

Karolinska Comprehensive Cancer Center

Karolinska CCC Vision, Mission and Strategic Areas 2024–2030

Vision

Reduce cancer incidence, mortality, and suffering through preventive measures, world-class healthcare, and groundbreaking research together with patients of all ages and their relatives.

Mission

Karolinska CCC provides world-class cancer care with a focus on the patient and their relatives. Groundbreaking research is fully integrated with our care and is used from prevention through understanding disease mechanisms to early detection, treatment, follow-up, and rehabilitation.

Karolinska CCC improves the quality of life for cancer patients and their relatives through ongoing collaborations with relevant civil society stakeholders and skills development for healthcare professionals.

Karolinska CCC offers the most advanced and effective treatments at individual level.

Parallel to this, we pursue research to find new and innovative ways to prevent, diagnose, and treat cancer to achieve the best possible health and quality of life.

Karolinska CCC is an international knowledge bank and a center for education in and the exchange of best practices in cancer treatment, nursing, rehabilitation, and the associated health outcomes.

Karolinska CCC is a role model for other hospitals and institutions worldwide in terms of delivering high-quality healthcare and pursuing groundbreaking research in the field of cancer. Together with representatives of the views of patients and their relatives.

Karolinska CCC pursues the development of world-class transnational research to generate new knowledge and methods with an integrated approach involving healthcare, academia, and industry.

Strategic areas

1. Each person's unique circumstances and context form the basis for personalized prevention, diagnosis, therapy, care, self-care, and rehabilitation.
2. Together with patients and their relatives, we develop future prevention, diagnostics, therapy, care, self-care, and rehabilitation with a focus on improving health and quality of life.
3. We fully integrate research with healthcare while also allowing healthcare to serve as an important basis for research.
4. We build networks for multidisciplinary collaborations nationally and internationally to be leaders in prevention, cancer diagnostics, care, research, and education.
5. Our activities are conducted with an optimal mix of skill sets in relation to patient needs by ensuring regular training and skills development.

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1. Each individual's unique circumstances form the basis for personalized prevention, diagnosis, therapy, care, self-care, and rehabilitation

Karolinska CCC provides access to the latest evidence-based treatment methods and the latest technologies. We offer patients the best possible support for self-care, care, and treatment to reduce the burden of disease, enhance health and quality of life, and improve survival rates for all cancers.

We promote the application of precision medicine and precision health for personalized treatment, care, and rehabilitation for each individual patient. Ensuring that all cancer patients are screened using advanced cell and tissue diagnostics combined with standardized biomarkers in routine healthcare enables personalized treatment based on each individual patient's specific needs. Precision medicine and precision health have the potential to improve health outcomes, reduce the impact of disease on life, and optimize healthcare resource use.

By collecting and analyzing data from tumor material, blood samples, health histories and medical records, symptoms, and lifestyle factors, we can identify disease mechanisms and risk factors as well as provide tailored recommendations in the shape of preventive measures and treatment strategies. We use predictive markers systematically to allocate patients to personalized treatment.

Our research and development efforts continue to strive to improve screening methods and increase the opportunities for early intervention. We do this in collaboration with other healthcare and industry stakeholders both nationally and internationally.

We continue to develop and ensure personalized cancer prevention with risk assessment and genetic counseling. Raising awareness of genetics across all professions enables us to provide genetic counseling to increasingly more patient groups

We are establishing a structured health and healthcare database encompassing all relevant information about each patient. Through close collaboration with patients, relatives, researchers, and clinicians, we define, structure, and implement practices that support structured healthcare information. This enables us to access data in real time, which in turn promotes a more effective and comprehensive healthcare environment.

Our work up until 2030 will ensure that:

- All patients are screened for standardized biomarkers and other key markers in routine healthcare
- Predictive markers are used systematically to allocate patients to personalized treatment and care
- We have fully implemented personalized cancer prevention with risk assessment and genetic counseling for patients at increased risk
- The care process is essentially digitalized, and we use and develop new technologies
- All patients are offered personalized diagnosis, treatment, rehabilitation, follow-up, and self-care support
- All patients shall be able to comprise the basis for research into underlying disease mechanisms
- We have successfully established a structured health and healthcare database encompassing all relevant information about each patient
- We have implemented real-time databases and learning systems that can be used in individual treatment plans as well as for following up, evaluating, and developing the majority of all cancer pathways

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2. Together with patients and their relatives, we develop future prevention, diagnostics, therapy, care, self-care, and rehabilitation with a focus on improving health and quality of life

Karolinska CCC works closely with patients and relatives in development work to improve health outcomes and quality of life. We offer personalized healthcare that considers medical and psychosocial needs, personal resources, and context.

