and academic research projects, and including external resources to a larger extent than before.

A science committee advises the management board of the Medical Centre and the Research and Development Department regarding the development of a R&D strategy and monitors the implementation of strategies.

The committee makes suggestions regarding the strategic objectives of the research and development fund and the optimal use of its means and allocates grants and bonuses from the fund.

The committee has 14 members: one representative from every clinic with a scientific degree or experience in managing research projects plus two staff members of the Medical Centre who have led remarkable R&D projects, a nursing representative, and representatives of the Medical Technology Division, IT Department, and Research and Development Department. The science committee is led by Terje Peetso, a member of the management board.

In 2022, R&D activities were affected by a large number of employees falling ill and cases that had been postponed, so the staff focused on providing care. This means that the number of new research projects fell by about a third (to the level of 2016 and 2017).

Main steps for promoting R&D in 2022

- We selected and launched six development projects focusing on the patient journey (altogether, 12 applications were submitted), in the course of which we improved the quality and availability of several healthcare services.
- We completed a pilot project for a uniform treatment path of stroke patients, financed by the Health Insurance Fund. As a result, we want to make a permanent change in the organisation for stroke care and treatment so that it would be smoother and more patient-centred. We submitted a proposal to the Health Insurance Fund to add stroke nurse and coordinator services to the list of healthcare services.
- During the remote service pilot project of the Health Insurance Fund, we adopted a web
 platform for cancer patients called Kaiku to increase the availability of care.
- We developed a digital database (a mobile application) of injectable drugs in cooperation with the hospital pharmacy.

Innovative cooperation

Pulmonologists submitted a challenge for the development of a remote monitoring service for patients with chronic obstructive pulmonary disease (COPD) to the Urban Tech competition held by Tehnopol. At the Hackathon held in November, the creator of the best solution selected by the pulmonologists, Eupnoos Ltc., received a first-round grant of 9,500 euros for the development of a minimal viable product. In 2023, cooperation with the company will continue.



At the beginning of 2022, the management board approved the research and development strategy 2031, which lists the design of patient-centric treatment paths as one of the items under the support for care.

9%

increase in the number of pharmaceutical studies compared to the previous year.

5%

increase in published research compared to the previous year.

Horizon Europe decided to fund five projects where the North Estonia Medical Centre is a member of the consortium:

- 1. AIDAVA (AI-powered Data Curation ja Publishing Virtual Assistant) the goal of the project is the maximum automation of the curation and disclosure of personal health data with the help of AI. The digital solution will allow the use of personal health data in clinical studies and by the patients themselves.
- 2. Procure4Health is a twinning project focused on the procurement of innovation in the healthcare sector; its goal is to create a pan-European cooperation platform to identify the main issues and possibilities for improvement in the field of healthcare innovation and science.
- 3. Strategic foresight for the future is a cooperation project with innovation and design centres, universities, and companies in three domains food production, transport, and healthcare. The objective is developing various materials (courses, guidelines, etc.) to help companies in developing strategic sustainability aspects. In this framework, co-creation workshops and conferences take place.
- **4. SAFEST** (Improving quality and patient SAFEty in surgical care through STandardisation and harmonisation of perioperative care in Europe) is a four-year project; the Medical Centre works closely with the University of Tartu and the Tartu University Hospital. The goal of the project is to improve and harmonise the perioperative care of surgical patients with the main emphasis on patient safety during the entire treatment path.
- **5. RELEVIUM** (Improving quality of life of advanced pancreatic cancer patients through an AI-guided multimodal intervention, combining pain and cachexia management, nutrition, and physical activity) is also a four-year project; its objective is improving the quality of life of pancreatic cancer patients through implementing various AI-based monitoring devices.

In addition to the grants received, we submitted a new project application, **DIAMOND-HEALTHCARE**, to the Horizon Europe measure, which is related to the field of pulmonology; we expect an answer in the first months of 2023. The goal of the project is developing a monitoring device for patients that would allow to identify and prevent potential COPD flare-ups.

CLINICAL TRIALS

In our research, we pay particular attention to the applicability. For example, the first part of the study led by Dr Karl-Gunnar Isand 'Validation of the efficiency of package of measures to prevent the infection of a surgical site' evaluates the incidence of infections in regular practice, and the second part implements measures for the prevention of infections in patients who are included in the study based on a standardised protocol. The intermediate results of the study indicate that the implementation of the new prevention

158
ongoing clinical research projects

measures package reduced the incidence of surgical site infections from 39.2% to 18.1%, which is a statistically significant change. Based on the results of the study, changes are made in regular practice.

For more information on research projects, please follow this link.

Current clinical trials

The downward trend of new clinical trials is most likely related to the increasing lack of medical staff caused by the COVID-19 crisis, which puts pressure on the amount of time that the employees can dedicate to research.

In cooperation with the Estonian healthcare technology start-up Nanordica Medical OÜ, National Institute of Chemical Physics and Biophysics, and the Connected Health cluster, Dr Helen Ilumets is leading a study of a medical device called 'Pilot clinical trial for evaluating the safety and efficacy of an innovative antibacterial dressing compared to Aquagel AG+ Extra dressing in the case of diabetic foot ulcer infections'. In the course of the study, the antibacterial dressing featuring unique technology combined with nanoparticles created by Estonian researchers is compared to the currently marketed dressing containing silver particles.



Under the guidance of Dr Svetlana Sergejeva, we have joined two registry studies: a European central registry called Severe Heterogeneous Asthma Registry, Patient-centred, a Clinical Research Collaboration (SHARP) and the International Severe Asthma Registry (ISAR). The objective of the registry studies is to collect information on the incidence and course of severe asthma, but they also allow for broad research.

28
new clinical trials.
(2021: 42; 2020: 59)

Completed clinical trials

Of all the clinical trials completed in 2022, we would like to point out the research project led by Dr Riin Kullaste 'Measuring ferritin levels in donor blood'. In the course of the study, the level of ferritin was measured in 3,029 donors of the Blood Centre of the Medical Centre, and during the follow-up study, in another 306 donors, in whose case the initial testing of ferritin levels had produced low results and whose donations were halted for a year for this reason.

21
completed clinical trials
(as at 13 January 2023)

During the project, the correlation of the levels of ferritin to age, gender, and the number, type, and seasonality of the donations were studied to determine whether some of the donors should undergo regular ferritin testing in the future and to identify which ones. The study indicated that low levels of ferritin were a problem for 23% of the donors, whereas low levels of ferritin were more of a problem among female first-time donors, but in the case of repeated donations, both males and females were affected. The follow-up study demonstrated that halting donations for a year is an efficient measure for bringing ferritin levels back to normal.

Supporting research conducted by the members of the staff

Every year, we award grants from targeted funds to our employees based on applications. As a rule, we support research by allocating working time for clinical studies, conducting development projects, paying bonuses to outstanding staff members who have acquired a doctoral degree and for the best-published research.

■ In 2022, we paid 71,129 euros to our staff to support research and development (2021: 79,480; 2020: 80,802); when adding project grants and the acquisition of equipment, the amount is 91,000 euros.

Research grant

The Medical Centre and AS Maag Grupp awarded their first research grant to a member of the staff of the Medical Centre with at least five years of research experience. In 2022, Andra-Maris Post, the quality specialist of the Anaesthesiology Clinic, Dr Kersti Oselin, Doctor of Pharmacology and an oncologist, Dr Sten Saar, trauma surgeon, and Professor Margus Viigimaa, a cardiologist and Head of Development of Cardiology of the Research and Development Department, applied for the grant.

The first recipient of the research grant of AS Maag Grupp is Dr Sten Saar.

Dr Saar also received the award of the Medical Centre for the best article published in *Eesti Arst:* 'Implementation of a trauma team in the largest trauma centre in Estonia: an analysis of 1,029 instances of activation'.

In 2022, we accepted 45 applications of all the applications for supporting research and development (2021: 62; 2020: 47). We mostly supported research conducted outside working hours (23 applications; 2021: 27; 2020: 15) and paid bonuses to the authors of research articles (14 applications; 2021: 29; 2020: 20).

We also gave out the third-ever award for the best research article. Out of 26 articles submitted to the main award, we selected Dr Priit Kampus' article 'Markers of Inflammation, Oxidative Stress, and Fibrosis in Patients with Atrial Fibrillation', which was published in the journal *Oxidative Medicine and Cellular Longevity*.

In addition to the articles published in international journals, the employees of the Medical Centre published the results of their research and case reports in the medical journal *Eesti Arst*. In 2022, a total of 11 case reports

were published in *Eesti Arst*, of which 7 (64%) were related to the Medical Centre. This demonstrates that the North Estonia Medical Centre is a research-based hospital where employees analyse their work and share educational case studies with others.

In 2022, Kristo Erikson, Chief Doctor of the Centre of Intensive Care and the Head of the Centre, defended his doctorate in medical sciences at the University of Oulu; his thesis was called 'The Brain as an end organ in sepsis?'. The results of the thesis were published in four international research articles.

200 research articles published in 2022 by the employees of the centre.

At the end of October, the fourth Research and Development Conference of the North Estonia Medical Centre Foundation took place, where we introduced the objectives and results of the ongoing or completed research and innovation projects to all employees of the Medical Centre. For more information about the conference, please read the article published in <u>Eesti Arst</u>.

PHARMACEUTICAL TRIALS

In 2021, COVID-19 had a huge impact on possible pharmaceutical trials and revenue from them. This trend came to a stop in 2022 and the number of ongoing pharmaceutical trials has stabilised. In 2022, two trials passed the quality inspection of the Agency of Medicines successfully:

- phase IIIb, multi-centre, randomised, double-blind, placebo-controlled study led by Dr Eve-Kai Rauss for the assessment of the efficacy and safety of subcutaneously administered guselkumab in active psoriatic arthritis patients. One of the reasons for the inspections could have been the transfer of the first Ukrainian study patient, who was a refugee, to the Estonian centre;
- phase III KEYNOTE-671 study led by Dr Tõnu Vanakesa (randomised double-blind study that evaluates the efficacy and safety of pembrolizumab (MK-3475) with platinum-doublet chemotherapy as neoadjuvant/adjuvant therapy for participants with resectable stage II, IIIA, and resectable IIIB (T3-4N2) non-small cell lung cancer). Globally, the North Estonia Medical Centre is among the centres that have included the highest number of patients, providing a remarkable contribution to the data on pembrolizumab and creating new options for non-small cell lung cancer patients.

In 2022, four phase II studies were launched in areas where we have previously been lacking opportunities for pharmaceutical trials or where the last trials were conducted about 10–15 years ago:

- MK-2140-004 (lead researcher: Dr Mariken Ross): a study to evaluate the efficacy and safety of zilovertamab vedotin (MK-2140) for relapsed or refractory diffuse large B-cell lymphoma patients;
- MK-2140-006 (lead researcher: Dr Mariken Ross): a study of to evaluate the efficacy and safety of zilovertamab vedotin (MK-2140) as monotherapy and in combination in participants with aggressive and indolent B-cell malignancies;
- Selinexor plus dexamethasone and in alternating combination with bortezomib and lenalidomide in the treatment of primary multiple myeloma patients who are not in the hematopoietic stem cell transplant group (lead researcher Dr Diana Loigom). This is a trial of the Nordic Myeloma Study Group;
- ALN-AGT01-003 (lead researcher Professor Margus Viigimaa): a randomised, double-blind, placebo-controlled, multi-centre study to evaluate the efficacy and safety of zilebesiran used as add-on therapy in patients with hypertension not adequately controlled by a standard of care antihypertensive medication.

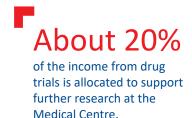
A growing trend is using real-life data when planning clinical drug trials and observational studies. A retrospective cohort study allows describing a patient population over a longer period and add important information for the development of new pharmaceuticals.

In 2022, an exciting phase 1/b/2 vaccine study was launched, led by Dr Kersti Kukk – HPV 001, which aims to evaluate the safety, tolerability, and immunogenicity of a chimpanzee adenovirus (ChAdOx1)-vectored multigenotype high-risk human papillomavirus (hrHPV) vaccine and modified vaccinia ankara (MVA)-vectored multigenotype hrHPV vaccine in women with low-grade HPV-related cervical lesions. This study includes 8 patients and it has a new lead researcher – it will continue under the direction of Dr Ülle Kiisla.



30 new applications for drug trials. (2021: 27)

24
new studies.
(2021: 22)



CLINICAL DATABASES

The procedure for clinical databases of the North Estonia Medical Centre establishes the procedure for the creation, management, and termination of a database. Only registered databases are allowed, ensuring a central oversight of the external use of the information systems of the Medical Centre, containing clinical data.

In 2022, 7 new clinical databases were registered and data was forwarded to the database of another organisation once (ECMO registry at the Tartu University Hospital), therefore, the Medical Centre has a total of 15 clinical databases. Unfortunately, five databases failed and only six databases are involved in active data exchange. The registration process of ten databases is incomplete for various reasons.

All databases use the REDCap platform; we have prepared an impact assessment on the platform regarding data protection, and the supporting materials on databases stipulate the good practices of using REDCap. The Surgery Clinic has the highest number of clinical databases (7), followed by the Internal Medicine Clinic (3), the Anaesthesiology and Oncology and Haematology Clinics with two, and the Rehabilitation and Palliative Care Clinic with one database.

The biggest obstacle in managing databases is the complexity of entering data – we need human resources and finances that would be sufficiently motivating; in addition, gathering data from different sources is a complicated process.

Raising awareness of the prevention of illnesses

The prevention plans of the Medical Centre are based on the long-term objectives of the national public health development plan. The financial volume of the prevention programmes was 0.5 million euros in 2022 (2021: 0.5; 2020: 0.3).

