

Annual report 2023





Table of contents

Foreword of the Executive Board	3
Report from the Supervisory Board	6
The value we create for society	8
UMC Utrecht in society	9
Our core tasks	10
Our strategy	12
Our tasks	14
Our approach	19
Our strategic KPI's	22
Our partners	24
Cooperations with an international impact	25
Partnerships with a nationwide impact	28
Cooperations with regional impact	31
Our patients	36
Our patients' appreciation	38
Care for our patients	40
Digital care	43
Cooperating with patients	47
Diversity and inclusiveness in care	50
Quality & patient safety	51
Incidents, major incidents, and complaints	53
Our research for the healthcare of tomorrow	55
Unique research	57
Valorization of research	60
Research funding	62
Open science: transparant, publicly available research	67
Collaborating with patients in research	69
Diversity and inclusiveness in research	70
Quality of research	72
Our students	74
Appreciation of education	76
The New Utrecht School	77
Interdisciplinary en inter-professional education	79
Cooperation with patients in education	81
Diversity and inclusiveness in education	82
Resilience and wellbeing	84
Planetary Health	86
Quality of education	88
Our colleagues	90
Appreciation of our colleagues	92
Development of our colleagues	93
Recruiting new colleagues	95



Talent development	96
Leadership development	97
Vitality and sustainable employability	98
Social safety: This is us	100
Diversity and inclusiveness	102
Environmental, Social and Governance (ESG)	104
Sustainable Development Goals	105
Environment	108
Social	109
Governance	110
Sustainability	111
CO2-footprint: on schedule for CO2 reduction	113
Circular healthcare	115
Prevention of disease	116
Raising awareness	117
Integrating Planetary Health and sustainability in education	118
Reducing the environmental impact of drugs	119
Our organization	120
Accomodation	121
Digitalization	123
Data science and artificial intelligence (AI)	125
Diversity and inclusiveness in our organization	127
Our finances	128
Looking back on 2023	129
Key figures	130
Financial results	131
Risk control	132
Looking ahead at the financial situation in 2024	137
Governance	139
Management and structure	140
Employee Representation	147
Integrity	151
Healthcare Governance Code and other codes of conduct	152
Credits	153



Foreword of the Executive Board

"Together, we remain on track towards the healthcare of tomorrow."

Together, we improve human health and create the healthcare of tomorrow. Together, we create more value, because every human being counts. This is what we as UMC Utrecht stand for. The world around us continues to change at a rapid pace. In 2023 we therefore set a new drive in motion to ensure that in all tasks that lie before us, we remain on track, towards the healthcare of tomorrow. With agility and flexibility, to turn challenges and opportunities into added value and impact for society. Now and in the future.

An attractive, innovative region

Motivated by the tasks from the Integral Healthcare Agreement (IZA), in 2023 for instance, we intensified collaborations in our region and continued to expand them. Not only with other hospitals, but also with many other stakeholders such as general practitioners, nursing and care homes, home-care professionals, and the community. And with educational and knowledge institutions. Together, in 2023, we also drew up a regional overview ('Regiobeeld') and plan. This is an achievement and an important basis on which we can collectively and through partnerships organize a coherent regional care network with a strong educational and research structure. All the stakeholders are enthusiastic and intensely involved.

"In 2024, we shall continue to work together on an attractive, innovative region where we provide the right care in the right place, focus on prevention, and reduce health disparities."

Continue to invest in the future

In addition, together with many of our colleagues, partners, and patients, we are setting up our strategic program, the Healthcare of Tomorrow. This enables us to continue investing in the future and to innovate in healthcare, research, education, and valorization, by optimizing our support processes and improving our efficiency. We can thus continue to invest in digitalization to turn the opportunities that it offers, into valuable solutions for colleagues and patients. And in the renovation and construction of our buildings to make them optimally suited to the (future) needs of all users. We also continue to invest in sustainability in order to fulfill the agreements in the Green Deal for Sustainable Healthcare 3.0 and contribute to sustainable development goals (SDGs).

A sustainable healthcare sector and healthy society'

In our **healthcare**, our **research**, and our **education**, patients are central. This is why we collaborate with patients in a structural way. The questionnaire **'We'd like to get to know you'** for example helps us to offer even more suitable, personalized care.

We also once again undertook worthwhile sustainability initiatives in 2023. Planetary Health and sustainability are thus becoming an increasingly integral part of our healthcare, our research, and our education. We are also continuing to make our operational management more sustainable. This has resulted in a decrease in our CO2 footprint, less waste, and less wasting of food and drugs. These are important steps whereby we continue together on the road towards a sustainable healthcare sector and a healthy society.



Patients are central

In our **healthcare**, our **research**, and our **education**, patients are central. This is why we collaborate with patients in a structural way. The questionnaire **'We'd like to get to know you'** for example helps us to offer even more suitable, personalized care.



In 2023 for the first time we also had medical students with a chronic disease – 'medical dual talents' – give **guest lectures** in our bachelor program in Medicine. The fact that **our patients appreciate our care** was again evident from the score that they gave us: an average of 8.7. This of course makes us happy and proud.

Appreciation from colleagues and students

We are also glad about the appreciation of our **colleagues** and **students**. We set high standards for ourselves. It is therefore wonderful to see that a large number of **students** are (very) satisfied with our education and that the percentage continues to rise. What is more, in 2023 both our bachelor program in Medicine and in Biomedical Sciences (again) received the '**Topopleiding**' label from the Keuzegids Universiteiten guide for choosing a university program. This is great news. At the same time, we are striving to improve even further. Which is also why we started in 2023 with the **movement** '**This is Us**' to create a more socially safe, open, inclusive, and stimulating work and learning environment. This has started a worthwhile movement and led to valuable dialog in our organization. We are therefore continuing with it in 2024.

Steps regarding healthcare, education, research, and valorization

Together with our colleagues, patients, students, and partners, we achieved good results in 2023 in our **four core tasks** namely healthcare, education, research, and valorization.



In the field of healthcare we have for instance provided a new home-monitoring application for all patients with a ventricular assist device. This is one of the reasons why home-monitoring further increased in 2023. In education we see that The New Utrecht School continues to develop and that we are introducing valuable educational innovations. We are for example using Virtual Reality as a complement to skill and practical training and preparing students more effectively before they enter the field.

We also have great appreciation for our researchers and the unique research at UMC Utrecht. In 2023 for instance it was discovered that babies, pregnant women, and older people can be vaccinated against the RS virus. It is a genuine turning point in the fight against this dangerous virus. And, if we look at valorization, we received a great contribution from Health~Holland. We are using this for instance to support five Al labs where we make use of Al and data science to develop answers to social issues.

Ready for the future

Looking back, we can conclude that we achieved good results in 2023 of which we can be proud. We also continued to invest to ensure that we will be and remain an agile, sustainable, and financially sound organization in the future. An organization that puts people at the center. Where we can continue in the coming years to work with drive and confidence to create the healthcare of tomorrow. And create more value, because every person counts. Now and in the future.

Executive board of UMC Utrecht,

Margriet Schneider Arno Hoes Josefien Kursten Remco van Lunteren





Report from the Supervisory Board

'An agile organization with a clear dot on the horizon'

UMC Utrecht is facing considerable social tasks such as keeping quality healthcare accessible and affordable, conducting unique scientific research, ensuring the funding and valorization thereof, and providing innovative, multidisciplinary education.

Topics that regularly come up in the various discussions and meetings that we as Supervisory Board held in 2023, included the Integral Healthcare Agreement (IZA) and Healthcare of Tomorrow program, the quality and safety of healthcare, sustainability, and diversity and inclusiveness in healthcare, research, and education. Employee recruitment and retention also received attention, as did the resilience and well-being of students. We furthermore looked at the financial side of affairs, such as quarterly figures, decisions in the scope of the 2024 budget, and the approval of annual figures and the 2022 financial statements. As Supervisory Board, we feel closely involved in the dialog around the concentration of care for children with congenital heart defects and the establishment of a collaboration agreement with Amsterdam UMC and Leids University Medical Center for academic cardiology and pediatric care.

During contact moments we were again and again impressed by the way in which innovation is conducted at UMC Utrecht. Not only by researchers, but also by colleagues in healthcare and education. Artificial intelligence (AI) and data science continue to allow better and more efficient care. And in our training programs, virtual reality is for example used as an effective complement to practical training. Although technology continues to offer more and more possibilities, we fortunately also observe that humans remain central at UMC Utrecht. We see this for instance in the launch of the This is Us campaign and the focus on psycho-social support for employees. The continuously increasing collaboration with regional and (inter)national partners also show that UMC Utrecht acts in the collective interest.

A number of changes occurred in the Supervisory Board in 2023. Caroline Princen stepped down. She was a member of the Supervisory Board of UMC Utrecht for almost nine years, including five years as chair. We are indebted to her for her tremendous input and valuable contribution both to the Supervisory Board and to UMC Utrecht as an organization. The undersigned took the chair over from Caroline as of June 1, 2023. In view of the renovation task that lies before UMC Utrecht, the Supervisory Board took Monique Maarsen on board. She is an expert in accommodation and building issues. In her previous secondary function at KiKa she was for example closely involved in the construction of the Princess Máxima Center.

All in all we may conclude that UMC Utrecht sees social tasks as its mission. UMC Utrecht furthermore has a sound financial basis. In the future, the organization will however face considerable financial challenges when it comes to investing in buildings, digitalization, and increasing sustainability. Also for this reason it makes sense that UMC Utrecht in 2023 further gave shape to the Healthcare of Tomorrow program whereby all challenges are brought together integrally and the focus is on achieving an efficient organization.



We have great confidence in the Executive Board and in the direction that was taken some years ago already towards the healthcare of tomorrow. The objective is clear, and the basis – the Connecting Worlds strategy – is steadfast. At the same time the organization has shown itself to be agile in its response to external and internal tasks. We believe that the Executive Board has a clear vision of the main challenges and opportunities and is working on these together with all employees in a driven and efficient manner. UMC Utrecht is making great strides and we are happy about it.

On behalf of the Supervisory Board,

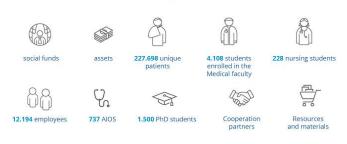
Henk Broeders, chair

Read more on how the Supervisory Board executed its supervisory task in 2023.



The value we create for society





What we stand for (our mission)

improving human health and creating the healthcare of the future.

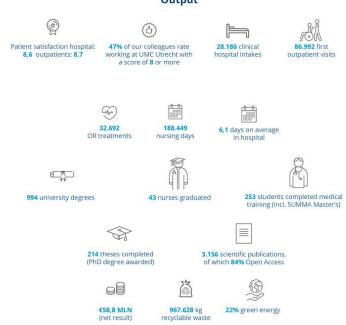
What we aim for (our vision)

Together we create more value, because every human being counts.

Our strategy

Connecting Worlds







UMC Utrecht in society





Our core tasks

Our mission is together to improve people's health and create the healthcare of tomorrow. In this we focus on our four core tasks that are inextricably interwoven:

Care

We offer patients qualitative and effective care according to the most recent insights, in line with our care profile. This includes care for which we have a statutory duty, such as level 1 trauma care and care to patients with rare diseases via our expertise centers for rare diseases, care within our six focal points, and complex care (such as multi-specialist or multi-diagnostic care). In addition, based on this specific care profile, we play a clearly distinctive role in our region. We provide knowledge and innovation for our partners, for example for healthcare in the neighborhood and prevention in the Health Hub

Utrecht including GGD. In the region we collaborate intensely on acute care and establish agreements for various components of medical specialist care (vascular surgery, oncology, and cardiothoracic surgery). We provide our care in a network model wherever we can (including with our fixed partners St. Antonius Hospital, Meander MC, and Diakonessenhuis), where we as UMC Utrecht play a primary role in complex and tertiary healthcare. Through our research we are the innovation driver for the region, which means that we tackle innovation together with regional partners, citizens, patients, and students and bring it back to the region as fast as possible so that patients can get optimal benefit from them. Collaboration with patients is our basis here, so that we can give patients the care that suits them. We are also making our care as sustainable as possible. Read more about our impact for patients.





Research

We do scientific research, with narrow links between our basic research and the more applied and clinical studies. Our research is condensed in **six multidisciplinary programs** (focal points). Our healthcare is also integrated therein. In this way new discoveries and knowledge can benefit the patient fast, whereby we bring about the healthcare of tomorrow. An important basis for our research is **questions from our patients** and from society. And we are looking at ways in which to make our research more **sustainable**. Read more about **our research** for the healthcare of tomorrow.

Education and training programs

We offer training for our students and (bio)medical researchers, doctors, nurses and other healthcare professionals via our principles of **The New Utrecht School**:

- · Inter-professional and interdisciplinary training
- · Patient participation
- Inclusion and diversity
- · Translational medicine and life sciences
- · Resilience and wellbeing
- Planetary Health

We are thus training top professionals who contribute to knowledge development in and for healthcare, for now and for tomorrow. For example via the new interdisciplinary bachelor program in Healthcare, Health and Society, and the master's program in Medical Humanities, which we are offering together with the Medical faculty. We involve our students and patients in the development of our education. We offer scope for development and a climate of continuous renewal. Read more about our impact for students.

Valorization

At UMC Utrecht we endeavor to turn acquired knowledge into new diagnostic opportunities, treatments, and preventative interventions that can also be applied in daily practice. We therefore support researchers and entrepreneurs in bringing knowledge and innovation to the market. To go from a concept to a start-up, we help for instance with: the protection of intellectual property, guaranteeing of integrity, obtaining of the necessary licenses, and acquiring of funding for the start-up. Read more about what we do in terms of valorization.



Our strategy

We work daily on the further improvement of care and the health of the population. Being on the forefront is not enough. Together with our partners we want to be trailblazers and take healthcare in the Netherlands further.

Our mission

Together we improve human health and create the healthcare of tomorrow.

Our vision

Together we create more value, because every human being counts.

With our Connecting Worlds strategy we give meaning to our mission and vision. We believe in connecting worlds that are often still separated. This is precisely where unexpected insights and trailblazing innovations arise. Within UMC Utrecht we bring the worlds of **research**, **healthcare**, **education** and **valorization** - our core tasks - together in order to train people in an inter-professional, multidisciplinary way based on the principles of **The New Utrecht School**. We concentrate on multidisciplinarity and interdisciplinarity as basis for working on complex issues and innovation. We are building up strong networks. International, national, and regional. And we bring focus to areas in which can make a significant contribution to healthcare and society.



Accelerating on content

Our focal points add focus to our profile and our strategic efforts. These are the areas in which we excel in healthcare, research, and education:

- Cardiovascular
- Brain
- Cancer
- Infections & chronic infectious diseases
- Child Health
- · Regenerative medicine

UMC Utrecht also has a large number of **expertise centers** in these fields . Patients and medical professionals know that for these they have to be with us.

Accelerating on content

We are accelerating our strategy by focusing specifically on content within these focal points. These 'accelerators' concern the following seven areas:



Healthy Living

We focus on furthering the health of people in general but also look at the wishes and needs of the individual by focusing on the prevention of diseases and the furthering of individual healthcare, and the individualization of diagnostics, prediction, and treatment.

Biofabrication & disease modelling

Combining technology and biology, we design (regenerative) treatment strategies that facilitate the body's own capacity to recover. We do this based on insights in the underlying mechanisms of the diseases on which we focus.

Molecular science & therapy

We develop effective therapies for diseases by developing a better understanding of these on a molecular and cellular level. Through fundamental research, we create innovative disease models and measurement methods (in combination with AI).

Image guided Interventions

Optical-, X-ray-, and in particular MRI-guided interventions (operating without cutting) are playing an increasingly prominent role in our focal points.

Integral complex care for children

Together with the Wilhelmina Children's Hospital and in collaboration with the Princess Máxima Center, we are focusing on integral complex care for children to unravel complex disorders and improve treatment and prevention.

Acute complex care

UMC Utrecht provides acute complex care via **the Major Incidents Hospital** together with the Central Military Hospital and the **Ministry of Defense**. In this we are striving towards a state-of-the-art accident and emergency service, operating facilities, and intensive care.

The New Utrecht School

With our innovative education and updated programs we prepare our students in the best possible way for the healthcare of the future. In our training and follow-up training programs we pay extra attention to interprofessional learning and multidisciplinary education with an inclusive and diverse learning environment. We call this The New Utrecht School. For this we work closely with Utrecht University and our other partners in the TU/e, WUR, UU and UMC Utrecht Knowledge Alliance.



Our tasks

Our mission and vision determine our direction for the coming years. Our dot on the horizon is clear: together creating the healthcare of tomorrow. Via our focal points and accelerators in our Connecting Worlds strategy, we build daily to accomplish this goal. The world however is not standing still. We are not living in a period of change, but in a change of a period itself. Healthcare too stands on the brink of a significant transition. We have a significant role to play in social challenges regarding healthcare and are facing substantial tasks. This requires agility. From our position as a university medical center we feel the responsibility to fulfill our social role.



Integral Healthcare Agreement (IZA)

As UMC Utrecht we have actively been following up on the Integral Healthcare Agreement or Integraal Zorgakkoord (IZA). The assignments and ideas contained in the IZA align seamlessly with our strategy and the initiatives that we had already implemented according to our strategy. For us, the IZA confirms the direction that we had already taken and the tasks that we are integrally working on. In 2023 there was however an acceleration. The IZA demands collaboration across all domains, in the region specifically, but also nationwide. We have therefore invested in collaboration with various partners. We have for instance made a significant contribution to Regiobeeld Midden Nederland (regional overview of Central Netherlands), through the role that we play in Health Hub Utrecht, and through base-building with data from the Julius Center and UMC Utrecht.



Based on the regional overview (Regiobeeld) we know where the greatest challenges for medical-specialist care in our region will be in the coming years. We are a relatively young region, with many births expected in the coming years. At the same time there is also a dual aging of the population, which is stronger than the average for the Netherlands. Lifestyle-related diseases and mental problems are also increasing among younger people. This implies a steep rise in healthcare with these target groups. It is expected that the demand for academic healthcare in the region will increase with just about 15% in the coming years. This while Utrecht, due to the high demographic pressure in the region, is also experiencing a very tight job market.



Based on the analysis of IZA assignments, our strategy, and tasks in the region, we as UMC Utrecht have also drawn up our own agenda with a specific IZA focus. Via six topics, driven by two academic leads per topic (inhouse professionals with end responsibility), we are formulating our IZA work agenda for the coming years in line with our strategy and regional collaborations. These topics are: Acute Care, Healthy Lifestyle & Prevention, Network Healthcare, Value-driven Healthcare, Digitization & Hybrid Healthcare, and Labor Market & Training. Via this structure we feed targeted input to the various IZA panels in the region on these topics and advise the manager who is part of it. At the same time, assignments from these regional panels are given to the academic leads of each specific topic, who in turn supervise the whole. With this structure and with the subject experts we add focus to the IZA tasks for UMC Utrecht, and bring it all together by giving the leads as a group guidelines for the whole. This is after all what the name integral healthcare agreement implies. Our IZA agenda and our strategic direction have thus been streamlined. We therefore see the IZA not as something extra, but as part of the direction we are taking.



Appropriate care

An important part of the Integral Healthcare Agreement (IZA) is appropriate care. Appropriate care is healthcare that works, at an affordable price. This implies that **our patients and healthcare professionals decide together** on the care that they will receive. It also means that we organize healthcare as close tot he patients as possible. **At home if we can.** And appropriate care is not only about disease, but also about health, **prevention** and self-reliance. Appropriate care ensures that patients receive better care that suits them, that healthcare costs are kept in check, that promising new treatments and drugs remain accessible, and that there is less pressure on healthcare professionals. Appropriate care therefore also provides a stimulus to think about sustainability. It puts the breaks on over treatment and thus reduces wastefulness. After all, the most sustainable care is the care that we can prevent.

Green Deal for ustainable Healthcare 3.0

As a university medical center we work on the improvement of health for everyone and help people to live a healthy life and prevent disease. However, the healthcare sector in the Netherlands is responsible for 7% of the country's CO2 footprint, 4% of its waste, and 13% of its use of commodities (metals and minerals). By delivering healthcare, we as a sector are therefore paradoxically contributing amply to the environmental crisis and growing demand for care. This is why the healthcare sector wants to provide sustainable healthcare, research and education: green and climate-neutral with minimal greenhouse-gas emissions and a minimal negative impact on the habitat. In the Green Deal for Sustainable Healthcare 3.0, partners have agreed to speed up considerably in making healthcare more sustainable for five topics from 2023 until 2026.

UMC Utrecht has of course also signed the Green Deal for Sustainable Healthcare. This is perfectly in line with our mission and vision to work daily on improving the health of people and of the society, also for generations to come. We increase our positive impact on health by reducing our negative impact on the environment and climate. Through various initiatives and projects we are taking steps to fulfill our ambitions for future-proof healthcare, research, and education, and to integrate these in our operational management. And we inspire our people to contribute in turn to the quality of life of our planet and society. Read more about this in the chapter **Sustainability**.

Uncertainty surrounding the funding of research and education

To reach our goals in **scientific research** and **education** and remain a progressive academic center, besides external research funding and non-profit organizations, we are highly dependent on government institutions. The national and international (political) landscape is however greatly subject to change. This also causes uncertainty about available funds for education. However, there is particular uncertainty regarding the availability of research funding in the future. In 2024 for example, following a vote in the Second Chamber, it was announced that the opening of round four of the National Growth Fund would be postponed until further notice. We therefore need to anticipate on international and national developments and make optimal use of research-funding opportunities when they arises.

Renovations

UMC Utrecht is building the university medical center of the future: a place where the best care for our patients, a pleasant work environment for our employees, an optimal training climate for our students, and state-of-the-art research facilities come together.





UMC Utrecht was built 35 years ago and since then, developments in the fields of healthcare, education, and technology have been taking place steadily. Patient care is now delivered remotely when possible, our office people work partly from home or from another location, and our students no longer come to UMC Utrecht for all their activities. This means that the needs in terms of buildings are not the same as before. Our physical environment, the Utrecht Science Park, has also changed considerably. We are therefore renovating but also adding new components. We are aiming for **sustainable**, efficient, and flexible and take the needs of the users of **buildings** and spaces as a departure point.

Digitalization

Digitalization offers many opportunities. Digital equipment makes it easier to deliver care in any location. Patients can be monitored at home and where necessary receive remote support from healthcare professionals. Our aim is to work digitally in the future, unless it is necessary to do otherwise. Patients will then only come to the hospital for acute and complex care that cannot be provided at home. Digitalization brings a fundamental change in the relationship with our patients. And the role of data keeps growing. Artificial intelligence (AI) is contributing significantly to prevention, prognosis and diagnosis. Through these developments we are acquiring the role more of a live-in coach for our patients and a reliable partner. The time that is freed up through digitalization is used for our patients, so that we can give them even more personalized care and attention. Besides healthcare, digitalization is also taking place in our education and research. Digitalization also brings risks. Besides the risk that our IT infrastructure does not adequately support this development, we further run a compliance risk for example in terms of privacy, and risks related to IT security (e.g. hacks or ransomware).

The 'Privacy in Control' approach enables us to achieve our strategic goals in terms of digitalization, data-driven work methods, and transmural cooperation, whereby the privacy of patients and employees is guaranteed and the aforementioned risks are minimized. This approach ensures that each digital application is developed from the design phase with privacy and security as core functions ('privacy en security by design'). Information security and privacy are therefore not only part of the deployed digital technologies, but also of all quality processes in healthcare, scientific research, and education.



Transforming our organization

Doing the right things is one thereof. Doing things well is another. Even more so in a time of scarcity. For this we need to organize our processes better, working in a more harmonized way, having a better idea of our capacity, and becoming more flexibility. We can use the available time to tackle as may core tasks as possible. This will bring us closer to our dot on the horizon. A uniform approach will us the necessary grip and clout and make it easier to work together efficiently. Thereby we can make better use of our capacity, become an agile, fast-moving organization, and keep innovating. To achieve this, we are rethinking our organizational structure. We must organize ourselves in in such a way that our organizational structure supports the movement that we need to pursue and the goals we want to achieve. This will enable us to innovate faster, cooperate better with each other as well as **our partners**, and cope with changes more effectively.

It is of course our people who will make the difference and fulfill our ambitions. To demonstrate the agility that is so important, we must ensure that **our colleagues** are and remain satisfied and involved.



Our approach

In our approach to work towards that dot on the horizon, tackle the tasks awaiting us, and reach our goals, there are three important pillars. These are Healthcare of Tomorrow, Fine-tuning our Healthcare Profile, and Creating Financial Scope.

Healthcare of tomorrow

Within our Healthcare of Tomorrow program we are harmonizing our processes based on a new structure where we combine related activities such as outpatients, inpatients, and OR in domains overarching our specialties and divisions. This enables us to create the healthcare of tomorrow through innovation, and thereby keep healthcare affordable and accessible. In this way we can effectively fulfill our role in the healthcare chain and in society, at a regional and country level but also internationally.



The domains represent a chosen structure of processes overarching our specialties and divisions (for example Brain, Heart & Lungs, and Children). Examples of domains are: Inpatients, Outpatients, OR, ED, Lab diagnostics, and Research.

Within the ten domains, in 2023 we formed multidisciplinary design teams (consisting of colleagues from all parts and layers of the organization as well as patients, their families, and students) and reflected on what these processes should look like in 2030. We based this redesign on the following three principles:

- People-centered: we pay attention to patients, their families, and colleagues.
- Digital, unless: we are digitalizing in order to offer more and better healthcare.
- Uniform and modular: by working in the same way we can help each other better.



This gave us a blueprint for the future towards which we want to work gradually by means of process improvements and projects. Important topics within these transformations are:

- · Giving control to patients and their families
- · Preventing consultations and (re)intake
- Regional cooperation and availability of data
- The future-proof and flexible deployment of workers
- Smart labor-saving technology
- · Job differentiation for workers

Based on the process blueprints, we looked at how we could organize ourselves differently. Which digital concepts could offer a solution for future healthcare processes. And which specific criteria and needs the future accomodations of UMC Utrecht must fulfill in order to support future healthcare and working processes. In the end this resulted in a first selection of tangible projects whereby we can effectively take the first steps towards the healthcare of tomorrow. In 2023 we started with preparations for these projects. In 2024 we are starting with the actual implementation. We are also adding new projects using the same method in 2024.

With our Healthcare of Tomorrow program we are following – with our vision as departure point – an integral approach whereby we are tackling our tasks in terms of accomodations, digitalization, and transformation of the organization in an integral way. This puts us at UMC Utrecht as well as our approximately 12,000 colleagues, partners, and patients, on the way to the UMC of the future and healthcare of tomorrow.

Watch the video 'Healthcare of tomorrow'.

Fine-tuning our healthcare profile: towards network care

Our healthcare profile consists of complex care, care that fits within our focal points, and care that we have a statutory duty to provide. Complex care for example includes care that requires the infrastructure or multidisciplinary expertise of an academic hospital. Statutory healthcare refers to care that in accordance with the law may only be provided at a few places in the Netherlands. An example is level 1 trauma care. Care that fits into **our focal points** mostly involves care for small patient groups with rare diseases. Within these focal points we combine healthcare, education, and research. For this last category, we are recognized through our **expertise centers for rare diseases**.

The move towards **network care** as an answer to the demands from society and the **Dutch Integral Healthcare Agreement (IZA)** that we must be very clear as to where we as UMC Utrecht bring the most value for patients and where we make a difference. Both at a regional and at the country level. In 2023 we reflected on this question with people who are broadly representative of our institution. On which topics and in which role do we have a place in this task and also in the network? Where are we leaders in terms of knowledge and innovation? For which type of care do patients really have to be with us? We also look at what type of care is needed at UMC Utrecht to support that care which we alone are able to provide in the region and countrywide. In 2023 fine-tuned our healthcare profile based on all these discussions, work sessions, and available information. We are rounding off this process in the spring of 2024. Based on the healthcare profile, we will have discussions with other healthcare institutions in the region and countrywide, to give shape to network care through cooperation.



Creating financial scope

The task that awaits UMC Utrecht has an impact on our financial position. The **necessary transformation** of our organization comes with significant investments. Both in terms of accomodations (renovation= and digitalization and of the transformation of the organization itself. At the same time we are using the opportunities through agreements in the IZA to reach agreements with insurance companies for development scope and therefore extra income. This while the demand for care is increasing in volume as well as complexity. It is therefore essential for us to create financial scope in a timely manner for the investments needed to back these developments and implement our strategy.

