

## Division of Rheumatology and Research

### Research and Innovation strategy - 2025

#### Ambition

We aim to be the leading research institution in rheumatology in Norway and at the forefront of the international research field in prioritized areas.

#### Vision

We conduct patient-centric research that improves clinical practice.

#### Focus Areas

To achieve our ambition and vision, three focus areas have been established, as described in the following sections:

- Integrated patient care pathways
- Excellent clinical trials
- Innovation

To support the realization, strategic goals have also been established for:

- Organization and financing
- Competence and networking

## FOCUS AREA 1: INTEGRATED PATIENT CARE PATHWAYS

**We will conduct research on integrated patient care and rehabilitation pathways and improve collaboration between specialist and primary healthcare services. User involvement, interdisciplinary collaboration, and a strong connection to national and international networks will ensure that research questions are patient-centric and clinically relevant.**

Over the past two decades, the clinic has established a robust interdisciplinary research environment with a broad research agenda that encompasses various methods for knowledge development and the implementation of interventions for patients with rheumatic joint diseases. An overarching focus is research into comprehensive care and rehabilitation pathways and improving integration between specialist and primary healthcare services. User involvement, interdisciplinary collaboration, and a solid connection to national and international networks ensure that professional development and research questions are patient-centric and clinically relevant.

Rheumatic diseases have a chronic, fluctuating course with significant individual variations in severity, requiring individually tailored treatment and follow-up. Investing in personalized medicine will eventually lead to more accurate diagnosis and treatment.

The treatment of patients with rheumatic diseases in recent years has been characterized by a shift towards early diagnosis, goal-directed treatment, and close monitoring. This approach has yielded positive results, and rheumatic diseases have a milder course today than 20 years ago. Defined treatment goals are set collaboratively by the patient and the healthcare provider, and treatment is planned and adjusted until the goal is achieved. Patient interaction is based on shared decision-making, a crucial premise in our research strategy. Goal-directed treatment increases the need for knowledge about what it takes to achieve remission and limit comorbidities and negative consequences of rheumatic diseases. Our research is aimed at developing strategies and pathways for both pharmacological and non-pharmacological interventions that enable the achievement of treatment goals.

Users will be involved in choosing research questions. Therefore, projects are directed towards areas particularly demanded by patients with rheumatic diseases who are users of our healthcare services. Such democratization of research increases the likelihood that results will benefit users promptly. Experience shows that user-identified research, where users participate in shaping research questions and all stages of the research process, makes research questions more relevant, and results more meaningful. Through such participation, users can also act as agents of change and contribute to the implementation of important measures in clinical practice

### Strategic goals

Through this initiative, we aim to:

- Develop implementation strategies for evidence-based practice
- Ensure user participation and collaborate with the patient council and relevant patient organizations in all research projects
- Develop care models across service levels for better treatment and follow-up of patients with rheumatic diseases

- Develop methods for, and investigate the effects of, early diagnosis and goal-directed intervention
- Identify predictors for optimal outcomes in comprehensive patient pathways
- Focus on personalized medicine
- Develop and test innovative technology and methods to enhance and prolong the effects of interventions and improve resource utilization and communication
- Strengthen an interdisciplinary and multidisciplinary approach to research

### Action plan

- Develop and test models for evidence-based, goal-directed treatment
- Develop, test, and implement models for collaboration between specialist and primary healthcare services
- Develop procedures for effective collaboration with the patient council and relevant patient organizations in all research project
  - Integrate research projects into clinical work, develop and test innovative methods for patient reporting
- Develop and implement evidence-based courses for users
- Professionalize collaboration with patient organizations on user representatives through evidence-based training
- Develop infrastructure and procedures for needs-driven research
- Further develop research projects integrated into clinical work
- Collaborate with primary healthcare in pilot projects
- Influence health policy processes to ensure integrated patient care pathways.

## FOCUS AREA 2: EXCELLENT CLINICAL TRIALS

### **We will conduct high-quality clinical trials with the potential to change clinical practice.**

Clinical trials provide unique knowledge documenting the effectiveness, utility, and safety of both new and existing methods and products for the diagnosis, treatment, and rehabilitation of diseases. Clinical trials contribute to the development of evidence-based healthcare, and participation in studies contributes to competence building in healthcare.

In recent years, Diakonhjemmet Hospital has developed an internationally recognized research environment with the expertise to conduct randomized, high-quality clinical intervention trials, with publications in leading journals worldwide. Our results have contributed to changing clinical practice. We want to further develop this core competence and contribute to the implementation of clinical trials that can improve patient care.