The Medical Centre participates in four prevention programmes financed by the Health Insurance Fund:

- early detection of cervical cancer;
- early detection of breast cancer;
- early detection of colorectal cancer;
- counselling for quitting tobacco.

Monitoring the journey of persons with a hereditary risk of breast cancer at the North Estonia Medical Centre – the objective of the project is to develop a service for monitoring people with a genetic predisposition for breast cancer at the Medical Centre. In 2022, a clinical database was created on the REDCap platform, containing the data of 59 patients with a high genetic risk. The database is used for inviting women to complete tests based on the monitoring events to be able to detect cancer as early as possible. We have created Estonian and Russian information materials in a digital format and on paper, called 'Links between breast cancer and gene mutations'. The project is led by Dr Riina Kütner and partially funded by the pharmaceutical company AstraZeneca. In 2023, the routine monitoring of patients with a high genetic risk will continue; we are also going to continue adding new patients to the database.

In addition to the aforementioned, we have created an Estonian familial hypercholesterolemia registry in partnership with other hospitals, which is mostly a tool for the prevention of cardiovascular diseases. The registry was launched in 2022.

The Medical Centre is the only one in Estonia to participate in the familial hypercholesterolemia (FHSC) registry of the European Atherosclerosis Society.

Patsiendikool (Patient School) of the North Estonia Medical Centre has an important role in raising awareness among the general population and in primary and secondary prevention. Its programme is prepared in cooperation with the Patient Council.

The topics covered at the Patient School in 2022:

- Life after a myocardial infarction
- Suitable lifestyle during cancer treatment
- The Sun and its impact
- Pharmacovigilance

The lectures and discussions of the Patient School are available on social media and videos can be watched on the website of the hospital, where patients can also share suggestions regarding the organisation of the courses and new topics, ask questions from the speakers, and register as permanent users.

We continued to use the topical websites of the Medical Centre (<u>sydamekeskus.ee</u>; <u>traumakeskus.ee</u>; <u>onkoloogiakeskus.ee</u>) to spread awareness of treatment options for heart diseases, traumas, and cancer. We have collected information on the prevention and treatment of COVID-19 to the website koroonakriis.ee.

Contribution to the development of healthcare policies

In addition to being directly involved in prevention and care, we also participate in the creation of national healthcare policies, cooperate actively with the Ministry of Social Affairs, the Health Insurance Fund, and other authorities as well as professional associations and unions in the healthcare sector.

The North Estonia Medical Centre is a member of the following organisations:

- Estonian Hospitals Association unites employers in the Estonian healthcare sector that provide healthcare services; membership is voluntary;
- European Institute for Biomedical Imaging Research EIBIR);
- European Society for Radiotherapy & Oncology (ESTRO) a non-profit research organisation that promotes radiotherapy and oncology in cancer treatment;
- European Blood Alliance (EBA);
- Organisation of European Cancer Institutes (OECI);
- European Society for Blood and Marrow Transplantation (EBMT);
- International Society for Telemedicine and eHealth (ISfTeH);
- European Network for Rare Adult Solid Cancer Reference Network (EURACAN) a European Union network for rare and complex diseases within the solid cancer network;
- The European Rare Kidney Disease Reference Network (ERKNet) a European Union network for rare and complex diseases; a kidney disease network;
- Connected Health cluster an Estonian healthcare innovation ecosystem;
- European Connected Health Alliance (ECHA) a European digital healthcare and innovation network;
- European Institute for Innovation Through Health Data (i~HD) a European non-profit organisation, the purpose of which is the optimal and reliable use of health data for the benefit of healthcare.

In addition to the organisations above, the doctors of the Medical Centre participate in the work of professional associations that aim to develop their respective fields, prepare recommendations for care, and organise topical conferences.

Environmental impact

The North Estonia Medical Centre is aware that climate change and the state of the environment in the world have a direct impact on public health and that providing healthcare services has an environmental impact which needs increasing attention.

It is possible to provide high-quality healthcare services that ensure the safety of patients while reducing the negative impact on the environment. We work towards integrating sustainability into the daily operations and decisions of the hospital so that it would be an integral part of the management system of the Medical Centre.

The most important environmental impacts of the hospital and possibilities for managing them are:

- managing energy efficiency;
- waste management and hazardous waste management;
- efficient and sustainable management of consumption.

The pillars of sustainability are:

- increasing the environmental awareness of employees;
- reducing the carbon footprint of the Medical Centre towards carbon neutrality;
- following sustainable practices when developing infrastructure;
- optimisation of the resource use of the Medical Centre.

EU taxonomy regulation

In 2020, the European Commission adopted a classification system for sustainable economic activity (the so-called taxonomy regulation). The taxonomy regulation establishes specific requirements and technical screening criteria for economic activities which help achieve the environmental objectives of the European Union. At the end of 2022, it was known which economic activities and under which conditions help to alleviate and adapt to the climate goals. When establishing the climate criteria, the Commission focused on the sectors and economic activities with the highest potential to help to achieve the climate goals. In the case of the healthcare sector, the taxonomy regulation currently only focuses on residential care activities (NACE Q87). Human health activities (NACE Q86) are not included, meaning that sustainability criteria have not been set for the main activities of the Medical Centre group.

Impact on the climate and energy consumption

One of the six strategies of the development plan of the Medical Centre is the sustainable development of the hospital to reduce the carbon footprint of its activities to achieve carbon neutrality.

In 2021, the carbon footprint of the Medical Centre was assessed, and the analysis indicated that we mostly contribute to global warming through power consumption, production of goods that we buy, and the commute of the employees.

- ¹ Regulation (EU) 2020/852 of the European Parliament and of the Council.
- The climate objectives of the European Union are alleviation of climate change, adapting to climate change, sustainable use and protection of water and marine resources, transitioning to circular economy, prevention and control of pollution, protection and restoration of natural diversity and ecosystems.

For the overall management of environmental impact, we formed an environmental group of the Medical Centre that organises communication for raising general awareness of environmental issues, monitoring the efficiency of actions taken by the Medical Centre for the management of its environmental impact, and initiating or supporting the managers of different fields in carrying out various projects for reducing the environmental impact of the Medical Centre.

In 2022, the activities for reducing the environmental impact focused on transitioning to renewable energy at the North Estonia Medical Centre, projects related to reduction in energy consumption, and the 'Cycling to work' exercise campaign for the employees of the hospital.

We also expanded the proportion of procurements involving green criteria during the financial year. For example, we held a procurement for the furniture for the new block, which was based on the principles of circular economy. Based on the results of the carbon footprint report that identified the environmental impact of using disposable gloves, we added sustainability criteria to the procurement of non-sterile gloves.

We have planned the projects for reducing our environmental impact based on the principle that they cannot affect patient safety and the quality of care. To reduce negative impact on the environment, we are planning to:

- decrease the use of disposable equipment;
- if possible, prefer more sustainable technologies, materials, and equipment;
- increase the proportion of green procurements, incl. integrate a criterion related to packaging into procurements;
- analyse food waste and find ways to cut down on it;
- reduce the amount of digital waste;
- encourage staff to choose sustainable means of transportation.

Energy consumption

In 2022, our total energy consumption was 38,981 MWh, of which:

- electricity was 20,283 MWh (52%);
- district heating was 14,210 MWh (36%);
- gas heating was 4,488 MWh (12%).

13% of energy came from renewable sources – on 1 October 2022, the Medical Centre transitioned to a renewable electricity package.

Power consumption per turnover: 127.6 MWh/thousand euros.

The hospital does not produce any power, but the investment plan for 2023 includes the installation of solar panels on the roofs of the hospital campus to produce some of the required power independently from renewable sources.

In addition, we use fuels in diesel generators to supply the Medical Centre with power in the case of an emergency and when using ambulances and other work vehicles. We used a total of 5,150 litres of diesel in diesel generators in 2022.

In 2022, we launched an energy savings programme, in the course of which:

- we reduced the temperature in areas not related to medical care;
- we reduced ventilation and the humidity level in areas not related to medical care;
- we reduced lighting in areas not directly related to medical care;
- we decommissioned unnecessary pieces of equipment;
- we encouraged our staff to help save energy.

The consumption of electricity has remained relatively stable over the course of three years. The consumption of the previous year was mostly affected by the temporary relocation of the Blood Centre to the Hiiu 44 unit due to reconstruction works at the Blood Centre, the completion of the parking garage on Retke Street in May, as well as the energy savings measures that were launched.

Use of electricity, MWh	2022	2021	2020
Blocks A, B, C, D, X. 19 J. Sütiste Street	18,043	18,051	16,340
Block E. 21 J. Sütiste Street	28	30	34
Hiiu Unit, 44 Hiiu Street	691	720	698
Hiiu Unit, 39 Hiiu Street	220	224	216
Psychiatry Clinic, 52 Paldiski Street	740	746	752
Blood Centre, 2 Ädala Street	475	681	659
Parking garage, 32 Retke Street	77		

Comparison of the relative change in the consumption of electricity over the last three years.

The consumption of heat at the Medical Centre largely depends on external temperatures and heat retention of the buildings. In the course of the renovation projects of hospital units, we replace radiators if necessary and install thermostatic radiator valves to increase energy efficiency.

District heating, MWh	2022	2021	2020		
Blocks A, B, C, D, X. J. Sütiste Street 19	11,048	11,856	9,440		
Block E. 21 J. Sütiste Street	0	0	0		
Hiiu Unit, 44 Hiiu Street	2,351	2,803	2,193		
Hiiu Unit, 39 Hiiu Street	639	629	558		
Blood Centre, 2 Ädala Street	172	307	249		
Psychiatry Clinic, 52 Paldiski Street	4,858	4,858	4,153		
Natural gas, m ³					
Psychiatry Clinic, 52 Paldiski Street	426,208	464,052	395,856		

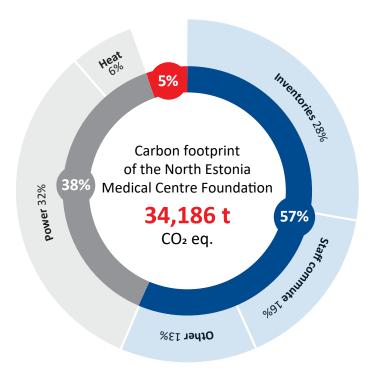
Comparison of the relative change in the consumption of heat over the last three years.

Greenhouse gas emissions

In 2021, the Medical Centre was one of the first to calculate the ${\rm CO_2}$ footprint caused by the activities of the hospital in all areas of impact and developed a methodology for monitoring the environmental impact of the Medical Centre in the future. The greenhouse gas footprint of the North Estonia Medical Centre was calculated by following the internationally acknowledged and most common greenhouse gas reporting standard – 'The GHG Protocol Corporate Accounting and Reporting Standard'.

We conduct a regular thorough assessment of greenhouse gases every two or three years because this is a labour-intensive project with little benefit compared to dedicating that time towards sustainability projects.

The objective of the Medical Centre for 2023 is to prepare an environmental implementation plan to help the Medical Centre reduce its CO_2 footprint in all scopes. We take steps to reduce our environmental impact, while not affecting the quality of healthcare services or patient safety.



SCOPE 1

Direct emissions from sources owned or controlled by the organisation.

Form 5% of the entire footprint, or 1,832 t CO_2 eq.

SCOPE 2

Indirect emissions from purchased energy.

Form 38%, or 13,031 t CO₂ eq.

SCOPE 3

All other indirect emissions created by the operations in the supply chain of the organisation.

Form 57%, or 19,323 t CO₂ eq.

On 1 October 2022, the Medical Centre transferred to renewable energy. This change has had the biggest effect because it reduces the annual environmental impact of the Medical Centre by over 30%.

In addition, the construction of charging station networks for electric vehicles has been considered in the construction of the new psychiatric unit as well as in the parking garage opened in 2022.

The Medical Centre keeps constant track of its direct carbon dioxide and nitrogen dioxide waste. The green-house gas emissions of the Medical Centre are mainly created by the boiler house running on natural gas, used in the unit at 52 Paldiski Street, and the diesel generators installed at 19 J. Sütiste Street for ensuring the continuity of operations. The generators emit greenhouse gases during regular engine exercises to make sure that the generators are at capacity and functional. The Medical Centre has been issued emissions permits for ambient air, which list the substances used for disinfecting that can be emitted into ambient air in addition to greenhouse gases.

In the last three years, the levels of emissions of the Medical Centre have remained stable. In 2021, the quantities increased somewhat. In 2022, the quantities dropped again by about 5% compared to 2021.

Quantities allowed with the pollution permit, in tonnes	2022	2021	2020
Nitrogen dioxide	0,88	0,93	0,82
Carbon dioxide	825,17	868,28	766,71

Quantities of greenhouse gases emitted at the Medical Centre over the last three years as established by the pollution permit, by emissions (in tonnes).

Waste management

While 2021 was challenging for the Medical Centre because of waste management due to COVID-19-related activities which caused a significant increase in the volume of infectious waste, then in 2022, the centre managed to reduce the volumes of both hazardous and regular waste. The amount of infectious waste fell by over 45 tonnes and the amount of municipal waste of the Medical Centre destined for landfill increased by 0.161 tonnes compared to the previous year.

The constant development of sorting principles and internal trainings at the Medical Centre have increased the overall volume of unsorted pharmaceutical waste as well as sorted chemical waste, batteries, and plastic and glass packaging in the entire centre. In 2022, we carried out a sorting centre project and adopted reusable dishes. Compared to previous periods, the volumes of paper and cardboard as well as paper and cardboard packaging have decreased. By relying on sorting solutions, we have managed to send masks used at the hospital to recycling and cut the number of plastic bags. As a result of the renovations of several care units and the acquisition of new furnishing and equipment in 2022, the quantity of large waste to be disposed grew significantly – it more than doubled (from 10.960 tonnes to 24.796 tonnes).