Following an extended analysis we launched the 'Creating financial scope' program in 2023. The long-term goal of this program is to improve the efficiency of UMC. To achieve this we are focusing in the short term on strengthening the procurement chain in order to save on procurement costs and reduce the cost of hiring staff (not salaried) and consulting services. Parallel to this we are improving our management model and financial management for the long term. In this way we are growing towards a healthy and sustainable operational management that meets all financial standards.



Our strategic KPI's

Patient satisfaction

Our patients are satisfied with the care we deliver. To keep challenging ourselves, we raised our target in 2023 from an average 8.4 in 2022 to 8.6. In 2023 we scored 8.7 for our outpatients which is above our target, while for our inpatients our score was on target (8.6). Naturally we are happy with these scores and proud or all our colleagues for having achieved this result together.

Because we find it important for our patients to feel heard, we added a new KPI in 2023. We have set ourselves the goal that at least 60% of our patients should feel that they are heard. We attained 54%, which is a good start but at the same time makes us realize that more effort is still needed in this regard. Another target for us to ensure that for 90% of all patients who are discharged from our hospital, a discharge report is sent to the general practitioner within 24 hours. Because we find it important for the general practitioner to be able to continue as efficiently as possible with home care following the patient's discharge. In 2023 we achieved a score of 73%. This is a great improvement from the 62% in 2022 that still left room for improvement in 2024. Lastly, our aim is to provide as much care as possible at patients' homes. We therefore want to perform 50% of all outpatient repeat consultations remotely. We attained 48% in 2023 (45.6% in 2022).

Student satisfaction

Our students are predominantly quite satisfied with our educational offering. For 24% of our courses, more than 55% of the students indicate that they are very satisfied with the course as a whole (16,7% in 2022). In this regard we are well above our target of 15%. Naturally we are very happy about this assessment.

For 88% of the courses, 80% or more of the students indicate that they are satisfied or very satisfied with the course as a whole (87% in 2022). Our target is 100%, but this is mainly in order to ensure that we pursue the right dialog between us. Our aim is always to have all courses on or above the desired level. With innovations in education such as new courses or new ways of teaching, this is however not always possible in equal measures. For the professionalization of lecturers in 2023 we scored above our target that 85% should have a basic teaching qualification (Basis Kwalificatie Onderwijs or BKO), with 87% having a BKO in 2023. This is a good improvement on 2022, where we scored only 78%. In the areas of diversity and inclusiveness we also progressed well and scored above our target. 70% of our lecturers and trainers have followed the basic training in diversity and inclusiveness (58% in 2022). Our target is 60%.

Employee satisfaction

In 2023, 47.2% of our colleagues rated working at UMC Utrecht with a score of 8 or more. This is slightly down from 2022 (48.7%), and a bit below our target of 55%. We are naturally striving to bring employee satisfaction up to the desired level as fast as we can. Important aspects that demand our attention here include support for colleagues regarding vitality and sustainable employability. And also for their development.

Sick leave in 2023 decreased from 6.3% to 5.7%. We are happy about this, but the percentage of sick leave in 2023 was still much higher than our target (4.9%). In the coming years, supporting our colleagues to reduce sick leave will therefore also remain an important issue. We are proud of all our colleagues' efforts to maintain the high level of care that we provide for our patients and to work on the healthcare of tomorrow.



Providing scope for development is an important aspect of being a good place to work. In 2023, 70.7% of our colleagues indicated that they were positive about the development opportunities that UMC Utrecht offered. This percentage is slightly higher than in 2022 (698%), but below our target of 72%. The number of finalized development interviews in 2023 was 41% which is below our target of 75%. To establish these interviews we make use of the Performance & Goals (P&G) system. The system is not experienced as being user-friendly which is why we took certain steps in 2023 to simplify it. At the end of 2023 we also created the possibility to upload a Word document in the P&G system, which means that employees and managers can now work with a Word document. We expect that these adjustments will help to push up the number of completed development interviews.

Impact or research

In 2023 our fund-raising capacity for research was € 133 million (100 million in 2022). This means that we exceeded our target of € 112 million. The amount fluctuates from one year to the next as we are dependent in this regard on external research-funding opportunities. Naturally we are very happy about this significant amount in 2023, which has enabled our researchers to conduct **unique research** in the interest of our patients and of society. In 2023, a total of 84% of our scientific publications were published with Open Access (85% in 2022). With a percentage of Open Access articles that remain more or less stable, we alas did not reach our target of an annual 5% increase. Many scientists continue to publish a certain proportion of their articles in 'closed' journals of commercial publishers. This shows that the transition towards 100% Open Access will also require a publicly financed publication infrastructure.

Returns

UMC Utrecht is financially sound. Our returns of 4.6% in 2023 were higher than our current long-term target of 1% and our consolidated result in 2022 (1.3%). This result mainly came from incidental income. Compared to the budget therefore, the following incidental income was realized: availability contribution from the Ministry of Health for ICU capacity € 10.8 million and COVID-19-related special revenues from previous years € 10.8 million. In addition, our valorization activities also brought an incidentally higher income of € 8.9 million in shareholdings particularly with the sale of shares in Julius Clinical Research B.V.

The internal calculation of healthcare provided versus agreements made is -1.3 million. This means that we did not reach our target of 0. The slight underproduction in 2023 can mainly be explained by a lower availability of ORs due to the lack of OR assistants and anesthesia nurses.

The year result of all divisions and departments together was 0.3 million in 2023. This is a considerable improvement on the \in -7.1 million in 2022 and is above our target of \in 0. Division results rose in 2023 because divisions managed to work more efficiently in terms of their balance. A few divisions have a negative result but this is compensated for by divisions with a positive result. The percentage of days on which the number of available emergency beds had a green code in 2022 was 52%. At the end of 2022 we took a package of measures to improve this. We also raised our target in 2023 from 75% to 95%. At 94% we have not yet reached this target. We are nevertheless pleased with the great improvements we have made in this regard.



Our partners

To resolve challenges in healthcare and reduce disparities in health, it is important to think and act collectively and through interaction. At a regional, country, and international level. UMC Utrecht strives to be an inspiring partner that brings different worlds together and creates **powerful cooperation**. By building ties and working together, we turn scientific research and education into products and services and innovation with added value for society.





Cooperations with an international impact

Current global challenges are significant. Think for instance of the climate crisis, wars, and disparities in health. Together with strategic partners worldwide, we are working on (the innovation of) healthcare, research, and education to make a positive contribution in this regard

ReSViNET fights the effects of RSV

In 2023 the ReSViNET foundation, an initiative by a researcher from Wilhelmina Children's Hospital (WKZ) in 2014, became part of UMC Utrecht. Respiratory syncytial virus (RSV) is the second biggest cause of infant death worldwide. The foundation fights against the effects of the virus by developing and sharing knowledge. The foundation therefore has control over the IHI RESCEU grant of € 29 million from the European Union. Via this grant information is gathered on the extent of RSV infections in Europe and the economic impact thereof. This led to the recommendation from the Dutch Health Council at the beginning of 2024 to protect all children against RSV through a national vaccination program. In addition, ReSViNET in 2023 for the seventh time organized the RSV Vaccines for the World (RSVVW) congress, which was attended by more than 550 participants from 52 countries.

In 2023, three studies in which UMC Utrecht was involved showed that it was possible to vaccinate babies, pregnant women, and older people against the RS virus. UMC Utrecht will also lead an international consortium that seeks to understand why children who had an RSV infection as a baby seem to have a greater chance later of developing asthma. Read more about this in the chapter **Our Research** for the healthcare of tomorrow.





Inter-university healthcare, research and education programs

To guarantee research of internationally high-standing quality and outstanding academic programs, we collaborate together with Utrecht University in a strategic network with KU Leuven, University College London, and the University of Toronto on inter-university healthcare, research, and education programs.

In November 2023, UMC Utrecht and Utrecht University paid a visit to KU Leuven to further explore and expand joint educational activities, knowledge-sharing, and opportunities for collaboration. For example in the field of regenerative medicine and the accompanying innovation and valorization, as well as artificial intelligence (Al) and data science.

LERU: impact on the European policy agenda

UMC Utrecht is a member of the League of European Research Universities (LERU). This association of major European research universities aims through cooperation to have an impact on the European policy agenda in the field of research, education, and innovation. In 2023, UMC Utrecht participated actively in various policy groups that worked on establishing principles on European policy for research and innovation, knowledge security, new developments in the European Health Data Space, interdisciplinary research, and supervision of PhDs.

Training of professionals to contribute to SDG

UMC Utrecht participates in the European university alliance **CHARM-EU**, an innovative challenge-based university model aimed at training professionals who in the future can make a contribution to the UN's 17 **Sustainable Development Goals**.

UMC Utrecht coordinates the Health Challenges & Solutions course within the accredited CHARM-EU master's program 'Global Challenges for Sustainability', and forms an active part of the Research Hubs network within this course. In 2023 the CHARM-EU team won the first ever UU Team prize for the project on CHARM-EU Master Global Challenges for Sustainability. In this innovative master program, students from different disciplinary backgrounds and nationalities in various locations in Europe conduct research together to find solutions to complex global challenges.

Specialist care for rare diseases

UMC Utrecht has **expertise centers for rare diseases** (ECZAs) for over 200 rare diseases. Through these expertise centers, UMC Utrecht has joined 17 of the 24 existing European Reference Networks (ERNs). These are virtual networks set up for and by healthcare professionals in Europe, commissioned by the European Commission.

One of the ERNs that UMC Utrecht has joined, is the European Reference Network for rare immunological diseases (ERN RITA). ERN RITA specializes in immune deficiencies, auto-inflammatory diseases, auto-immune diseases, and juvenile arthritis. The European coordination of ERN RITA takes place from UMC Utrecht. In 2023 UMC Utrecht organized the ERN RITA conference. 120 participants came together there, representing 54 healthcare providers and 9 patient organizations. During the conference, they talked about challenges and objectives for the next four years to improve care for patients with immunological disorders.



Improving specialist care in Aruba

At the end of 2022 UMC Utrecht signed a collaboration agreement with Horacio Oduber Hospital (HOH) in Aruba. Since 2023, structural multidisciplinary team meetings (MDO in Dutch or MDT in English) have been taking place for neurosurgery patients. An alternating group of UMC Utrecht neurosurgeons also provide treatment on Aruba that was not possible previously. This has given a great quality impetus to neurosurgery care on Aruba.

In October 2023, our Pediatric division also started a collaboration with HOH for pediatric care on Aruba.

Global Health: health for everyone

As UMC Utrecht, together with Utrecht University (UU), we contribute to the improvement of health for everybody through **Global Health** activities. At a regional, country, and international level. We do this in collaboration with hospitals and knowledge institutions in low- and middle-income countries on all continents. We thereby contribute to the worldwide ambitions of the **Sustainable Development Goals** (**SDGs**).



In 2023 two European Capacity Building in Higher Education grants were awarded to partnerships in which we participated, namely: a partnership in West Africa regarding chronic diseases and a partnership in Southeast Asia for Planetary Health. In addition, we provide a broad range in Global Health education. In 2023 the annual summer schools took place where we offered courses in the various Bachelor and Master programs at Utrecht University and the EWUU alliance. We presented educational innovations as virtual international partnerships with foreign universities.

In 2023, we organized the 13th European Global Health Congress (ECTMIH) in Utrecht and became a member of Global Health Hub Netherlands whereby we contribute to the implementation of the national Global Health strategy.

Watch the video 'ECTMIH 2023'.

Read more about the Global Health activities at UMC Utrecht.





Partnerships with a nationwide impact

As a university medical center and with our specialist knowledge, healthcare, education and research we not only have a role to play in the region but countrywide. To optimize our national impact, we are strengthening our cooperation with strategic parters.

Emergency care and disaster response with the Ministry of Defense

In the scope of our collaboration with the Dutch Ministry of Defense, we are continuing to give shape to our Complex Acute Care accelerator and disaster response. In 2023 we developed a plan of action to establish a joint knowledge center for civil-military trauma care. This center of expertise, the Civil Military Center of Expertise for Trauma Care (CETC) was officially established in January 2024 with a symposium. The purpose of the CETC is to contribute to reaching the target of zero avoidable deaths and reduce trauma-related invalidity to the minimum for the military as well as civilians.

In 2023, together with the Ministry of Defense, we carried out the **annual major-incident drill** in **the Major Incidents Hospital**. In April 2023 we opened up the Major Incidents Hospital for the **victims of the rail** disaster at **Voorschoten**.

Watch the video of the annual major incident-drill.

In August 2023 Minister Ollongren paid a working visit to the Major Incidents Hospital and in October the new Secretary-General of the Ministry of Defense, Mr Schuring, came on a visit. Various members of the Second Chamber from various parties also visited the Major Incidents Hospital and ED.

The Central Military Hospital (CMH) presented the new longterm strategy in 2023. The cooperation with UMC Utrecht, in addition to the cooperation in healthcare, now also materialized in the joint mobilization during a large-scale conflict and in the process of investigation. For the Institute of Hospitals for Defense Force Family Members (IDR), after receiving their training at the Royal Military Academy (KAM) in Breda, the first OR assistants and anesthesia nurses were sworn in in 2023.

Care for children with cancer and congenital heart defects at Princess Máxima Center

UMC Utrecht cooperates intensively with the Princess Máxima Center, the national center for pediatric oncology, in the field of care, research and education. We are next-door neighbors at Utrecht Science Park and share facilities with each other. In 2023 we celebrated the fifth anniversary of the Princess Máxima Center.





Together with the Princess Máxima Center we provide medical care for instance to little Ukranian patients at the joint OR and Intensive Care unit. In 2023 we performed the **first germ-cell tumor operation** from our combined expertise center.

We also provide care for patients with a congenital heart defect. A lot had to be done in the past few years in this regard when the former Minister of Public health decided to concentrate heart surgery in the Netherlands and not in Utrecht. In November 2023 alas we stood before the court in proceedings to annul the decision to bring the authorization to perform interventions for congenital heart defects back to Utrecht. In January 2024 we received the good news that the judges had decided to annul the concentration decision. UMC Utrecht and the Princess Máxima Center underline the importance of cooperation, also when it comes to pediatric heart care. We have therefore entered a collaboration with Amsterdam UMC and Leids University Medical Center for patients with a congenital heart defect. We are working on an efficient alternative to concentrate this care. We are conducting discussions in this regard with the Ministry of Health and the other UMCs. UMC Groningen has in the meanwhile also joined this network. This enables us together to provide patients with a congenital heart defect with the care that it deserves.

In 2023 we also collaborated with the Princess Máxima Center in various national and international research consortia. One example is the **Oncode-Accelerator project** which is financed from the National Growth

EWUU: joint knowledge development and education

Together with Eindhoven University of Technology, Wageningen University & Research, and Utrecht Utrecht and UMC Utrecht, we form the **EWUU** alliance. The EWUU alliance build bridges across the borders of institutions so that knowledge can be combined and we can contribute jointly to social transitions.

Watch the video of the annual conference.

In 2023 we expanded the EWUU Lifelong Development offer for professionals with the interdisciplinary courses Optimizing nutrition and exercise for cancer patients and Dealing with a pandemic. We furthermore participated in various EWUU challenges such as: the Da Vinci program for budding 'change-makers', the Dutch Dairy Challenge for the transition to a sustainable dairy industry, the Inter-university Sustainability Challenge, and the Planetary Health and Climate Resilient Health Systems Challenge. The annual Bio-Tech-Med Nutrition Interdisciplinary Team Training (BITT) challenge also took place one again, and from UMC Utrecht we contributed to the development of a guide to help organizations within the EWUU Core Alliance to organize challenges.

Another initiative within the EWUU alliance is **eduxchange.nl**, a platform that enables students to follow courses easily at a partner establishment. In 2023 the number of courses offered through eduxchange.nl increased from about 300 to nearly 600.

Lastly in 2023 the EWUU allocated more seed funds to innovative and multidisciplinary research which gave shape to and stimulated it. The topic for the 2023 seed-fund call pertains to artificial intelligence (AI), with the aim to stimulate the development of AI to the benefit of society.



Alliance for Nutrition in Healthcare

In 2023 we joined the alliance for nutrition in healthcare (Voeding in de Zorg). The alliance makes scientific insights on nutrition and exercise personally applicable in healthcare. In more and more places, as at UMC Utrecht, the focus is on the prevention of health issues. For example through a healthy lifestyle and nutrition. This development is in line with the agreements in the Integral Healthcare Agreement (IZA) and contributes to the attainment of United Nations Sustainable Development Goal 3, 'Good health and well-being'. Gelderse Vallei Hospital, Wageningen University and Rijnstate already form part of the alliance.





Cooperations with regional impact

Working together is the only way in which we can provide the right care in the right place and reduce health disparities. In the Dutch Integral Healthcare Agreement (IZA), cooperation is therefore central. Together with our partners we also took worthwhile steps with a regional impact in 2023.

Medical specialist care in the region

In 2023 all regional healthcare and well-being stakeholders together with healthcare insurance companies and municipalities delivered a Regional Mapping and a Regional Plan. In the Regional Mapping for the province of Utrecht, the biggest task for the coming years concerns the health of citizens.



Even before the Dutch Integral Healthcare Agreement (IZA) started, hospitals in the region already relied on each other to ensure that medical specialist care in the Utrecht region of remained of high quality, efficient, and accessible.

It is our common goal now and in the future to provide the most suitable medical specialist care. We are convinced that this can only happen if we work together intensively and in an innovative way, whereby UMC Utrecht would add specific value as an academic knowledge and innovation center for and with the region.



Regional vision on innovation in line with regional network care

In 2023, to mutually accelerate the IZA tasks, we defined our common ambitions with St. Antonius Hospital, Meander MC, and Diakones center in a joint administrative framework for IZA with five topics: acute care, concentration and distribution of medical specialist care, care for the elderly, the labor market, and training and digitalization. Together, with healthcare professionals in the lead, we will continue to work out plans for this in the coming years.

As basis for this collaboration we have together established a vision that serves as guideline for establishing our plan. The dot on the horizon that we thereby formulated is the movement towards coherent, innovative network care, in which healthcare is concentrated transmurally on the patient. A strong education and research structure forms part of this network care to ensure an innovative and attractive region. On this component as well, we deliver our added value as an innovation driver for a strong region. A role that is also recognized and appreciated by our partners. As partners we have not only fixed a substantive dot on the horizon, we have also established a mutual relational contract by agreeing on guiding principles for our actions within this vision. These principles form the touchstone for everything that we establish jointly in the collaboration process. We see this new way of working as an important aspect of the movement that we must start in the scope of the IZA. The 'how' of our collaboration is as important, if not more important, than the 'what'.

The administrative framework forms the basis of the IZA task Appropriate Medical Specialist Care in the region. Based on the framework, we shall continue dynamically with the collaboration in 2024, and intend jointly to translate the tasks in the Regional Plan for Central Netherlands into concrete plans for medical-specialist care and the implementation thereof. To do so, we are naturally working closely with all stakeholders in the region, such as general practitioners, nursing and care homes and home care, municipalities, mental health organizations, and healthcare insurance companies.

These plans were of course already prepared in 2023, and will further become a reality in 2024:

- The Regioplan for acute care will be worked out further within ROAZ.
- In terms of concentration and distribution, we are currently establishing a vascular surgery network
 and further developing our oncology network OncoMid to contribute further to the quality and
 accessibility of healthcare. OncoMid is an example of an innovative form of network care that can also
 serve countrywide as an example to address the IZA tasks.
- We are further intensifying the collaboration with St Antonius Hospital in the field of cardiothoracic surgery, where we work as a single heart team.
- Together with regional partners we have started projects around patient groups for trauma geriatrics and Parkinson's disease.
- For the vision of an attractive labor market and innovative training programs, hospitals are working for example with UtrechtZorg and its partners on adequate training places for scarce professions such as OR assistants and nurses. In this respect there is also close collaboration with Hogeschool Utrecht and MBO programs.
- Together with TRIJN we are laying the digital foundations for the region in terms of data exchange and support for regional healthcare programs.
- To ensure that healthcare remains appropriate and accessible, we contribute together with general practitioners, ROAZ and IVVU – to making plans to ensure that older people can live at home in good health for longer, and to provide the right care in the right place.

To ensure that this care remains appropriate and affordable, we contribute together with general practitioners, ROAZ, and IVVU to plans for keeping elderly people at home for longer and more healthily, and for the right care in the right place.



Health Hub Utrecht: health and happiness for everyone in Utrecht

UMC Utrecht together with the municipality of Utrecht is an active member of Health Hub Utrecht: a 'regional innovation ecosystem for health and happiness'. The thirty partners in Health Hub Utrecht have the joint objective to make health and happiness available to everyone in Utrecht. For this, we are working on six coalitions. In 2023 the coalitions started with phase 2, 'Covering the distance' ('Meters maken'). In this phase the coalitions are putting their plans into action. Within the coalitions, various members of Health Hub Utrecht are working together. Through various groups, participants can make use of each other's knowledge and expertise and thus achieve the best result for everyone in the Utrecht region. In 2023 UMC Utrecht together with Utrecht University and Hogeschool Utrecht also further professionalized the knowledge table within the Health Hub, just like the businesses table in cooperation with ROM Utrecht and the inhabitants table together with municipalities.



Cartesius Utrecht: building a healthy neighbourhood

As UMC Utrecht we want to contribute to improving public health. We do this through innovative research and education, and through healthcare. Not only in hospital beds, but also in terms of prevention and improving the habitat in neighborhoods. In July 2023 we signed the covenant 'Building a Healthy Neighborhood', during the symbolic start of construction of 770 new homes in the Cartesius healthy city district in the heart of Utrecht.

In the covenant 'Building a Healthy Neighborhood', UMC Utrecht works with 'Cartesius consortium' Ballast Nedam Development, MRP, Hogeschool Utrecht, Utrecht Municipality and Utrecht University on a countrywide monitoring program that focuses on studying the relationship between layout of the (living) environment, first-line healthcare organizations, and health. The aim is to get insight into which actions in the physical and healthcare environment contribute positively to health and the well-being of inhabitants. Cartesius Utrecht is the first place where this is being measured. The aim is to upscale the blueprint of the monitoring program to more locations in the Netherlands. The World Health Organization (WHO) has also joined the initiative. This organization looks at whether these measures can also have a real impact on the state of mind and health of inhabitants. The WHO decided this during the trade mission of the Economic Board Utrecht (EBU) in Copenhagen. UMC Utrecht is one of the ambassadors of EBU. Cartesius Utrecht contributes to the international reputation of Utrecht as the 'Heart of Health'.

Watch the video 'Cartesius - Healthy Urban Living'.

Oncomid: the best care for people with cancer in the region

To give people with cancer the best care in the right place, we work with other hospitals in the Central Netherlands in the regional oncological network **Oncomid**. These multidisciplinary team meetings (MDO in Dutch or MDT in English) are the backbone of our cooperation: locally if it can, and regionally where it is necessary and useful. Good logistics and organization is the first requirement for a thorough MDT. In 2023 we therefore used the Vitality 2.0 platform for two regional MDTs. The intention is to do so for more regional MDCs in 2024.



Sharing data for optimal healthcare in the Central Netherlands

To support cooperations, UMC Utrecht is working on solutions to facilitate healthcare professionals and researchers effectively. For instance via the **innovative Data Delen Midden-Nederland program**, an initiative from cooperating hospitals in the Utrecht region and the Dutch federation of mutual insurers (Zorgverzekeraars Nederland). In the summer of 2023 the IT solution from Data Delen Midden-Nederland supported the first regional multidisciplinary team meetings (MDTs). And by the end of 2023, all technical integrations were in use. The adoption by regional oncological MDTs thus got underway. There is a lot of interest countrywide for the Data Delen Midden Nederland program. We are keen to share this knowledge with organizations that are facing the same challenges. The Dutch federation of healthcare insurers, Zorgverzekeraars Nederland VECOZO, a stakeholder that facilitates the safe and efficient exchange of administrative information in healthcare, even requested that what is learned and invented at Utrecht should be made available countrywide as quickly as possible.

Expansion of network care in the Utrecht region

At the Transmural Contact and Coordination Center (TCC) UMC Utrecht is working on the expansion of network care for patients in the Utrecht region. We do this by optimizing cooperation between healthcare professionals of UMC Utrecht and of the regional GP organizations and hospitals. In 2023 for instance we: cleaned up the referral platform ZorgDomein, implemented teleconsultation, and analyzed over eight transmural incident reports. In addition, healthcare professionals cooperated from within UMC Utrecht in bringing about various Regional Transmural (Work) Agreements (RTAs) and we started with the implementation thereof at UMC Utrecht. Together with healthcare professionals from the region, we are working on seven care-innovation trajectories, including the testing ground 'Thinking warmly about patients in the palliative phase'. The method has now been taken up widely in the region.

UMC Utrecht is also a member of the Regional Cooperation Organization (RSO) TRIJN and thus contributes to offering the right care in the right place. This is done by cooperating with healthcare stakeholders from the Utrecht region, such as hospitals, regional GP organizations, nursing and care homes and home-care organizations (VVTs), pharmacists, and diagnostic laboratories. The focus is on projects in the field of digital data exchange and healthcare communication with inhabitants/patients. In 2023, TRIJN was given the role of coordinator of the foundation 'digitalization and data exchange' of the IZA regional plan. The main topics that will be tackled in the coming years are: expansion of digital communication, (acute) e-transfer, a vision of remote monitoring (which is part of hybrid care and regional medical service center), and the foundation task (establishing the data and application architecture in steps). Besides the development of a vision for regional digitalization, attention is also given to: digital communication between general practitioners and medical specialists, drawing up and implementing regional transmural (working) agreements, and collaborating on improvement trajectories in the field of patient safety within a platform for the transmural reporting of incidents (TIM: Reporting Transmural Incidents).

Qualitatively outstanding gynecological care with Bergman Clinics

For many years we worked successfully with Bergman Clinics in the field of uro-gynecology and cervix pathology. This cooperation was expanded in 2023 to the domain of general gynecology. In this way we are contributing further to the accessibility, quality, and affordability of healthcare.



Furthering health with FC Utrecht

For a number of years already we have been working with FC Utrecht and other knowledge and educational institutions to further the health and vitality of people and society. For example in May 2023 for the second time we led the joint campaign 'Wear this Band 2.0' for the prevention of cardiovascular disorders. On December 1, 2023 we signed a partnership and officially joined the FC Utrecht partnership platform FC Utrecht Next.

Understanding the impact of sleep

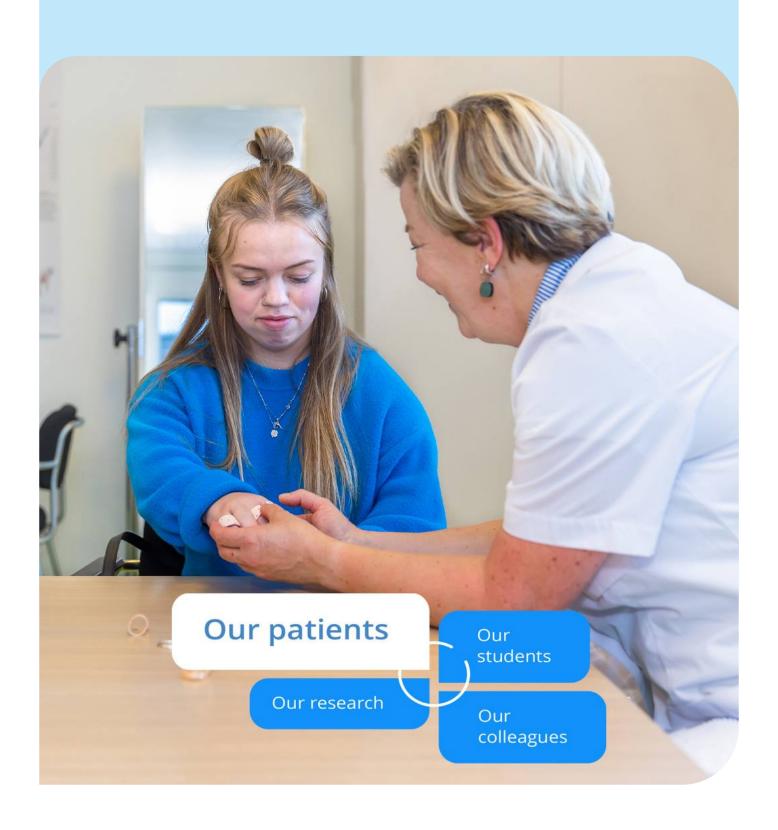
Sleep is essential for our well-being and functioning. On World Sleep Day, March 17, 2023, the Sleep Discovery Lab was officially launched to gather scientific knowledge on the origin, evolution, and functions of sleep. In this lab, we work from within UMC Utrecht and Wilhelmina Children's Hospital (WKZ) together with researchers from Princess Máxima Center, the 030-lab, De Hoogstraat Revalidatie, the Strategic Alliance TUeTU/e, WUR, UU and UMC Utrecht and a number of somnologists countrywide. Together we are developing understanding of the impact of sleep on the development of premature children, brain development in newborns, the functioning of the immune system, and the origin and course of diseases in children and adults.