We want to create a person-centered healthcare system that considers each individual's unique needs and wishes. Engaging with patients and their relatives enables healthcare to strengthen those patients' ability to actively participate in their care and contributes to a comprehensive approach to health and wellbeing.

The role of patients and their relatives is essential to the further development of rehabilitation and palliative care practices. Together with the patient, the multidisciplinary team ensures a personalized rehabilitation plan to address the patient's individual needs.

Karolinska CCC promotes the development and broad use of world-leading precision medical diagnostics, where molecular, imaging, and other objective measurement data are linked in a patient-centered manner with integrated data analysis for improved diagnosis and therapy choices.

The development of rehabilitation also encompasses improved integration of palliative care with an increased emphasis on patient needs and wishes. Close collaboration between researchers, palliative care specialists, and patients enables us to develop new methods for symptom management as well as for supporting patients and their relatives.

We promote self-care and help patients and their relatives to take responsibility for their health and wellbeing. We offer tools and resources that enable patients to monitor their health, participate in their treatment, and make informed decisions.

Collaborations between leading researchers in academia and leading industry stakeholders enable us to effectively develop and implement new medicines, medical devices, and self-care support. Collaborations with surrounding structures, such as government agencies and regulatory bodies, are also of great importance to testing and implementing new treatments and technologies as well as to evaluating their clinical benefits and cost-effectiveness.

We consider civil society an important partner, with patients and their relatives, survivors' organizations, and interest groups contributing to a better understanding of the needs and expectations of patients and their relatives. Civil society participates in and influences our development and decision-making processes.

Our work up until 2030 will ensure that we have:

- Implemented integrated self-care interventions in our routine clinical practices in all cancer diagnoses
- Established ourselves as an active partner in the transition to good quality, local healthcare
- Implemented a systematic approach to quality improvement and learning that should have resulted in concrete actions in all cancer diagnoses
- Developed and implemented precision medical diagnostics across the field of cancer
- Established collaborations with industry and civil society organizations through which we have jointly developed and implemented new medicines and medical devices

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3. We fully integrate research with healthcare while also allowing healthcare to serve as an important basis for research

Karolinska CCC pursues high-quality cancer research in prevention, the understanding of disease mechanisms, diagnostics, treatment, palliation, and rehabilitation. This includes collaborations with local, national, and international research institutions as well as other Comprehensive Cancer Centers, the use of advanced technologies and techniques, and investments in research infrastructure and resources.

Our research includes patients and their relatives, who actively participate in identifying priority research projects as well as in their design and execution. We develop citizen science wherein the general public actively participates in the collection of cancer-related data and observations to accelerate research progress.

Different disciplines enable a multidisciplinary approach to share knowledge and promote new research and discoveries. Karolinska CCC and SciLifeLab (Sweden's national center for molecular biosciences) have a mutually established process for the systematic implementation of research in healthcare, which enables the more effective implementation of research results in clinical practice.

We invest in sustainable research infrastructure and strategic human resource management to support high-quality research and healthcare. This enables the effective implementation of the latest research results in healthcare, as well as the effective use of patient data and materials in research.

Karolinska Institutet and Karolinska University Hospital have established the necessary expertise and infrastructure for storing and analyzing real-world data as an open resource for researchers. Within the framework of research collaborations with Karolinska CCC, results are shared as per contractual stipulations with the pharmaceutical and medical device industries, for both primary and secondary use. All patient data and material generated in each patient interaction shall in consultation with patients and in compliance with applicable laws and agreements be made available for research. Karolinska University Hospital's biobanks and pathology core facility are available to researchers with approval from the Swedish Ethical Review Authority and the Stockholm Medical Biobank.

Karolinska CCC has established sample processing laboratories within the hospital in collaboration with KI and SciLifeLab to develop the sample flows in next-generation precision diagnostics to provide opportunities for the advanced biobanking and analysis of living cells and single cells as well as other advanced transnational research. This includes diagnostics in innovative clinical trials that pave the way for next-generation treatments and diagnostics. Furthermore, we develop sample and data flows between healthcare and academia for research purposes.

The hospital provides a digital platform for clinical study databases that protects research subjects' privacy in a satisfactory manner but is also available for use by internal researchers as well as external partners in Sweden and abroad.

Cancer studies are made available to all patients regionally, nationally, and internationally. We employ standardized approaches to enable study participation across national borders.

We ensure dedicated research time for clinical researchers and create internal funding for academic studies. One prerequisite is clear career paths in both medicine and nursing with opportunities for skills development to improve the academic environment. As far as possible,

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Karolinska CCC shall strive to ensure that staff working in both healthcare and research can combine the two activities as productively as possible.