In 2022,

4.11 kg

of waste was created per patient per one day of hospitalisation at the Medical Centre, of which

0.72 kg

was hazardous waste and

3.39 kg

was municipal waste.

Hazardous waste	2022	2021	2020	2019	2018
	223	264	270	214	197
Non-hazardous waste	2022	2021	2020	2019	2018
	1,051	1,064	1,028	1,195	1,102

Quantities of waste in 2018–2022 (tonnes).

In the coming years, we are going to focus on reducing the consumption of disposable dishes and other disposable items, incl. disposable textiles.

Water consumption

Water consumption, m ³	2022	2021	2020
Blocks A, B, C, D, X. 19 J. Sütiste Street	79,842	89,701	72,875
Block E. 21 J. Sütiste Street	0	0	0
Hiiu Unit, 39 Hiiu Street	1,808	2,016	2,030
Hiiu Unit, 44 Hiiu Street	3,347	5,525	6,197
Psychiatry Clinic, 52 Paldiski Street	13,934	11,573	12,077
Blood Centre, 2 Ädala Street	487	840	867

Water consumption at the Medical Centre by units in the last three years.



Preventing environmental pollution and disruptions in the vicinity

In 2023, we are planning to develop and approve a document explaining the management of all environmental issues, which is going to describe the principles of the assessment of environmental risks, management principles of environmental aspects, and steps for reducing environmental risks.

To prevent issues related to disruptions affecting residents living in the vicinity, the staff, and patients, we are going to publish news in the intranet and the website of the Medical Centre to inform people of disturbances caused by planned construction and maintenance works, the extent of their impact, duration, and any changes in the area.

To communicate any disturbances caused by construction, we are going to agree on a plan with the contractors for disruptive works ahead of time, where we will determine the nature of disruptions, their duration, the affected area, and decide persons responsible and measures for mitigating the impact.

Respect for biodiversity and the surrounding natural environment

The main direct impact of the Medical Centre on biodiversity and the surrounding environment stems from the use and maintenance of the territory of the units of the Medical Centre and from construction procurements. When maintaining the territory of the Medical Centre, we comply with national requirements and guidelines for maintenance. In construction procurements, we pay increasing attention to sustainable solutions and, if possible, take into account additional sustainability criteria.

The Medical Centre started to prepare the development of the plot of the former Seewald summer manor (the current psychiatry clinic) as early as in 2001, when the centre initiated the creation of a detailed plan for the area. In cooperation with the city government and the Estonian Association of Architects, we held an architectural competition to find the best plans for a comprehensive complex for the area that would consider public interests, the natural environment, and the biodiversity of the surrounding area. The winning plan prepared for the architectural competition emphasises high vegetation and combines old with the new while preserving the existing architectural heritage and keeping the valuable trees in the area. The backbone of the plan is the axis of the park that will be preserved. The area is going to be as car-free as possible and an independent living space that values the biodiversity in the area. While preparing the detailed plan, the following biodiversity studies have been completed on the Seewald plot in 2021–2022 in addition to the previous ones:

- inventory of trees, bushes, and grasses and an expert assessment of flora to analyse the condition of the forested area and meadows in the planned development;
- detection survey of bats for determining possible breeding colonies, conducted in summer, and the hibernation sites survey of bats, completed in winter;
- expert assessment of the use of amphibian habitats along with measures for substitution, mitigation, preservation, and enrichment to avoid the destruction of the local amphibian population and ensure safe living and mobility conditions for them;
- inventory of breeding birds and an assessment on the impact of the realisation of the planned development and possible substitution, mitigation, preservation, and enrichment measures.

Currently, the City of Tallinn is planning to build another street through the registered immovable at 52 Paldiski Street according to a comprehensive plan that is still in development. The street would reduce the traffic load at the Endla-Paldiski-Mustamäe and Paldiski-Sõle-Tulika intersections and include lanes for buses and bicycles as well as sidewalks to disperse the traffic load in the area. The comprehensive plan would alter the concept of creating an independent space as free from vehicles as possible on the registered immovable at 52 Paldiski Street, which was first planned. The Medical Centre has informed the local government that it does not agree with the construction of a road through the registered immovable at 52 Paldiski Street according to the comprehensive plan, the purpose of which is to reduce the traffic load of the larger intersections in the area.

When planning the building of the new psychiatry clinic, we have focused heavily on combining the new buildings with the existing natural environment, i.e. the edge of the Mustamäe-Nõmme sands, which is a Natura 2000 area. For this, we have used the following sustainable solutions on the registered immovable at 21 J. Sütiste Street:

- a roof garden has been established on the roof of the single-storey building 55% low stonecrops, 25% meadow and moorland plants (maiden pinks, bellflowers, wild strawberries, etc.), 20% of wild thyme;
- the flowerbeds in the courtyards of departments are inspired by Japanese gardens, where the main elements are grasses, stones, and low coniferous plants;
- large flowerbeds in the public area around the building;
- during construction, new trees are planted as replacement to preserve valuable vegetation. In total, 3,368 landscaping units worth of new landscaping is added.

Responsible management of the organisation

Management structure

Supervisory boards of the Medical Centre and its subsidiaries

Members of the Supervisory Board of the Medical Centre:

Taavi Rõivas (Chairman of the Board)

Hanno Matto

Heidi Alasepp

Regina Vällik

Mihhail Kõlvart

Members of the Supervisory Board of Läänemaa Hospital:

Peep Talving (Chairman)

Andri Meriloo

Agris Peedu

Urmas Sukles

Sergei Kagalo

Members of the Supervisory Board of Raplamaa Hospital:

Agris Peedu (Chairman)

Ülle Laasner

Rene Kokk

Monica Kirspuu-Uik

Terje Peetso

Members of the Supervisory Board of Hiiumaa Hospital:

Agris Peedu (Chairman)

Aivi Karu

Agris Koppel

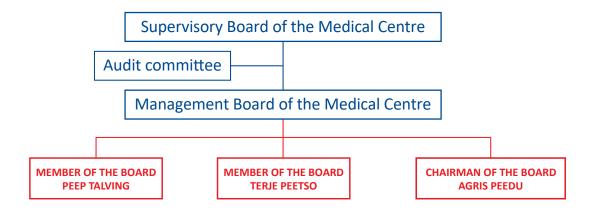
Reili Rand

Äli Roose

Management boards of the Medical Centre and subsidiary hospitals

There were no changes in the composition of the management board of the Medical Centre in 2022.

In 2022, the management board of the Medical Centre had three members: the Chairman of the Board Agris Peedu, Member of the Board and Medical Director Dr Peep Talving, and Member of the Board Terje Peetso.



The management boards of the Läänemaa and Raplamaa Hospitals consist of a single member.

The chairman of the Läänemaa Hospital is Edvard Garder and the chairman of the Raplamaa Hospital is Pille Mukk.

The management board of the Hiiumaa Hospital has two members: Riina Tamm and Tõnis Siir.

Appointment policy

As a foundation established by the state, the principles for appointing the members of the governing bodies of the North Estonia Medical Centre Foundation are stipulated in the State Assets Act. An individual to be appointed to a governing body must be in possession of the knowledge and experience required to perform the duties of the office, taking into account the area of activity of the legal person and the area of finance, and the capability of acting with the degree of care expected of them and in accordance with the requirements of the office, taking into account the aims and interests of the legal person, and the need to ensure the effective protection of the interests of the state as the shareholder, founder, or member.

In accordance with the statutes of the Medical Centre, the founder appoints the members of the supervisory board for three years and the members of the management board for five years. The chairman of the management board must be elected as a result of a public competition.

In accordance with the Public Sector Financial Accounting and Reporting Guidelines, information regarding transactions with relevant parties is disclosed if it does not comply with legislation or the general requirements of the internal documents of the accounting entity or market conditions.

Management checks

The management checks of the Medical Centre cover all activities conducted by the supervisory board, the management, and employees to ensure that, when providing services, the centre:

- complies with the laws;
- protects its assets from squandering, unintended use, incompetent management, and other such damage;
- operates in an adequate manner when performing the tasks set to the organisation;
- gathers, stores, forwards, and manages truthful, timely, and reliable information.

The Medical Centre implements three lines of defence:

- the first line of defence are activities in the units of the Medical Centre, conducted in compliance with rules and agreements, which support daily risk management. The heads of units are responsible for a functional first line of defence;
- the second line of defence consists of activities and functions for building the checks of the first line of defence and/ or constant monitoring and analysis of these checks;
- the third line of defence consists of the independent assessment of activities: external audits and internal audits for evaluating the efficiency of the first two lines of defence. However, this line of defence cannot design or develop the systems of internal controls itself or be liable for the functioning of the internal control system to maintain its independence.

1st LINE OF DEFENCE

 Daily risk management in treatment and in horizontal and support processes.

2nd LINE OF DEFENCE

- Risk, incident, and crisis management
- Information and data security management
- Occupational safety management
- Quality of care and patient safety management
- Management of feedback

3rd LINE OF DEFENCE

- Internal audit
- Independent external audits

Audit committee and internal audit

The task of the audit committee is to advise the supervisory board in issues regarding monitoring. In 2022, the members of the audit committee of the Medical Centre were Urmas Kaarlep (chairman), Georg Männik (until 17 May 2022), Sven Kirsipuu (until 25 August 2022), Regina Vällik (from 30 August 2022), Vladimir Šokman (2 September 2022 until 30 November 2022), and Hanno Matto (from 30 November 2022).

The audit committee met five times in 2022. Among all else, they:

- made proposals to the supervisory board regarding the work plan of the internal audit;
- assessed the work of the internal auditor and the internal audit unit;
- evaluated measures that the management board had implemented based on the proposals of internal audits;
- assessed the efficiency of mitigating important risks in audited areas;
- analysed the results of the auditing firm;
- reviewed the annual report of the Medical Centre and submitted its opinion to the supervisory board.

Internal audit

The purpose of the internal audit unit is to increase the confidence of the founder and the management board that the management and control measures of the Medical Centre support the goals of the organisation, are compliant with the laws, and guarantee the most economically efficient use of human and material resources. In 2022, the activities related to internal audit were led and carried out by an internal auditor of the Medical Centre; parts of the service were purchased from the auditing firm KPMG Baltics OÜ.

Internal audits are conducted according to the risk-based annual plan approved by the supervisory board; when preparing the plan, input from the supervisory and management boards, the audit committee, and the risk manager are taken into account while considering the objectives, risks, and risk management processes of the Medical Centre. Preparing the annual plan and deciding the scope of audits is based on the principle that at least one of the audits of the year focuses on the activities of the subsidiary hospitals in the audited area.

In 2022, all seven planned internal audits were completed:

- Leaving employment and reporting workplace violence as a management instrument the objective of the audit was to assess whether the procedure of the Medical Centre for leaving employment and reporting workplace violence supports management decisions and achieving the objectives of the institution.
- Authorisation agreements and contracts for services the purpose of the audit was to assess whether the process of managing authorisation agreements and contracts for services at the Medical Centre and subsidiaries ensures compliance with the law.
- Availability of medical tests for outpatients and inpatients the objective of the audit
 was to evaluate whether the procedure of waiting lists for medical tests at the Medical
 Centre is transparent and ensures the availability of tests within the agreed time according to medical need.
- Monitoring equipment the purpose of the audit was to evaluate whether the process of managing and using monitoring equipment of the Medical Centre ensures compliance with data protection requirements and is efficient and effective.
- Management decisions as exemplified by COVID-19 crisis the objective of the audit was to assess whether the management decisions made during the COVID-19 crisis at the Medical Centre were appropriate and timely.





- Management of purchase and sales invoices the purpose of the audit was to assess whether the process of managing purchase and sales invoices of the Medical Centre ensures the protection of the assets of the Medical Centre from damage caused by squandering, unintended use etc.
- Ordering stock the purpose of the audit was to assess whether the process of the Medical Centre for ordering stock and completing orders is organised efficiently and supports the functioning of the hospital and achieving the goals of the organisation.

The management of the hospital and the internal auditor regularly monitor any non-compliances identified during internal audits, the conclusions reached and recommendations made, and the implementation of action plans based thereon. A summary of the monitoring results is presented to the audit committee once a year.

Risk management

The purpose of the risk management system of the Medical Centre is to support the goals of the Medical Centre and constantly help improve the quality of management and care processes.

Process of risk analysis

- A centre/service conducts a risk analysis by:
 - identifying risks;
 - assessing risks;
 - planning the measures for risk management;
 - introducing important and critical risks to the head of the clinic.
- Head of the clinic/service:
 - corrects and/or approves risk assessments and measures for risk management if necessary; supplements them if necessary;
 - explains critical risks and the planned measures for their management to the risk committee.
- The risk committee:
 - takes note of any serious risks presented;
 - if necessary, amends the risk assessments;
 - if necessary, supports risk management with measures applied to the entire centre.

The focus of risk management in 2022 was continuing with operational risk assessments, which had already become a management tool, managing operational continuity risks, and implementing an incident management process.

The risk assessments completed during the year were:

- Risk assessment of the Anaesthesiology Clinic
- Risk assessment of the Oncology and Haematology Clinic
- Risk assessment of the Diagnostics Division
- Risk assessment of the Hospital Pharmacy
- Operational risk assessment of the IT Department
- Risk assessment of information security
- Risk assessment of operational continuity

When prioritising risks, we evaluate the likelihood of a risk actually emerging and its impact on a five-point scale. In the case of operational risks, we evaluate the impact of the risk on human health, the compliance of the Medical Centre with regulations, the operational continuity of the hospital, the staff, reputation, and finances.