Watch the video 'Slaap'.



Our patients

Providing care to patients is one of our three core tasks. We continuously try to improve this care through innovation. We base this on an ongoing dialog with our patients, scientific research, technical innovations, and by continuously assessing what we can do better. And through intensive cooperation and coordination with our (chain) partners.





Patient care in numbers



227.698 unique patients



28.186 clinical

hospital intakes



86.992

first outpatient visits



32.692
OR treatments



188.449 nursing days



6,1
average number of days in hospital



Our patients' appreciation

Since we want to continue improving our healthcare, it is important always to have insight in how our patients experience our care. Because care is only good if it is experienced as such. We measure our patients' experience continuously by means of our Patient Experience Monitor (PEM).

In 2023, 21,254 adults who came to outpatients filled in the questionnaire (20,292 in 2022). And 6,571 adults who were hospitalized (6,641 in 2022). Both the appreciation of our care in the outpatient clinic and in the hospital was equal to the appreciation of both in 2022.

To continue improving via input from patients, in September 2023, we updated the questionnaire for adults who come to the outpatient clinic. We added a number of new topics and adjusted questions with four response categories instead of three. We also checked whether the questionnaire was written in understandable language and adjusted it where necessary.

The overall patient experience gives a consistent and high result. We take actions where ever it is possible to make sure we improve our care constantly. All based on the need of our patients.



Patient satisfaction

Appreciation of outpatients



hospital 8,6

Appreciation of

What have we done to improve healthcare?

Patient experience overall shows a stable and high score. We continue however to take action where possible to keep improving our care, in line with patients' needs.

We have for instance made it possible since 2023 for patients to ask for more understandable information on drugs via the drug overview portal 'My UMC Utrecht'. Through animation, patients can now get their own information on the related drug. At the initiative of various colleagues who receive signals from patients outside the care relationship, we have also started with a Patient Signals work group. In this way we are trying to get a more complete picture of patients' experiences, including less pleasant or negative aspects. Based on this we are learning and improving.

Cooperating with patients

In our Patient Experience Monitor (PEM) we ask adult patients two specific questions on patient participation. The average score on these questions remains stable at a high level.



Do you feel that you have enough opportunity to share your own knowledge and experience with your care givers?

	Appraisal of the outpatient clinic	Appraisal of the clinic
2023	96%	94%
2022	96%	94%

Were you allowed to co-decide on your treatment or examination?

	Appraisal of the outpatient clinic	Appraisal of clinic
2023	93%*	86%
2022	92%	85%

*Question changed from: Were you able to participate in deciding about your treatment or examination? 'Did you decide together with the healthcare provider about your care and treatment?' with new possible answers to go with it.

Did you feel that you were heard completely, during your treatment or appointment?

	Appraisal of the outpatient clinic	Appraisal of the clinic
2023	58%	46%
2022	60%	48%

In this regard there is room for improvement. As of January 1, 2023, we have therefore included the topic 'feeling heard' as a new KPI focus. Our target is: at least 60% feel completely heard. What if we don't reach the target? Then we'll discuss it among ourselves and with patients. In 2023 quality officers from various divisions conducted a total of fifty telephone conversations with patients who did not feel that they had really been heard. This gave us a lot of insight into the factors that determine whether patients feel heard. When employees listen during conversations and think along, most patients feel that they have been heard.



Care for our patients

We offer qualitative and effective care according to the most recent insights to patients, in line with our care profile. This includes care for which we have a statutory duty, such as level 1 trauma care and care to patients with rare diseases via our **expertise centers for rare diseases**, care within our **six focal points**, and complex care (such as multi-specialist or multi-diagnostic care). Our objective here is to **work together with patients**, so that we can give patients care that is suited to them. And because healthcare and **sustainability** go hand in hand, we are making our care more sustainable wherever we can.

Lifestyle advice via the Healthy Living Access Point (Schakelpunt Gezond Leven)

A healthy lifestyle contributes to good health, reduces complaints, and prevents disease. With the Healthy Living Access Point (Schakelpunt Gezond Leven), a joint initiative of Hogeschool Utrecht and UMC Utrecht, we help patients to have a better and healthier lifestyle. Practitioners at UMC Utrecht refer patients to the Access Point. Our lifestyle consultants talk with patients through motivational interviewing. In this way they reach an action plan of which the patient has ownership and that they can follow at home. The Access Point is therefore a bridge between the hospital and the patient's own (home) environment that contributes to prevention, reduces pressure on healthcare professionals, leads to healthier patients, and ensures more complete care. It fits seamlessly into our strategy as well as important social engagements like the Integral Healthcare Agreement (IZA) and the Green Deal for Sustainable Healthcare.

In 2023 we expanded the Access Point. There are now four lifestyle consultants who are available on different days centrally in the outpatient clinic at UMC Utrecht. We are also building further on a strong regional lifestyle network. This helps to find each other as healthcare organizations easily and fast, learn from each other, and identify 'holes" or redundancies in preventative care. A study group has also started with implementation and impact studies and we are working on the integration of lifestyle in medical and paramedical training programs.



Watch the video about our Healthy Living Acces Point.

Exercise monitoring for faster recovery

Exercise is important, before, during, and after hospitalization. To encourage patients to start and keep moving, we have introduced a **movement sensor**. This monitoring makes patients' exercise behavior visible. For healthcare professionals via **HiX** and for patients on a screen at the unit and on a mobile app. Monitoring exercise, in combination with setting exercise targets and multidisciplinary support for patients, is a scientifically based way to improve patients' physical activity and thereby accelerate their recovery. It also gives patients more control over their own recovery. In addition, it gives healthcare professionals a concrete way to help patients more effectively and give them customized advice. Since 2023 we have been using the movement sensor in all clinical sections. In 2024 we are starting to introduce it in outpatients.





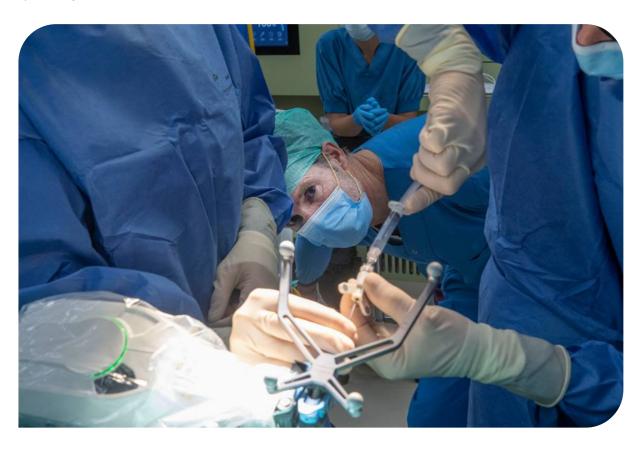
Buddy project gives support to parents with sick children

At UMC Utrecht a number of colleagues in the Pediatric/surgery unit have started with a **buddy project to support parents with sick children**. Healthcare professionals at UMC Utrecht do their best to support parents of sick children the best they can and to listen to them. But for parents of sick children it is sometimes difficult to find an answer to practical issues that they encounter daily. In the buddy project we match parents of children with the same or comparable diseases with each other, so that they can support each other and talk about practical matters. The aim is to expand this unique buddy project to other sections such as Neonatology, and to other patient groups, like children with chronic disorders.



Making optimal use of scarce OR time

With a growing demand for healthcare and a shortage of operation-room (OR) colleagues due to a tight labor market, we unfortunately had less operation hours in 2023 than we should have had. We want to structurally reserve OR time for adult patients who need specialist surgical care from UMC Utrecht specifically.



In 2023 we therefore redistributed the available OR time in line with our strategy and our task in the scope of the Dutch Integral Healthcare Agreement (IZA). It was no easy task. It appeared that the number of available hours was less than expected. And for some specialties there were too few training hours available to meet the requirements of their medical follow-up training. With much creativity and pooled forces we achieved some fine results in 2023.



In our redistribution we gave room for specialties in cardiovascular, oncology, neurosurgery, traumatology, and emergency care. We also started to establish preconditions to make optimal use of scarce OR time. For example waiting-time management, a centralized implementation of the digital system ZorgDomein, and centralized control of the uptake schedule. We created a more uniform process for operation schedules and GPs know better via ZorgDomein for which purposes they can refer patients specifically to UMC Utrecht.

To have enough OR time for medical follow-up training, we also set up temporary extra 'training ORs' in 2023. Both at UMC Utrecht, and externally in cooperation with a number of partners. In the coming years we shall also work further not only on making optimal use of scarce OR time for our patients, but also on creating more and more OR time.

Patients get specialized drugs administered at home

In 2023 approximately 1,500 patients, both children and adults, received **specialist pharmaceutical care from UMC Utrecht at home** instead of at the hospital. An example is the administering of chemotherapy/ immune therapy for patients with cancer. Or antibiotics for instance for patients (children/adults) with a chronic lung disorder or an infection following hip or knee surgery. In 2023 our pharmacy delivered a total of 14,000 antibiotic infusions for home treatment. Administering specialist drugs at home contributes to patients' quality of life. And avoids unnecessary traveling. It can also shorten hospital stays or sometimes even prevent hospitalization completely.

Innovative care for patients with rare disease

Rare diseases are often life-threatening and/or chronically disabling, difficult to identify and detect, and challenging to treat (that is to say, if a treatment exists). At UMC Utrecht we feel that it is our task to be able to offer this highly specialized care. Experts from various specialties therefore work together to make the best and most innovative care available to patients suffering from a rare disease.

In our centers of expertise for rare diseases (ECZAs) patients can be helped for over 200 recognized diseases. In 2023, seven centers received recognition from the Dutch Ministry of Public Health. This includes extension of recognition, expansion with new recognized rare diseases in existing centers of expertise, and a new recognized center. In these centers of expertise we are working relentlessly to develop healthcare, education, research and innovation so that we can continue to offer the best quality care in the future. To this end, we also work with patient organizations and other healthcare institutions. Through the centers of expertise for rare diseases we have joined 17 of the 24 European Reference Networks (ERNs).

Infusion monitoring for vulnerable babies

In 2023 the worthy cause of our hospital **foundation Friends of UMC Utrecht & Wilhelmina Children's Hospital** received a total of € 7.2 million in donations. Thanks to this tremendous support our Friends foundation was able in 2023 to start up and carry out a large number of worthwhile projects. We were for instance able to purchase **infusion monitors** to prevent pain or nasty wounds for vulnerable babies who are getting infusions. In addition, many companies and funds made it possible for us in 2023 to purchase **a robot arm** for the printing of human tissue for a new left or tight heart chamber. And in September 2023 the **renovated pediatric operating theater at WKZ** opened its doors. Read more about the activities of the Friends of UMC Utrecht & Wilhelmina Children's Hospital foundation.



Digital care

UMC Utrecht, together with its partners in and outside the region of Utrecht, are giving shape to the healthcare of tomorrow. We are studying whether and how digital technology can make healthcare more personal, more efficient, and better. Healthcare that is available to everyone, and as close as possible to individual wishes and needs. If care can be provided at home, that is what we do. This will leave room for care that needs to be provided at the hospital. And avoid unnecessary travel, which will help to reduce our CO2 emissions. Naturally we accompany and support patients in the use of digital healthcare solutions. Much of this is done from our **Medical Control Center**.



Safe remote care through ongoing monitoring

The demand for emergency care is growing, while healthcare employees remain scarce. To be able to (still) offer high-quality acute care in the right place, we must organize our healthcare in a smart and safe way. Within the COVERED program we develop and implement **ongoing monitoring of patients from a distance**. For example the monitoring of vital statistics like heartbeat and breathing. We can thus detect faster when patients are deteriorating and can help healthcare professionals to do their job efficiently.

Watch the video about safe remote care.

In 2023 we successfully pursued with continuous monitoring via COVERED@UMCUtrecht in our nursing unit C2West. It now forms part of the regular process here with over 1,000 patients who have already been monitored continuously. In addition, we started in 2023 with continuous monitoring in the scope of research at medium-care surgery (C2Oost). Based on the experiences of both these units, we are improving and optimizing continuous monitoring. We thereby ensure that we are applying it safely and effectively. In 2024 we want to deploy COVERED@UMCUtrecht in even more nursing units at UMC Utrecht.

In 2023 we also temporarily used continuous monitoring via COVERED@UMCUtrecht in the treatment of a patient with cancer, following a request for help from an internist-endocrinologist. The hemodynamically instable patient could thus get monitored effectively during radiotherapy. Both the patient and the healthcare professionals involved are **enthusiastic about the use of continuous monitoring**.

In 2023 we furthermore looked at how we could use COVERED@home safely and efficiently in home situations. Within this feasibility study, twenty patients wore a continuous-monitoring sensor for five days after they were discharged from UMC Utrecht. With the gathered data and patient interviews we were able to establish the right protocols for COVERED@home. We thus ensured that patients could recover safely in their own living environment from for instance airway infection or surgery, with support and 24/7 remote monitoring from our **Medical Control Center**. The results of this technical feasibility study were made known at the beginning of 2024.



More patients monitored at home

In 2023 home monitoring and treatment increased further. In total we monitored over 1,250 patients at home, which is an increase of over 40% compared to 2022. This involved periodical monitoring, where patients updated their own measurements a few times a week from their home environment into an app. For example body temperature, blood pressure, and the strength of their hand grip. They also answered questions on how they were doing. Our healthcare professionals watched from a distance. They evaluated and sorted all imported data based on the established treatment protocols and accompanied patients in their treatment or recover process. Colleagues from other hospitals in and outside the country also visited UMC Utrecht in relation to home monitoring. We shared our knowledge and (further) explored cooperations.

Improved care to patients witg ventricular assist devices through home monitoring

For patients who had received a ventricular assist device at UMC Utrecht, we developed the homeventricular the home monitoring application MCS@home. A MCS ventricular assist device stands for Mechanical Circulatory Support) is a mechanical pump that supports and partly takes over the function of the left heart chamber . Since November 2023 all patients with a ventricular assist device have been able via the MCS@home app to fill in and update relevant data from home and monitor the progress thereof. For example ventricular assist device values and weight. A weight increase can indicate water retention, which is an important sign of possible complications. If any of the values that have specifically been defined for the patient is exceeded, the specialized ventricular support system nurse ant UMC Utrecht receives a small signal. They will then contact the patient and take action if needed. With the help of MCS@home (health) problems can be signaled early on. This can reduce the number of complications and possible re-uptakes and help us to improve care for patients with a ventricular assist device.

Since the end of 2023 MCS@home has formed part of ventricular assist care at UMC Utrecht. Studies show that patients give ventricular support care at UMC Utrecht a score of 9.

(Regional) support for remote care

Our Medical Control System, a digital care and monitoring facility, plays a significant role in the support for remote care. Through the structural organizing and expansion of the Medical Control Center in recent years, remote monitoring since 2024 no longer needs to be done periodically but can also be done continuously, i.e. 24/7.



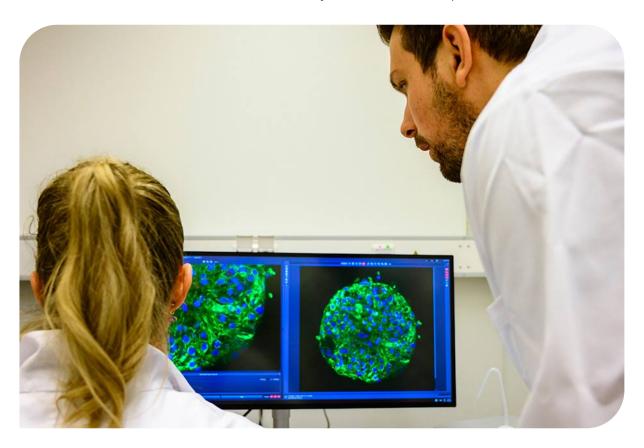
To give patients the best possible care, it is also necessary to work with healthcare institutions and professionals at a regional level. It is for instance important that a healthcare professional at the hospital can coordinate with a patient's GP or a home-care nurse. For example by providing aids such as oxygen administered at home. Our Medical Control Center plays an important part here. In 2023 we therefore, in line with the Integral Healthcare Agreement (IZA), launched a study of how we as UMC Utrecht can organize and give support at a regional level.



Al improves the quality and efficiency of healthcare

In 2023 we worked further on applied data-science initiatives in healthcare, where we make use of artificial intelligence (AI). On the one hand these initiatives reduce the administrative burden of our healthcare professionals, so that they can give more time to patients. On the other hand these are care applications with which we improve the quality of care for patients. These AI applications form part of the 'implementation of AI' in our program 'Data Science UMC Utrecht'. In this **program** we bring data infrastructure, research & development, and the implementation of AI together ('3AI').

In 2023 we worked among other things on an application that allows the automatic counting of cell divisions in a pilot for patients with breast cancer. With this application we support pathologists in their work. It enables them to work faster and often more accurately. The outcomes of the pilot will be known in 2024.



In addition we are working on an application that predicts no-shows in outpatients. Patients with a high chance of no-show are called by a student call team to remind them of their appointment. Following a pilot at three outpatient units we have seen a definite drop in no-shows. In 2024 we shall be extending this to other outpatient units at UMC Utrecht. We are hoping eventually to have 15 to 20% fewer no-shows at our outpatient units. This will ensure that patients receive the care they need, and that we can make better use of our capacity.

In 2023 we also investigated how AI language models such as ChatGPT could help to reduce the administrative load of healthcare professionals at UMC Utrecht. And what healthcare professionals' needs are in this regard. Based on this, we have launched three projects: automation of discharge letters with language that is more accessible for patients, automated preparation of any information that is needed for consultation appointments at outpatients, and smart search of information in care protocols. We are also working on an application to convert spoken text in the consulting room into a summary for the electronic patient record. This gives patients and their families the chance to reread the most important information in their own time.



Lastly, we are organizing a meeting for the knowledge network on AI implementation in healthcare for more than 40 healthcare organizations and knowledge institutions in the Netherlands. Topics include ways in which we can work together even more effectively to speed up the implementation of artificial intelligence (AI) in the healthcare process.

Good and safe digital healthcare

Digital healthcare cannot be considered without quality and safety. Safety and responsibility must be prerequisites for using digital healthcare. This involves many aspects. In 2023 we made considerable strides in setting up a quality-management system for the inhouse development and implementation of Al applications. We furthermore assessed for each case specifically whether we could use home-monitoring applications responsibly. For example through risk-benefit analyses. In 2023 the quality and safety of digital healthcare were also included in the external audit at UMC Utrecht. The results of the audit were very positive. Positive findings were for instance that UMC Utrecht was looking at the patient's perception, and that a lot of attention was given to risk management, both internally and externally when the connection was made. It was established that UMC Utrecht has taken a leading position in the Netherlands in terms of quality and safety around Digital Health.

Self-management via the patient portal myumcutrecht.nl

Via the online patient portal myumcutrecht.nl patients can get fast and safe access to their medical information. This gives patients the chance to manage their own care. Patients can for example ask (non-urgent) questions or request a repeat prescription via an e-consultation on the portal. In 2023, an average of 44,459 patients logged in on the portal (unique logins). In 2022 there were 34,824.





Cooperating with patients

At UMC Utrecht we want to work together in a structural way with patients and their families when it comes to healthcare, **education** and **research**. Our goal is to make decisions together, so that we can be in line with patients' needs, expectations and possibilities. In our approach we work closely with a network of patients and caregivers as well as the UMC Utrecht Client Council.

Watch the animation 'Together we make a difference'.

Together we make a difference

Patients' knowledge and experience are crucial for us to keep improving and innovating. Because care is only good if our patients experience it as such. To make both our patients and our employees even more aware of this, we started in 2022 with the campaign <u>Together we make a difference</u>. In 2023 we pursued this campaign with two topics: 'We want to get to know you so we can give you the care that suits you', and 'How do you help patients who find it difficult to read and write?'.

Watch the video 'Which care is best for Marjon?' and 'How can we inform Quinten in a way that suits him?'

Bringing offer and demand for patient experience together

We actively involve patients in decisions about the way we organize healthcare, scientific research, and education. To bring the demand for patients' experiential knowledge and the offer thereof together, we set up the **Bureau for Patient Input (BPI)** in 2022. In 2023 the BPI received 72 requests for experiential knowledge. These pertained for example to the reading and improvement of a request for a study of type 2 diabetes, looking at real estate and building plans for Wilhelmina Children's Hospitals (WKZ), and giving input on a call script for patients who are on a waiting list. In addition, about twenty patients were involved in 2023 in making plans for our Healthcare of Tomorrow program.

Encouraging patients to share their experience

To encourage patients/family members to defend their own interests, the BPI has developed a course for patient partners. The course looks at questions such as:what is patient participation, how can I participate effectively, how does UMC Utrecht work, and how can I share my (experience) knowledge in an optimal way? In 2023 we gave this training four times to a total of 48 patients or their family members. Participants rated the training with an average score of 8.4.

Support for patients who hare these experiences

At patients' request in 2023 we organized two afternoon sessions for patient partners, people who share their experiences and think along with UMC Utrecht. It gave them the chance to meet, get to know each other, and hear about new initiatives. Attendees rated the afternoon with an average score of 9. Patient partners brought up their own topics that they wished to discuss. One of these were functional illiteracy. As a result we invited a coach and a language ambassador from the ABC Foundation. They shared their experiences and gave tips and advice on how to communicate with people who find it difficult to read and write. These insights can be used by patient partners in projects where they are asked for their input.





Support for employees in cooperation with patients

In a basic e-module we introduce employees to the notion of cooperation with patients in healthcare, education, and research. In 2023 we had 200 employees who completed this e-module on Patient Participation. An e-learning module aimed specifically at researchers looks at patient participation in research. 93 researchers followed this e-learning in 2023 in Dutch, and 42 in English.

We'd like to get to know you

To support our healthcare professionals, engage the dialog with patients, and offer personalized care, there is a questionnaire 'We'd like to get to know you" / 'We'd like to get to know you (junior)" (for patients under 18). Via the questionnaire patients can for example indicate what they consider to be the most important activities, things that worry them about their health, and what they expect from an appointment/ treatment.

Watch the video about the questionnaire 'We'd like to get to know you'.

In 2023 over 53% of the adult patients and over 30% of the parents/children filled in the questionnaire. In general, experiences with the questionnaire - for patients and for healthcare professionals - are positive. Patients indicate that the questionnaire helps them to prepare properly for their discussion. For healthcare professionals, the questionnaire gives concrete leads that help them to give tailored information, establish a good relationship with a patient, and provide care that is as personalized as possible.



Studying cooperation with patients

In January 2023 we appointed a professor in patient and public participation and started with research in this field. Two studies on participation in healthcare are currently under way. We are evaluating the implementation and functioning of the questionnaire 'We'd like to get you know you' at UMC Utrecht. And in the neuro-oncology section we are studying 'existential treatment' as a form of patient participation in healthcare. We are also studying cooperation between academically trained researchers and 'family-researchers' via self-reporting and interviews in the scope of a project on housing projects for people who are prone to psychoses, which was initiated by family members. Finally, we are studying the impact of new hospital policy that aims to stimulated more patient participation. We look at case studies to see how researchers tackle this and how patients experience it.



Diversity and inclusiveness in care

UMC Utrecht strives to be a home where patients feel recognized and acknowledged. Factors like gender, cultural or social background, personality, ideology, work capacity or age may not stand in the way. In 2023, we deployed various activities to further increase diversity and inclusiveness in our care.

Awareness-training section, Obstetrics

In 2023 the entire Obstetrics team at Wilhelmina Children's Hospital (WKZ) followed the de training course 'Become aware of your own bias'. Nurses and midwives as well as gynecologists and doctors who are training to become gynecologists took part in the training. They learned for instance about their own biases and how these could impact the healthcare that they provide. And through case-studies and discussions with experience experts on exclusion, they talk about how they can make certain situations in their work more inclusive. Participants also receive tools to know how to act as an 'active bystander' if they see something untoward happening. Through further discussions in the section and follow-up actions the section ensures that the healthcare and ambiance in the section keeps getting more inclusive.

Based on this series of training courses, we are now developing Awareness training for all healthcare staff at UMC Utrecht. This training will be ready by the end of 2024.

Masterclasses diversiteit & inclusie WKZ

At the end of 2023 a large proportion of our colleagues in the Child division of Wilhelmina Children's Hospital (WKZ) followed a master class on diversity and inclusion. In these interdisciplinary master classes, employees become familiar with the topic of diversity and inclusiveness, what biases are, and how these biases can influence healthcare. Participants spoke about their own biases and discussed specific cases and possible solutions to make their healthcare and division more inclusive.



Quality & patient safety

Healthcare implies working with people. Our patients are counting on good and safe care. Through research and experiences in the field we improve our care proactively and learn about care that did not go quite as we had intended. If an incident or major incident occurs, we investigate thoroughly what factors contributed to the fact that something did not go according to plan. We also look at how we can prevent this from happening again in the future, and work actively on improvements

Testing, improving, and guaranteeing the quality of healthcare

2023 we continued to build on our Quality Cooperation method. We started in 2022 with this approach of testing, improving, and guaranteeing quality. With Quality Cooperation, we continue to build on the solid foundation that we have developed in the past fifteen years. In the same period, three external assessments were made by Joint Commission International (JCI), of which the last was in 2019. Our new method brings us closer in line with patients' experiences and our healthcare professionals' intrinsic motivation to improve. After all, they know better than anyone where there is still room for improvement in healthcare. Quality Cooperation is based on five pillars, whereby we move from monitoring to trust.



In 2023 we went further to draw up a department-specific quality agenda with all departments. We are finalizing these in 2024. These agendas incorporate the national improvement goals of the Dutch Inspection for Healthcare and Youth (IGJ), our own priorities as UMC Utrecht, and improvement goals specific to each department.

In 2023 we also continued to work in the scope of NFU on the pillar 'Horizontal learning' as a quality instrument. We exchanged best practices internally, with other UMCs, and/or with other professional sectors. Lastly, in 2023 we once again received certification for the NEN8009:2018 standard. With this certification we show that we meet the requirements for a safety-management system.



Adrienne Cullen lecture: learning from mistakes

The annual Adrienne Cullen lecture plays an important role in making it possible to talk about and learn from things that went wrong. We thus avoid making the same kind of mistake again, and patients feel that they are supported. The lecture can be watched online with Dutch subtitles as well as live English interpretation and English subtitles. The lecture is named after Ms Adrienne Cullen who contracted terminal uterus cancer due to a medical error at UMC Utrecht. The fourth Adrienne Cullen lecture took place on Friday, March 10, 2023. It focused on the experience of a family member of a patient with regard to our communication.

Discharge communication further improved

In 2023 we continued to improve our discharge communication. Our ambition is to send a discharge report to the general practitioner/referrer within 24 hours for 90% of all transfers to the patient's home. We thereby guarantee care continuity, also after a patient has left UMC Utrecht. In 2023, we sent 73% of all discharge letters on time (62% in 2022).



Incidents, major incidents, and complaints

Our professional work daily and with passion to give patients the best care. Sometimes unfortunately things do not go according to plan, and an incident or major incident may occur. A patient may also have an unpleasant experience and make a complaint. In all cases our policy is to help the patient in question and/or their family members to the best of our ability, and to learn actively from an incident, major incident or complaint. We hereby want to prevent similar situations in the future and further improve the quality of our care and the safety of our patients.

Figure 1: Number of patient-care incidents reported (MIP)

2023 saw a slight drop in the total number of incidents compared to 2022. There were 115 less reports (3% decrease). The decrease is slightly smaller than in the previous two years (4.9% and 5.5%).

Number of reports

Figure 2: Number of reports of (possible) major incidents

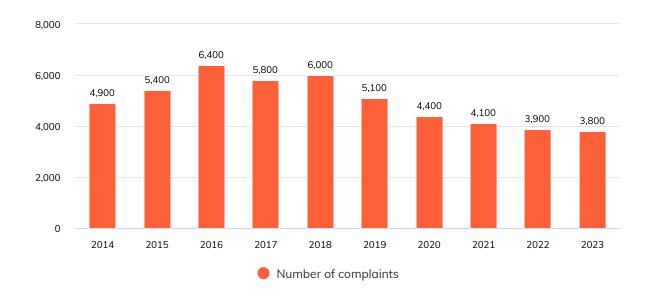
	Internal reports	Potential incidents	Ultimate incidents
2016	136	66	42
2017	98	49	32
2018	71	39	25
2019	74	43	21
2020	57	21	18
2021	55	23	8
2022	58	21*	4*
2023	59	24*	11*

^{*}not yet finalized



The number of internal major-incidents reports, reports to the Inspection for Healthcare and Youth (IGJ) and investigations leading to the conclusion 'major incident', remained more or less at the same level in 2023 than in previous years (2020-2022).