It is particularly important to facilitate an appropriate infrastructure at the hospital with available support staff. Establishing a Clinical Trial Unit (CTU) will be a central part of the initiative. The main focus will be on investigator-initiated (academic) studies. We will focus on both pharmacological and non-pharmacological studies. It may also be relevant to participate in industrial (commercial) studies if it is significant to ensure access to experimental treatment for our patients or if there are other compelling reasons, such as economic incentives or competence building.

Ultimately, the goal for the focus on clinical intervention trials is to foster an environment that is competitive for obtaining the status from the Research Council as a 'Research Centre for Clinical Treatment.' Adequate research infrastructure and capacity (personnel and facilities) to conduct clinical intervention studies will be crucial to achieving this status and ensuring that the environment is competitive in applications for other external funding.

As part of the initiative, we want to collaborate with national partners so that patients can be recruited from across the country. We will further develop existing international research collaborations, including through guest professor programs and collaboration on multicentre studies.

## Strategic goals

Through this initiative, we aim to:

- Conduct high-quality pharmacological and non-pharmacological clinical trials with the potential to change clinical practice
- Contribute to evidence-based treatment
- Foster innovation in treatment
- Educate competent clinicians and clinical researchers
- Take national responsibility for conducting excellent clinical studies
- Collaborate internationally
- Compete nationally and internationally to obtain external funding
- Ensure that achieved research results are swiftly implemented in clinical settings
- Introduce systems for quality and control
- Conduct projects in close collaboration with users
- Actively disseminate research results to user groups and the general public

## Action plan

- Ensure competence in clinical trials (Good Clinical Practice - GCP) at all levels of the organization
- Establish strategic collaboration with the Clinical Trial Unit at Oslo University Hospital
- Develop internal expertise in project management, with research nurses and project coordinators to support scientific personnel

- Establish a Clinical Trial Unit at Diakonhjemmet Hospital with necessary infrastructure
- Coordinate applications for financial support
- Organize annual workshops to ensure the quality of new projects and funding applications
- Develop internal expertise in statistics
- Utilize relevant information and communication technology
- Participate in industry-funded studies of high quality to secure early access to new treatments

## FOCUS AREA 3: INNOVATION

**We will conduct innovative research, method and process development that generates new knowledge valuable for patients and society.**

Innovation is about creating something new that is useful and is being put into use. Innovation is the key to the growth and sustainable development of research, and it holds a central position in current research policy in Norway.

The Directorate of eHealth is working on creating a national infrastructure for the availability and analysis of health data. The Health Analysis Platform, gradually introduced in the coming years, will facilitate advanced analyses across health registries, basic data, records, and other sources of health information.

The clinic conducts high-quality research with innovation potential, and recent results have provided new knowledge contributing to changes in clinical practice nationally and internationally. We want to use our available resources in continuously new ways, staying updated and innovative so that our research remains forward-looking.

We have access to and expertise in large amounts of valuable data. Our databases will be restructured to utilize the data in new and more efficient ways. A central focus moving forward will be on establishing registry linkages. We will stay informed and leverage the opportunities that will arise for registry linkages when the national health analysis platform is implemented. Furthermore, it will be crucial to work towards improving digital and cloud solutions at Diakonhjemmet Hospital, as this forms the foundation for innovative research.

Diakonhjemmet Hospital has a rich research environment comprising researchers with diverse professional backgrounds, many with broad clinical experience. A central part of the innovation initiative will be to create forums for the exchange of knowledge and ideas, facilitating their realization. We will invest in internal and external collaboration and idea development, nationally and internationally. Collaboration with other healthcare institutions, academic environments, industry, and business will be relevant, fostering the development of patentable ideas in service and product innovation.

For our research results to be applied, they should be perceived as useful and relevant to our patients. We will focus on increased user involvement in the planning and implementation of clinical studies and in the initiative for service and product innovation.

## Strategic goals

Through this initiative, we aim to:

- Facilitate the implementation of research and development projects in collaboration with other entities and enterprises, such as those from the business sector
- Participate in the development of digital tools for patients
- Increase access to and knowledge about registries and perform registry linkages that provide new, relevant, and useful knowledge
- Further develop and leverage the existing biobanks for multiple projects
- Build expertise in new methods for data collection
- Strengthen existing and establish new forums for innovation internally and externally, nationally and internationally

## Action plan

- Further develop digital expertise and establish a structure conducive to innovative research
- Introduce, evaluate, and monitor measures to enhance a culture of innovation
- Specify the innovation potential in research projects and apply for innovation funding
- Develop methods for data collection directly from patients at home
- Develop a national registry for biological medications
- Implement structured electronic patient journal systems, extract data, and facilitate research
- Utilize modern solutions for the handling and tracking of human biological material in the biobank
- Collaborate with innovation clusters
- Establish collaboration with the Life-Science initiative at the University of Oslo
- Develop a complete digital outpatient clinic with the option for remote consultations
- Utilize existing platforms that can support research administration and archiving (P360)
- Facilitate the recruitment of key individuals with core expertise in the focus area
- Strengthen expertise and develop procedures on privacy (GDPR) through collaboration with the data protection officer