The combination of impact and likelihood determines the level of criticality of a risk. We have agreed that all critical risks are discussed in the risk committee. The risk committee consists of the management board, Director of Nursing, Administrative Director, Quality Manager, Risk Manager, and a representative of the

clinics. The risk committee evaluates the sufficiency and relevance of planned measures for risk management and, if necessary, advises on issues of risk management.

The risk committee met 12 times in 2022 to discuss specific individual risks (such as a risk of power cuts) as well as the submitted risk assessments. In addition, it approved a procedure of incident management of the Medical Centre.

Financial risks, operational continuity risks, and cybersecurity risks were identified as new emerging risks.

The Medical Centre considers a potential threat of an activity or an event affecting the financial status of the organisation negatively to be a financial risk. When assessing financial risks, 24 separate risks were identified, of which 10 were considered critical or significant.

The risk management of 2022 focused on managing risks related to the quality of care, the staff, cybersecurity, and information systems.

In 2022, we identified the following as critical financial risks:

- price risk, which would significantly increase the cost base;
- interest risk, which would lead to higher financial expenses;
- compliance with the conditions of investment grants when carrying out development projects.

We have determined the target levels of critical and significant risks and steps for risk management for managing financial risks.

In 2022, the price risk was realised due to the largest price hike in recent history, when the average annual inflation rate grew 20% (YoY). In 2022, main operational costs as well as general administrative costs escalated. The largest price increase was in energy carriers, where the YoY reached 95%. The rise in interest rates became a critical risk. This was caused by the decision of the Governing Council of the European Central Bank to raise interest rates gradually, leading to EURIBOR climbing to 2.7% by the end of the year.

Regarding significant financial risks, we need to point out that we expect an increase in personnel costs due to high inflation and low unemployment rate.

We have also identified a potential deterioration of the economic environment fostered by high inflation and an increase in borrowing costs as emerging financial risks.

Basic values and ethics

The Medical Centre is one of the most important actors in the healthcare sector in Estonia, and therefore, the words and actions of every employee have a huge impact on individual patients and the entire society. Therefore, every employee is expected to behave with honesty and dignity in compliance with the basic values of the Medical Centre in any situation regardless of their profession or level of management.

The basic values of the Medical Centre are:

- dedication and professionalism;
- caring attitude and responsibility;
- openness and cooperativeness.

Ethical behaviour is based on:

- the code of ethics of the Medical Centre;
- professional ethics of doctors;
- professional ethics of nurses;
- procedure for the prevention and management of conflicts of interest at the Medical Centre.

The ethics committee of the hospital started to operate in 2018. The composition of the ethics committee is designed to include as many different points of view as possible. It consists of representatives of clinical and non-clinical fields and is a mixture of employees with a lot of experience as well as recent ones. To ensure that various topics would be discussed as broadly as possible, the ethics committee includes a doctor, a young doctor, a doctor who is a recipient of a lifetime achievement award, representatives of nurses, support services, and patients (appointed by the Estonian Chamber of Disabled People), as well as an expert in ethics.

The purpose of the ethical committee is to support comprehensive compliance with ethical values at the Medical Centre.

The ethical committee of the Medical Centre met six times in 2022. It discussed ethical issues related to:

- ending therapeutic feeding of patients in a vegatative state;
- handling tissues and organs removed from patients;
- proposing the participation in endeavours other than the ones related to medical care to a patient who has been admitted for treatment;
- the project of good communication practice.

In September 2022, an option to report ethical issues or unethical behaviour was launched on the website of the Medical Centre and the portal of support services. It is available for all employees and persons impacted by the activities of the Medical Centre. Reports can be submitted anonymously and personally. In autumn, a report was submitted through the new channel. All reports and the procedures for solving them are documented. Reports regarding ethical issues are sent to a risk manager, who will forward the information to the ethical committee for deliberation or to the manager responsible for the field for processing, based on the nature of the information.

Prevention of corruption

We have established a procedure for conflict prevention and management, which guides the employees of the Medical Centre in how to avoid a conflict of interest and to handle one if it arises. The administrative director advises the managerial staff regarding conflicts of interest. Any conflicts of interest that have not been solved correctly can be reported to the risk manager for a proper solution of the situation.

To manage the risk of a conflict of interest, we created an online course in 2021 on the risks of corruption to increase the awareness of employees of the nature of the conflict of interest through practical examples. The purpose is to prevent possible unpleasant situations for employees and the employer.

Purchases and procurements

The purpose of the supply chain of the Medical Centre group is to ensure goods and services for the main activity. The design of the purchasing process is based on transparency and efficiency. Internal procedures and guidelines have been prepared for managing these processes, including a procurement procedure

stipulating the procedural rules for procurements and principles for avoiding conflicts of interest.

When organising procurements, the rational and economical use of the funds of the Medical Centre must be ensured.

The procurement procedure is based on valid laws and the foundation does not implement additional assessments of the regional, environmental, and social impact of the tenderers. Due to the specific nature of the sector and the limited size of the market, the number of tenderers is also limited. Additional limitations could have a significant adverse impact on the availability of the procured services and products.

The Medical Centre group mostly organises public procurements for acquiring goods, services, and construction works. The choice of the procurement procedure depends on the nature of the items, services, or construction works and the volume of the contract. The circle of suppliers and service providers of the Medical Centre is international and develops as a result of the procurement procedures. When conducting a procurement, we describe important criteria for the principal activity, with which the chosen supplier must comply.

The largest groups of purchased goods of the Medical Centre are pharmaceuticals and materials used in treatment processes.

According to the Public Procurement Register, the foundation declared 225 procurements, of which 19 where joint procurements (the Medical Centre held 216, of which 19 were joint procurements; the Hiiumaa Hospital held 23 procurements, of which 17 were joint procurements; the Raplamaa Hospital held 19 procurements, of which 17 were joint procurements; and the Läänemaa Hospital held 18 procurements, of which 17 were joint procurements).

Led by the Medical Centre, the procurement for the development and maintenance of the Estonian Blood Information System and the acquisition of pacemakers were completed in 2022 as national joint procurements.

In 2022, aside from the regular supply process of the hospital, procurements were held for furnishing the soon-to-be-opened Y-block and for preparing for the construction of the new psychiatry clinic.

The procurement contracts of the Medical Centre usually stipulate a payment deadline of 14–30 days. The Medical Centre settles invoices on the payment deadline.









Direct economic value created and shared

thousand EUR	2022	2021	Change
Total operating income	305,438	277,276	10%
Donations and targeted financing	21,472	13,694	57%
Healthcare services	280,312	260,436	8%
Other services	2,792	2,783	0%
Other income	863	364	137%
Total operating expenses	295,412	271,010	9%
Labour costs	151,652	142,944	6%
Remuneration	113,065	106,885	6%
Fringe benefits	853	508	68%
Taxes on labour costs and social security contributions	37,734	35,550	6%
Management expenses	106,279	95,902	11%
Other expenditure	21,795	17,450	25%
Taxes to the state and local governments	59,467	52,892	12%
incl. labour taxes	37,374	35,550	5%
incl. VAT	21,665	17,285	25%
VAT expense on other products and services	14,113	12,360	14%
VAT expense on the acquisition of fixed assets	7,552	4,925	53%
incl. local taxes	37	37	0%
Land tax	36,66	36,85	-1%
incl. other taxes	32	20	60%
Financial performance of the financial year	9,367	5,890	59%

The created and shared direct economic value describes the financial value that the Medical Centre group creates through its operation. In the entire course of our activity, we are creating value for many stakeholders, including patients, staff, suppliers, state authorities, and the local community.

In 2022, the economic results of the Medical Centre Foundation were affected by the volume of medical care provided by the Medical Centre and other hospitals of the group, and the rising costs due to high inflation. In addition, targeted financing for construction projects also had an effect.

Most of the increase in the revenue from healthcare services comes from the volume of treatment and increased prices of services. The costs grew due to high inflation driven by energy carriers. Compared to 2021, the cost of electricity grew by 93% for the Medical Centre group. The increase in income from healthcare services is mostly related to the amendments to the collective agreement, allowing to raise employment costs by an average of 8% compared to 2021. The funding of general expenses also grew in healthcare services.

The better financial performance of the financial year is affected by the accounting principle applicable to national foundations, according to which targeted finances are reflected in the income of the period, whereas acquired assets impact costs over a longer period, depending on their commissioning and depreciation.

The Medical Centre invests the entire net gain into its main activity: employees, technology, infrastructure, and innovation.

The paid taxes increased by 12% compared to the previous year, mainly caused by higher labour costs and larger investments in fixed assets. Due to investments in fixed assets, the amount of VAT on fixed assets increased by 53% compared to the previous year (2.6 million euros).

Financial ratios

thousand EUR	2022	incl. Medical Centre	2021	incl. Medical Centre
Current liabilities coefficient (current assets / current liabilities)	1,3	1,2	1,3	1,2
Liquidity coefficient (cash / current liabilities)	0,4	0,3	0,3	0,2
Net assets coefficient (net assets / assets)	57,4%	55,9%	62,0%	60,5%
Net debt ((debts – liquid assets) / operating income)	14,9%	17,1%	15,4%	17,9%
ROA ((net gain of the financial year / assets) \times 100)	3,6%	3,1%	2,6%	2,6%

The North Estonia Medical Centre group invested 33 million euros in fixed assets in 2022. We borrowed 24.5 million euros to finance reconstruction projects in 2022. With the help of this loan, we reconstructed the Oncology and Pathology Centre.

As loan obligations increased, the ratio of net assets to assets decreased by 4.5 per cent because the assets grew at the expense of loan obligations.

The Medical Centre group is not aiming for profits from its operation and it does not distribute operating gain. The cash flow from the main activity is used to cover operating costs and for investments. The main economic indicators and financial coefficients are monitored to make sure that the foundation remains economically viable, is solvent in the short term, and can implement the planned investments in the long term.

Grants received

In 2022, the foundation received a total of 21.5 million euros in grants and targeted financing (2021: 13.7; 2020: 11.6), of which:

- **F**21.5
- targeted financing from structural funds for investments in construction was 15.6 million euros (2021: 6; 2020: 0.3);
- targeted financing for the remuneration of residents was 4.7 million euros (2021: 4.6; 2020: 4.7).

million euros – grants and targeted financing for the foundation in 2022.

Investments in infrastructure

When developing the infrastructure of the hospital, we focus on the needs of patients and the staff. We make sure that the changes would be modern, simplify the work processes of the hospital, ensure the operational continuity of the infrastructure, and reduce the operating costs of real estate due to the improved energy efficiency of the buildings.

In 2022, we invested a total of 33 million euros in infrastructure, which was distributed as follows:

- Y-block and the connecting levels between floors 0 and 1 of the AB-block 18 million euros;
- partial reconstruction of the B-block (including isolation rooms) 7 million euros;
- stage II of the reconstruction of elevators in the B-block 2.2 million euros;
- stage I of the reconstruction of the Blood Centre 1 million euros;
- Hiiumaa Hospital 2 million euros;
- other upgrades and renovation projects related to investments in infrastructure –
 1.3 million euros.

The Regional Development Fund of the EU allocated a grant of 13.1 million euros for the construction of the Y-block in 2022. The structural funds of the European Union also support the partial reconstructions of the Blood Centre and the B-block as well as the construction of isolation rooms in the B-block.

The 2023 budget for investments in infrastructure is 31.7 million euros (incl. VAT), which is distributed as follows:

- stage I of the reconstruction of the Blood Centre 8.7 million euros;
- connecting levels between the floors 0 and 1 of the AB-block and the Y-block 5.8 million euros:
- partial reconstruction of the B-block (including isolation rooms) 5.2 million euros;
- stage II of the reconstruction of elevators in the B-block 0.3 million euros;
- reconstruction of the Hiiumaa Hospital 10 million euros;
- other upgrades and renovation projects of the investment plan for infrastructure (first half of the year) -1.8 million euros.

Significant infrastructure development projects of 2022:

We continued the construction of the Oncology and Pathology Centre, which began in 2020, and the reconstruction of the connecting levels of the AB-block according to the design plan. We acquired the necessary permits for commissioning the Oncology and Pathology Centre.



- We conducted the second procurement for the construction of a mental health centre and announced a third procurement for the construction of the building due to a general increase in construction costs.
- We reconstructed three departments in the Mustamäe ward facility and began the reconstruction of the next two departments.
- We acquired the parking garage for 500 cars at 32 Retke Street.
- We relocated the Blood Centre to temporary premises and started the first stage of the reconstruction of the Blood Centre (2 Ädala Street, Tallinn).

Objectives for 2023:

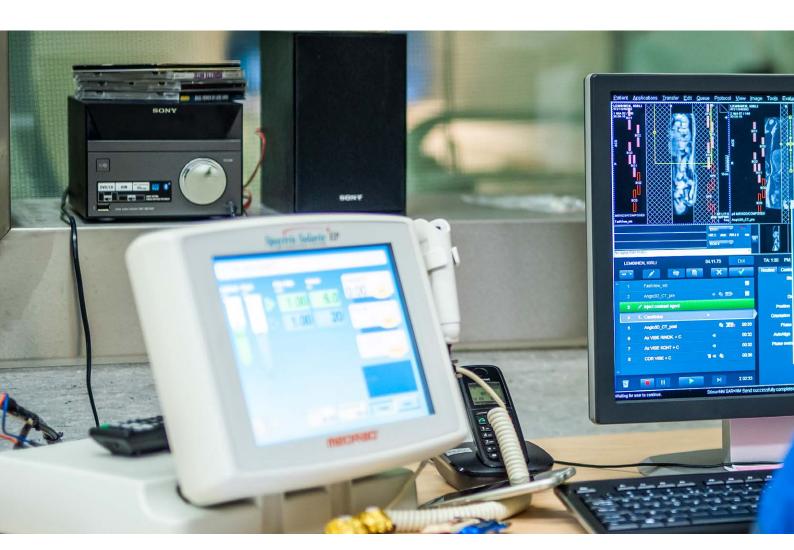
- we are going to open the completed inpatient and outpatient unit of the Oncology Centre and the Pathology Centre;
- we are going to compete the reconstruction and open the updated lobby and ward facility departments for use along with modern isolation rooms and modern central environmental systems;
- we are going to complete the first stage of the reconstruction of the Blood Centre building (2 Ädala Street, Tallinn).