Figure 3: Number of complaints at Complaints Mediation



The total number of complaints in 2023 was slightly up from 2022, partly due to a different way of registering. Complaints can now also be submitted as notification, which means that the threshold for submitting a complaint is now even lower. Most of the complaints had to do, as in previous years, with treatment and care, and communication and harassment. We saw a slight increase in complaints about access times for outpatients (first consultation after referral), the waiting list for the OR, and changes in our healthcare offer.



Our research for the healthcare of tomorrow

To improve people's health and create the healthcare of tomorrow, our research staff work together with our partners and patients on multidisciplinary studies. Patients' demands is of course our point of departure. We strive to achieve the highest possible quality and impact for patients and society.





Our research in figures











214
PhD completed (graduated)



More sustainable laboratories

In our research we look at sustainability, both in the topics on our research agenda and in terms of making our research as such more sustainable.

In 2023 for instance we joined LEAF (Laboratory Efficiency Assessment Framework), and UMC Utrecht employees contributed to putting this initiative from the United Kingdom on the map in the Netherlands as well. Laboratories use a lot of energy and commodities. Through LEAF we have been making our labs more sustainable and have reduced our CO_2 to 10%. In 2023 more than 35 research groups and 17 lab units at UMC Utrecht with a zero measurement mapped their equipment, energy consumption, and waste. This has earned us a bronze certificate as a first step to becoming more sustainable. Actions will follow In 2024 to continue reducing CO_2 emissions.





Unique research

We have divided our research into six substantial programs (focal points). Some examples of unique, trailblazing research in 2023 are:

Active sleep ensures the best possible for premature babies

Researchers at UMC Utrecht have studied the role of sleep on the brain development of premature babies. In 2023 they found a link between more more active sleep and better development of white matter in their brains. White matter is essential for processing information and connecting different areas of the brain, which in turn is vital for cognitive and motor functions. Based on this discovery, the research team in future wants to keep a closer eye on the sleep of premature babies in pediatric IC. Medical interventions can then, insofar as possible, be done at times when the baby is not in an active sleep phase. This will give premature babies the best possible start in life. On March 7, 2023 the Sleep Discovery Lab was also officially launched.



Artificial intelligence improves cancer treatment

In the Netherlands, tumors are detected in the brains or spinal cords of some 1,400 adults and 150 children each year. Previously, the type of brain tumor and how aggressive it was, could only be determined one week after its surgical removal, once the removed tissue had been analyzed. In 2023 researchers from UMC Utrecht, Princess Máxima Center, and Amsterdam UMC made successful use of artificial-intelligence (AI) technology to determine the type of tumor during surgery already, within an hour and a half. Through this new technique the neurosurgeon can, if necessary, already adapt the operation plan for children while the operation is still under way. This often eliminates the need for a second operation. Princess Máxima Center has judged that the results of this technique are sufficiently reliable and is are now using it in practice with children for whom the outcome may be determining for the operation plan.



Watch the video about research on brain tumors.

Al also helps to screen breast cancer more effectively. Women with very dense breast tissue are more likely to develop breast cancer. With the help of Al, researchers at UMC Utrecht have now found a factor that could be an additional indicator of the development of cancer in this group of women: the extent to which normal gland and connective tissue shows up through contrast medium in an MRI. This outcome could eventually help to perform additional MRI screening in very dense breast tissue more effectively.

Vaccinating against RS virus now possible

Every year, 150 to 200 babies in the Netherlands with an RS-virus infection are taken up in intensive care. Worldwide, RSV is the second largest cause of death among infants, after malaria. From **three studies in which UMC Utrecht** was involved, it appeared in 2023 that it was becoming possible to vaccinate babies, pregnant women, and older people. This can prevent serious infection due to the RS virus. The new vaccines present a turning point in the fight against RSV.

Increasing the efficiency of treatment for heart failure

Both with healthy and sick people the so-called 24-hour rhythm is important for the functioning of the body. Researchers at UMC Utrecht had been asking themselves whether the **24-hour rhythm might alter in patients with heart failure**, a condition that some 250,000 people in the Netherlands suffer from. They discovered in 2023 that, despite disturbances in hormone levels and bodily functions, the molecular clock in the heart remains intact and that a 24-hour rhythm is still present. If we keep this in mind for instance when scheduling operations or administering drugs, we can thereby improve the effectiveness of a treatment.

Patients with kidney failure 23% less risk of dying

Kidney failure frequently occurs as a chronic, non-transmittable disease. Over 6,200 patients in the Netherlands, and about 4 million worldwide, undergo dialysis treatment. Research led by UMC Utrecht showed in 2023 that a new dialysis method, hemodiafiltration, is a **better treatment** for patients with kidney failure than hemodialysis. This new dialysis treatment reduces by 23% the risk of death among patients with kidney failure. An important breakthrough in the treatment of patients with kidney failure. This is expected to lead to a more widespread use of hemodiafiltration around the world.

Two new types of bacteria discovered in patients with bowel inflamation

In 2023, researchers from UMC Utrecht and Yale University (USA) discovered **two new types of bacteria in patients with an inflammatory bowel disease (IBD)**. IBD is a chronic inflammatory condition that mainly consists of Crohn disease and colitis ulcerosa, and that affects millions of people worldwide. An in-depth characterization of the two new types of bacteria has shown that these are responsible for breaking down the protective mucous layer of the bowel wall which in turn causes strong immune reactions. These findings emphasize the potential role of bacteria in the disease course of IBD and might contribute to new treatments in the future.



Bioprinting to replace tissue and organs in the future

For years already there has been a shortage of suitable donors. In 2023, various steps were taken at UMC Utrecht to eventually be able to produce replacement tissue and organs through bioprinting. A chemical 'map' could for instance be made for cells from which tissue and organs can be built up. A PhD student also developed a granular gel that helps to place cells in a very precise and controlled way during bioprinting. This granular gel also allows more biological activity in the printed tissue or organ. Stem cells can thus spread more, create epithelial cells with more connections, and enable neurons to connect with each other.Lastly, researchers developed a very precise method of 3D printing whereby a blood vessel can be made, a complex structure that must be mechanically strong and powerful.





Valorization of research

Translating scientific knowledge into impactful solutions for patients and society is a core task of UMC Utrecht. We support researchers and other professionals with valorization and funding from the **Research Support Office**, our participation in **Utrecht Holdings** and **Utrechtlnc** among others, and via program such as **Ureka Mega Challenge**.

Licenses and startups Utrecht Holdings

Within **Utrecht Holdings** a total of fifty new ideas for innovations were further elaborated in 2023 and twelve patent applications were filed for initiatives from UMC Utrecht. As a result, five licenses were granted for the marketing of innovations from UMC Utrecht.

In 2023 five licenses were granted for the marketing of innovations from UMC Utrecht.

In 2023, Utrecht Holdings invested in three new UMC Utrecht startups via the **Utrecht Health Seed Fund**, namely:

- Phlox BV. With the help of gene therapy, Philox BV relieves and cures various heart diseases.
- Cordys Analytics BV. Cordys Analytics BV enables revolutionary heart treatment by giving doctors and patients seamless access to AI diagnostics for electrocardiograms.
- Fair Therapeutics BV. With the help of personalized medicine, Fair Therapeutics BV provides accessible drugs against cystic fibrosis.

In December 2023, Utrecht Health Seed Fund concluded the investment period. A new fund was launched in 2024: Utrecht Holdings Seed Fund.

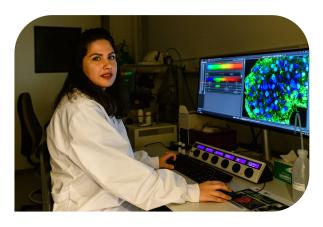
New UtrechtInc startups

In 2023, the startup incubator **UtrechtInc** was able to welcome two new startups with an UMC Utrecht background (founder of IP) in its program and startup ecosystem. These were:

- DoDerm, a company that offers natural skincare for animals that repairs the skin.
- Cell-XS, a flexible platform which ensures that gene therapy can quickly target diseased cells in the body and thus cause less side effects for patients.

TKI grant from Health~Holland for AI labs

The top sector Life Sciences & Health of in 2023 made € 7.5 million available via Top Consortia for Knowledge and Innovation (TKI) grants for projects initiated at UMC Utrecht. The TKI subsidy is a financial incentive for researchers to set up innovation projects in collaboration with companies.





Part of the TKI grant (€ 4 million, of which 2 million came from the TKI grant of 2022 and 2 million from the TKI grant of 2023) has already been used to give financial support to **five AI labs** to help them get started. Each lab received € 800,000. These artificial-intelligence (AI) labs at UMC Utrecht initiate public-private projects to find answers to social issues with the help of AI and data science. In the AI labs researchers from various disciplines develop new knowledge and applications, together with experts from public and private organizations, authorities, and other knowledge institutions. The five labs focus four Accelerators in our Connecting Worlds strategy: Healthy Living, Imaging and Guided Interventions, Molecular Science, Living Technologies, and AI methods.

The remaining 5.5 million was allocated to protects that had submitted a grant application via a call. This include a project on new diagnostic modality **PrecorDX** and the Discover E3 project. In Discover E3, in cooperation with **Oncode Institute**, research is conducted on the use of degrading proteins (multispan E3 ligases) for the targeted breaking down of membrane proteins in cancer. The Lipid Five project also received a grant. Here an extra substance is added to nano-drugs, such as certain vaccines, which can considerably improve the performance thereof.

A new public-private cooperation concept by UMC Utrecht also received support from Health~Holland. In the UMC Utrecht Bachelor Research Hub a group of 20 bachelor students in Biomedical Sciences worked for 10 weeks on a research question from the biotechnology company Genmab. The project, in which research was done on new starting points for the treatment of cancer, created a synergy between research, education, and the biotechnology and pharmaceutical industry. The students developed their academic and research skills and got a peek into the engine house of a company. Genmab gained new knowledge that will help to improve immunotherapy treatment of cancer.

Innovations by colleagues

In the innovation program **Ureka Mega Challenge** we support colleagues in turning their innovative ideas into actual products, tools or work processes that will improve the quality of care both for the patient and for the healthcare professional. 2023 was an anniversary year for the Ureka Mega Challenge: It was the tenth time we organized the challenge and we got to select **nine great ideas**.

In February 2024, the jury chose four finalists:

- **HeLLO**: a liver model that can predict the toxicity of medication for the liver, which helps to develop safe drugs.
- JAMA: the use of natural nanoparticles to target medication safely at sick cells, which helps to treat diseases (more effectively).
- **PERFECT FIT**: perfectly fitting 3D printed ventilation masks for patients who are ventilated for extended periods, which avoids sores due to pressure and prevents air from escaping.
- R-KEY: a small dividing open-end wrench that can quickly and easily separate feeding tubes from the feeding system to prevent them from getting damaged unnecessarily.

The final show takes place on June 5, 2024, with a festive touch especially for the anniversary.



Research funding

In 2023, our fund-raising capacity for research was € 133 million (100 million in 2022). This means that we exceeded our target of € 112 million. In 2023 we received the following research subsidies among others:

Investments from the National Growth Fund

The Dutch **National Growth Fund** (NGF) invests in projects that make the biggest possible contribution to sustainable and structural economic growth.

In 2023 the NGF gave an award to the **DUTCH-project** in which UMC Utrecht is involved. With the rising demand for healthcare and an increasing scarcity of staff in healthcare, a shortage in operating capacity of 20% is expected in 2030. In the DUTCH-project, UMC Utrecht is working in a group that includes other university medical centers, universities, and companies as well as the Ministry of Public Health, Well-Being and Sport, to reduce the drain of current healthcare professionals, increase inflow (and operating capacity), transform healthcare education in the Netherlands, and provide sufficient continuous and refresher training.

In addition, the NGF has earmarked € 125 million for a **new Center for Non-Animal Biomedical Translation** (CPBT) to accelerate the transition towards research without laboratory animals in the next 10 years. Instead of laboratory animals, we are using increasingly advanced patient models which also brings us closer to the conditions of actual patients and drugs with a better chance of success. This will yield economic and social gains: better drugs, and less animal testing. CPBT, in which UMC Utrecht plays a big role, aims to focus on transition programs for instance in the fields of ALS and cystic fibrosis. This will ensure that drugs for these diseases become available faster for patients.

UMC Utrecht is now a partner in the following approved and selected projects in the category Health and Healthcare in the three NGF rounds. Besides DUTCH and CPBT from this round, this includes Health-RI and RegMedXB from the first round, and Oncode Accelerator (previously Oncode-PACT), Biotech Booster, and PharmaNL from the second round. UMC Utrecht is also a consortium partner in NXTGEN HIGHTECH.

Oncode Accelerator was officially launched in September 2023. Within Oncode Accelerator, UMC Utrecht works together with more than 30 public and private partners to get new cancer medication to patients faster.

Better recovery after a stroke

Each year about 40,000 people in the Netherlands suffer from a stroke. Many of them retain scars. They may for instance find it more difficult to move a hand or an arm, which limits them in their everyday life. No treatment to date has proven effective if these complaints are still present days or weeks after a stroke. In 2023, researchers from UMC Utrecht received a grant of € 4 million from the Veelbelovende Zorg ('promising care') program of the Dutch healthcare institute, Zorginstituut Nederland. With this money they can now do research on motor recover after a stroke by means of brain stimulation. If the result is positive, the treatment will be included in the basic package of health insurance.



Treatment for liver cancer reduced from 2 weeks to 2 hours

Treatment that takes two hours instead of two weeks: in 2023, the green light was given for two clinical studies where **liver-cancer patients will be treated with a hybrid C-arch**. The device, invented at UMC Utrecht, makes radio embolization faster and more flexible. The project forms part of the IMAGIO consortium, which has now received an Innovative Health Initiative (IHI) grant of no less than € 24 million from the European Union.



Reduced risk of asthma RSV infection

UMC Utrecht will be leading an international consortium that seeks to understand why children who had an RSV infection as a baby seem to have a **greater chance later of developing asthma**. The study which will take five years is funded by a HORIZON HLTH 2023 grant of € 7 million from the European Commission. Pediatricians, infection specialists, lung specialists, and other health professionals will work together in this study. The results could contribute to better treatment for chronic respiratory diseases. It could also make people more aware of RSV and the link with chronic respiratory diseases such as asthma and COPD.

New MRI techniques and insight in food allergies

A consortium of seven partners, led by the Donders Institute for Brain, Cognition and Behaviour of Radboud University, in which UMC Utrecht is also closely involved, received a NWO Roadmap grant of € 19 million in 2023. Thanks to this, the **first MRI scanner in the world with a magnetic strength of 14 Tesla**, which is suitable for tests on humans, will be built in Nijmegen.



A group of Dutch research institutions, companies and social partners led by UMC Utrecht also received a Perspectief (Prospect) grant of € 4.5 million from the Dutch Organization for Scientific Research (NWO). With this money the so-called 'CHIME-consortium' will develop new, advanced MRI technologies. The aim is to get a clearer picture of brain processes that play a role in dementia, so that the development and testing of possible treatments could be more effective.

In the scope of the NWO research program 'Safe and healthy nutrition and food systems' the project 'Monitoring the Safe Introduction of Novel foods' (MoSIN) was also rewarded in 2023. In this project, a consortium led by UMC Utrecht with partners from the food system is investigating how a food allergy develops in an altered nutritional environment. For example from animal to plant foods. The knowledge gained in this study will be used to develop and implement a monitoring system for rising food allergies.

Better personalized treatment for high blood pressure

Het consortium bestaat uit twaalf partners en het onderzoek wordt geleid door het UMC Utrecht. An international research team has received a subsidy of € 10 million from Horizon Europe and UK Research and Innovation. With this subsidy, the HYPERMARKER team will develop and test instruments with which clinicians, by means of artificial intelligence, could select the most effective personalized treatment for patients with high blood pressure. The consortium consists of twelve partners and the study is led by UMC Utrecht.



Pandemic preparedness and active cooperation

How could we detect a possible pandemic at an early stage so that we can work together more effectively? The funding organization ZonMw in 2023 released € 2.5 million to the Netherlands Centre for One Health (NCOH) for **research on pandemic preparedness** based on lessons learned from the COVID-19 pandemic. Nine Dutch knowledge institutions, including UMC Utrecht, are taking part in NCOH.



Vaccine against inflamatory rheumatism

ReumaNederland in 2023 made € 500,000 available to Utrecht University, UMC Utrecht, and Radboudumc for a follow-up study on a vaccine against inflammatory rheumatism. This vaccine should 'reeducate' the immune system to prevent joint tissues from getting damaged as happens in patients with inflammatory rheumatism.

More effective use of immunotherapy

How can immunotherapy be used more effectively against head and neck cancer, liver cancer, multiple myeloma, and other types of tumors? And how do we avoid over-treating children with thyroid cancer? These questions are being investigated in **four new studies at UMC Utrecht**. KWF Kankerbestrijding (for cancer prevention) announced in 2023 that they would finance these projects with a total of € 3 million.

Researchers from UMC Utrecht are also starting with three innovative cancer studies with organoids, made possible by a total of nearly € 1.6 million in subsidies from KWF Kankerbestrijding. Organoids (a Utrecht invention) are a kind of 'mini organs' that could contribute significantly to the customization of cancer treatment, among others.

Sector plan: reinforcing basic scientific research

In the period 2023-2029 UMCs in the Netherlands together received approximately € 40 million per year for the implementation of the sector plan for medical and health sciences. The aim is to offer researchers and lecturers peace of mind and scope through extra jobs and more fixed appointments. This reinforces the basis of scientific research and education in order to take on major challenges in health and healthcare.

In 2023, UMC Utrecht developed a plan to use the awarded resources (about € 5 million per year) for various projects within the scope of the topics that were jointly defined by UMCs in the Netherlands: prevention and data-driven innovation, from basis to application as well as the accompanying educational innovation. The results for 2023 were presented in a joint annual report for all UMCs drawn up by NFU.

Within the topic of prevention, we are for instances focusing on reducing socioeconomic health discrepancies via a district-centered approach, including with the cooperation of **Health Hub Utrecht**. And for the topic of data-driven innovation we are working among other things on setting up the **data facility U-Cloud**.

Support for researchers from national support programs (NPO)

During the Coronavirus pandemic there was less capacity/opportunity for scientific research that was not related to COVID-19. Due to this a lot of scientific research has been delayed since March 2020 . In 2021 and 2022 UMC Utrecht received € 8.5 million in total from the National Program for Education (NPO), the national support program for education and recover and prospects for researchers.

From 2012 up until 2023, UMC Utrecht spent a total of \in 6.461 million to cover (a part of) the salary costs of 458 PhD students and post-docs (approximately 40% of UMC Utrecht researchers). This included \in 700,000 in 2021, \in 2.906 million in 2022, and \in 2.855 million in 2023. The rest of the money we received has been reserved for outflow in 2024.



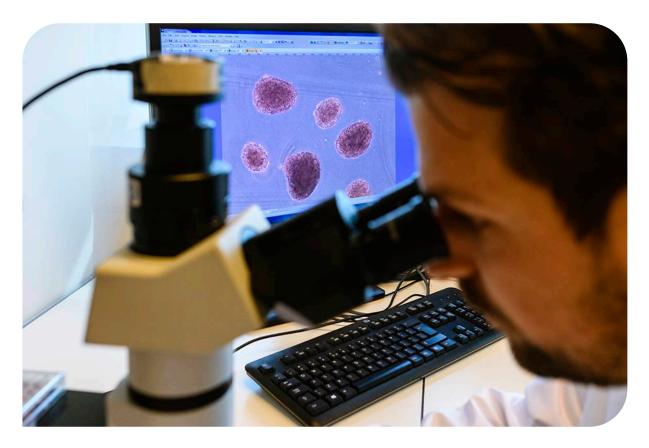
The decision on how to use the NPO funding was made in consultation with representatives of the divisions, the strategic focal points, and the R&D Council of UMC Utrecht. The compensation on average was equal to three months of wages. In addition, UMC Utrecht used € 1 million from its own resources to compensate for the wage costs of another eighty or so researchers.

Starter and incentive grants for researchers

From the Ministry of Education, Culture and Science and via Utrecht University, UMC Utrecht has since 2023 received two new types of subsidies for researchers, referred to as starter and incentive grants. Both these grants can be spent freely and are intended to give researchers peace of mind and scope to develop their own line of research. In 2023 these **grants were distributed through a draw system**. Five young researchers with a fixed contract at university-lecturer level received a starter grant of € 240,000. Six researchers, from university lecturer to university head lecturer, also received a stimulus grant of more than € 200,000.

Veni, Vidi, Vici grants for researchers

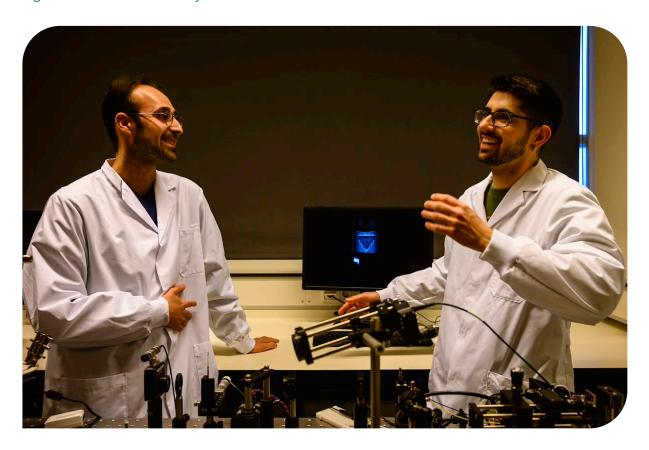
The Dutch organization for Scientific Research (NWO) in 2023 gave six promising young scientists from UMC Utrecht a grant of up to € 280,000 via a Veni funding (Veni round 2022). Thanks to this grant the winners can for the following three years develop their own research ideas further. Four researchers from UMC Utrecht also received a Vidi grant of up to € 800,000. With the Vidi grant, these researchers can in the next five years develop their own, innovative line of research and set up or continue to build up a research group. Lastly, three researchers from UMC Utrecht received a Vici grant from NWO. With this grant of € 1.5 million they can in the next five years do innovative research and continue to build up their research group.





Open science: transparant, publicly available research

One of the guiding principles for research at UMC Utrecht is the transition to Open Science; a way of doing science where the entire research process – from prioritizing to the publication of results – is made public and transparent and where we involve society in the research phase whenever we can. In this we work together with Utrecht University.



Together with Utrecht University we put together a Open Science Team in 2022 to study various Open Science topics further and to implement them. In line with the normalizing of open research practices, Utrecht University in 2023 adjusted the organization and set up a large portion of these activities at the faculties. At UMC Utrecht we are keeping the Open Science team up and running. It consists of a widely chosen group of researchers and other research professionals, chaired by the dean.

In 2023 a total of 84% of our scientific publications were published with Open Access.

Open Acces scientific publications

An important aspect in Open Science is the free Open Access publication of scientific articles. This makes our scientific research results accessible to everyone online and helps maximize their dissemination. In 2023, a total of 84% of our scientific publications were published with Open Access (85% in 2022, and 79% in 2021). We also made preparations to make all scientific publications from UMC Utrecht as of 2024 openly accessible six months after they appeared, regardless of the journal in which they were published.



Wide appreciation of researchers

At UMC Utrecht we are developing new career profiles for the appointment of new associated professors, which we have been using in a pilot since 2022. In 2023 the Executive Board of UMC Utrecht formally defined these profiles. This rounds of the development phase. The profiles are: Implementation Researcher, Clinical Researcher, Exploratory Researcher, Methodology & Technology Researcher, Academic Educator, and Valorization Researcher. These profiles are in line with our focus on Open Science and our talent program 'Research Development Program'. It is accompanied by an evaluation system (Recognize and Appreciate), in which the scope of academic activities and both individual and team achievements are recognized. The accent is on quality rather than quantity, and all aspects of Open Science and academic leadership are encouraged. UMC Utrecht is one of the pioneers of this broader appreciation of researchers. At the start of the academic year in 2023 this led to countrywide media coverage for UMC Utrecht career profiles.

Emphasis on cooperation rather than competition

UMC Utrecht decided together with Utrecht University as of 2023 no longer to participate in the worldwide Times Higher Education ranking of universities. We put the emphasis on cooperation and Open Science rather than scores and competition. It is also virtually impossible to capture the quality of all educational programs and subjects in an entire university or university medical center in a single figure. Those who make these rankings moreover use data and methods that are highly disputable, as studies have shown. Universities for instance have to spend a lot of their own time on delivering the right kind of information. Utrecht University is the first Dutch knowledge institution that is no longer participating in the Times Higher Education ranking, but all Dutch universities have agreed to pay less attention to university rankings.



Collaborating with patients in research

Ondersteunen onderzoekers in samenwerken met patiënten Helping researchers to collaborate in research

To help researchers at UMC Utrecht to work together with patients, UMC Utrecht has since 2022 been offering an e-learning course on how researchers can include collaboration with patients in a research proposal. At the request of researchers we also translated this e-learning course in English in 2023. The e-modules are already being used a lot (93 times in 2023), including in education. An e-module on collaboration during research projects is coming soon.

Students learn to collaborate in research

In the education batch Clinical Scientific Research (KWO), 3rd-year medical students learn how to set up and perform scientific research. Patient participation forms a fixed part of this course. Since September 2023, patients also give feedback on research proposals that students have to do in small groups.

Watch the video about patient participation in research.

Collaborating with patients in METC applications

Research with human test subjects must first be tested by a Medical Ethics Testing Committee (METC). Since March 2023 the METC application form also includes questions on patients' involvement in the setting up and performing of the research. A master's degree student writes a clear explanation for researchers on the extra questions.



Diversity and inclusiveness in research

At UMC Utrecht, we believe it is important for our researchers to take the diversity of the patient population into account in their research before and during the study. Knowing for whom research findings are applicable or not, and what differences there are in disease profiles and treatments between populations, are prerequisites for good research and good care. This is also increasingly essential for the funding of research.

Our **Gender Equality Plan** helps us to create a diverse and inclusive research culture and to promote inclusive and diverse research. This is a living document. With the steps that we have taken in recent years and the expected developments in this field from the European Commission, we shall be updating the plan in 2024. With this we are also expanding the scope of the document to address not only gender, but also other subjects that promote a diverse and inclusive research environment and diverse and inclusive research.

In 2023 we reinforced the necessary infrastructure to promote diversity and inclusiveness in research. We have for instance engaged in collaborations with other people and groups within our organization, such as the **Graduate Council**, the **Young Academy**, and **This is Us**.

Read more about diversity and inclusiveness at UMC Utrecht.

Other activities in 2023 were:

A diverse and inclusive research culture

In 2023 we undertook various activities to increase awareness among employees of our goals and the need for diverse and inclusive research, and to create a diverse and inclusive research culture. In March for instance we organized a panel discussion on social safety in our research community. We have also started with a survey on the question of what researchers experience as causes for the stagnation of growth in the number of female researchers. In 2024 we are actively going to try and lower these thresholds.

Inclusive and diverse research

In October, in collaboration with **DiversiUnity** we organized a week-long series of workshops, training and events for researchers. We stood still on the importance of diversity and inclusiveness at all levels and stages of research. Researchers for instance worked on assignments related to diversity and inclusiveness in research proposals, the use of diversity and inclusiveness to improve research strategy, and support for international and multicultural research teams.

In 2023 we furthermore added information on diversity on the research section of our intranet. We are hereby giving diversity and inclusiveness a central place as a standard part of planning and doing good research. In 2024 we are going to enrich our **quality textbook** with guidelines for diversity and inclusiveness in the design and execution of research. Preparations for this were done in 2023.





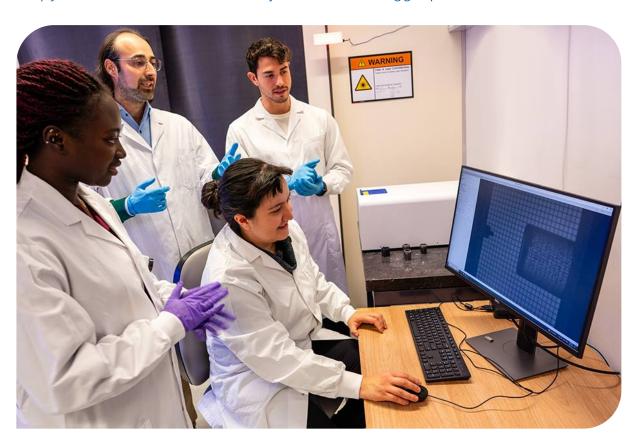


Quality of research

UMC Utrecht strives for socially robust scientific research in which patient participation has an important part, and which makes use of the best and most appropriate methods. We want to make the biggest possible impact, both for our patients and for the health of society as a whole. And at a regional as well as (inter)national level. High quality and compliance with laws and regulations are the basis for this.