Similarly, we develop career and collaboration opportunities by means of positions shared between healthcare and academia for researchers to contribute to the implementation of research in healthcare while also providing expertise in highly specialized care.

All patient pathways have a well-established role in place that is specialized in implementing clinical trials or clinical studies (Clinical Trialist). This is a role that offers further opportunities and includes working hours dedicated to working with clinical studies.

Our work up until 2030 will ensure that we have:

- Created established processes and practices that take into account the views of patients and their relatives.
- Created established environments for the effective exchange of research results, information, and material between research and healthcare.
- Implemented a platform for sharing a broad range of samples and health data for primary and secondary use within healthcare, research, and industry.
- Ensured the availability of cancer studies to all patients regionally, nationally, and internationally.

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4. We build networks for multidisciplinary collaborations nationally and internationally to be leaders in prevention, cancer diagnostics, care, research, and education

Karolinska CCC remains a world leader in cancer diagnostics, care, research, and education by together with other Comprehensive Cancer Centers building networks for multidisciplinary collaborations at both national and international level. This results in greater opportunities to identify new research areas and solutions for the prevention, diagnosis, and treatment of cancer.

Our ambition is to comprise a central hub for cancer care and research for the entire Stockholm region. This is to ensure that all patients have access to high-quality care as well as the opportunity to participate in research projects and clinical trials regardless of where they live. We strive to develop cancer care and provide patients with equal access to care, clinical research, and modern cancer treatments to improve health regionally and nationally.

Our collaborations enable the exchange of expertise and knowledge whereby our patients gain access to different treatment methods and research results while also enabling staff to participate in training courses and workshops to develop their skills in different areas.

We help to create the conditions necessary for establishing new networks. We strive for equal cancer care across Europe wherein we want to comprise a hub for international collaborations and knowledge exchange.

Our work up until 2030 will ensure that we have:

- Established a management network in Region Stockholm in the field of cancer.
- Implemented standardized processes for multidisciplinary conferences (MDCs) based on shared guidelines/care programs in collaboration with other hospitals regionally, nationally, and internationally.
- Developed collaborations between pediatric and adult oncology and established a network of healthcare providers in primary care, palliative care, and rehabilitation within healthcare in Stockholm County.
- Implemented, together with the national and Nordic-Baltic CCC network, structured processes and management structures.
- Established international CCC networks, realized throughout the organization, through memberships in OECI, CCE, and EUHA* and active participation in EU4Health and Cancer Mission projects.
- Established new networks in precision medicine/diagnostics/health and ATMPs**.

*Organisation of European Cancer Institutes, Cancer Core Europe, European University Hospital Alliance.

** Advanced Therapy Medicinal Products.

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5. Our activities are conducted with an optimal mix of skill sets in relation to patient needs by ensuring regular training and skills development

Karolinska CCC promotes the exchange of knowledge between and opportunities to learn from different disciplines. We provide opportunities to devise innovative solutions and create new knowledge to meet the needs of society by establishing learning platforms. These are accessible to all and promote inclusion and diversity, thereby creating an open and inclusive environment.

Our mandate extends beyond our own activities, wherein we interact with other universities and institutions, as well as industry, to make the necessary expertise available. We do this by creating centers of excellence to promote skills development and share knowledge in particular areas. Patients' and their relatives' own knowledge, advocacy skills, and experiences are included as a natural part of our development efforts. We gather the appropriate expertise for the patient's needs.

We educate and develop new generations in healthcare and research, with new career paths developed as needs arise. We play an active role in society and spread knowledge about cancer prevention, early detection, treatment, and rehabilitation. This includes establishing educational programs and conferences.

We regularly educate patient representatives and our own staff to increase knowledge about and understanding of the views of patients and their relatives.

To achieve continual knowledge development, we actively participate in further education, networks, congresses, and courses to educate others about and keep abreast of the latest treatment methods, research, and guidelines in healthcare. We are active participants in the national and regional care program groups.

We have a pronounced knowledge-sharing culture within the organization, with staff encouraged to share their knowledge and experiences with one another.

Having an optimal mix of skill sets and continual knowledge development enables us to ensure that we provide patients with the best possible care and are always abreast of the latest developments in healthcare. We strive to be a learning organization such that we continually improve and develop our expertise to best meet patient needs.

Our work up until 2030 will ensure that we have:

- Established platforms for education and teamwork for patient representatives and staff
- Implemented centers of excellence through which we ensure the right expertise and continual regeneration
- Effective systems in all patient pathways to gather the views and experiences of patients, their relatives, and survivors to promote development in healthcare, research, and society
- A pronounced knowledge-sharing culture within the organization, with staff encouraged to share their knowledge and experiences with one another
- An approach and culture wherein all staff actively contribute to research and development