Digital capability

Modern patient care requires coordinated treatment between different healthcare providers and a high IT cooperation capability.

To increase the transparency of decisions regarding the development of IT, the development committee assesses and decides the development of IT systems. The development committee consists of representatives of doctors (Dr Helis Pokker and Dr Äli Roose), a representative of nursing (Katre Zirel), Priit Tohver from the Quality Department, Riina Tamm representing subsidiary and partner hospitals, and Imbi Kivi-Sild from the IT Department.

A functional and secure IT service has become a normal expectation. The IT Department of the Medical Centre completed an ITIL (Information Technology Infrastructure Library) training to be able to provide proper IT services and the team members were awarded an ITIL certificate. ITIL is a framework that aggregates globally recognised good practices of providing IT services. The highest value of the ITIL framework is a shared concept of IT processes, terminology, and connections that a team needs for providing high-quality IT services.



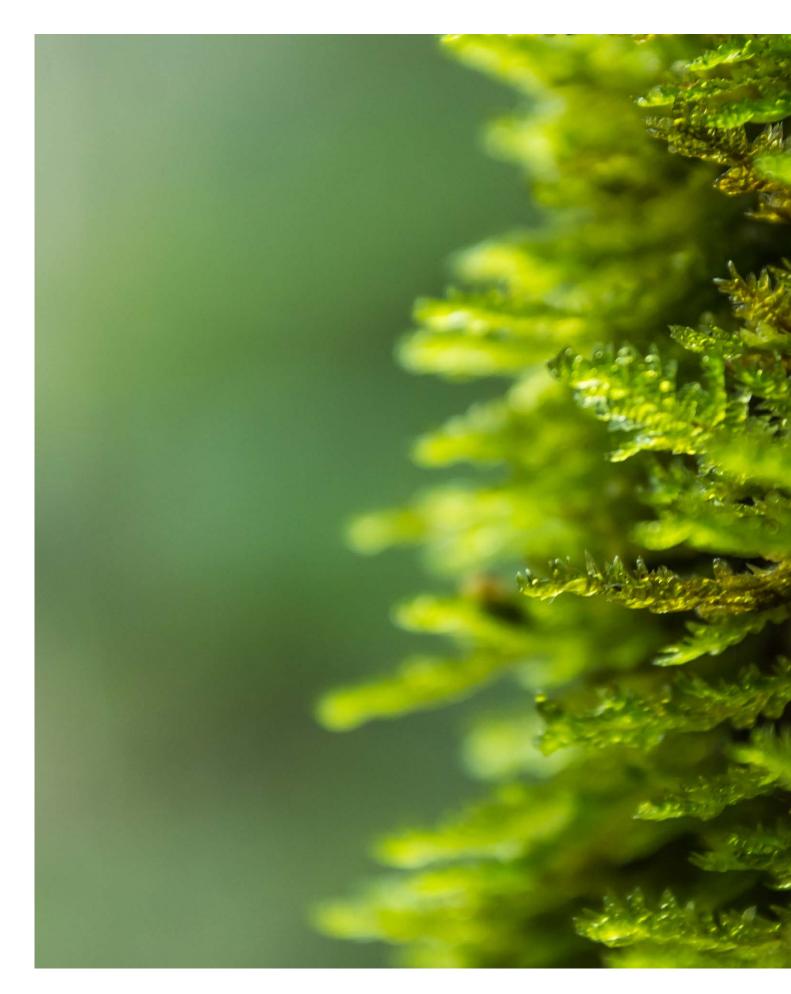
The main digital capability projects of 2022

- We conducted a procurement for purchasing an Al-based autocontouring system for radiation therapy, which allows to plan the treatment of selected locations automatically. The system was commissioned in January 2023 and we continue to implement the Al.
- We completed the analysis of adopting digital pathology and discussed the possibilities of the nationwide implementation of the system with the Society of Pathologists. We continue to conclude agreements for completing the project.
- We completed the preliminary and commercial analyses of the new online case history system, which allows to acquire a new information system for the entire foundation the Medical Centre and other interested partners. The project is ongoing and we are planning to hold another information system procurement soon.
- We concluded a framework agreement with a tenderer for the implementation of a national information system of Blood Centres in cooperation with the Tartu University Hospital, ensuring a better cooperation between Estonian Blood Centres.

In the future, we are planning to interface the cardiac surgery and cardiac anaesthesia database with the EACTS (European Association for Cardio-Thoracic Surgery) database to create an option for comparing treatment results with other centres.



Regionaalhaigla





Consolidated balance sheet

In thousands of euros	31 Dec. 2022	31 Dec. 2021	Notes
ASSETS			
Current assets			
Cash	20,157	9,826	3
Receivables and prepayments	37,112	31,427	4
Inventories	7,923	6,933	5
Total current assets	65,192	48,186	
Fixed assets			
Financial investments	3	3	
Investment properties	5,725	5,791	6
Tangible fixed assets	181,696	164,740	7
Intangible fixed assets	8,626	8,153	8
Total fixed assets	196,050	178,687	
TOTAL ASSETS	261,242	226,873	
LIABILITIES			
Current liabilities			
Trade creditors and other payables	44,073	31,849	10
Loan liabilities	6,604	5,080	15
Total current liabilities	50,677	36,929	
Long-term liabilities			
Trade creditors	1,338	1,843	
Loan liabilities	59,173	47,458	15
Total non-current liabilities	60,511	49,301	
TOTAL LIABILITIES	111,188	86,230	
Net assets			
Foundation capital at nominal value	34,243	34,243	
Net gain/loss of previous periods	106,444	100,510	
Net gain/loss of the financial year	9,367	5,890	
Total net assets	150,054	140,643	

Consolidated statement of financial performance

In thousands of euros	2022	2021	Notes
Revenue			
Sales revenue	283,104	263,218	16
Donations and targeted financing	21,472	13,694	17
Other income	863	364	
TOTAL REVENUE	305,438	277,276	
Expenses			
Grants awarded	-70	-41	17
Staff costs	-151,652	-142,944	18
Miscellaneous operating expenses	-106,279	-95,902	19
Other expenses	-21,795	-17,450	20
Depreciation and impairment of fixed assets	-15,616	-14,673	6,7,8
TOTAL EXPENSES	-295,412	-271,010	
NET GAIN/LOSS FROM PRINCIPAL ACTIVITY	10,026	6,266	
Financial income and expenses	-659	-376	
NET GAIN/LOSS OF THE FINANCIAL YEAR	9,367	5,890	

Consolidated cash flow statement

In thousands of euros	2022	2021	Notes
Cash flow from principal activities			
Proceeds from the sale of goods and services	281,199	263,117	
Operating subsidies and donations received	5,769	5,213	17
Purchase of goods and services	-119,935	-132,891	
Payment of staff costs	-150,959	-140,059	
Grants issued	-49	-41	
Interest paid	-293	-75	
Interest received	0	3	
TOTAL CASH FLOWS FROM PRINCIPAL ACTIVITIES	15,732	8,183	
Cash flows from investment activities			
Purchase of tangible and intangible assets	-32,320	-28,860	
Proceeds from targeted financing of fixed assets	14,032	4,791	17
Proceeds from the sale of tangible assets and real estate investments	0	4	
TOTAL CASH FLOWS FROM INVESTMENT ACTIVITIES	-18,288	-24,065	
Cash flows from financing activities			
Proceeds from loans	24,500	0	
Loans repaid	-5,569	-4,806	15
Financial lease repaid	-6,044	-271	
TOTAL CASH FLOWS FROM FINANCING ACTIVITIES	12,887	-5,077	
TOTAL CASH FLOWS	10,331	-20,959	
Cash and cash equivalents at the beginning of the period	9,826	30,785	3
Cash and cash equivalents at the end of the period	20,157	9,826	3
CHANGE IN CASH AND CASH EQUIVALENTS	10,331	-20,959	

Consolidated statement of changes in net assets

In thousands of euros	Foundation capital	Accumulated net gain	Total net assets	Notes
31 December 2020	34,243	100,510	134,754	
Group result of the financial year	0	5,890	5,890	
31 December 2021	34,243	106,400	140,643	
Revaluation of fixed assets	0	44	44	7
Group result of the financial year	0	9,367	9,367	
31 December 2022	34,243	115,811	150,054	



Notes to the consolidated annual accounts

Note 1 Accounting policies

1.1. General information

The consolidated annual accounts of SA Põhja-Eesti Regionaalhaigla (North Estonia Medical Centre Foundation) have been prepared in accordance with the Estonian financial reporting standard (EFRS). EFRS is a set of financial reporting requirements meant for the public, which is based on internationally recognised accounting and reporting principles; its main requirements are established by the Accounting Act of the Republic of Estonia and supplemented by guidelines issued by the Estonian Accounting Standards Board and the Public Sector Financial Accounting and Reporting Guidelines.

The consolidated annual accounts present the performance figures of SA Põhja-Eesti Regionaalhaigla and its subsidiary hospitals (SA Läänemaa Haigla, SA Raplamaa Haigla, SA Hiiumaa Haigla) in euros. Information about the subsidiary hospitals can be found in Note 2.

The annual accounts have been prepared based on the acquisition cost model, except revaluations of certain assets and financial instruments.

1.2. Reporting on subsidiaries

Consolidation principles

The financial results of all subsidiary hospitals have been reported line by line in the consolidated report. Any intra-group receivables and liabilities, transactions between the companies included in the group, as well as any unrealised profits or losses generated as a result thereof have been eliminated.

Unconsolidated statements of the parent company disclosed in the notes to the consolidated accounts

Notes to the consolidated annual accounts disclose the individual unconsolidated main financial statements of the consolidated entity (parent company).

The unconsolidated statements of the parent company, presented as notes to the consolidated annual accounts, recognise investments into subsidiaries at amortised cost.

When preparing the main financial statements of the parent company, the same accounting principles have been followed as in the case of the consolidated annual accounts.

1.3. Financial assets

Financial assets include cash, short- and long-term financial investments, trade receivables, and other short- and long-term receivables.

Financial assets have been initially registered at cost, which is the fair value of the consideration paid for the financial asset. The initial acquisition cost includes all direct expenses of the acquisition of the financial asset, including fees of mediators or advisers, any non-refundable taxes accompanying the transaction, and similar expenses (except the expenses accompanying any changes in the financial assets reported in fair value which are reported in the statement of financial performance), and acquisition expenses.

Any purchases and sales of financial assets completed under normal market conditions are reflected on the transaction date, i.e. the date on which the organisation took on the obligation (for example, entered into a contract) to buy or sell a financial asset. A purchase and sale transaction is deemed to have been completed under normal market conditions if the financial asset purchased or sold is transferred from the seller to the buyer during the period of time customary in the market or required by the applicable market regulations. After initial recognition, all financial assets are carried at fair value, except receivables from other parties (carried at amortised cost).

Long-term financial investments are loans granted with a deadline that is more than 12 months after the reporting date.

1.4. Cash and cash equivalents

Cash in the cash flow statement means cash and demand deposits (money on bank accounts).

Cash equivalents are deposits in currencies which are widely accepted and sufficiently liquid and demand deposits convertible within 3 months.

The cash flow statement has been prepared based on the direct method. Cash flows from commercial activity are presented in gross amounts, meaning that significant inflows and outflows are recognised separately.

1.5. Receivables and prepayments

Trade receivables, accrued income, and other short and long-term receivables (including loans receivable, deposits) are recognised at amortised cost. The amortised cost of short-term receivables is generally equal to their nominal value (minus write-downs); thus, short-term receivables are recognised in the balance sheet in the amount which is likely to be received.

At the end of every quarter, the probability of the receipt of claims is assessed. The probability of the receipt of a claim is assessed based on individual claims. All claims which have not been received for 90 or more days are classified as doubtful debts. All claims against natural persons classified as doubtful debts are transferred to collection agencies and derecognised.

An exception is made in the case of claims to insurance companies for medical services where the processing period before write-down is up to 3 years.

Write-down is recognised in the balance sheet on the customer receivables account as a negative amount and in the expenses according to the type of claim (on the 'Other expenses' line in the statement of financial performance). Doubtful debts which are later declared irrecoverable are derecognised.

Medical cases which are open on the reporting date but not yet completed and forwarded to the Health Insurance Fund, are recognised as a separate entry in receivables and prepayments.

1.6. Inventories

Inventories are initially recognised at cost, which consists of acquisition, manufacturing, and other expenses that are required for bringing the inventories to the current location and condition.

In accordance with the Public Sector Financial Accounting and Reporting Guidelines, the non-refundable VAT and fees accompanying the acquisition of inventories are recognised as expenses on the 'Other expenses' line in the statement of financial performance.

The cost of inventories has been determined based on individual cost (pharmaceuticals) and FIFO (except pharmaceuticals) methods. Inventories are reported in the balance sheet at cost or in the net realisable value, depending on which is lower. The net realisable value is the approximate price of the product if sold in the course of regular commercial activity less the approximate expenses necessary for preparing the product for sale and completing the sales transaction.