New rules for drug research

In 2022 the EU regulation on drug research, 536/2014 Clinical Trial Regulation (CTR) entered into force with the purpose to accelerate and simplify clinical research in the EU. Since 2023 new drug trials must be submitted via the EU portal CTIS. To support our researchers in this, we have set up a special intranet page with instructions and created a central point of contact within UMC Utrecht to launch new trials. For ongoing drug research we have drawn up instructions on how researchers can pass these on to CTIS, so that it will comply with the new rules. UMC Utrecht also joined the NFU working group on CTR.



Electronic consent procedures for research on human subjects

From July 1, 2022, it will be permitted, under certain conditions, to electronically sign the consent form for participation in scientific research under the Medical Research Involving Human Subjects Act (WMO). To be able to make use of this, we started in 2023 with a pilot with three different tools that are safe and that comply with methods approved by the law. The pilot has been extended until 2024.



Continuous development

As part of the quality assurance of research, we have an audit program in which we use tracers to scrutinize research and leadership in research (the role and responsibilities of leadership in the division).

Based on the findings from these tracers we made a number of improvements in 2023.

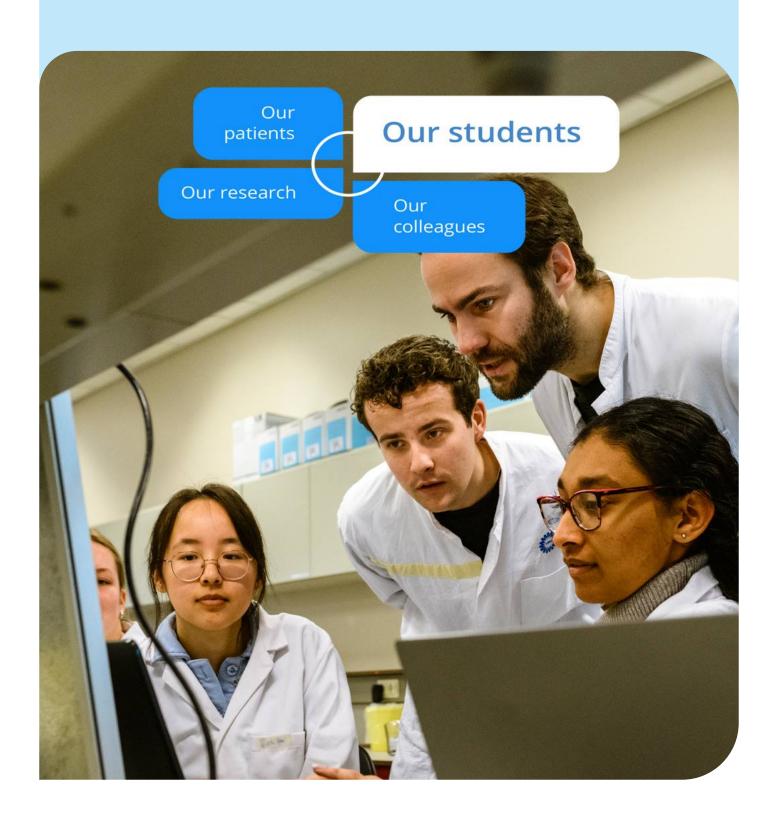
- To give new research workers effective support and onboarding, we developed an e-module on research policy and quality at UMC Utrecht. The e-module will become available early in 2024.
- UMC Utrecht decided to handle consent requests for research via a research management application (Vidatum) instead of submitting these by hand at the METC NedMec office. This saves researchers time and money.
- Information for our researchers on our intranet has been made clearer and we have drastically reduced the number of main topics under which they can search. We furthermore improved the accessibility of research support.
- We started the process of revising our Research Code and making it more accessible. The new code in particular includes references to the right desk, procedures and policy, with the Dutch Code of Conduct for Scientific Integrity as underlying principle. The new Research Code becomes available in 2024.

In the middle of 2023 we started with research tracers in which we looked if biobank research was being done in accordance with current laws and regulations and the policy specific to UMC Utrecht. For leadership tracers we continued to give a wider focus in 2023. On the one hand we look at the quality of leadership in research, and on the other hand, at whether UMC Utrecht ambitions are sufficiently taken into account in research. The outcomes of these tracers will be evaluated in the second half of 2024.



Our students

Besides care, research and development, education is one of our core tasks. Our aim is to prepare our students well for healthcare and the society of the future. This takes shape under the name The New Utrecht School. De Nieuwe Utrechtse School stands for: inter-professional learning and multidisciplinary education in a diverse and inclusive environment.





Our students in numbers



4.108 students enrolled in the Medical faculty



nursing students (152 hbo, 76 mbo)



university degrees



nurses graduated (30 hbo, 13 mbo)



253 students graduated in medicine (incl. SUMMA Master's)



Appreciation of education

Top Programs

In 2023 our bachelor program in Biomedical Sciences received the 'Topopleiding' ('Top Program') label of excellence from Keuzegids Universiteiten. In addition, our bachelor program in Medicine again received the 'Topopleiding' label in 2023. Keuzegids Universiteiten is an independent comparison of university bachelor programs that helps young people make informed decisions about where to study.

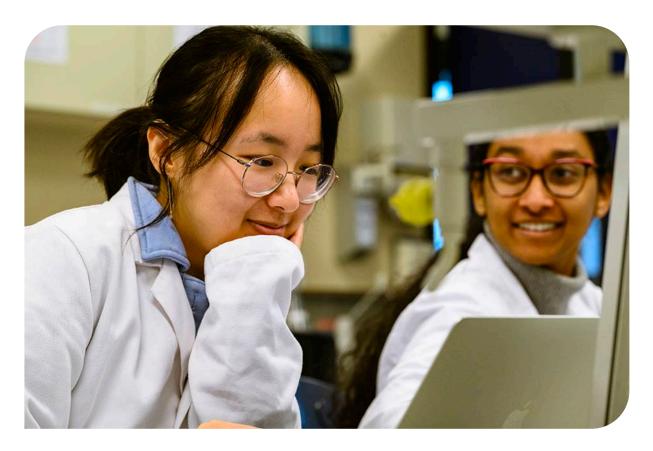
See Keuzegids Universiteiten for more information.

In 2023 our bachelor programs Biomedical Sciences and Medicine the label of excellence 'Topopleiding'.

Student satisfaction

- For 88% of our courses, 80% or more of our students/respondents indicate that they are 'satisfied' or 'very satisfied' (87% in 2022).
- For 24% of our courses, 55% or more of our students/respondents indicate that they are 'very satisfied' (17% in 2022).

Source: Focus dashboard





The New Utrecht School

Our education strategy **The New Utrecht School** stands for cooperation between disciplines in the training of (future) care and health professionals. De Nieuwe Utrechtse School focuses on the following topics: Interdisciplinary and Inter-professional Education, Patient Participation, Diversity and Inclusiveness, Translational Medicine & Life Sciences, Resilience and Wellbeing, and Planetary Health.

Bringing initiatives together with the The New Utrecht School program

In order to accelerate on our strategy and make The New Utrecht School a structural part of UMC Utrecht, our The New Utrecht School program has been running since 2021. Within this program, all initiatives are brought together and where possible aligned with each other, and at the same time we raise awareness of these initiatives. Our aim is to inspire and motivate students, colleagues, and patients together to establish top-quality education that is innovative and unique at an (inter)national level.



Watch the video about De Nieuwe Utrechtse School.

Virtual Reality to enhance skill and practical training

In 2022 we developed Virtual Reality (VR) applications for our courses. In 2023, we implemented these as a pilot in regular education. VR can be used as an alternative for and complement to skill and practical training. This addresses the need to make the safe practice of specific skills in our education more accessible. And to prepare students more effectively for new situations. The experience of students, lecturers, and educational organizations with VR training was overall positive. The new working method has been well received. There is a need now to further develop and validate VR education. The VR pilots will therefore be followed up in 2024. We continue to evaluate, research, and develop it to reach an optimal, full-fledged VR education.

We use the following three VR applications in education:

- 'VR Sterile' (Biomedical Sciences program). The steps of working in sterile conditions can thus be practiced in the lab as preparation for real lab work. The VR application is fully modeled in English and in 3D.
- 'VR OK Ready' (training for Scrub Nurses and Nurse Anesthetists). With this, the procedure for 'getting an
 OR operational' can be practiced repeatedly as preparation for practice in a real OR. The VR application is
 3D-modeled and in Dutch.
- 'VR Apprenticeship in the Neighborhood' (Medical program). This prepares students for an apprenticeship in the neighborhood. They become aware of the patient context by experiencing a surgery consultation and a home situation from the patient's point of view. The VR application consists of two interactive scenarios based on 360-degree photo and video material.





Medical curriculum revised

We are dealing with significant changes in society and care, such as an aging population, more and increasingly complex demands for care, and topics like prevention and sustainability. We therefore started in 2022 with a revision of our education curriculum for the bachelor and master's degree in Medicine. In 2023 we went further with the redesign of the curriculum. Our points of departure here are the Framework for Physician Training 2020, our education strategy De Nieuwe Utrechtse School, and outcomes of the training visitation, among others. We also collected input from students, lecturers, patients, and apprenticeship trainers during sessions. At the beginning of 2024 the draft curriculum for the bachelor and master's degree in Medicine was ready and the education-development process could start. We expect to start with the new curriculum in the academic year 2025/2026 so that future healthcare professionals can be trained optimally for the healthcare of tomorrow, based on the principles of De Nieuwe Utrechtse School.

Ready fort he healthcare needs of tomorrow with CZO Flex Level

In line with the national education protect **CZO Flex Level**, we implemented EPA-based training in 2023 in all our Follow-up Training programs for Nurses. EPAs (entrustable professional activities) are characteristic professional activities in the daily work of a healthcare professional. These form an important basis for learning in the workplace and at the training institution. We are also implementing it in the first study year of the training courses for supporting medical staff, and are working on the further development of the other two study years. The (follow-up) training courses for specialized nurses and supporting medical staff that are recognized by the College Zorgopleidingen (CZO) have been revised and made more flexible. Healthcare professionals are thereby given more career possibilities, receive more efficient training, and can be deployed more flexibly. This contributes to making us ready for the healthcare needs of tomorrow.



Interdisciplinary en interprofessional education

In 2023 we worked on the (continued) development of inter-professional and interdisciplinary education. Some of our worthwhile initiatives:



Rounding off the first year of the new bachelor and master program

In 2023 we rounded off the first year of the new interdisciplinary bachelor in Care, Health and Society, which is offered by the faculties of Medicine, Veterinary Medicine, and Beta Sciences at Utrecht University. The first 15 students (out of 24 who entered) in the new Medical Humanities master's program received their degree in 2023. This interdisciplinary master's program kicked off in September 2022 and is offered by the faculties of Medicine and Humanities. In September 2023, 44 students enrolled for the master's, which was almost double the amount of the first year that the course ran.

With these new courses we are joining the Utrecht University in addressing society's demand for professionals in humane and veterinary healthcare who are trained differently. The interdisciplinary training in these programs will make future professionals particularly well equipped to tackle health challenges in an innovative, interdisciplinary way and with knowledge of modern technologies. The new training programs therefore fit in perfectly with The New Utrecht School.



Inter-professional education in the regular curriculum

We also continued to integrate inter-professional education further in the regular curriculum. Students in Pharmacy, Nursing and Medicine (1st year master's) are for instance now studying inter-professionally in the Geriatrics section. Another example is the development and implementation of a new optional course for inter-professional cooperation in Nutrition and Lifestyle together with Nursing (HU, 3rd year) and Medicine (2nd year bachelor).

Watch the video about the Masters program Medical Humanities.

Innovative, interdisciplinary Women's Heart Challenge

In October 2023, we organized an **innovative**, **interdisciplinary Women's Heart Challenge** for students in Medicine and Biomedical Sciences. Together with researchers, doctors, and patients, students reflected on the rare heart disease SCAD (Spontaneous Coronary Artery Dissection). Students then carried out the best idea in practice at UMC Utrecht.



Cooperation with patients in education

To reinforce and improve our education, we make use of patients' unique expertise based on their experience. Patient-lecturers now give lectures in various courses. These active and involved groups of patient-lecturers grew to 14 in 2023. In November 2023 for the first time six medical students with chronic conditions - 'medical dual talents' - gave guest lectures in the 2nd year of the bachelor in Medicine. The reactions from fellow students and lecturers were very positive. We are definitely continuing with the deployment of these medical dual talents in 2024. Patients are furthermore closely involved in the development of education. In 2023 we assembled a focus group of patients for the overhaul of the Medical curriculum. Patients were represented both in the bachelor and the master's curriculum-overhaul commission. For this we put together a separate focus group of patients.

Watch the video about patient participance in education.

In 2023 we recorded twelve videos for our Pharmacotheraphy learning line, in which patients share their experiences in the taking of medication. These videos are used in education for the first year of Medicine. Students indicate that they have gained more insight in what the taking of medication means to the patient. In 2024 we shall also be using these videos for the Pharmacy and Care, Health and Society training programs. Finally, we have extended the Patient Participation learning line to the entire master's program in Clinical Health Sciences. In this learning line, students are trained to take the patient perspective into consideration in scientific research.

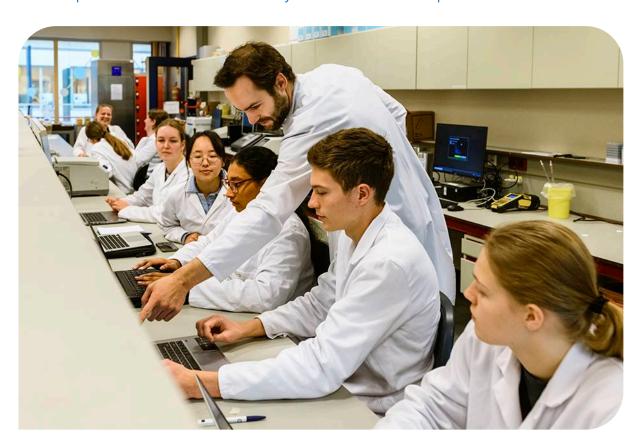


Diversity and inclusiveness in education

In 2023 we continued to work on making education at UMC Utrecht even more diverse and inclusive. Our actions included:

Knowledge about implicit prejudices through bias training

A total of 760 colleagues followed a bias-training course in the period from 2020 to 2023. In 2023 there were 275. The purpose of this training is to give participants who are involved in education insight into the concept of bias and possible consequences it may have for education. In 2023 we also studied the impact of the training. This showed that following the training, participants knew more about and were better able to recognize and explain implicit prejudices. Participants also indicated that they were better able to think of solutions for their own implicit biases. We further developed a new (further) training course called 'Active Bystander', which we are offering for the first time starting March 2024. The aim is for these courses to become a permanent offer at UMC Utrecht. They will fall under our P&O department.



Sense of Belonging expanded

A culture in which everyone feels that they belong, are appreciated, and have the opportunity to grow through open, equal, and inspired education. This is an important goal for UMC Utrecht and Utrecht University. In 2022, together with Utrecht University, we sent out a questionnaire to students to find out to what extent they felt able to be themselves and have a sense of belonging. More than 4,000 students filled in the questionnaire. The results of this 'belonging survey' were published in 2023 on our internal



Belonging@UU dashboard. The dashboard also gives students and lecturers practical information for example on how they can contribute to a place where everyone feels that they belong and can be themselves. In addition, we developed a welcome program for new students and a workshop for lecturers on the principles of 'pedagogical caring' in higher education, to further increase the sense of belonging among students.

First-years well underway with the K.I.C.K start program

For any first-year student, the beginning of their studies is a stressful time. Some students need a bit of extra footing to start their studies with greater confidence (for instance: first-generation students, and students who for whichever reason feel a bit different from other students). With the two-day summer bridging program, students can get a clearer picture of their study environment, support options, and expectations. In September 2023, fifty Medical and Biomedical Sciences students took part in the K.I.C.K start program.

Education for refugee students

In the summer of 2023 we started with a revised edition of the **education program for refugee students**. Based on input from former participants (summer 2022), we improved the education program for refugee students. This year for example we paid more attention to the integration of participants in departments, working in Dutch healthcare, and giving and receiving feedback.

Watch the video about refugee students.



Resilience and wellbeing

In 2023 we worked on further embedding resilience and wellbeing in education. Some of our initiatives:

Social safety in education: This is us

In May 2023, the 'This Is Us' campaign got off the ground. We brought This Is Us to the attention of students and lecturers through various activities. For example, we organized a 'This Is Us' College Tour, and were present at the introductions of the Medical program and the Graduate School of Life Sciences with This Is Us. We also integrated This Is Us in the mentor- and buddy-training day, the faculty-wide tutor-training day, and Education Day. We furthermore drew up a plan for the 2023-2024 academic year in which we specifically included student and lecturer perspectives. We also developed a code of conduct and an e-module called 'consent matters'. This module is available for all first-year students in Medicine and Biomedical Sciences (as an optional course).



Improve students' wellbeing and resilience

Together with Utrecht University we developed a varied offer of training courses and workshops on wellbeing and resilience for students. A sample from our offer: *Tackle stress, Resilience, Here and Now, personal leadership: making choices, mental fitness: training courses in VR.* We also offer students personal coaching.



Symposiums on resilience

More and more room is also made for students' wellbeing and resilience within our curricula. For example, in 2023 we organized for the second time an end-of-the-year symposium with a focus on resilience and wellbeing in the Biomedical Sciences bachelor. This symposium is compulsory for all first-year students. They have a choice between the workshops that are offered. And in November 2023, we organized our first symposium with the same setup for third-year Medical students.



Planetary Health

Planetary Health and **sustainability** are an increasingly integral part of healthcare, research and education at UMC Utrecht. In 2023 we undertook a number of successful endeavors in the integration of Planetary Health and sustainability in education, for example:

Ensuring Planetary Health in our training programs

The Planetary Health Impulse Team (PHIT) worked for an entire year on the accelerated embedding of planetary health in training programs at UMC Utrecht. To back this impulse structurally, we set up a Core Team for Planetary Health. In the coming period, a policy officer from each program will be in charge of further integrating planetary health in the courses.



Innovations in Planetary Health education

We also undertook various successful innovations in education. From the **EWUU Alliance** in cooperation with the Global Health team we developed and offered the *challenge-based* learning course 'Planetary Health & Climate-Resilient Health Systems'. We further integrated four hours of teaching from a planetary perspective in the course An Eye for Impact within the Biomedical Sciences program. And for the Medical program, in cooperation with colleagues from infection prevention, we developed classes on hand hygiene and sustainable use of gloves, which we integrated in the program.





NFU vision: Planetary Health in UMC programs

To conclude, in cooperation with all UMCs, UMC Utrecht drew up the national vision: 'Planetary Health in educational programs at university medical centers. Striving together for a sustainable healthcare sector and a healthy society.' We thereby attained one of the goals of the NFU Implementation Plan in the scope of the Green Deal on Sustainable Healthcare 3.0. UMC Utrecht is the leader of pillar 2: Knowledge & Awareness within NFU implementation plan. UMC Utrecht has also developed a countrywide e-module: 'Planetary Health, what does it mean for me as a (future) healthcare professional?'



Quality of education

Further quality improvement of education with quality funds

By converting the basic grant for students, an extra, gradually increasing amount of approximately € 0.9 to € 1.2 million is available for the Faculty of Medicine of UMC Utrecht each year from 2019 until 2024 to further improve the quality of education. This is what is called quality funds. In 2019, together with students and lecturers, we drew up a multi-year spending plan which we have adjusted twice within the period with the agreement of the Works Council. In 2023 we once again made use of the quality funds to invest in student wellbeing and student development. For instance, we made extra coaches and a training offer available and continued to improve these. The K.I.C.K. Start program, which ran for the third time, was also financed with these funds. In addition, we continued to develop a variety of innovations in education. Examples include activating working methods, inter-professional and interdisciplinary (project) education, 'research-based learning' (RBL), and Virtual Reality (VR). We are also focusing on the professionalization of lecturers: for example the (further) development of the educational qualifications BKO/SKO/KKO and the partial qualification, Implementation of Education (UvO). Lastly, we organized tailored lecturer-professionalization activities such as intervision and image coaching, and a faculty training day for tutors.





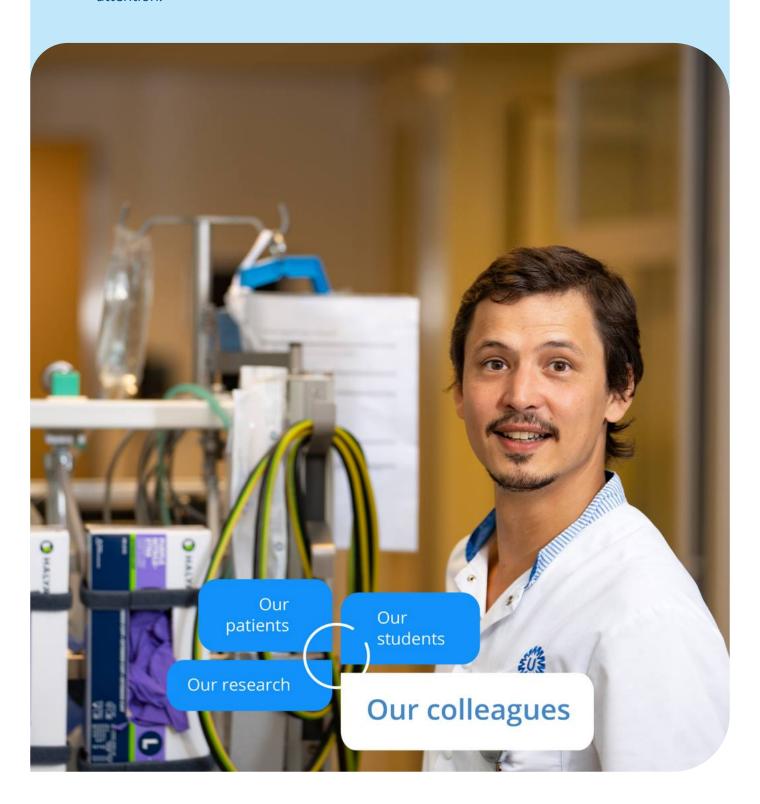
NPO Medicine mitigates COVID consequences for students

In line with the spending plan, in the first part of 2023 we spent the remainder of the National Plan for Education (NPO): Medicine (a total of over € 750,000 for 2022 and 2023) on catching up on backlogs in waiting times for apprenticeships. For this we appointed an extra clinical education physician, in addition to the six others plus secretarial support whom we had already appointed in 2022. The actions we took in 2022 and in the first part of 2023 were successful. Since the 2023-2024 academic year the situation has returned to what it was before COVID-19 and we are no longer offering extra apprenticeships. We continue to make use of extra (e-learning) education that we developed from NPO resources when students drop out for instance due to illness. In 2023 we furthermore started with the action 'Learning about Workplace Learning', for which there appeared to be a significant need among students. It is a multi-year program for students in the master's phase, in which they are guided to identify learning opportunities in the workplace and to make optimal use thereof. If the pilot is successful, this course will become a definitive part of our Medical training.



Our colleagues

Our core tasks - care, research and education - can only be performed if we have the input of all colleagues. It is therefore important for us to pay attention to each other, for example when it comes to (psychosocial) health, job satisfaction, and growth opportunities. At the same time we, like many other healthcare institutions, are challenged by the issue job-market scarcity. Not only the retention of existing colleagues, but also the recruitment of new colleagues therefore has our ongoing attention.





Our colleagues in numbers





3.367 male (28%)

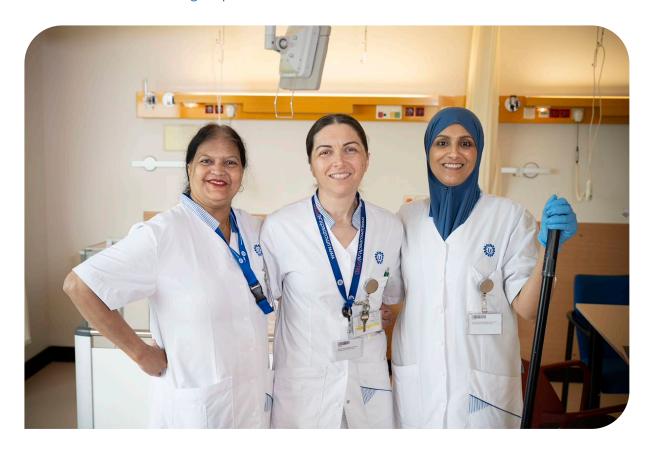


8.827 female (72%)



Appreciation of our colleagues

UMC Utrecht conducts three employee-experience surveys a year. With these surveys we want to find out to what extent UMC Utrecht is a good place to work.



In 2023, an average 47.2% of our colleagues at UMC Utrecht rated their job satisfaction with 8 or more.

This is a good score, and slightly higher than in 2022 (48.7%). The overall appreciation (score) of colleagues in 2023 was 7.2 (7.3 in 2022).

We once again saw a slight increase in colleagues' appreciation of development opportunities: In 2023, 70.7% of our colleagues indicated that they were positive about the development opportunities that UMC Utrecht offered (69.8% in 2022). This percentage is slightly higher than in 2022, but below our target of 72%. At the same time, 84.1% of our staff indicate that they take pleasure in their work (target 85%). This is more than in 2022 (83%). We are of course happy about this.



Development of our colleagues

A number of significant developments in 2023 were:

Support for colleagues via UMC Utrecht Helpline

From October 2022 to April 2023, UMC Utrecht and the Staff Provident Fund jointly set up a UMC Helpline to support colleagues who risk encountering financial problems due to high inflation and energy costs. Via the helpline, colleagues were able to ask questions, share their concerns, ask for help and advice, and receive financial support.

The Helpline was a temporary initiative, but colleagues can continue to rely on the Staff Fund for support. In 2023 the Staff Fund assisted 240 colleagues with medical, psychological, social, and financial problems.

Future-proof nursing

Input from nursing expertise and experience is a substantial and essential part of our multidisciplinary care. With the 'Future-proof Nursing program' we as UMC Utrecht are reinforcing the nursing discipline and investing in the development of our nurses. It ensures that nurses can continue going to work with pleasure and that we continue to offer quality patient care. This program is offered for, by, and with our nurses.

Watch the video about the Future-proof Nursing program.

Through the program, we are ensuring that the composition of our nursing teams – a functional mix, with more time and space for research, development, innovation and education – will match the future demand for care. In 2023 we started to implement the new functional mix – with nursing job descriptions that were updated in 2022 – in more divisions, and for in- and outpatients. We also started with the roll-out of various schooling and development programs, for new and current nurses as well as management positions. Important topics in these programs are nursing leadership and empowerment. We intend to give nurses a greater say at all levels in UMC Utrecht. And, via (intervision) meetings for managers of nursing departments and for nurses, colleagues can learn from each other across departments and divisions.

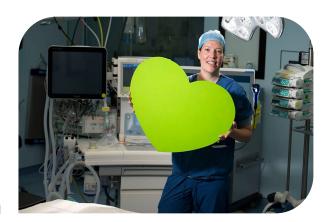
Science and innovation form an essential part of quality in healthcare. This is why we set up an Academic Workshop in 2023. It reinforces the relationship between daily (nursing) practice and research, innovation, and education so that new knowledge and technological innovation can find their way into practice and contribute to scientific knowledge and renewal. We are also continuing to develop our Innovation Lab. Colleagues work here on innovative solutions for small and larger practical challenges that nurses encounter from day to day.

We also organized a 2nd and 3rd edition of a UMC Utrecht-wide traineeship for nurses to give new nurses a better start; for a total of 24 trainees. To conclude, we supported nurses with irregular working hours with the **Energetic@night pilot** so that they can have **optimal energy** and get more out of their day (and night).



Healthcare professionals with a green heart inspire other colleagues

At UMC Utrecht, a large group of professionals are acting to make healthcare, research, and education more sustainable and more circular, for instance in the Green network. In 2023 the network grew from 84 to 126 members. At the end of 2023 as many as seventeen **Green Teams** were active at UMC Utrecht. These colleagues with a green heart have very diverse motives to act for sustainability. In the summer series of 2023 on **Sustainability at UMC Utrecht**, they talked about what motivates them, what has already been achieved, and what they still want to achieve. In this way we inspire people in and outside of UMC Utrecht to act for more sustainable healthcare, research, and/or education.



Green professionals have over the past six years been a driving force for the sustainability movement within UMC Utrecht. With their knowledge of the field, they know perfectly well where opportunities for sustainability can be found. In impact was for instance made by reducing OR gases and switching to reusable materials. Sustainable healthcare pioneers were also a driving force in making sustainability an integral part of the strategy of UMC Utrecht, as is now the case.





Recruiting new colleagues

There was also a tremendous shortage on the labor market in 2023. By drawing attention to UMC Utrecht as an attractive employee and bringing our vacancies to the attention of the right target group via online campaigns, we succeeded in getting a lot more applications. In 2023 we received 19,298 applications, compared to 15,309 in 2022. This is a 26% increase. In total we filled 1,387 vacancies in 2023 (20% more than in 2022).



The right person in the right place

To attract new colleagues, we expanded our reach on the labor market in 2023. For example, we improved our visibility and are now working with via-via recruitment. With the reactions and open applications we received, we have built up a talent pool from which we can fill vacancies. We also organized various Live@ events where people who are interested could get to know a department online. Lastly, we paid extra attention to our students and future colleagues, including with campus recruitment. To make the application process more accessible, it is now also possible to apply through WhatsApp.

Flexible working via our Flex Office

Via our Flex Office ('the Workshop'), nurses, administrative staff, and (medical) students can find temporary and flexible jobs at UMC Utrecht. This gives people the opportunity to gain experience in various divisions and to see for instance whether UMC Utrecht suits them, also in terms of flexibility in the schedule.

In 2023 we started to make use of so-called 'ad-hoc nurses'. These nurses draw up their schedule three months in advance, but will only find out in which department they are deployed shortly before they go on duty. This trial got a positive assessment: much fewer beds had to be 'closed' as a result.



Talent development

At UMC Utrecht, growing in knowledge, skills, and sustainable employability is naturally important. We support our colleagues for instance with our digital portal LEV ('Loopbaanontwikkeling en Vitaliteit' or 'career development and vitality'). 2,254 employees made use of the LEV offer in 2023. We also offer a wide range of training courses in personal strength and leadership, communication, digital skills, and productivity. In 2023 there were 7,634 digital lesson visits.

Development of highly talented academics

In 2023, a total of 97 talented academics with a research or education profile started with one of the following talent programs to help them build and further their career and develop a broad network:

- The PhD Boost Program, aimed at PhD students in the second or third year of their dissertation.
- The Research Career Development Program, for post-docs and UDs/Assistant Professors who can take a next step within two years.
- The UHD Program, for UHDs/Associate Professors who can take the next step within two years.
- The New Professor Program, for Professors in the first five years of their appointment.

In 2023 the career profiles in the scope of Recognize & Appreciate were formally defined. We now use these as a standard both with the UHD/Associate Professor appointment round and the Qualification portfolios for appointment procedures for new chairs.

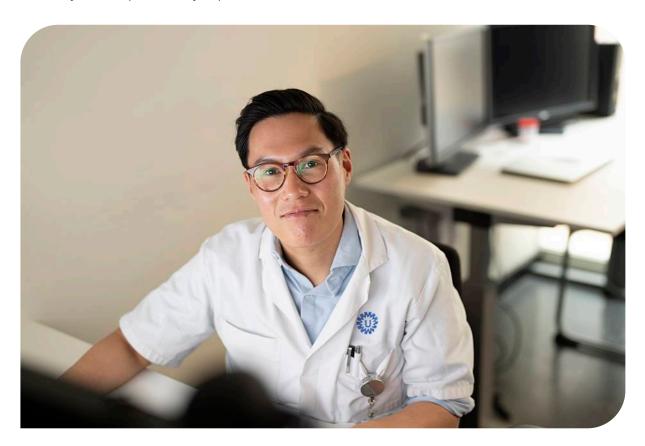




Leadership development

At UMC Utrecht we support our leaders in the (further) development of the necessary leadership skills with our leadership program Connecting Leaders, taking our vision of leadership that was redefined in 2023 as a starting point.

In 2023 we added several new modules to the offer for leaders, namely: 'Get started with your team', 'Leaders without formal power', and 'Future-oriented leadership', so that leaders can fill their role as effectively and comprehensively as possible.





Vitality and sustainable employability

UMC strives to be a healthy and good place to work. A workplace where not only the health of the patient but also that of our colleagues is central. It is therefore very important to create a vibrant and resilient working environment.



Special attention for nocturnal workers

To give our approximately two hundred colleagues who work nightly in our hospitals extra support, we continued in 2023 with the Energetic@night pilot (launched in 2022). Energetic@night helps nocturnal workers to find and maintain a good balance between work and rest, which is often especially challenging for this group of colleagues. The feedback we receive from nocturnal workers is positive. They are for example feeling fitter.

In 2022 hadden we speciale aandacht voor onze circa tweehonderd collega's die 's nachts werken.

Psychosocial support

As in previous years, we continued in 2023 to focus on (psychosocial) support and the vitality of our colleagues. In our ongoing 'Work in Balance' program, we offer all colleagues the possibility to get psychosocial support through 1-on-1 conversations with in-house counselors. This offer was also available in 2023. In total, over 205 colleagues made use of it (257 in 2022), and our in-house counselors conducted about 1,100 conversations (1,088 in 2022).



Less sick leave

Sick leave in 2023 decreased from 6.3% to 5.7%. 36% of the employees who reported sick and who consulted the in-house physician suffered from overexertion, burn-out, or other psychic ailments. The average overall amount of sick leave at UMC Utrecht is lower than the average percentage of sick leave in the hospital sector (an average 6.5% up till the 3rd quarter in 2023), but higher than the percentage of sick leave in the Netherlands (4.8%, source **CBS**).

Everyone in the right place

It is important for us that everyone at UMC Utrecht should be in the right place. In 2023, 107 employees reported for a replacement process. Of the 89 replacement processes completed in 2023, 43 people once again found a job at UMC Utrecht or were able to resume their own work. Another 14 people found a job elsewhere. In total, 17 employees were taken up in WIA and 6 in WW.



Social safety: This is us

Integrity is a precondition for carrying out our mission. Patients are often in a vulnerable and dependent position and must be able to trust our individual integrity and the integrity of UMC Utrecht as a whole. Students, employees, and the society around us must also be able to put their trust in this. Integrity means doing the right thing in the right way, also when no-one is looking. Whether it's the way in which we act towards each other (social integrity), how we do research (scientific integrity), how we handle business choices (business integrity), or how we act towards patients and stakeholders in research (professional integrity). Besides a clearly defined framework, appropriate behavior also requires a socially safe, open, inclusive, and stimulating work and learning environment.



In May 2023 we started with the program **This is Us** which focuses on creating a more socially safe, open, inclusive, and stimulating work and learning environment for everyone who who is working and learning at UMC Utrecht.

To raise social-safety awareness, we started the campaign 'Let's talk about (in)appropriate behavior' and launched the **This is Us website**. Awareness is also fueled by repeatedly bringing up the topic on the agendas of for instance management, of various consultative bodies, at the start of the academic year, during Integrity Week, and on Education Day. In the campaign we focus not only on those who have experienced inappropriate behavior and those who were (unintentionally) guilty of it, but also on bystanders. The group of people who have witnessed inappropriate behavior is in fact the biggest and can make a difference provided they are aware of it and have the right tools to act.

Initiatives were also taken to offer an action guideline in the event of inappropriate behavior. In 2023, the action guideline that we offer included the facilitating of dialog and the development of skills through (online) training. On the This is Us website, toolkits can be found for each target group (employees/students/managers), including the customized e-learning course on 'Appropriate behavior'.

We have also fine-tuned our basis and made it easier for instance to find our **code of conduct** and procedures for reporting or asking for help on our **This is Us** website. We facilitated and accompanied about 25 internal dialogs in departments, in teams, and 1-on-1.



The program with the campaign has proven to be a catalyst in making it easier to discuss the topic of social safety. And to set up effective follow-up steps to increase social and psychological safety. A movement has been started, valuable dialogs are being conducted, and there is a need for more. We are therefore continuing with it in 2024. In 2024 the focus is on further increasing social safety and anchoring it in the organization.



Diversity and inclusiveness

UMC Utrecht promotes inclusive employership with inclusive onboarding, inclusive leadership, and a representative workforce. Read more about **diversity and inclusiveness** at UMC Utrecht.

In 2022 we carried out the Dutch Inclusiveness Monitor (NIM). Our cultural diversity was also mapped. The results show that majority groups at UMC Utrecht experience the environment as more inclusive than minority groups do. In 2023 these outcomes further stimulated the dialog on diversity and inclusiveness at UMC Utrecht. We also focused on creating more awareness and to become a more diverse and inclusive employer. Some of our activities in 2023:

Raising more awareness of inclusiveness and diversity

The **This is Us movement** that started in 2023 has brought more awareness of inclusiveness and social safety. Specific actions were also undertaken to raise awareness, for example during Diversity and Inclusiveness (D&I) month at Wilhelmina Children's Hospital (WCH), and gender week in the Psychiatry section.

In addition, together with Utrecht University, we organized **Mindlab theater performances** on social safety. Some 200 colleagues saw the representation and gave a positive appreciation of both the representation and the discussion afterwards. Inclusive leadership was in the spotlight during a D&I breakfast session. We have also adapted the D&I offer for leaders in **Connecting Leaders**. The first module was well received by managers. We furthermore asked an external party to screen our recruitment and selection process for diversity and inclusiveness. Areas for improvement were highlighted that we shall tackle in 2024.





Participation Law jobs

On July 1st, 2023, 78 colleagues at UMC Utrecht were employed under the Participation Act (76 FTE). We organized an informative meeting for managers to encourage them to recruit employees under the Participation Act.

More members in the USP Inclusive Network

Watch the video about the USP Inclusive employees' network.

Unite and support bicultural and LHBTIQA+ colleagues

Within UMC Utrecht there are specific groups of bicultural and LGBTIQA+ colleagues. Both groups have launched an employee network with successful kick-off events. The LGBTIQA+ network BeYou joined the ranks of Utrecht Pride 2023 along the quays from UMC Utrecht, and organized a successful Pride event at UMC Utrecht.

The number of female colleagues remained very high in 2023.

Consistently high proportion of female talent

Utrecht actively pursues a policy on female talent, in healthcare as well as research and education. The total number of female colleagues remained very high in 2023.73% of our colleagues were female (72% in 2022). In 2023 the percentage of women in top-level medical, scientific, and management positions remained the same as in 2022, namely 54%. The number of female professors went up in 2023 to 36% (32% in 2022).



Environmental, Social and Governance (ESG)

At UMC Utrecht we work daily to improve people's health. We are aware of and feel responsible for the well-being and rights of employees, students, patients and society in the value chain of which we form a part.





Sustainable Development Goals

We aim to contribute to a healthy life and a healthy society, also for future generations, We want to increase our positive impact on health by reducing our negative impact on the environment and climate. We do this by offering future-proof healthcare, education, and research. In economic and social but also in an environmental respect.

In the SDG Charter, Dutch companies and social organizations work together each at their own level, alone or in partnership, to reach the **Sustainable Development Goals (SDGs)**. These goals, set by 193 UN Member States, reflect what the world should look like - in terms of a 'sustainable society' - by 2030. We see added value in work as being in line with SDGs and want to support it in practice. The commitments in the Green Deal for Sustainable Healthcare also contribute attaining the SDGs. UMC Utrecht plays a crucial role in delivering quality healthcare, innovative research, valorization and quality education. By working together and continuing to innovate, we create social value and **reduce negative impacts**.



Outstanding SDG recognition for sustainability

In 2023 UMC Utrecht received the SDG label. This label is awarded only to organizations that have made the United Nations' Sustainable Development Goals (SDGs) part of their policy. The SDG label is an outstanding acknowledgment of our ongoing efforts to improve people's health and to strive towards a healthy society, for generations now and in the future. Or, as SDG Netherlands puts it: "At a time where sustainability and health have become crucial issues for our planet and its population, UMC Utrecht stands out as a shining example of commitment to these goals."



Biggest contribution to SDGs

For our own organization and environment we have made an inventory of how UMC Utrecht can contribute to reaching the SDGs. Where does our biggest impact lie, and where have made the biggest difference? For this we have put the SDGs next to our core activities and looked at our entire process of value creation. We looked at which goals were most in line with our own initiatives, objectives, strategy, and the expectations of our stakeholders. This brought us to a number of 'high-impact' SDGs. These are SDGs that UMC Utrecht will work and focus on in the coming years.





SDG	Explanation	Relevance for UMC Utrecht:	How can UMC Utrecht contribute
3: Good health and well-being	Ensure good health and promote well-being for all age groups.	Together, we improve human health and create the healthcare of tomorrow.	Healthcare of tomorrow Prevention Digital Health Global Health Vitality and sustainable employability for employees
4 Quality education	Ensure equal access to quality education and promote lifelong learning for everyone.	The New Utrecht School, strong, multidisciplinary networks	Planetary health and sustainability are an integral part of all medical and biomedical science programs The New Utrecht School
10 Reduce inequality	Reduce inequality within and among countries and further social, economic, and political integration for all.	Together we create more value, because every human being counts.	Driver of Health Hub Utrecht, a regional innovation ecosystem for health and happiness Buddy project for parents with sick children set up
12 Responsible consumption and production	Ensure responsible consumption and production patterns	Sustainable procurement unless	Sustainable procurement Circular healthcare in 2050 Prevent wasting, reduce waste
13 Climate action	Take urgent action to combat climate change and its impacts	Commitment objectives Climate Act and the Green Deal for Sustainable Healthcare 3.0	55% CO2 reduction in buildings in 2030 30% CO2 reduction by 2026 on transport
17 Partnerships for the goals	Work with regional, national and international partners to help reach the SDGs.	We believe in connecting worlds that are often still separated	UMC Utrecht Global Health Fellowship program Clinical Electives International Partners Utrecht University & UMC Utrecht's international strategic partners













Towards impact

Keeping 2030 in mind as our eventual target, we are taking action in stages to understand how we can contribute most effectively. This year our aim was to understand more about the SDGs, become familiar with the upcoming Corporate Sustainability Reporting Directive (CSRD) law and EGS reporting, and translating the objectives of the Green Deal for Sustainable Healthcare 3.0 into actions. We also concentrated in particular on raising internal awareness of the link between health and sustainability.



Environment

Our sustainable objectives are strategically one of our biggest priorities. Having signed the **Green Deal for Sustainable Healthcare 3.0** in 2022, the NFU implementation plan followed in March 2023. As a result of this we integrated our responsibilities clearly in our organization. Necessary actions were converted into a **roadmap** with a budget for the coming years. Sustainable therefore now forms an integral part of our management and our colleagues' actions are moving up a gear. In terms of the environment, five main topics have been defined: climate change, pollution water and marine resources, biodiversity and ecosystems, and resources and circular economy.

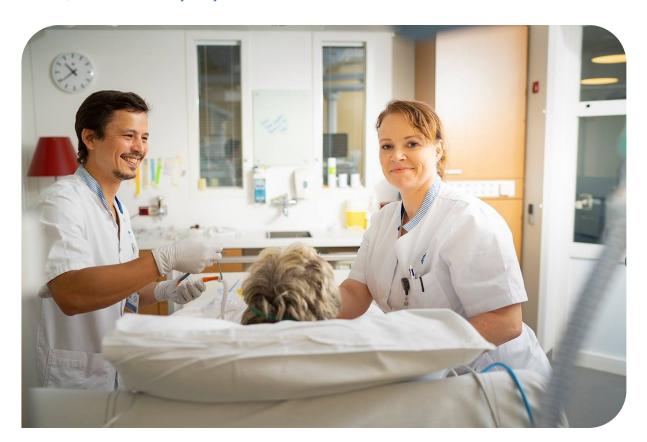
Watch our video about sustainability.



Social

For the social pillar, four main topics were defined. The first, 'Own employees', is mandatory for everyone. We have already reported on this, although not yet with a different approach.

Other components: 'Workers in the value chain', 'Impact on communities', and 'Consumers and end-users' are targets for which we definitely have a responsibility and that we indirectly also include as stakeholders in our processes. But we have not yet reported about this separately. Reporting on data that represent our achievements on these components, but that also give insight into our objectives regarding these pillars and the accompanying policy, is something that we shall look into further in the coming year. Here we shall have to make clear choices about what exactly we must and want to report on. An important first step in making a choice, is to do a materiality analysis.





Governance

To go further in terms of Governance, five components must be kept in mind. As with the social pillar, we have already **reported partly on this**. At the same time we need to go into more depth.

To enable us to meet the ESG requirements from the CSRD, we have developed an integral roadmap. The five components are:

- 1. The role of management, leading and supervisory bodies of UMC Utrecht with regard to sustainability, including their expertise and skills.
- 2. The main characteristics of internal control and risk-management systems with regard to sustainability.
- 3. Business ethics and business culture, including the fight against corruption and bribery, protection of whistleblowers, and animal welfare.
- 4. Activities and commitments of the company.
- 5. Management and quality of relationships with patients, suppliers, and communities.



Sustainability

At UMC Utrecht we work daily to improve people's health. We want to contribute to a healthy life and a healthy society, also for future generations, We want to increase our positive impact on health by reducing our negative impact on the environment and climate. We do this by offering future-proof healthcare, education, and research.





Sustainability in numbers





Sustainability is an important part of everyone's job. Whether it has to do with our healthcare, our research, our education, or operational management: Everyone who works or studies at UMC Utrecht can contribute to sustainability. In 2023, UMC Utrecht received the SDG label from SDG Netherlands for the the contribution to Sustainable Development Goals (SDGs) and impact that UMC Utrecht is making in this regard.



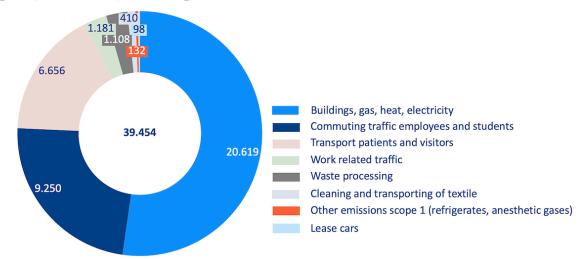
CO2-footprint: on schedule for CO2 reduction

In 2023 our overall CO2 footprint was 39,454 tonnes. This means that we are on schedule when it comes to direct CO_2 reduction. Our direct CO_2 impact mainly comes from buildings (52%) and commuting (23%).



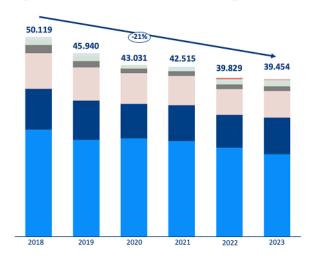
CO2 emissions broke down as follows:

CO₂ footprint in 2023 (in tons CO₂)



The development of our CO2-footprint the last years:

CO₂ footprint in 2018 - 2023 (in tons CO₂)





Establishment of CO2 figures

Our direct CO2 impact (scope 1) is determined through the actual use and emissions of our operational activities, measured with the NFU-footprint tool. The emission factors do not include the extraction of raw materials and supplier production. For energy sources such as natural gas, diesel, and wind and solar power, we use figures that were validated by the Dutch Emissions Authority. For employee and student commuting, we base our figures on average distances and traveling days, and the results of a work-experience survey on the use of transport means. Our indirect CO2 impact (scope 2 and 3) is estimated at 115.485 tonnes based on procurement, according to CE Delft 2019.

More sustainable buildings

In the scope of the Climate Act and the **Green Deal for Sustainable Care 3.0**, the aim is to reduce the CO2 emissions of buildings with 55% by 2030 compared to 2018, with the ultimate goal to have climate-neutral buildings by 2050. In 2023 we reassessed our CO2 roadmap for increasing the sustainability of our buildings. In this way we can reach our goals subject to financing.

More sustainable transport

In the scope of the **Green Deal for Sustainable Healthcare 3.0** we are aiming for a 30% reduction in CO2 emissions from transport by 2026 and 55% by 2030 compared to 2018. In 2023 we drew up a mobility plan, introduced a 100% public-transport reimbursement in the new CLA, and made preparations for the sustainable-transport testing ground.

Sustainable-transport testing ground

A significant source of CO2 emissions is the mobility of our 12,000 colleagues. With the growing scarcity of staff we want to keep each colleague satisfied. It is therefore important to have a clear understanding of our people's motivations and obstacles in terms of sustainable transport to UMC Utrecht. To look together for suitable, effective, and feasible solutions, we developed a **testing ground for sustainable transport** in 2023. We launched this initiative in the spring of 2024, together with 300 colleagues. And together with Pon and its subsidiary Shuttel and Hely, and TU Delft. The testing ground includes higher reimbursement for cycling, free public transport, and a mobility hub with shared E-bikes at Utrecht Central Station.

Cycle to work more often

In 2023, in collaboration with **Goedopweg**, the province of Utrecht, and Utrecht Science Park, we organized 'Utrecht helps you into the saddle': colleagues were able to try out electrical bicycles and borrow them for commuting. A bike challenge resulted in 100,000 km of cycling, supported by the 'I'm cycling' app that turns red lights to green. We are also expanding our 'CLA à la carte' arrangement whereby colleagues can spend up to € 2,500 tax free on bicycle-related costs. 1,733 colleagues made use of this in 2023.

Watch the video about 'We help you in the saddle'.



Circular healthcare

In line with the **Green Deal for Sustainable Healthcare 3.0**, we are focusing on the circular and sparing use of (raw) materials. We have committed ourselves to a 50% reduction in the use of primary raw materials by 2030 compared to 2016, with the aim of offering a maximal amount of circular healthcare by 2050.

Reduce waste and optimize recycling

We are aiming for 46% residue waste in 2023 and 25% in 2030. In 2023 we reached 45% residue waste and 44% recycling. In 2023 we reduced the volume of specific hospital waste (SHW) by 40% by **introducing circularity for infectious SHW**, such as needles and bandages. SHW is ground and used as a replacement for sawdust in the cement industry. We also started with the sorted collection of incontinence material for recycling and have chosen a new waste processor for better recycling. We also want to prevent food wastage and are striving towards a healthy, sustainable nutritional offer. For example, we introduced '**no-waste' meals** to promote more sustainability. Thanks to our actions, we have already reached the targets for the prevention of food wastage in the Green Deal for Sustainable Healthcare.

Watch the video about 'No waste'-meals.

Sustainable procurement

UMC Utrecht applies Socially Responsible Procurement and Circular Procurement, also referred to as sustainable procurement. Besides the price of products or services, UMC Utrecht also looks at the impacts of procurement on the environment as well as social aspects. Where possible, we opt for products that are made out of sustainable, renewable, or secondary raw materials. And for products that can be repaired, reused, or recycled.





Prevention of disease

At UMC Utrecht we do not only treat people, we also help our patients and employees to be and stay as healthy as possible. This leads to a health benefit, but is also good for the environment. The most sustainable healthcare is after all ensuring that it doesn't need to be given. We aim to promote a healthy environment, food, and lifestyle. Both for patients and for employees. We do this via programs around mental health, sport and exercise, nutrition, smoking, and alcohol consumption. The **Healthy Lifestyle access point and exercise monitoring** are fine examples of this.

Healthier and more sustainable food offer

UMC Utrecht is a trailblazing hospital in the project **Good Care You Can Taste**. In 2023 we adapted our nutritional offer to include more vegetarian, plant-based, and whole-grain products, and products with less salt and sugar. In the scope of the **EWUU alliance** we are studying environmental pollution caused by hospital meals and the protein content of vegetarian versus non-vegetarian meals. This provides insights for future research on the role of vegetable protein in food for patients, and the improvement thereof.



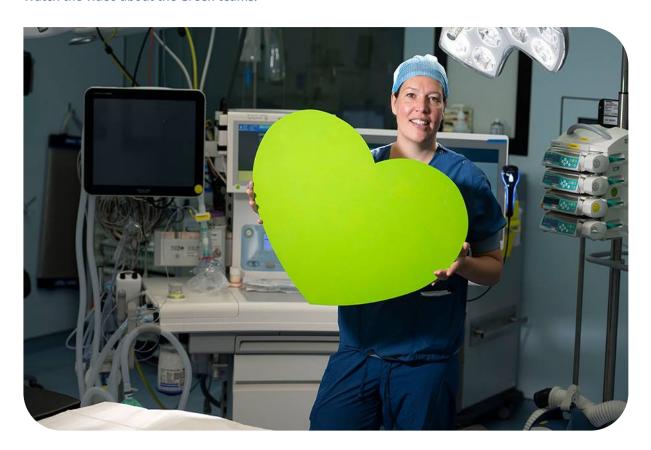


Raising awareness

During the Green and Healthy Expedition, health and sustainability took center stage for three weeks, with activities aimed to raise awareness and stimulate action in our work environment. Workshops were organized to support the Green Teams at UMC Utrecht. During the workshops, participants for instance learned about planetary health and what they themselves could do for a healthier planet.

Colleagues could also take part in a forest walk on the Oostbroek estate where the forest guard showed them the consequences of climate change and the resilience of nature. At the circularity market, colleagues could buy secondhand furniture from Wilhelmina Children's Hospital, of which the profits went to the association Friends of Wilhelmina Children's Hospital. 'Ralph (Return all left-over pharmaceuticals) the fish' is a work of art that draws attention to the prevention of drug residues in water.

Watch the video about the Green teams.





Integrating Planetary Health and sustainability in education

In education too, we are working on sustainability. Planetary health and sustainability are thus becoming an increasingly integral part of our healthcare, research, and education. Read more about this in the chapter **Our students**.

Healthcare professionals more aware through 'The green OR' learning line

In 2023 we launched the 'Green OR' learning line to make new healthcare professionals aware of sustainability and our work in this regard at UMC Utrecht. Over two days, anesthetists in training get an understanding of sustainability in our OR complex, with a focus on air treatment, circularity, and medication. Participants also discuss ways in which we can make our own OR complex more sustainable. This learning line is also available via the countrywide Green OR network.



Reducing the environmental impact of drugs

In 2023 we focused on reducing the environmental impact of drugs, with an emphasis on redispensing and on preventing waste.

Sustainability through the redispensing of drugs

In 2023, UMC Utrecht continued with the ROAD (Redispensing Oral Anticancer Drugs) study in collaboration with four hospitals led by Radboud UMC. We studied the possibilities of having certain cancer drugs in tablet form that are not used by patients, redispensed to others. This initiative reduces waste, CO2 emissions, and healthcare costs. The results were positive: it appeared possible to redispense while maintaining quality. The study is being pursued and expanded to more hospitals in 2024.



25% fewer seringes wasted in IC

In collaboration with the pharmacy A15 in 2023 we achieved a 25% reduction in the wasting of syringes in IC. By sterilizing syringes after preparation, we are now autonomous for eighteen weeks instead of four. This has brought wastage down to only 5%. We would like to expand this success to other departments in the hospital.





Our organization

To address the changing demands of society and perform our core tasks of healthcare, research and education effectively, it is essential to have efficient, inclusive and sustainable management, and to ensure that our accommodation meets the physical requirements for the healthcare of tomorrow.





Accomodation

UMC Utrecht is building the hospital of the future: a place where the best care for our patients, a pleasant work environment for our employees, and an optimal training climate for our students will come together. Our guiding principle is to accommodate the needs of the users of buildings and areas, such as patients, visitors, employees, students and cooperation partners. Topics like sustainability, efficiency and flexibility are of course of the highest importance here.



Strategic housing development vision

In our Strategic Housing Development Vision, we describe the development of our accomodation for the next ten years. To ensure that our accomodation support the fulfillment of our goals and the tasks that we are facing, we are opting for a mix between new-build and renovation. This means that we are renovating old parts and adding new ones. This includes technical renovation, functional renovation, and implementing the environmental vision of Utrecht Science Park, where UMC Utrecht is located.

Our Strategic Housing Development Vision focuses on various components, such as outside areas, public areas, outpatient clinics, clinics, offices, labs, and the renovation of the maternity center at Wilhelmina Children's Hospital (WKZ).

We will be conducting these programs in six phases over the next ten years. That way we will remain flexible and can continue along the way to respond to societal changes and the changing expectations of users. During the execution process, we shall keep asking for input and continuously adapt our plans accordingly. During renovation, some inconvenience for patients, visitors and staff will be unavoidable. By means of phasing we will ensure that primary processes remain fully operational throughout the entire renovation.

In 2023 the program planning of the Strategic Housing Development Vision (SOH) will be managed under the **Healthcare of Tomorrow program**.