1.7. Investment property

In the meaning of the Public Sector Financial Accounting and Reporting Guidelines, investment property is only a facility rented to an entity not belonging in the public sector for the purpose of earning rental income that no public sector entity uses in their principal activity.

Investment property is initially recognised at cost. Investment property is subsequently reported in the balance sheet at cost, less any accumulated depreciation and potential write-downs arising from the impairment of the value.

Depreciation is calculated based on the linear method. The rate of depreciation is determined based on the useful life of the asset.

The useful life of the investment property of the Group is 50 years. If there are any signs of the useful life or residual value of an object of assets having changed significantly, the asset is depreciated prospectively.

1.8. Tangible assets

Tangible assets are initially recognised at cost, which consists of the purchase price and the direct expenses accompanying the acquisition that are required for taking the asset to the operating condition and location.

The lower limit of capitalisation of tangible assets is 5,000 euros (without VAT), except land, which is recognised at cost regardless of the cost.

Tangible assets are recognised in the balance sheet at cost, less any depreciation and potential write-downs arising from impairment of the value.

The lower limit is not implemented in case of land that is recognised regardless of cost. The lower limit is also not applied in the case of assets with cultural value, the value of which does not decrease over time.

Cost

Tangible assets are initially recognised at cost.

- The acquisition cost of purchased tangible assets consists of the purchase price and expenses directly accompanying the acquisition that are necessary for taking the assets to their working condition and location.
- VAT, other taxes (except labour taxes), and fees accompanying the acquisition of assets are not capitalised in the acquisition cost of tangible assets.
- The acquisition cost of self-constructed assets comprises the costs of preparing the location, cost of materials and services used in construction and commissioning, and staff costs.

If the construction of a tangible asset lasts for a substantial amount of time and is financed with a loan or some other debt instrument, then borrowing expenses are not capitalised in the acquisition cost of tangible assets, but recognised as interest expenses in the period they incurred.

The consolidated report reflects the tangible assets of subsidiary hospitals at the time of networking at their carrying amount.

Calculation of depreciation

Depreciation is calculated based on the linear method. Depreciation rates are determined separately for each object of fixed assets, depending on the useful life thereof. The useful lives of groups of tangible assets have the following depreciation rates:

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Buildings 3–38 years Structures 2–20 years

Plant and equipment

Medical devices 2–17 years

Transport fleet 5–8 years

IT equipment 3–5 years

Other fixed assets

Furniture 3–10 years Other 3–10 years

Land is not depreciated.

If the real useful life of an asset differs significantly from the original estimate, the depreciation period is corrected. The impact of a change in the depreciation period is recognised in the reporting period and the subsequent periods, not retrospectively.

Recognising improvements

A component replaced in the course of improvements is derecognised. The lifespan of the new component is determined according to its useful life; however, it cannot exceed the lifespan of the main object.

Revaluation of tangible assets

Pursuant to the public sector financial accounting and reporting guidelines, the original cost of a tangible asset can be replaced, as an exception, with a revalued amount if the fair value of the object significantly differs from the carrying amount and it has been caused by at least one of the following:

- the tangible asset was acquired in or prior to 1995;
- there is no accurate data on the actual cost of the tangible asset, including when it has been transferred to the public sector entity during reorganisation or due to a lack of an owner and the recipient has no correct data on the acquisition cost or if this absence of data is caused by differences with the earlier accounting principles compared to the accounting principles established by general guidelines.

Land can be revalued based on the assessed value of the land valid during the time of the revaluation. Tangible assets can be revalued only once.

Sale of tangible assets

The sale, free transfer, and granting without charge of tangible assets from one state-owned entity that is required to maintain accounting to another is considered an asset transfer where the cost and depreciation of the asset are also transferred. As the recipient of an asset, the accounting of the group recognises the cost and depreciation of the tangible asset that was transferred.

Derecognition

An object of tangible assets is no longer recognised if the object no longer exists, it is transferred, decommissioned, or the Group does not expect any economic benefits from its sale.

Tangible assets are derecognised in accordance with the State Assets Act.

Profits and losses arising from the derecognition of tangible assets are recognised in the period of derecognition on the 'Other income or other expenses' line in the economic outturn statement.

Impairment of tangible assets

In the case of impairment of tangible assets (partial or complete disassembly, demolition, destruction, damage, loss), the assets are written down. The write-down of assets is recognised with depreciation.

As a public sector entity, the Medical Centre does not test the value of assets and does not recognise the impairment of the value of assets that can be covered in the case of tangible assets needed for the provision of public services if the value of assets has not decreased due to perishing or discarding these partly or completely for other reasons.

1.9. Intangible assets

Intangible assets are initially recognised at cost, which consists of the purchase price and any expenses which are directly related to purchasing the assets. Intangible assets are recognised in the balance sheet at cost, less any accumulated depreciation and potential write-downs arising from the impairment of the value. The lower limit of capitalisation of intangible assets is 5,000 euros (without VAT).

Goodwill is recognised at cost, less accumulated depreciation.

Depreciation is calculated based on the linear method. Depreciation rates are determined separately for each object of intangible assets, depending on the useful life thereof.

The duration of useful life of groups of intangible assets is as follows:

Computer software 3–5 years Licenses 3–5 years Goodwill 5 years

If there are any signs of the useful life or residual value of an asset having changed significantly, the asset is depreciated prospectively.

1.10. Financial liabilities

All financial liabilities (trade payables, loans received, accrued debts, and other short- and long-term loan obligations) are recognised at amortised cost. The amortised cost of short-term financial liabilities is generally equal to their nominal value, and therefore, short-term financial liabilities are recognised in the balance sheet in the amount payable. For the calculation of the amortised cost of long-term financial liabilities, such liabilities are initially registered in the fair value of the payment received (less any expenses of the transaction), taking into consideration the interest costs of upcoming periods by using the effective interest rate method.

Financial liabilities are considered short-term liabilities if their payment date is within twelve months after the reporting date, unless the group has an unconditional right to postpone the payment of the liability to a date which is more than twelve months after the reporting date or the creditor has the right to withdraw the financial liability due to violations of the terms and conditions of the loan agreement on the balance sheet date.

1.11. Leases

A financial lease is a commercial lease contract that transfers all significant risks and rewards incidental to ownership of an asset to the lessee. Other lease contracts are recorded as operating lease.

When classifying lease contracts as financial or operating leases, public sector entities whose main objective is not earning profits for the owner consider circumstances where the leased assets cannot be easily replaced with other assets a criterion of financial lease.

When a lease contract is concluded between entities in the same group, the lease contract is always classified as operational lease.

The group as the lessee

Capital lease is recognised in the balance sheet at the fair value of the leased assets and liabilities or the present value of the minimum lease payments, if the latter is lower. Lease payments are divided into financial costs (interest costs) and reduction of the residual value of the liability (repayment of the principal). Financial costs are divided over the entire lease term based on the assumption that the interest rate remains the same with respect to the residual value at all times.

Assets leased under financial lease are depreciated in the same way as acquired fixed assets, whereas the depreciation period is the presumed useful life of the asset or the period of the lease contract, whichever is shorter. The direct primary expenses covered by the lessee which arise from concluding financial lease contracts are recognised under the acquisition cost of the asset leased.

Operational lease payments are recognised in a linear manner as expenses in the statement of financial performance during the lease term.

The Group as the lessor

The assets which have been leased on the basis of operational lease are recognised in the balance sheet as usual similarly to other assets of the Group, which are reported in the balance sheet. Operational lease payments are reported as income in a linear manner during the lease term. The Group leases commercial premises.

1.12. Provisions and contingent liabilities

Liabilities of the reporting period or previous periods are recognised as provisions in the balance sheet if they have a legal or contractual liability, the realisation of the liability is probable, and its amount can be reliably measured. Provisions are reported in the balance sheet in the amount which is, based on the management board's assessment, required for the satisfaction of the liability which is related to the provision as at the balance sheet date.

Other potential or actual liabilities which are less likely to realise or in the case of which it is not possible to reliably assess the amount of the expenditure that would incur are reported as conditional liabilities in the notes to the annual accounts.

1.13. Donations and targeted financing

Types of grants

Earmarked subsidies, or targeted financing – project-based grants received and given for specific purposes where the objectives are determined along with the indicators for monitoring the fulfilment of objectives: schedule and budget; the grantor requires a detailed report from the recipient about the use of the funds; the surplus of funds or any unintended use must be paid back or compensated to the grantor.

Non-targeted subsidies, or operating grants – allocated and received grants and collected and received donations, which are given to the recipient based on its tasks set in the articles of association and goals established by development documents.

Domestic targeted financing – targeted financing from and to residents, incl. other public sector entities, except foreign grants mediated through them.

Foreign targeted financing – targeted financing from non-residents, incl. international organisations.

Targeted financing for fixed assets – the main condition is that the recipient must buy, build, or acquire certain objects of fixed assets in some other manner.

Targeted financing for operating costs – targeted financing that is not targeted financing for assets.

Subsidies allocated for a specific purpose and under certain conditions are recognised as grants.

Recognition of grants

Targeted financing is recognised as income of the period of operating expenses or of the acquisition of fixed assets if the conditions of the targeted financing do not include the actual risk of a claim for repayment or failure to receive the grant; in the case of risk of actual claim for repayment or failure to receive the grant, the grant is recognised as income once the risk disappears.

Targeted financing for operations is recognised as income when the targeted financing becomes collectable and any potential conditions of the targeted financing have been met. Any targeted financing received, in the case of which the terms and conditions for reporting as income have not been met, is recognised as a liability in the balance sheet. Targeted financing is recognised in the fair value of the asset received or to be received. Income from targeted financing is recognised in the statement of financial performance as 'Grants and targeted financing'.

Non-monetary targeted financing or operational subsidies are recognised at the fair value of the assets received.

1.14. Income

Sales revenue is recognised at the time of providing a service or, if a service is provided during a longer period, based on the maturity of the provided service, presuming that the income and expenditure of the service can be reliably predicted and the collection of the payment for the transaction is probable (healthcare services have been provided to natural persons by the reporting date but the cases have not yet been submitted to the Health Insurance Fund).

Sales revenue is adjusted according to the change in the number of unfinished medical cases on the first and last date of reporting.

The sales revenue of the Group comes from its principal activity – the provision of healthcare services to insured persons and the provision of emergency care to all persons under the contract for financing medical treatment of the Health Insurance Fund.

In addition, paid healthcare services to natural and legal persons, diagnostic services, psychiatric assessments, the sale of blood products to medical institutions, and fees for medical trainings and conferences that the centre has organised are recognised as the sales revenue of the Group.

Income from the sale of goods is recognised when all significant risks of ownership have been transferred to the buyer and the income and transaction costs can be measured reliably.

Interest income is reported on an accrual basis.

1.15. Expenses

When recognising economic transactions, the principle of matching income and expenses is followed, according to which the expenses of the period are expenses that are necessary for earning the income of the period. Expenses are recognised in accordance with the accrual method.

Staff costs include the salaries of employees, calculated based on the accrual method, other remuneration that is taxed under equal terms, and fringe benefits with taxes paid thereon.

Staff costs not paid during the reporting period are recognised as liabilities to employees. The liability arising from unused holiday and the holiday pay payable is evaluated once a year at the end of the financial year and recognised as an expense of the reporting period.

The depreciation and impairment of tangible and intangible assets are recognised as depreciation and write-down of fixed assets.

Income and expenditure of financial investments and borrowings are recognised as financial income and expenses. Financial income and expenses are recognised in the period of their generation.

1.16. Recognition of foreign currency transactions

The entities in the group make settlements in euros. The presentation currency of the consolidated financial report is the euro.

Transactions in foreign currencies are reported based on the official exchange rates of the European Central Bank on the date when the translation was executed. Monetary assets and liabilities registered in foreign currencies are converted into the functional currency on the balance sheet date based on the exchange rates of the European Central Bank on the balance sheet date. Any exchange profits or losses which arise from the conversion are reported in the statement of financial performance of the reporting period.

1.17. Related parties

Parties are deemed related parties if one of the parties has control over the other party or a significant impact over the other party's business decisions.

The Group considers its related parties to be the following:

- the members of the highest governing body or management of the Medical Centre and their family members (a spouse, a partner, and a child);
- foundations, non-profit organisations, and undertakings under the dominant or significant influence of a member of the highest governing body or management of the Medical Centre or their family members;
- foundations where the Medical Centre is one of the founders;
- the members of the highest governing body or management of a subsidiary of the Medical Centre, and their family members (a spouse, a partner, and a child);
- foundations, non-profit organisations, and enterprises under the dominant or significant influence of a member of the highest governing body or management of a subsidiary of the Medical Centre or their family members.

In accordance with the Public Sector Financial Accounting and Reporting Guidelines, information regarding transactions with related parties is disclosed if they do not comply with the general requirements stipulated by law or the internal documents of the accounting entity or market conditions.

1.18. Events after the reporting date

The annual accounts reflect any significant circumstances which have an impact on the assessment of the assets and liabilities and which have arisen within the period between the balance sheet date and the date on which the report was prepared, but involve transactions which occurred during the reporting period or in previous periods. The adjusting events are recognised in the balance sheet and the statement of financial performance of the concluded year. An adjusting event is an event which had an effect on the reporting date.

The impact of non-adjusting events is not recognised in the balance sheet and the statement of financial performance of the concluded year, but disclosed in notes if they were significant. Non-adjusting events after the reporting date are events that do not indicate the existence of circumstances on the reporting date.