Some of the highlights in terms of accommodation in 2023 were:

Outpatient building design

2023 we designed a plan for the accommodation of outpatient units to support innovative healthcare, research and education, and to further optimize the care we provide to patients. We described the spaces that were needed, and the specifications that they had to meet. This includes size, daylight, temperature, and air conditioning. We are striving for uniformity and flexibility. This is why we opted for a fixed relationship between buildings, but with flexible divisions. We can thus facilitate outpatient process in an optimal way, and offer our people various types of work and meeting spaces. With centrally located stay areas we make healthcare more comprehensive and accessible for our patients. Patients can go there for various actions to prepare for an outpatient appointment, like measuring, weighing or blood collection. These frequently visited areas will be near the entrance.

Starting renovation of administrative building

At UMC Utrecht we are working in an increasingly hybrid way: partly from home, and partly at the office. In 2023 we started with the renovation of our administrative building and workplace layout. Part of our staff who are using this building were already able to do hybrid work during a pilot, and make use of new ways of working. We evaluated the experience of these employees in 2023. Based on this, we are adapting a number of areas to form meeting areas and are taking essential technical measures to bring these spaces optimally in line with users' needs. This renovation will be completed in 2024. We shall then use the administrative building to temporarily house users of the Matthias van Geuns building, so that we can start with the planned renovations of that building.

Renovation of education building complete

Many of our educational activities take place in our Hijmans van den Bergh building. Due to tightened safety requirements for floor construction, we had to renovate the floors in this building. We started with this in 2022 and at the end of 2023 all students and employees were able to return to the Hijmans van den Bergh building. In the meanwhile all educational activities have been moved to various educational locations and to the administrative building. Both students and lecturers were very satisfied with the temporary locations and facilities.







Digitalization

In the scope of our Connecting Worlds strategy, we developed a longterm vision for IT that we translated into a practical roadmap with five digital goals:

- 1. Digital communication with patients and professionals
- 2. Data platform and data management
- 3. An engine for regional and national cooperation
- 4. User-friendly, reliable, and safe systems
- 5. Technological innovation

In 2023 we continued to work on the implementation of this roadmap. Some examples of actions are:

Getting employees on board for digitalization oppurtunities

To get employees on board for the opportunities that digitalization offers and show them the innovations that we are already using at UMC Utrecht, we organized two master classes in 2023. In these master classes, various colleagues for instance talked about the possibilities of 3D printing and the use of certain apps and virtual reality (VR) to improve care for patients. The master classes could be followed online by doctors and nurses. They got accreditation scores for it.





Giving further shape to electronic patient records

Within the **Healthcare of Tomorrow program** we are giving shape to internal processes within various domains. For all of these domains in 2023, we translated substantive blueprints for the future, and for the Healthcare of Tomorrow (2030), into concrete information needs and generic building blocks. We are using these as input for the further shaping and filling in of our electronic patient records HiX 6.3 Standard Content within our organization in 2024.

Multidisciplinary cooperation at a regional level

Together with other university medical centers we developed a singly countrywide data structure (CumuluZ). With this we will enable healthcare professionals in the Netherlands to collaborate flexibly in (regional) networks. Healthcare professionals can thus have insight into all the relevant information for a patient in order to provide the best patient-centered care. This will ensure that the best care remains accessible and affordable for patients. Because if we work together, we are more efficient and can also reduce costs. Besides healthcare, CumuluZ also affects and supports research. In 2023 we started to put together a development team for CumuluZ at UMC Utrecht. They collaborate with hospitals in the Utrecht region to allow fast and safe information exchange.

Meer impact voor patiënten More impact for patients

At UMC Utrecht we are creating more and more space in our organization for so-called 'software robots'. In this way we are automating tasks that are repetitive, predictable and simple and that take up too much of our colleagues' time to execute. Colleagues thus have more time to focus on other valuable tasks where we can have a greater impact for patients. In 2023 we automated hundreds of hours worth of manual labor.

Healthcare professionals reachable toe ach other

To ensure that healthcare professionals can easily reach each other, we are renovating and replacing the Nursing and Medical Call System (VOS/MOS). Obsolete parts of the telephone system such as the buzzer system were replaced by smartphones in 2023. With this care phone, healthcare professionals (nurses and doctors) can mutually facilitate care for patients and organize and coordinate more efficiently with one another. In 2024 we are expanding this by making HiX accessible via care phones. Nurses can now directly check and import information at the patient's bedside. This saves time and improves the care that they give to the patients.

Safe digitalization

In 2023 we performed our yearly audits for the annual report (IT General Controls), Security certifications (ISO27001 and NEN7510), and the use of DigiD. These were concluded successfully.

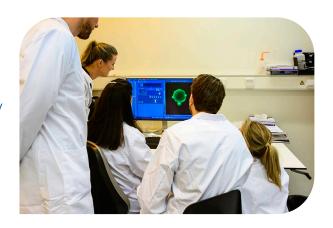


Data science and artificial intelligence (AI)

Our healthcare is changing drastically. Data science, AI and the fast digitalization of systems play an increasingly central part and are essential for learning faster in healthcare and to organize healthcare more efficiently. Our vision is that data science will become an integral part of our healthcare, education, and research. To do this, a safe data infrastructure, innovation, implementation, and evaluation are essential. This is why we launched the 'Data Science UMC Utrecht' program in 2023. In it, we bring data infrastructure, research & development, and AI implementation together ('3AI'), because it is the synergy between the three that is essential.

Data infrastructure

To benefit from the potential of data and transform it into knowledge, a safe, reliable and simple data infrastructure is essential. This requires a transparent organization, uniform technical solutions, legal frameworks, and clear game rules. But also trust. This we achieve through transparency and supervision of what happens with the data.



Within the healthcare landscape, two parties have been appointed at country level to build data infrastructures. **Cumuluz** unlocks the data infrastructures for the primary care process. **Health-RI** does the same for the secondary process: research and education. UMC Utrecht is the regional hub for both initiatives and is responsible for design and implementation with all regional stakeholders and parties. Combining regional data and making it understandable and available is essential here. That is why we set up U-Cloud in 2023, as a regional hub of Health-RI, which we connect to the Cumuluz infrastructure. We are starting with the implementation in 2024.

Research & development

We want to integrate data science and AI in our daily healthcare, research and education. In 2023 we set up a collaborative community and infrastructure between UMC Utrecht and Utrecht University (UU) for this purpose. We also established, equipped and started up five 'Health AI labs' within the Utrecht Life Sciences community from where we can run projects. This was partly made possible with the allocation of TKI funds to AI Labs [LINK TO the chapter Our research/TKI subsidies Health Holland].

The five AI labs focus on the following domains: AI Methods, Healthy Living, Imaging and Guided Interventions, Molecular Science, and Living Technologies. In May 2023 the various labs presented themselves to the outside world during an Utrecht AI event and demonstrated the link with the business world among others. Lastly, the Health AI Labs form an integral part of the EWUU Alliance [LINK TO the chapter Our partners / Partners with a nationwide impact/ EWUU Alliance] and various projects were launched from within this collaboration.



Implementation

In 2023 we worked further on applied data-science initiatives in healthcare, where we make use of artificial intelligence (Al). On the one hand these initiatives reduce the administrative burden of our healthcare professionals, so that they can give more time to patients. On the other hand these are care applications with which we improve the quality of care for patients. Read more about our data-science initiatives in healthcare in the chapter **Our patients**.

Watch the video about applied data-science initiatives in healthcare.



Diversity and inclusiveness in our organization

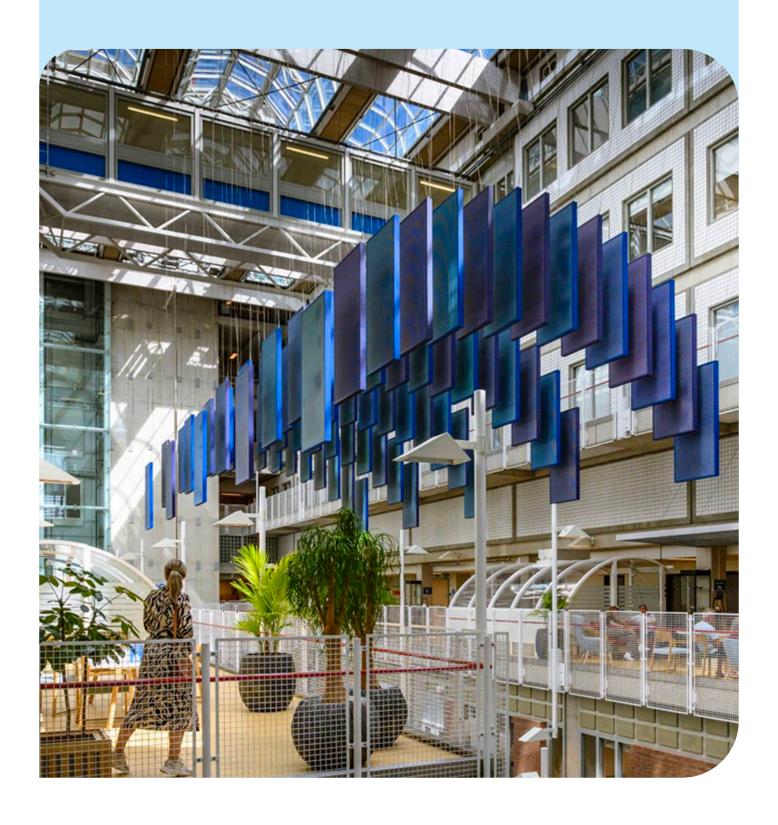
UMC Utrecht wants to be a place where everyone is welcome and can be themselves. We believe in the power of diversity, which makes us more complete and better in our work. We are all different. And it is these differences that bring more movement, more opportunities, and questions to answer together and inclusively. Thanks to these different perspectives, we can put ourselves better in the patient's position. And recognize the patient in ourselves. This is how our research touches a wide variety of people and how we educate inclusively. In short, each person's unique story makes our story complete.

In our policy, we focus both on being an **inclusive employer** and on diversity and inclusiveness in **education**, **research** and **healthcare**. To reach our goals in terms of diversity and inclusiveness, we work from within our Implementation Plan for Diversity and Inclusiveness that we drew up in 2023. Based on an evaluation, we are establishing goals for 2024 and 2025.



Our finances

What are the financial results for 2023 and how have we dealt with (financial) risks to protect our reputation and continuity?





Looking back on 2023

Uncertainties regarding the details of COVID-19-related measures, which still came into play when the 2022 annual report was drawn up, were resolved in 2023. In the annual report for 2023 we therefore see a significant incidentally positive impact following the completion of these COVID-19 measures, while healthcare, education and research returned to normal in 2023. Our underlying management and (strategic) programs/projects could also resume in full again in 2023. We continued with the Healthcare of Tomorrow program and, pursuant to this, also worked hard once again on the implementation of our Strategic Housing Development Vision (SOH). This did not yet lead to any major decisions regarding accomodations in 2023. Rising inflation, staff shortages, and growing demands for sustainability in used materials makes this a complex task. This delay has a financial impact that can be seen in the increase of our deposits in banks which we keep for future investments. The interests that we earn on these partially compensate for rising costs.

In the course of 2023, 9,362 FTEs were active at UMC Utrecht. 8,110 FTEs worked in collectively financed healthcare, education, and research, and 1,117 FTEs in research financed by other funding flows such as collection-box funds and companies. 135 FTEs were employed in other activities.

1.63



2021

Key figures

Below, based on financial key figures from the consolidated financial statements, we give a short summary of our financial developments and achievements (in millions of Euros). The figures for 2022 were adjusted for the sake of comparison.

	Operating income	Staff costs	Net profits
2023	1,643.00	863.2	58.8
2022	1,539.10	802.7	20.1
2021	1,485.40	777.6	6.6
	Group equity	Provisions	Total assets
2023	517.5	77.8	1,178.90
2022	461.4	52.7	1,088.40
2021	441.1	45	1,005.90
	Return on equity	Capital ratio	Liquidity
2023	3.60%	43.90%	1.75
2022	1.30%	42.30%	1.59

43.80%

0.40%



Financial results

Our operating income was once again higher than in previous years (increase of approximately € 104 million (6.75%)). This increase is partially due to higher proceeds from care services (e.g. Indexation and expensive drugs) and partially to an increase in other revenue (settlements from previous years, externally funded research projects and higher revenue from consolidated entities). Healthcare revenues in 2023 contrary to previous years were influenced to a limited extent by COVID-19. The settlement of the subsidy from the Ministry of Health for the upscaling of IC related to COVID-19 over the years 2020, 2021 and 2022 made a positive contribution of € 29.3 million on operating income.

As opposed to the increase in operating income, there were also higher costs. Our staff costs went up 7,5% from 2022 (increase of approximately € 61,5 million). The increase in staff costs is mainly due to CLA developments.

On balance, these developments have led to a consolidated result of € 58,8 million. This is approximately € 29.3 million more than the consolidated result for 2022 and approximately € 57,7 million more than the budget for 2023. This result is due especially to a cumulation of incidental income and expenses that came out positively in terms of balance. In terms of budget, the following incidental assets were recorded: availability contribution from the Ministry of Health for ICU capacity € 10.8 million and COVID-19-related special revenues from previous years € 10.8 million.

The increased income and expenses from expensive drugs and externally funded research projects contributed only slightly to the increase in result.

For these developments, income and expenses were more or less equal to each other. The annual increases in the cost of expensive drugs underline the importance of all projects and initiatives undertaken to mitigate this increase. An important initiative here pertains to the agreement that the Dutch Federation for University Medical Centers (NFU) made with health insurers regarding transformation funds.

The result was added as a whole to our equity capital. This enabled us to maintain our healthy equity position. Our financial ratios went up slightly compared to previous years and remain healthy. We thereby amply meet the minimum requirements agreed with our banks in terms of capital ratio and Debt-Service Coverage Ratio (DSCR). At the end of 2023 the positive cash balance was € 466 million. We expect that with the implementation of our **Strategic Housing Development Vision (SOH)** it will become essential to attract additional funding as from 2026.

Consolidated participating interests had a positive impact on our result on balance of about € 7.2 million. This effect is mainly due to the sale of our shareholding in JCR BV. The Executive Board intends to use resources from the proceeds of the sale of the shares to ensure the continuity of clinical research.



Risk control

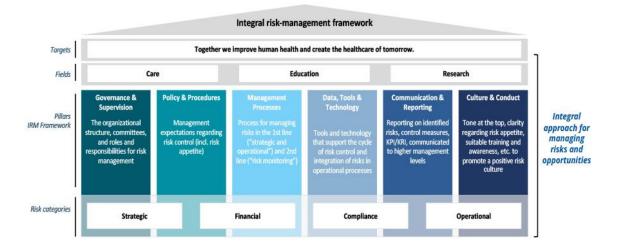
Risk appetite

Partly because of our social role and the financing of our core activities with public money, we are obliged to manage these risks adequately and to be conservative when it comes to risk appetite. We applied this conservative approach generically in 2023. We also started discussions about whether it was expedient to formulate a differentiated risk appetite for different risk categories. We are finalizing these in 2024.

Organization & Governance

All our activities with regard to risk management at a strategic, tactical, and operational level have been brought together in one comprehensive framework, based on the COSO-ERM framework.

Integral Risk Management Framework





In accordance with the principles of our framework (comprehensiveness, uniformity, and alignment of risk management with existing procedures) and the three lines of responsibility, the responsibility for risk management lies primarily with our divisions, departments, and sections. For the analysis and control of these risks, they are assisted by disciplines for instance in areas such as patient safety, labor conditions, integral safety, data security, infection prevention, and financial continuity.

The Risk & Compliance Manager formulates policy, gives instructions, monitors the process, and adjusts if necessary. This enables us better to identify possible risks in the organization and combine them in order to control them more effectively. It gives us more certainty that we can reach our strategic goals.



To implement this framework, we are initially working from top to bottom. This means that in 2023, besides the strategic risk analysis (for the next 3 to 5 years) which is performed by the Executive Board, we added a risk paragraph to management contracts that are signed between the Executive Board and the management teams of divisions and departments (for 1 year). This paragraph stipulates identified risks that go together with the annual goals that the divisions and departments have to reach.

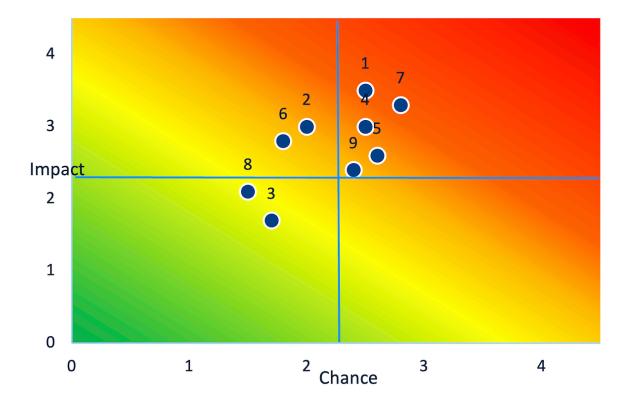
In 2023 we worked on an integral risk-management policy that endorses our principles, whereby we do not prescribe but rather describe the main principles/minimum requirements. Any specific focal areas, for example how to deal with compliance, are supported by additional standards. The intention is that this policy should enable the organization at an operational level to judge whether its risk analysis/risk management complies with the current requirements.

With the signing of a new Horizontal Supervision covenant with the Dutch Tax authority, we also completed the formalization of our tax-control framework in in 2023 on the basis of the same COSO-ERM framework. A significant part of this was based on risk management.

Risk overview

Strategic risks

The heat map below gives an overview of the main strategic risks at the end of 2023. The position on this heat map depends on the one hand on the estimated chance that a risk may occur, and on the other hand, on the potential impact that the risk would have on reaching the organizational goals. These are the *gross* risks that were identified. Any impacts of control measures that are taken will not be visible here





Number	Description
1	Availability of staff: There is a shortage of staff with the right qualities. This not only puts pressure on the quality of primary tasks, it also gives us insufficient adaptability/agility to bring about the desired strategic changes.
2	Inter-division changes: Divisions focus mainly on their 'own' organization. As a result, strategic projects are progressing slowly, and UMC Utrecht is not seen as one organization from the outside.
3	Centralization of Healthcare: IZA requirements and the vision formulated by UMC Utrecht demand intensive cooperation with (regional) partners. There is a risk that arrangements/ activities within UMC Utrecht will not be sufficiently suited to the cooperations that are organized. This will also put pressure on our position as an innovative medical science center.
4	Digitalization: A large part of the change agenda is based on the further digitalization of healthcare (digital unless). The risk is that, due to the lack of an automation strategy to support this transformation, the necessary steps cannot be taken that the Healthcare of Tomorrow requires from us. And that this strategy will does not lead to the intended improvement of efficiency.
5	Efficiency targets: If operational and support processes are insufficiently covered by existing financing flows and the cost level cannot be lowered fast enough, there is a risk that there will be too little scope left for essential innovation (for example through research and education) and that financial frameworks of large projects will be exceeded. This has an impact on the sustainability task, building-renovation task, and transformation task (for example through lack of investments in staff).
6	Supply chain: The supply chain of UMC Utrecht is vulnerable. Not only are certain suppliers unable to make (affordable) deliveries due to shortages or sustainable alternatives in line with sustainability goals are not available. It could also lead to delays in (primary) processes and projects that are essential for UMC Utrecht. In addition there is a great dependency on a few large suppliers.
7	Cyber incidents: The risk of attacks from outside UMC Utrecht (DDos, ransomware) keeps growing. The security of data, but also guarantees of continuity (availability of data and systems) is becoming increasingly important as the importance of automation becomes bigger. In addition, there is a risk that laws and regulations may not be complied with.
8	Climate change & Sustainability: Not meeting the targets of the Dutch Climate Act and the Green Deal for Sustainable Healthcare could potentially have far-reaching consequences. In the long term a failure to meet these could impact our ability to attract funding (for example for building renovations), to retain people in the organization who are necessary to implement the strategy, and to find network partners. Eventually, climate damage could create an additional demand for healthcare.
9	Buildings: The renovation/new-build task is crucial for the transformation (including the concentration of healthcare/network care) of UMC Utrecht. There is a risk that insufficient progress will be made which means that the transformation task will not be fulfilled and that divestments will have to take place. There is also a risk of significant cost overruns.

(Expected) impact of risks on results or financial positions

The risks as mentioned did not have a material impact on the 2023 results and the financial position at year-end. What the impact of these risks will be in the near future, is unclear. The consequences of the centralization of care and the agreements in the Integral Care Agreement (IZA) are also still unclear. We can however say that these will only become visible in the medium term (three to five years).

Use of financial instruments

UMC Utrecht does not make use of any compound or complex financial instruments. 'Open positions', due to their risky nature, are not allowed under the treasury statute. Should we ever use a financial instrument, we would do so only to hedge an existing position. At year end 2023, there are no (material) positions.

As indicated, the heat map shows our gross estimate. Needless to say, we employ many control tools to manage these risks. We explain the main measures below.



Availability of staff (risk 1)

See the chapter 'Our colleagues' for all programs/measures aimed at attracting and retaining colleagues.

Strategic projects (risk 2, 3 and 4)

To deal with uncertainties ensuing from the Integral Healthcare Agreement (IZA) and the consequent concentration of healthcare, we have rolled out various strategic programs including the **Healthcare of Tomorrow**. In it we focus both on the question of which care we are going to deliver, and how we should deliver it. Colleagues across the organization are working towards these goals.

Efficiency targets (risk 5)

We have set up the program 'Creating financial scope' to find room for the necessary innovation and primary tasks. This also receives ample attention in our planning & control cycle (cf. risk-control and -monitoring systems). More about this in 'Our tasks' in the chapter UMC Utrecht in society.

Supply chain (risk 6)

To fight this risk, we apply proactive assortment management where we keep an eye on the most critical products. We continuously evaluate the availability and pricing of products and where necessary study alternative products that will fit in with the (sustainability) targets of our organization.

Cyber risks (risk 7)

In 2023 we performed our yearly audits for the annual report (IT General Controls), Security certifications (ISO27001 and NEN7510), and the use of DigiD. These were concluded successfully.

Climate change (risk 8)

See the chapter 'Sustainability' for programs under way and control measures taken with regard to this risk.

Buildings (risk 9)

In 2023, the program planning of the strategic development outlook for buildings (SOH) will be managed under the **Healthcare of Tomorrow program**. In addition, we are setting up a new Real Estate, Buildings, and Area Development department in 2024 to give appropriate attention to the issue.

Risk-control and monitoring system

As in previous years we have identified action owners for risk management who:

- 1. Identify which control measures reduce the listed risks to what extent.
- 2. Identify what additional measures are needed to reduce risks to the desired level and evaluate existing measures for effectiveness.

We continue to monitor the remaining risks for:

- The continued implementation of measures.
- The degree of mitigation of risk in line with the desired risk appetite.
- Whether the estimate of the risks must be adjusted.
- Evaluate whether new risks should be added due to new circumstances.



In addition, the internal risk management and control system consists of the following, among others:

Performance dialog	We have a weekly performance dialog with each other. In it, we discuss the current state in all focal areas - patient experience, employee satisfaction, productivity, quality and safety, and impact - at all levels of the organization via (strategic) KPIs. Visual dashboards give us insight into the current state for each focal area and per KPI at central as well as departmental level, and thus facilitate monitoring and coordination.
Planning & control cycle/ Management contracts	Our planning & control cycle starts with an annual update of the most important internal and external opportunities and threats, including those resulting from our strategy. Management contracts (which include a risk analysis and execute actions using the OGSM methodology) and budget based on these form the basis for the monthly monitoring of financial and non-financial performance, including risk management, and are the prelude to taking corrective measures. Divisions and departments included KPIs in their monthly reports in areas such as quality and safety, employees and finances.
Policy and guidelines	At UMC Utrecht, formal policies and guidelines exist for a variety of focal areas, such as scientific research, quality and safety of care, and the security of data and automated systems and finances. Where possible we have embedded policy in our systems with the aim to guarantee optimal compliance via IT applications.
Targeted management instruments	Control of quality and patient safety is done via SAFER (Scenario Analysis of Failures, Effects and Risks). SAFER is a method for proactive (or predicative) risk analysis. Guidelines and protocols regarding quality and patient safety have conveniently been brought together in one place and are accessible to all employees. Incident reporting is very relevant and we support it in various ways.
	For risk analysis in healthcare registration, we conduct an annual dialog with health insurers on the basis of Horizontal Supervision of Healthcare to jointly create an overview of risky healthcare processes. For these risks, we set up control measures and, after a review by the external auditor, we report back to the health insurers.
Three lines of responsibility	Within UMC Utrecht, we have a 'three lines of responsibility' system for risk control. Our Internal Audit department works according to a group-wide risk analysis that is updated each year, and an audit year plan. Based on this risk analysis and the annual plan, the department conducts audits and reports to the Executive and Supervisory Boards. The second-line risk management function is formalized further.
Informal controls	Risk management also lies in promoting and securing desirable and ethical behavior among employees and management, known as informal controls. Informal controls receive structural attention within UMC Utrecht, including in the following areas: By recruiting the most suitable employees with appropriate prior training and experience, providing career training and development, and fostering a safe work environment, we strive to mitigate risks and, in the event that they occur, to learn from our mistakes. Informal controls form an implicit part of audits and recommendations from the third line (internal audit).



Looking ahead at the financial situation in 2024

The main challenges for healthcare

In recent years we have seen an increasing demand for complex care. Due to an aging population combined with increasing medical capabilities, the demand for complex care will only continue to rise in the coming years. At the same time we are experiencing a huge shortage in the labor market across the full spectrum which poses challenges to us. Both in terms of recruitment and retention of colleagues. Our healthcare professionals are already experiencing the current work pressure as high, and although the percentage of sick leave went down in 2023, it is still higher than our target (4.9%). In addition, our resources available for care are under pressure. In the signed Integral Healthcare Agreement (IZA), it was agreed to limit healthcare spending. This will require significant transformation and means that we must:

- · Prevent people from falling ill.
- Ensure that patients arrive at the right place fast.
- · Organize care differently.
- Pay a lot of attention to engaging and retaining our (healthcare) staff.
- · Implement innovations based on research.
- · Offer differentiating education.

Transformation agreements and deployment of transformation resources

To provide appropriate care, the IZA places more emphasis than in the past on collaboration between health care parties, including across health care domains. To facilitate this, the IZA includes agreements on equal contracting for impactful care transformations. This allows us, as a healthcare provider, to submit transformation plans to health insurers, and if necessary request temporary transformation funds. These plans could be hooked onto our own initiatives for healthcare transformations and/or to regional representations and plans that are drawn up.

Concerns regarding inflation and CLA increases

The increase in our costs in 2024 and future years will not keep pace with compensation to be realized on the income side. Combined with the increase in capital costs due to our aging accomodations, this means we will be forced to make substantial financial adjustments in the coming years. We base this on the **Healthcare of Tomorrow movement**. In order to maintain our financially healthy position also in the short term, we must make the necessary choices throughout 2024 and in the budget for 2025 to redesign our operations differently, more effectively, and more efficiently.

Staffing development

The development of our staffing on the one hand depends on the healthcare demand, our research and education portfolio, and the amount of staff needed to deliver the necessary care and research and educational activities, and on the other hand, on developments in the labor market. Due to the currently tight labor market it is not always feasible for instance to optimize the staffing of operating rooms, which means that operations sometimes have to be postponed. In this regard we aim to employ as many workers as possible on a contract basis and to limit the use of external hires. The pressure on available resources and the tight labor market require us to exercise strict control of staffing and phase out the use of self-employed staff.