Note 2 Subsidiaries of the Group

SA Põhja-Eesti Regionaalhaigla networked SA Läänemaa Haigla (Läänemaa Hospital) on 13 February 2015, SA Raplamaa Haigla (Raplamaa Hospital) on 26 February 2015, and SA Hiiumaa Haigla (Hiiumaa Hospital) on 24 July 2017.

The founding members of the foundations do not exercise control through a holding, but through the appointment of the members of the supervisory board.

SA Põhja-Eesti Regionaalhaigla can appoint three members to the supervisory boards of the networked hospitals and local governments can appoint two members of the supervisory board. Through that, SA Põhja-Eesti Regionaalhaigla has an important role in directing the daily operations of the hospitals it has acquired.

Note 3 Cash

In thousands of euros	31 Dec. 2022	31 Dec. 2021
Cash at the State Treasury	12,116	5,423
Cash in commercial banks	7,989	4,360
Cash in hand	51	42
Total cash	20,157	9,826

The Ministry of Finance has created an overdraft facility of 10 million euros, which has not been used as at the reporting date; see Note 22.

Note 4 Receivables and prepayments

In thousands of euros	31 Dec. 2022	31 Dec. 2021	Notes
Accounts receivable	21,437	19,571	
Pending treatment cases ¹	8,137	6,201	
Prepayments and deferred expenses	1,235	1,488	
Receivables from grants	6,126	3,941	16
Other receivables	175	204	
Tax prepayments and taxes payable	2	22	
Total receivables and prepayments	37,112	31,427	

¹ Pending treatment cases are medical cases which are ongoing on the reporting date, i.e. not yet completed and forwarded to the Health Insurance Fund.

Note 5 Inventories

In thousands of euros	31 Dec. 2022	31 Dec. 2021
Medical supplies	3,932	3,258
Medicines	3,602	3,201
Blood and blood components	320	418
Other (incl. food and foods for special medical purposes (FSMP))	69	55
Total inventories	7,923	6,933

As a result of the annual stock taking, the stock of medicines decreased by 801 (2021: 476) thousand and the stock of medical supplies increased by 63 (2021: 3) thousand units as at the reporting date.

Note 6 Investment property

In thousands of euros	Parking garage	TOTAL
Carrying amount as at 31 Dec. 2021	5,791	5,791
Changes in 2022		
Purchases and improvements	70	70
Depreciation costs	-135	-135
Balance as at 31 Dec. 2022		
Cost	5,973	5,973
Accumulated depreciation	-248	-248
Carrying amount as at 31 Dec. 2022	5,725	5,725

In May 2022, the Medical Centre acquired a parking garage for 7 million euros, of which 6 million euros was investment property and 1 million was VAT. Until the acquisition, the parking garage was under financial lease.

In thousands of euros	2022	2021
Revenue from parking fees of the investment property	209	166
Direct expenses of managing the investment property	81	41

Note 7 Tangible assets

In thousands of euros	Land	Buildings	Machinery and equip- ment	Other	Unfinished projects	Pre- payments	TOTAL
Balance as at 31 Dec. 2021							
Cost	5,723	172,743	74,193	1,659	20,226	2,063	276,607
Accumulated depreciation	0	-58,382	-52,607	-878	0	0	-111,867
Carrying amount as at 31 Dec. 2021	5,723	114,361	21,586	781	20,226	2,063	164,740
Changes in 2022							
Purchases and improvements	0	0	5,609	184	24,245	381	30,419
Revaluation of assets	44	0	0	0	0	0	44
Depreciation costs	0	-7,788	-5,317	-246	0	0	-13,351
Written-off assets in carrying amounts	0	-35	-43	0	0	0	-78
Reclassification and other changes*	0	6,693	175	0	-4,978	-1,967	-77
Balance as at 31 Dec. 2022							
Cost	5,767	176,459	76,597	1,797	39,493	478	300,591
Accumulated depreciation	0	-63,228	-54,590	-1,077	0	0	-118,895
Carrying amount as at 31 Dec. 2022	5,767	113,231	22,007	719	39,493	478	181,696

^{*}Other changes – assets recognised as unfinished construction or prepayments which are later reclassified as operating costs.

Raplamaa Hospital relied on section 45 (revaluation of tangible assets) of the Public Sector Financial Accounting and Reporting Guidelines, allowing the revaluation of land.

The value after revaluation is 53 thousand euros; this is considered the new acquisition cost and the previous acquisition cost (8 thousand) has been eliminated. The new cost was determined by relying on the taxable value of the land in 2022.

The difference between the old and the new cost is recognised under the entry for equity capital – accumulated operating result of previous periods.

Projects recognised as ongoing construction (in thousands of euros)

Amount	Name of the project
26,598	Construction of the Mustamäe Y-block
6,315	Renovation of the Mustamäe B-block
3,607	Reconstructions of blocks in Mustamäe
1,471	Renovations of the main building of Hiiumaa Hospital
956	Construction of the Ädala block
301	Construction of primary healthcare centre of Hiiumaa Hospital
74	Equipment for Läänemaa Hospital
81	Renovation of the Mustamäe C-block
57	Renovation of the Mustamäe X-block
39	Reconstruction of the Psychiatry Clinic
39,393	TOTAL

Projects recognised as prepayments of fixed assets (in thousands of euros)

Amount	Name of the project
230	Y-block
152	Renovation of the Mustamäe B-block
96	Design plans of the Psychiatry Clinic
478	TOTAL

Note 8 Intangible assets

In thousands of euros	Software	Licences	Goodwill	Unfinished projects and prepayments	Total
Balance as at 31 December 2021					
Cost	7,233	1,169	3,699	525	12,625
Accumulated depreciation	-3,240	-579	-653	0	-4,472
Carrying amount as at 31 Dec. 2021	3,993	590	3,046	525	8,153
Changes in 2022					
Purchases and improvements	0	646	0	1,899	2,545
Depreciation costs	-1,073	-261	-739	0	-2,072
Reclassification	1,414	0	0	-1,414	0
Balance as at 31 Dec. 2022					
Cost	8,647	1,815	3,699	1,009	15,170
Accumulated depreciation	-4,313	-840	-1,392	0	-6,545
Carrying amount as at 31 Dec. 2022	4,334	975	2,307	1,009	8,626

The acquisition of a part of Dr Kai Noor Silmakabinet OÜ, an enterprise providing ophthalmological services, is recognised as goodwill.

The transactions involved the acquisitions of equipment needed for the provision of ophthalmological services, rights, contracts, and obligations (incl. employment contracts with the staff). In addition, a lease contract was concluded for the use of the premises of the clinic at Katusepapi 6 in Tallinn.

The sales agreement was concluded in 2021 and the transaction value was 2.7 million euros, which is going to be paid over the course of 4 years. In 2022, 0.4 million was paid (2021: 1.08 million); the unpaid amount is recognised as a liability in the balance sheet.

The amount of 2.3 million euros is recognised as goodwill with an amortisation period of 5 years.

Projects recognised as ongoing projects and prepayments (in thousands of euros)

Amount	Project name
291	New developments
198	Nursing epicrisis
138	Digital referral
89	Smaller developments total
71	New solution for sick leave certificates
69	Implementation of ERP-BC
58	Patient Portal – access to specialists
94	Investments in keeping the systems functional
1,009	TOTAL

Note 9 Operational lease

Accounting entity as the lessor

In thousands of euros	2022	2021	Notes
Income from operational lease	1,202	1,166	16

Operational lease income of the next periods under noncancellable lease contracts

In thousands of euros	2022	2021
Within 12 months	662	756
Within 1–5 years	767	1,640
More than 5 years	742	1,100

Carrying amount of leased assets

In thousands of euros	2022	2021
Total other assets	2,656	2,788

Accounting entity as the lessee

In thousands of euros	2022	2021
Operational lease expense	1,668	1,198

Operational lease expense of the next periods under noncancellable contracts

In thousands of euros	2022	2021
Within 12 months	1,394	738
Within 1–5 years	4,537	2,062
More than 5 years	2,893	1,410

Note 10 Trade payables and other liabilities

In thousands of euros	31 Dec. 2022	31 Dec. 2021	Notes
Trade creditors ²	18,417	8,665	11
Employee-related liabilities	13,426	12,583	12
Taxes payable	3,404	3,178	13
Accruals	5,288	6,101	
Provisions	1,760	1,287	14
Prepayments of grants and targeted financing	532	18	17
Other liabilities, prepayments received, and interest payables	7,848	17	
Total liabilities and prepayments	50,675	31,849	

Accrual-based social security contributions are recognised as accrued liabilities.

Note 11 Trade creditors

In thousands of euros	31 Dec. 2022	31 Dec. 2021	Notes
Trade creditors for products and services	14,627	4,165	
Trade creditors for fixed assets	3,790	4,500	
Total trade payables	18,417	8,665	10

Lisa 12 Employee-related liabilities

In thousands of euros	31 Dec. 2022	31 Dec. 2021	Notes
Remuneration liability	8,180	7,636	
Holiday pay liability	2,937	2,808	
Tax liability	2,264	2,109	
Deductions from wages	45	30	
Total employee payables	13,426	12,583	10

² Ei sisalda pikaajalist võlga tarnijale

Note 13 Tax payables

In thousands of euros	31 Dec. 2022	31 Dec. 2021	Notes
Social tax	3,092	3,314	
Personal income tax	1,723	1,884	
Value added tax	134	471	
Unemployment insurance premium	208	227	
Mandatory funded pension	109	129	
Other tax payables	22	76	
Total tax payables	5,288	6,101	10

Note 14 Provisions

In thousands of euros	31 Dec. 2022	31 Dec. 2021	Notes
Provision as at 1 January	1,287	1,397	
Use of provision during the period	-1,968	-1,397	
Provisions made	2,441	1,287	
Provision as at 31 December	1,760	1,287	10

Performance pay paid in 2023 and additional remuneration fund of 2022 are recognised as provisions.

Provisions are formed in the amount of 10% of the additional remuneration paid for the previous period approved by the management. Payments take place in the first quarter of 2023 if the economic results correspond to the budget.

Note 15 Debt obligations

In thousands of euros

Long-term debt obligations	31 Dec. 2022	31 Dec. 2021	Notes
Long-term debt obligations	58,684	41,314	
Long-term financial lease obligations	490	6,144	6
Total long-term debt obligations	59,173	47,458	
Short-term debt obligations	31 Dec. 2022	31 Dec. 2021	
Short-term debt obligations	6,340	4,779	
Short-term financial lease obligations	264	301	
Total short-term debt	6,604	5,080	
Total debt	65,778	52,538	

Loan agreements for bank loans include certain conditions (loan covenants) on ratios in addition to other terms, which the financial indicators of the Group must meet. Otherwise, the bank may have the right to reclaim the loan immediately.

As at 31 December 2022, the financial indicators of the Group met all terms and conditions of the loan agreements.

Change in debt during the period

					Distribution	by remaining	g maturity
In thousands of euros	Balance as at 31 Dec. 2021	Repaid loans	Received loans	Balance as at 31 Dec. 2022	Within 12 months	1–5 years	Over 5 years
Nordic Investment Bank (NIB)	13,000	-2,855	24,500	34,645	3,645	14,581	16,419
European Investment Bank (EIB)	33,074	-2,695	0	30,379	2,695	10,780	16,904
Swedbank	19	-19	0	0	0	0	0
Financial lease	6,445	-6,044	354	753	264	490	0
Total debt	52,538	-11,614	24,854	65,778	6,604	25,850	33,323

Carrying amount of assets pledged as collateral

In thousands of euros	31 Dec. 2022	31 Dec. 2021
Buildings	1,042	1,174
Land	37	37
Total	1,079	1,211

Loans from EIB and NIB are not secured by a pledge. The loan from EIB is secured by the 52.2-million-euro guarantee issued by the Ministry of Finance.

Laen	Contract date	Termination date	Loan amount in euros	Interest	Base cur- rency
Nordic Investment Bank	8 June 2006	12 Sept. 2028	32 million	6m Euribor + 0.22%	EUR
Nordic Investment Bank ³	9 Oct. 2017	5 Oct. 2037	24.5 million	6m Euribor + 0.85%	EUR
European Investment Bank	25 May 2020	25 May 2044	25 million	6m Euribor + interest depending on the disbursement	EUR
European Investment Bank	16 Sept. 2011	30 April 2035	43.5 million	6m Euribor + (0.40%–0.75%)	EUR
Council of Europe Development Bank ³	18 Dec. 2020	18 Dec. 2043	25 million	6m Euribor + interest depending on the disbursement	EUR
Swedbank	2009–2012	2020–2022	1.7 million	6m Euribor + (1.29%–1.95%)	EUR

³ In 2022, no disbursements were made in accordance with this loan agreement.



Note 16 Sales revenue

In thousands of euros	2022	2021	Notes
Provision of healthcare services			
Sale of services to the Estonian Health Insurance Fund	257,256	239,638	
incl. cost-based healthcare services to Hiiumaa Hospital ⁴	3,429	3,409	
incl. additional funds related to COVID-19	1,564	4,020	
incl. ongoing medical cases	1,936	575	
Sale of healthcare services to other legal persons	10,574	9,389	
Sale of ambulance services	9,922	9,074	
Cost-sharing by patients and paid services	2,560	2,335	
Total revenue from healthcare services	280,312	260,436	
Provision of other services			
Lease income	1,202	1,166	9
Catering	521	440	
Training services	520	427	
Other services	403	552	
Sale of medicines	146	196	
Total revenue from the provision of other services	2,792	2,783	
Total business revenue	283,104	263,218	

Starting from 1 April 2018, the Estonian Health Insurance Fund finances the services sold by SA Hiiumaa Haigla based on cost; other hospitals in the Group are funded based on medical cases.

Note 17 Fees, donations, and grants for intended purposes

Targeted financing and operating grants recognised as income by types

In thousands of euros	31 Dec. 2022	31 Dec. 2021
Targeted financing for fixed assets	15,796	8,013
Domestic targeted financing for the acquisition of fixed assets	226	1,966
Foreign targeted financing for the acquisition of fixed assets	15,570	6,048
Targeted financing for operating costs	5,592	5,565
Domestic targeted financing for operating costs	5,503	5,568
Foreign targeted financing for operating costs	89	-3
Grants and donations	83	115
Total targeted financing, donations, and grants	21,472	13,694

The means received as targeted financing for fixed assets were used as follows: 12 million euros for the construction of the Mustamäe Y-block of the Medical Centre; 2 million euros for the reconstruction of the primary healthcare centre and the main building of the Hiiumaa Hospital; 0.6 million euros for the renovation of the B-block; 1 million euros for the reconstruction of the Blood Centre.

Targeted financing for operating costs has been received as research grants, as support for participation in international studies, and as targeted financing of other operating costs.

Change in targeted financing and operating grants during the reporting period

In thousands of euros	2022	2021	Notes
Receivables as at the reporting date	6,126	3,941	4
Liabilities as at the reporting date	532	18	10
Income of the reporting period	21,472	13,694	
Expenses of the reporting period	70	41	
Received during the reporting period	19,801	10,796	

Note 18 Labour costs

In thousands of euros	2022	2021
Remuneration, performance pay, holiday pay, and bonuses	113,065	106,885
Labour taxes	37,734	35,550
Labour costs classified as fringe benefits along with taxes	853	509
Total labour costs	151,652	142,944
Average number of employees, reduced to full-time equivalents	4,098	4,122

Note 19 Operating expenses

In thousands of euros	2022	2021
Principal activity expenses		
Medicinal products	32,594	29,519
Medical supplies	14,018	12,881
Surgery supplies	9,344	8,347
Reagents and allergens	9,093	9,260
Purchased medical services	5,091	5,941
Operating expenses related to medical equipment	4,149	5,089
Special clothing and disposable textiles	2,766	3,325
Other medical supplies	3,768	1,916
Research and development	74	94
Total principal activity expenses	80,897	76,372
Various operating expenses		
Operating expense of property, buildings, and premises	13,804	9,250
Information and communication technology expenses	4,059	3,089
Foodstuffs and catering services	1,768	1,152
Training and travel expenses	1,465	771
Administration costs	1,359	1,188
Operating cost of vehicles	1,135	990
Miscellaneous administrative expenses	1,107	2,500
Cost of managing fixtures and fittings	685	590
Total other operating expenses	25,382	19,530
Total operating expenses	106,279	95,902

Note 20 Other expenses

In thousands of euros	2022	2021
VAT expense of goods and services	14,113	12,360
VAT expense of fixed assets acquired	7,552	4,925
Other taxes, fees, doubtful receivables, write-down of inventory, and changes in exchange rates	130	165
Total other expenses	21,795	17,450

Note 21 Related parties

1. Remuneration and other significant benefits for the executive and senior management of the North Estonia Medical Centre and subsidiaries in the group.

In thousands of euros	2022	2021
Labour costs, incl. tax expenses	707	653
Fringe benefits	0	26
Compensation for the use of a personal car for business travel	6	2

No transactions were conducted during 2022 or the reference period with the executive and senior management and their family members and foundations, non-profit organisations, or companies under their dominant or significant influence.

2. Important transactions with foundations where one of the founding members is the Foundation.

	The supervisory board of the lender approved the decision for granting a loan	Termination date	Loan amount in euros	Base cur- rency	Interest
Läänemaa Hospital, contract 2019/9-17/127-1	30 Oct. 2018	15 Dec. 2026	1,200 thousand	EUR	6m EURIBOR + 1.10%

					Distribution by the remaining maturity	
In thousands of euros	Loan balance 31 Dec. 2021	Calculated interest	Loan repaid	Loan balance 31 Dec. 2022	12 months	1–5 years
Läänemaa Hospital	900	9	400	500	100	400
Total debt	900	9	400	500	100	400

Note 22 Events after the reporting date

Amendments were introduced to regulation No. 105 of the Minister of Finance of 11 December 2003 'Public sector guidelines for financial accounting and reporting', which will take effect on 1 January 2023.

An amendment that will affect the 2023 economic result of the Medical Centre group is increasing the threshold of acquisition costs of tangible and intangible assets from 5,000 euros to 10,000 euros.

Pursuant to implementing provisions, acquired fixed assets with an acquisition cost of under 10,000 euros are derecognised by 31 January 2023 at the latest and the residual value of such assets is recognised as depreciation costs of 2023 as at 31 December 2022.

Following the reporting date, the fixed assets with a value under the limit of 10,000 euros have been derecognised in the entities belonging to the group. The residual value of written-off assets, recognised as depreciation costs, is 2.4 million euros. The normal depreciation of the same assets in 2023 would be 0.8 million euros, or in other words, the change in the threshold reduces the net gain by 1.6 million euros.

In March 2023, the new Y-block of the Mustamäe campus of the Foundation will be completed for a total cost of 27 million euros, of which 13 million euros is structural support.

In March 2023, the Ministry of Finance increased the overdraft facility of the North Estonia Medical Centre Foundation from 10 million to 20 million euros to ensure the necessary circulating capital.

Hiiumaa Hospital concluded a contract for using an overdraft facility of 2.5 million euros with Swedbank AS.

The overdraft facility is used for better management of cash flows and liquidity risks of the current month. The state of the current cash flows is impacted most by investments in construction, carried out with the help of structural support, which are funded from the cash flow of the Medical Centre until the grants are received.

Note 23 Unconsolidated statements of the parent company

Balance sheet

In thousands of euros	31 Dec. 2022	31 Dec. 2021	Notes
ASSETS			
Current assets			
Cash	16,446	5,465	
Receivables and prepayments	34,144	30,744	
Loan receivables	100	100	22
Inventories	7,806	6,827	
TOTAL CURRENT ASSETS	58,496	43,136	
Fixed assets			
Shares in subsidiaries	2,300	2,300	
Financial investments	400	800	
Long-term loan receivables	3	3	22
Investment properties	5,725	5,791	
Tangible fixed assets	169,311	153,570	
Intangible fixed assets	8,626	8,153	
TOTAL FIXED ASSETS	186,365	170,617	
TOTAL ASSETS	244,861	213,753	
LIABILITIES			
Current liabilities			
Trade payables and other liabilities	38,830	28,873	
Loan liabilities	6,604	5,060	
Provisions	1,734	1,259	
Targeted grant liabilities	378	18	
TOTAL CURRENT LIABILITIES	47,547	35,210	
Non-current liabilities			
Trade creditors	1,337	1,842	
Loan liabilities	59,173	47,457	
TOTAL NON-CURRENT LIABILITIES	60,511	49,299	
TOTAL LIABILITIES	108,058	84,509	
Net assets			
Foundation capital at nominal value	34,243	34,243	
Net gain/loss of previous periods	95,000	89,513	
Net gain/loss of the financial year	7,559	5,488	
TOTAL NET ASSETS	136,803	129,244	
TOTAL LIABILITIES AND NET ASSETS	244,861	213,753	

Statement of financial performance

In thousands of euros	2022	2021
Revenue		
Sales revenue	268,154	248,543
Donations and grants received	19,104	13,351
Other income	863	369
TOTAL REVENUE	288,121	262,263
Expenses		
Grants awarded	-97	-41
Labour costs	-140,548	-132,286
Various operating expenses	-103,489	-93,213
Other expenses	-20,980	-16,896
Depreciation and impairment of fixed assets	-14,795	-13,970
TOTAL EXPENSES	-279,909	-256,406
OPERATING RESULT FROM PRINCIPAL ACTIVITY	8,212	5,857
Other financial income and expenses	-653	-369
OPERATING RESULT OF THE FINANCIAL YEAR	7,559	5,488



Cash flow statement

In thousands of euros	2022	2021	Notes
Cash flow from principal activities			
Targeted financing, grants, and donations received	5,665	5,103	
Proceeds from the sale of goods and services	266,046	248,666	
Purchase of goods and services	-116,066	-116,623	
Staff costs	-140,003	-129,565	
Interest paid	-293	-74	
Grants and targeted financing made	-49	0	
TOTAL CASH FLOWS FROM PRINCIPAL ACTIVITIES	15,291	7,464	
Cash flows from investment activities			
Purchase of tangible and intangible assets	-31,338	-28,065	
Proceeds from the targeted financing of fixed assets	13,714	4,417	
Repayments of loans issued	400	100	22
Interest received	9	17	
TOTAL CASH FLOWS FROM INVESTMENT	-17,215	-23,531	
Cash flows from financing activities			
Proceeds from loans	24,500	0	
Loans repaid	-5,550	-4,760	
Financial lease repaid	-6,044	-271	
TOTAL CASH FLOWS FROM FINANCING ACTIVITIES	12,906	-5,031	
TOTAL CASH FLOWS	10,982	-21,098	
Cash and cash equivalents at the beginning of period	5,465	26,563	
Cash and cash equivalents at the end of period	16,446	5,465	
CHANGE IN CASH AND CASH EQUIVALENTS	10,982	-21,098	

Statement of changes in net assets

In thousands of euros	Foundation capital	Accumulated result	Total net assets
Adjusted net assets as at 31 December 2021	34,243	106,400	140,643
Result of the financial year	0	7,559	7,559
Net assets as at 31 December 2022	34,243	102,559	136,803
Carrying amount of holdings under dominant and significant influence	0	-2,300	-2,300
Value of holdings under dominant and significant influence according to equity method	0	15,705	15,705
Adjusted net assets as at 31 December 2022	34,243	115,965	150,208



KPMG Baltics OÜNarva mnt 5 Tallinn
10117 Estonia

Telephone Fax Website +372 6 268 700 +372 6 268 777 www.kpmg.ee

INDEPENDENT SWORN AUDITOR REPORT

To the Supervisory Board of the North Estonia Medical Centre Foundation

Opinion

We have audited the consolidated annual accounts of the North Estonia Medical Centre Foundation and its subsidiaries (hereinafter referred to as the group), which include the consolidated balance sheet as at 31 December 2022, the consolidated statement of financial performance, the consolidated cash flow statement, and the consolidated statement of changes in net assets of the year which ended on the aforementioned date, as well as the consolidated notes to the annual accounts, including the summary of significant accounting policies.

In our opinion, the preceding consolidated annual accounts reflect fairly the consolidated financial position of the group as at 31 December 2022 in all material respects, as well as the consolidated financial result and the consolidated cash flows of the financial year that ended on the date above in accordance with the Estonian financial reporting standard.

Basis for the opinion

We have conducted the audit in accordance with the international auditing standards (Estonia). Our obligations based on these standards are described further in the 'Sworn auditor's responsibilities relating to the audit of the consolidated annual accounts' section of the report. We are independent of the group, in accordance with the Code of Ethics for Professional Accountants (Estonia) (incl. independence requirements), and have met all of our other ethics-related obligations based on these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Other information

The management is responsible for other information. Other information contains the management report, but does not include the consolidated annual accounts or this sworn auditor's report.

Our opinion on the consolidated annual accounts does not cover the other information and we do not express any form of assured conclusion thereon.

In connection with our audit of the consolidated annual accounts, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the consolidated annual accounts or our knowledge obtained in the audit or otherwise appears to be materially misstated. In addition, it is our responsibility to disclose whether the information presented in the management report is consistent with the applicable legal requirements.

Should we conclude, based on the work conducted by us, that other information has been significantly misreported, it is our obligation to report this fact. We have nothing to report in this matter.

Responsibilities of the management and those in charge for management relating to the audit of the consolidated annual accounts

The management is responsible for the preparation and fair presentation of the consolidated annual accounts in accordance with the Estonian Financial Reporting Standard and for such internal control as management determines is necessary to enable the preparation of consolidated annual accounts that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated annual accounts, the management is responsible for assessing the group's ability to continue as a going concern, disclosing, as applicable, matters related to the going concern and using the going concern basis of accounting unless it is expected to liquidate the group or to cease operations, or if it has no realistic alternative but to do so.

Those in charge of management are responsible for overseeing the group's consolidated financial reporting process.

Sworn auditor's responsibilities relating to the audit of the consolidated annual accounts

Our objectives are to obtain reasonable assurance about whether the consolidated annual accounts as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's 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 International Standards on Auditing (ISAs) (Estonia) will always detect a material misstatement when it exists. Misstatements can be due to fraud or errors and are considered material when it can be presumed with good reason that these can affect economic



decisions individually or together, which the users make based on the consolidated annual accounts.

As part of an audit in accordance with ISAs (Estonia), we exercise professional judgement and maintain professional scepticism throughout the audit. We also:

- identify and assess the risks of material misstatement of the consolidated annual accounts, whether due to fraud or error, design and perform audit procedures as a response 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 to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the group'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 the 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 group's ability to continue as a going concern. If we conclude that a material uncertainty exists,
 we are required to draw attention in our sworn auditor's report to the related disclosures in the consolidated annual
 accounts 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 sworn auditor's report. However, future events or conditions may cause the group to
 cease to continue as a going concern;
- evaluate the overall presentation, structure, and content of the consolidated annual accounts, including the disclosures, and whether the consolidated annual accounts represent the underlying transactions and events in a manner that achieves fair presentation;
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision, and performance of the group audit. We remain solely responsible for our audit opinion.

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.

KPMG Baltics OÜ

Firm of Auditors Licence no 17

/signed digitally/

Andris Jegers

Registry number of the sworn auditor: 171

Tallinn, 29 March 2023