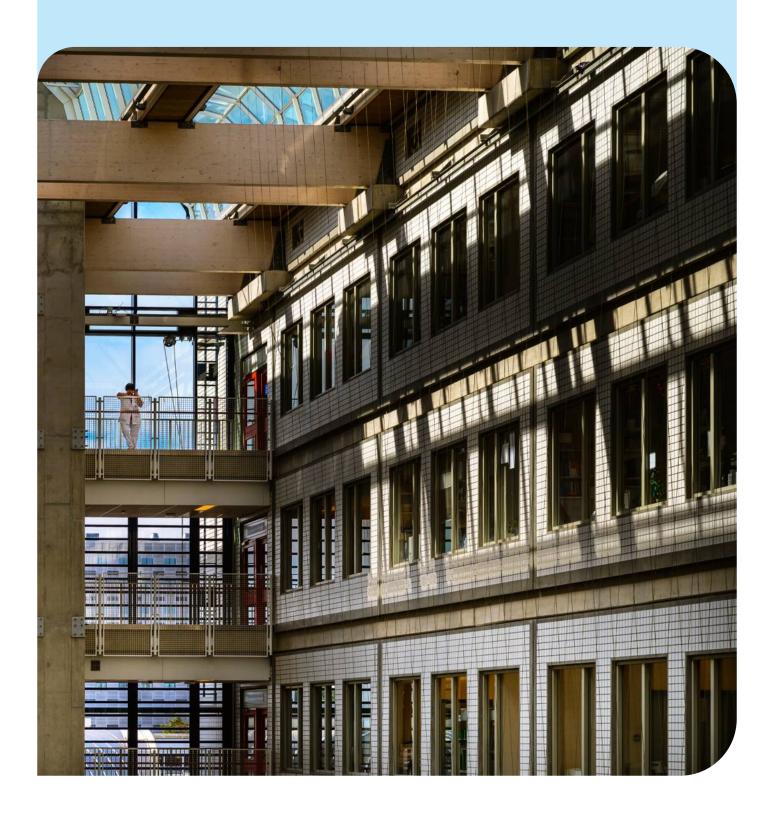
Significant investments in accomodation and ICT

Due to the age of our buildings and changing needs, we will be renovating and adding new buildings in the next ten years. To tackle these building and financial challenges in a proper way, we have drawn up an integral vision on **accommodation**. At present we are once again recalculating the financial aspect of the vision as a whole and having it validated externally. An important issue here is the development of sharply rising building costs over the past period. We shall not start with the next phase before it has clearly been concluded that the entire package of renovation projects is financially feasible. Considering the current extent of our cash resources we expect that additional financing will be sought as of 2026 approximately.

In the coming years we shall also have to invest in ICT due to the steadily increasing digitization of processes within UMC Utrecht, developments in the fields of e-Health, artificial intelligence (AI) and big data, and scheduled investments to replace IT components (hardware, system software, and applications).



Governance





Management and structure

UMC Utrecht has an Executive Board with a chair, a dean/vice-chair, and two members (one for finance, buildings and operations, and one for operational control). The Board members jointly ensure the integral implementation of the policy on healthcare, research, and education. In addition, a Supervisory Board is in charge of overseeing everything that happens at UMC Utrecht. The tasks and competencies of the Executive Board and the Supervisory Board are defined in the administrative regulations. Within the Executive Board, we have established a portfolio allocation.

Chair

- · General UMC Utrecht-wide strategy
- Strategy regarding healthcare and healthcare innovation
- Strategic collaborations
- Communication
- HRM policy
- Medical continuation courses
- · OR/Client Council/Staff Assembly/VAR

Dean/vice-chair

- · Education and research
- Academic cooperation
- Internationalization of research and education
- Valorization
- Focal points
- Education & Research Council and Student Representative Council

Member for finance, buildings and operations

- Finance & Information Technology
- Operations
- Facilities
- Procurement
- Sustainability
- ICT

Member for operational control

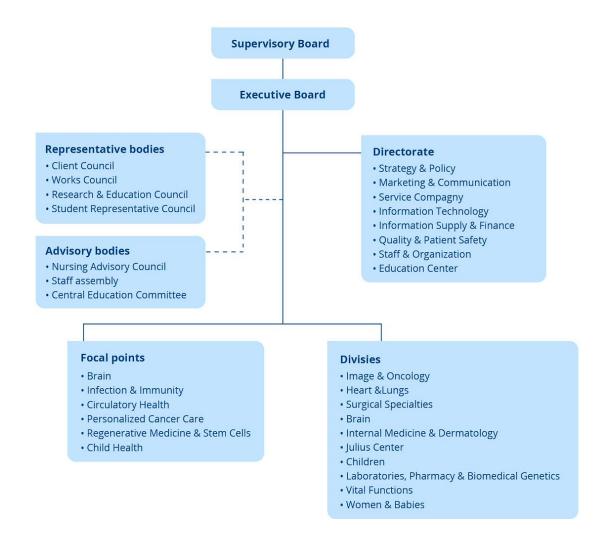
- Inter-division operational affairs such as capacity, planning, quality, patient safety, work on focal points, and operational aspects of collaboration with third parties
- · Capacity management
- · Quality & Safety
- Digital transformation

Legal structure

University Medical Center Utrecht (UMC Utrecht) is a legal entity governed by public law under the Act on Higher Education and Scientific Research (WHW).



UMC Utrecht organization chart



All activities at UMC Utrecht related to the commercialization of patentable inventions and the creation of spin-off companies fall under UMC Utrecht Holding B.V. UMC Utrecht Holding B.V. pioneers innovation and knowledge valorization through patent control, the licensing of knowledge or participation in BVs where knowledge is developed further, and provides services (care-related innovations that do not involve any patents or licenses). UMC Utrecht is the sole owner of UMC Utrecht Holding B.V.

The public-law entity UMC Utrecht is accredited under the Care Institutions Accreditation Act (Wet toelating zorginstellingen, WTZi) and applies the Governance code for Healthcare. UMC Utrecht is registered at the Chamber of Commerce under KvK number 30244197 and company number 000023527250.

Management philosophy

The management philosophy of UMC Utrecht is based on three lines of responsibility:

1. Divisions and departments are according to the first line wholly responsible for their own operational process and risk control. Through self-monitoring they supervise how effectively they are doing it with regard to policy and strategic frameworks.



- 2. Directorates are in the second line responsible, together with healthcare professionals, for taking the strategic goals of UMC Utrecht, operational risks and laws and regulations that apply to their content supporting field, and translating it into policy. The focal points do this in the field of health care, research and education. In coordination with the divisions, they issue a supported proposal that is submitted to the Executive Board for decision. Departments and focal points advise/facilitate the first line in the implementation of policy and monitor the organization-wide execution thereof. The second line monitors implementation and reports this to the first line, including the Executive Board.
- 3. The Executive Board is responsible for the strategy of the organization and is wholly responsible for business operations, compliance with laws and regulations and standards, and the realization of the strategic goals. The Executive Board is supported in this by an internal audit section that, based on an annually drafted audit plan, tests whether risks in the organization are sufficiently controlled, and where there may be areas for improvement.

A number of UMC Utrecht-wide consultation structures facilitate and structure the coordination between division managers, board members, focal-point chairs, and members of the Executive Board: Strategic Consultation, Operational UMC Utrecht Consultation, Business Operations Consultation, Education Consultation, and Research Consultation.

Executive board

Prof. dr. M.M.E. (Margriet) Schneider, chair

Margriet Schneider (1959) became Chair of the Executive Board of UMC Utrecht in November 2015. In this capacity she has given shape to the renewal of UMC Utrecht. She is a Professor of Internal Medicine at Utrecht University (UU).

Margriet Schneider held the following additional positions in 2023:

- Vice Chair (until June 1, 2023) NFU (unremunerated, position-related)
- Health Hub Utrecht ambassador (unremunerated, position-related)
- Director of Koninklijke Hollandsche Maatschappij der Wetenschappen (unremunerated, work-related)
- Chair of Bestuurstafel Gezond Utrecht (unremunerated, position-related)
- Chair of ROAZ Midden-Nederland (unremunerated, position-related)
- Board member of Oncomid (unremunerated, position-related)

Prof. dr. A.W. (Arno) Hoes, Dean and Vice Chair

Prof. Arno Hoes (1958) has been Dean and Vice-Chair of the Executive Board of UMC Utrecht since June 1, 2019. Arno Hoes is Professor of Clinical Epidemiology and General Practice at Utrecht University and was Division Chair of the currently Chair of the Julius Center for Health Sciences and Primary Care of the UMC Utrecht until June 1, 2019.

In 2023, Arno Hoes held the following additional positions

- Chair of the steering group cluster cardiovascular risk management, Dutch Federation of Medical Specialists (FMS) (unremunerated, work-related)
- Member of the advisory commission, Dutch Association for Epidemiology (VvE) (unremunerated, work-related)
- · Chair of the Supervisory Board, DCVA (Dutch Cardiovascular Association) unremunerated, work-related)
- Member of the Heart Failure Guidelines Task Force of the European Society of Cardiology (unremunerated, work-related)
- Member of the Supervisory Board of the Netherlands Center for One Health (unremunerated, work-related)
- Member of the Supervisory Board of Utrecht Holdings (unremunerated, position-related)



- Chair of the Supervisory Board, European Clinical Research Alliance on Infectious Diseases (ECRAID) (unremunerated, work-related)
- Chair of the Supervisory Board, anDREa B.V. (digital research environment) (unremunerated, work-related)
- · Member of the editorial board, European Journal of Heart Failure (unremunerated, work-related)
- Member of the ESC Heart Failure editorial board (unremunerated, work-related)

Mr. J.W.R. (Remco) van Lunteren, member of the Executive Board

Remco van Lunteren joined the UMC Utrecht Executive Board on November 1, 2021 as Chief Operations Officer.

Remco Van Lunteren held the following additional positions in 2023:

- Member of the Supervisory Board of A15 Apotheek (unremunerated, position-related)
- Member of the Supervisory Board of Utrecht Science Park (unremunerated, qualitate qua)
- Chair of the Supervisory Board, PALLAS Foundation & NRG Foundation (since September 2023, remunerated, work-related)
- Vice-chair of the Supervisory Board, PALLAS Foundation & NRG Foundation (until September 2023, remunerated, work-related)
- Vice-chair Executive Board, International Franz Liszt Competition (until April 2023, unremunerated)
- Chair of the Supervisory Board of Speelklok Museum (unremunerated)
- Chair of the Association of Former Members of the Utrecht Provincial Council (unremunerated)

Ms. J.C.E. (Josefien) Kursten, member of the Executive Board

Josefien Kursten (1973) became a member of the Executive Board of UMC Utrecht on January 1, 2022.

Josefien Kursten held the following additional positions in 2023:

- Acceleration Board in Healthcare (unremunerated, position related)
- General Board member Vereniging Samenwerkingsverband Uithofbeheer (unremunerated, position-related)
- Member of the Council of Members, SURF (unremunerated, position-related)
- Board member, DHD (unremunerated, position-related)

Supervisory Board

The Supervisory Board is in charge of continuously monitoring everything that happens at UMC Utrecht, which includes supervising compliance with laws, rules, guidelines, instructions and regulations that apply to UMC Utrecht. These tasks and competencies are described in more detail in the administrative regulations.

Members of the Supervisory Board are appointed by the Minister of Education, Culture and Science (OC&W). The Supervisory Board draws up a general profile for its composition, with attention to expertise, skills and diversity.

Six committees advise the Supervisory Board in their respective fields and help the Board prepare for its decision-making tasks. The Supervisory Board is responsible for decision-making. The six committees are:

- the Audit committee
- the Quality of Care and Patient Safety committee
- the Education and Research committee
- · the Governance and HR committee



- · the Defense committee
- · Buildings committee

The composition of the Supervisory Board was modified in 2023. On June 1, 2023 Henk Broeders became the new Chair of the Supervisory Board of UMC Utrecht. He was appointed in this capacity by the Ministry of Education, Culture and Science He has taken over from Caroline Princen who was member of the Supervisory Board since March 1, 2014 and Chair since June 1, 2018. In addition to being Chair of the Supervisory Board, Henk is also a member of the Defense committee. In addition, Monique Maarsen joined the Supervisory Board on September 1, 2023. She is Chair of the Buildings committee and a member of the Audit Committee.

The composition of the UMC Utrecht Supervisory Board in 2023 was as follows:

Mr. H.M.T. (Henk) Broeders, Chair (first term, ending 06-01-2027)

· Member of the Defense Comittee

Previous main position: senior partner McKinsey & Company

Henk Broeders holds the following additional positions:

- · Vice Chair, Supervisory Board, PGGM
- Member of the Supervisory Board, Salvation Army Foundation Wellbeing & Healthcare/Youth protection and Reclassification
- Chair, Stichting Steun Amsterdam UMC Alzheimer Centrum
- Chair, Stichting Hanarth Fonds
- Member of the Advisory Board, Hersenonderzoek.nl
- Member of the Advisory Board, ABOARD consortium
- Member of the investors' advisory committee, Aescap
- Chair of the Supervisory Board, Stater NV (until May 31, 2023)
- Member of the Supervisory Board, Alexander Monro Hospital (until May 31, 2023)
- Member of the Advisory Board, Stichting Zorg na Werk in Coronazorg (ZWiC) (until June 30, 2023)
- External advisor McKinsey & Company (until December 15, 2023)

Prof. M. (Marianne) de Visser, Vice Chair (second term, ending 07-01-2024)

- · Chair, Quality and Safety committee
- · Member of the Education and Research committee

Former primary posts: Neurologist and former Chair of the Outpatient Division of Amsterdam University Medical Center, and Emeritus Professor of Neuromuscular Diseases at the University of Amsterdam.

Marianne de Visser holds the following additional positions:

- Member of the Supervisory Board, Leyden Academy
- Member of the Supervisory Board, Center for Human Drug Research
- Chair of the Board, Interest Group for Chronic Respiratory Support (VSCA)
- · Board member, Genetic Engineering Committee
- Chair of the Advisory Board, Wetenschap en Innovatie Hersenstichting
- Chair of the Board, Erfo Center (per December 2023)



Mr. D. (Dave) del Canho, general member (first term, ending 05-01-2026)

- Chair of the Audit committee
- · Member of the Accomodations committee

Primary post: Managing partner at Del Canho & Engelfriet B.V.

Dave del Canho holds the following additional positions:

- Member of the Supervisory Board, Blue Sky Group
- Board member, Foundation Drs. Cor van Zadelhoff Fund
- Member of the Supervisory Board, Verzetsmuseum (Dutch Resistance Museum)
- · Chair of the Board, WKZ Fund
- · Ambassador for the National Holocaust Museum

Mr. A.H.P. (Aloys) Kregting MBA, general member (second term, ending 12-01-2024)

- · Member of the Audit Committee
- Chair of the Governance and HR committee

Primary post: Senior Vice President Global Enabling Services at ASML

Aloys Kregting holds the following additional position:

Member of the supervisory board, Volksbank

Mr. J.H. (Han) van Gelder, general member (first term, ending 10-1-2024)

· Chair of the Defense Commitee

Primary post: Deputy Secretary General, Ministry of Finance (until September 16, 2023)

Prof. B.A.M. (Anne-Mei) The, general member (first term, ending 5-31-2025)

- · Chair of the Education and Research committee
- Member of the Quality of Care and Patient Safety committee

Primary positions:

- Instigator and owner Tao of Care B.V.
- Co-instigator and owner of Dementie achter de voordeur B.V. (until July 2023)
- Endowed professor of Longterm Care and Social Approach to Dementia, with a special focus on diversity,
 VU
- Advisor to Minister Ursell Arends of Transport, Integrity, Nature and the Elderly, Aruba (since April 2023)

Anne-Mei The holds the following additional positions:

- Regent RCOAK (Rooms Catholyck Oude Armenkantoor Foundation), an equity fund
- Member of the Supervisory Board, In mijn buurt Foundation

MS (Monique) Maarsen, general member (first term, ending 09-01-2027)

· Chair of the Accomodations committee



· Member of the Audit Committee

Primary position: General Manager, Maarsen Group

Monique Maarsen holds the following additional positions:

- Board member, Carré Fund
- Supervisory board member, SADC NV
- Board member, Het Jeroen Pithuis Foundation
- Netherlands Committee Member Human Rights Watch
- Member of the recommendation committee, Artsen voor Kinderen foundation
- Board member, Koninklijke Hollandse Wetenschap Maatschappij (KHWM)

Activities of the Supervisory Board

The Supervisory Board was briefed in 2023 on developments at UMC Utrecht and on the implementation of its policy.

In 2023, the Supervisory Board organized supervision through webinars, consultations with the Executive Board and employee representatives, newsletters, team-building, topic discussions, work visits, various reports, and a self-appraisal. The Chair of the Supervisory Board moreover participates in Chair discussions of the joint Supervisory Boards of UMCs, which take place twice a year.

The Supervisory Board also undertook various other activities in 2023, including:

- Six times a regular meeting with the Executive Board.
- Attendance of the committee meetings of the Supervisory Board.
- Twice in consultation with the Works Council and twice in consultation with the Client Council.
- In the scope of onboarding of the new chair and one new member, introductory talks were held, work visits were conducted, and a master class was presented.
- · Attendance of a digital week-start, participation in digital tracers, and in-depth theme events.
- The (new) chair attended the annual disaster exercise at the Major Incidents hospital.



Employee Representation

UMC Utrecht has the following formal Employee Representation bodies

Works council

UMC Utrecht staff members are represented in a Works Council. The Works Council meets weekly, and committee meetings take place every other week. Once every six weeks, a consultation takes place with Executive Board representatives. The Works Council reports to UMC Utrecht staff members on activities and results in an annual report on the UMC Utrecht intranet.

Works Council members serve for a three-year term. 21 Works Council members were active in 2023. One member left for another job. Due to vacancies and in preparation of the elections in 2024, a few interested employees joined as trainees in 2023. The Daily Management (chair, vice chair, secretary and deputy secretary) coordinates the activities of the Works Council and holds agenda meetings with the manager. Three division committees and four theme committees prepare documents, hold informal meetings with managers, and consult staff members. Each Works Council member sits on at least one division committee and one theme committee. The Works Council is supported by a secretariat that consists of three staff members.

The three division committees are:

- Committee 1: Brain division, Internal Medicine and Dermatology division, Julius Center, Image and Oncology, Information Supply and Finance department, Information Technology department, and the Education Center
- Committee 2: Pediatric division, Laboratories division, Pharmacy and Biomedical Genetics, Women & Baby division, Strategy & Policy department, Staff and Organization department, Quality and Patient Safety department, and the Marketing and Communication department
- Committee 3: Service Company department, Heart and Lung division, Surgery Specialties division, and Vital Functions division

The four theme committees are:

- · Finance and Strategic Policy
- Social Policy and Working Conditions
- · Safety, Health, Welfare & Environment
- Education & Research

The Works Commission is furthermore represented in a number of forums by Works Council members or people with specific expertise. Examples include the Complaints Committee, the UMC Utrecht staff provident fund, and the National Meeting of UMC Works Councils. Also in preparation of the elections for the Works Council and addition members of the Research and Education Board in March 2024, an Election Committee was temporarily active.

Important topics that were handled by the Works Council in 2023 included: the adjusted Whistleblower procedure at UMC Utrecht, the Change Plan for Future-proof Nursing for in- and outpatients in the Internal Medicine and Dermatology division and Pediatric division,, the development of the P&O organization, and the OR Availability regulation.



The Education and Research Council (O&O council) and the Student Representative Council

Education and Research Council (Dutch O&O council) is the legislative body for employee participation in the field of university education and research at UMC Utrecht. The Council's rights are based on the Law on Higher Education and Scientific Research.

The Council has eighteen seats. Nine of the seats are for UMC Utrecht employees (who together form the 'Education and Research committee') and the other nine are for students who together form the **Student Representative Council**. Not all of the seats are occupied at all times. The Education and Research committee and the SRC meet and discuss separately every fortnight, and together every four weeks. The Education and Research committee, consisting of five Works Council members and four additional members (who work as university lecturers or researchers), sit for a three-year term. The students sit for one year. New elections will take place in 2024 for the Education and Research council and the Works Council. SRC elections take place each year.

The daily board of the Education and Research council consists of two staff members and two students and is elected annually by the council. The chair of the Education and Research council as well as the chair(s) of the SRC are students. The daily board, together with the official secretary, coordinates the work of the Education and Research council and conducts agenda consultations with the dean and vice dean. There are three permanent committees, namely Education, Research, and Strategy & Finance, which prepare records, hold informal meetings with the dossier holders, and consult with staff and/or students. Each O&O council member sits on one committee.

The O&O Council looks at UMC Utrecht's policy on university education and research. In 2023, the O&O Council consulted at least five times with the dean and vice dean of the Faculty of Medicine of Utrecht University on Education and Research topics.

In 2023 specific attention was given to the following topics: the wellbeing of students and PhDs, quality funds for education, attendance at courses in the Medical and Biomedical Sciences programs, the composition of education committees, the faculty assessment policy, the revision of the Medical program's curriculum, starters' and stimulus grants for researchers, artificial intelligence (AI) and its impact on education, Education and Examination arrangements, the main lines of faculty budget, the UMC budget, the EWUU alliance, and the return to the Hijmans van den Bergh building. The Student Representative Council lastly proposed to change the name of the faculty to the Faculty of Medical Sciences, so that all programs can recognize themselves in the name. The Board of Governors of Utrecht University is examining the proposal.

Client council

UMC Utrecht has its own Client Council by virtue of the Law on client representation in health-care institutions (WMCZ). The Client Council advises the Executive Board on anything that affects the interests of patients at UMC Utrecht. The council has also been asked to help promote patient participation within UMC Utrecht. The aim is to involve hospital patients in a far broader sense than merely via the Client Council in anything that happens at UMC Utrecht. The Client Council works on the basis of a longterm plan entitled 'More person, less patient: From patient participation to person-oriented care'. The Client Council each year publishes an annual report on the UMC Utrecht website.



The Client Council gathers monthly for a plenary meeting, which is joined every two months by a member of the Executive Board. Monthly consultations also take place with (the Chair of) the Executive Board and (the Chair of) the Client Council. The Client Council also meets twice a year with the Supervisory Board, and a member of the Supervisory Board nominated by the Client Council, regularly joins the plenary meeting. There were also smaller group (portfolio) consultations on specific topics. The Executive Board of UMC Utrecht asked the Client Council to advise on eight proposed decisions. Furthermore, at the request of the Client Council, the Executive Board decided to add a Patient Effect Paragraph (PEP) to every policy decision. The PEP describes the effect on patients and how patients were involved in reaching the decision. The Client Council has also asked for a description of how the patient experiences the policy proposals.

Members of the Client Council are members in their own personal capacity. New members of the Client Council are recruited by UMC Utrecht. Each member of the Client Council may serve a maximum of two four-year terms. A chair and an official secretary are in charge of meeting agendas and ensure that all commitments are met.

Staff assembly

The Staff Assembly consists of medical specialists from all fields who come together to safeguard the quality of patient care. The Council of members, the representative consulting body of the Staff Assembly, gives the Executive Board solicited and unsolicited advice on developments in medical fields and administrative affairs that pertain thereto.

The Staff Assembly meets twice a month. The Chair of the Executive Board joins the meeting once a month. In addition, the daily management of the Staff Assembly meets monthly with the Chair of the Executive Board.

The Staff Assembly advised among other things on major UMC Utrecht-wide trajectories such as the Healthcare of Tomorrow, Implementation agreements for outpatients, Future-proof Nursing, and Room for the right care. The Staff Assembly also gave input for the CLA. This emphasized the importance of a good CLA for the entire team, in other words all UMC Utrecht employees, and vitality and sustainable employability of medical specialists regularly came under discussion. The performance of Individually Functioning Medical Specialists (IFMS) within UMC Utrecht was also discussed by the Staff Assembly. In this regard, the Staff Assembly works closely with the P&O department.

Nursing Advisory Council

The Nursing Advisory Council (VAR) is an advisory body appointed by the Executive Board to give advice – solicited or unsolicited – on matters that concern nursing care. The VAR includes nurses, nurse specialists, and team leaders from various divisions and departments, and forms the mouthpiece for all nursing staff at UMC Utrecht. The VAR aims to expand and reinforce the impact of nursing within UMC Utrecht. Nursing leadership is central to this. The goal is to improve and guarantee the quality of care. The VAR liaises with all care divisions and informs nurses on current topics that are relevant for their profession. In addition, the VAR organizes nursing lunch forums eight times a year where important nursing topics are presented and attendees can interact with each other. The VAR also has a weekly walk-in hour for all questions from nurses (both for review and for assistance).

The VAR daily management meets weekly, the broad representation with all VAR members meet monthly, and a reduced leadership team also meets monthly. Policy days take place twice a year, to which ambassadors are also invited. For information and inspiration on internal and external developments, speakers and members themselves are given the floor. The daily management is monthly in contact with the Chair of the Executive Board. One member of the Executive Board also joins the plenary VAR meeting each month.



In 2023, the VAR focused for instance on the positioning of nurses and the Future-proof Nursing program, the professionalization of nurses, nursing leadership, the promotion of nursing research, and professional pride. All of these topics were brought together on Healthcare Day. The annual Nurse of the Year election also took place on this day. The VAR brings out an annual report on the UMC Utrecht intranet on activities and results.



Integrity

Integrity is an important prerequisite to fulfilling our mission 'Together we improve the health of people and create the **healthcare of tomorrow**'. Whether it's the way in which we act towards each other (social integrity), how we do research (scientific integrity), how we handle business choices (business integrity), or how we act towards patients and stakeholders in research (professional integrity). Our way of working is described in our Integrity code of conduct and in our Research code. These codes also indicate to whom a (suspected) breach of (scientific) integrity can be reported.

Ombudsman and Confindential Matters

In 2023, the Ombudsman and Confidential Matters office received 276 notifications (as opposed to 257 in 2022).

Most of these notification pertained to questions and issues regarding problems in cooperation and/or conflict situations. 67 issues had to do with a situation between an employee and a manager, and in 37 cases it was a situation between employees only. As in previous years the notifications in this category often had to do with disrupted communication patterns, ongoing work pressure, and a number of situations with insufficiently strong leadership qualities.

38 notifications were related to legal position and 38 to inappropriate behavior. The number in this last category therefore dropped by 13 compared to 2022. The continued focus from society on the topic of transgressive behavior did not lead to an increase in the number of notifications, but on the contrary to a decrease. Possibly the tools and tips that we provide online via **This is us** have made it clearer for employees how they could act in situations where they experience inappropriate behavior themselves, or where they have witnessed such a situation.

In 2023 we also developed and implemented the e-learning program 'Appropriate behavior at UMC Utrecht' with a learning path for employees as well as managers. In addition our Ombudsman and Confidential Matters office gave extra presentations/workshops in teams/sections on the topic of inappropriate behavior at work. Information was given in these and discussions on inappropriate behavior were facilitated.

Whistleblower procedures

In 2023 there was one notification in the scope of the Whistleblower procedure at UMC Utrecht, following a notification of possible irregularities in share transactions of two former shareholdings of Utrecht Holdings, the Knowledge Transfer Office of Utrecht University and UMC Utrecht.

Last year Utrecht Holdings declared irregularities in which three (former) employees were involved. The ongoing criminal investigation on the parties involved drew media attention at the end of 2023, since one of them is active in national politics. The criminal investigation is still under way and the Executive Board is considering the possible next steps to take.



Healthcare Governance Code and other codes of conduct

The UMC Utrecht Executive Board and Supervisory Board adhere to the principles of the new **Healthcare Governance Code of 2022** that came into force on January 1, 2022, as well as those of the previous Healthcare Governance Code of 2017. Because good management and good supervision are of great importance to guarantee good care.

The Healthcare Governance Code is based on seven principles, which contribute to ensuring good care, reaching the community goals of healthcare institutions, and community trust. The principles furthermore serve as guidelines regarding rules, to leave more room for dialog rather than 'ticking off' little rules as in the past. The code focuses in particular on culture and behavior, values and standards, and participation and dialog. These are all aspects that keep changing and that therefore require ongoing attention.

At UMC Utrecht we also continue to focus on culture and behavior, values and standards, and employee participation and dialog. For example via our leadership program Connecting Leaders, dialog with patients, our employee-participation bodies, our ombudsman and confidential matters, and our work-experience survey in which we ask employees about their experiences, also in these areas.

Other codes on conduct

Besides the Healthcare Governance Code, we also look at:

Internal codes of conduct:

- the Integrity Code of Conduct (see 10.3 Integrity)
- the UMC Utrecht Research Code (see 10.3 Integrity)
- the Code of Conduct for dealing with ICT and data
- the Code of Conduct for Dealing responsibly with body material for scientific research (Federa/UMC Utrecht)

Codes of Conduct in Healthcare:

- the Dutch Code of Conduct for Scientific Integrity of 2018
- the Code of Conduct for Health Research
- the Code of Conduct for Electronic Data Exchange in Health Care
- the Code of Conduct for Transparency regarding Medical Incidents and Medical Accountability (GOMA)
- the European Code of Transparency (EFPIA)
- the Code of Conduct in Drug Advertising (CGR)
- The Code of Conduct for Medical Equipment (GMH)



Credits

This is a publication of the UMC Utrecht Executive Board, May 2024

Physical address

Heidelberglaan 100, 3584 CX Utrecht Postadres: Postbus 85500, 3508 GA Utrecht www.umcutrecht.nl

Contents

Text and lay-out marketing & communication, UMC Utrecht

Do you have any questions regarding this report or comments regarding the content?

Then please contact the UMC Utrecht Marketing & Communication department. +31 (0)88 75 574 80 info@umcutrecht.nl