## ORGANIZATION AND FINANCING

**We aim to further develop our research environment through a clear organizational structure and common goals to ensure long-term funding and strategic gains. We will support the hospital's strategic plans and take responsibility beyond our own field.**

A long-term perspective is necessary to carry out relevant projects and to develop proficient researchers. A clear organizational structure, effective leadership, as well as adequate funding facilitate this.

We intend to organize research at the Rheumatology Department as a research centre with clear organization and leadership. This can contribute to better prioritization, simplifies long-term planning, and provides a more attractive framework for long-term financing.

Ultimately, the goal is for this initiative to result in an environment that can compete for the status of a " Centre for Clinical Treatment Research " from the Research Council.

The Rheumatology Clinic, outpatient clinic, and research at Diakonhjemmet Hospital have a significant research activity conducted by skilled researchers, but the research is mainly project-funded, and there is a limited number of permanent positions. The research group is coordinated through one leader, but beyond this, there is little formal organization. This makes the research group vulnerable to changes in funding and management, limiting long-term planning and prioritization.

Funding not tied to individual projects makes it easier to ensure good, long-term research and the development of research support and infrastructure over time. Unrestricted funds provide independence and flexibility. With this, one can choose to work on the projects deemed most important, not just those that receive support. The environment becomes more flexible, allowing the initiation and continuation of research without waiting for approval and disbursement of project funding.

Collaboration with other departments and research groups can strengthen us by providing access to broader expertise; additionally, a larger environment can confer competitive advantages.

### Strategic goals

Through this initiative, we aim to:

- Establishing a competitive research centre that facilitates outstanding research projects
- Developing an organization that ensures optimal prioritization of our resources (financial, personnel, infrastructure, and technology)
- Ensuring long-term funding, both as a support for operating infrastructure and as unrestricted funds for initiating prioritized projects

### Action plan

- Internal reorganization and visibility of the research unit in the clinic

- Investigate practical, financial, and legal consequences of different organizational models and choose an organization based on this
- Identify potential collaborators for a research centre and/or research network and initiate strong collaborations and partnerships with other leading hospitals
- Develop and strengthen collaboration between researchers and the Rheumatology Patient Council
- Participate in application(s) to become a K.G. Jebsen Center
- Identify relevant EU projects where we can contribute as a partner
- Facilitate applications for EU funds for relevant projects and research talents
- Develop action plans to achieve strategic goals
- Regularly revise the research strategy
- Co-locate research infrastructure and researchers
- Strengthen collaboration on research in orthopedics and rheumatology
- Establish the department as the preferred national contact for pharmaceutical companies wishing to conduct studies in Norway within musculoskeletal disorders
- Implement professional development initiatives for all staff
- Demonstrate our societal engagement to politicians, healthcare professionals, researchers, patients, and the public through traditional and social media

## COMPETENCE AND NETWORK

**The Division of Rheumatology and Research at Diakonhjemmet Hospital are to play a central national and international role, promoting collaboration that enhances clinical practice and contributes to a better healthcare service. The results of research should quickly benefit patients through evidence-based interventions.**

The most important resource in any knowledge-based organization is motivated and competent staff. The Division of Rheumatology and Research aim to be an attractive workplace that cares for its employees, develops their expertise, and attracts talented individuals. This is crucial to achieving the ambition of being a leading European research centre that enhances clinical practice.

The research activities should seek to influence clinical practice both nationally and internationally. To achieve the desired impact, it is necessary for competent staff to seek and take on key roles in relevant organizations and collaborative projects. Clinical activities should, as far as possible, facilitate such participation. Where appropriate, collaboration with other research environments and clinical departments at Diakonhjemmet Hospital will be sought, contributing to competence-building and knowledge transfer across departments and professional backgrounds.

To achieve long-term results, it is important to nurture research talents and ensure competence-building, including through the education of doctoral candidates and the facilitation of further



academic careers. Specialist candidates should develop research competence, and the department should facilitate this within a regular training program. Career paths combining clinical research and clinical work will be developed.

## Strategic goals

Through this initiative, we aim to:

- Be an attractive workplace that takes care of employees and develops their competence
- Ensure good coordination and optimal collaboration between research and the clinic
- Recruit talented researchers and ensure attractive career paths
- Educate competent clinicians and build research competence broadly in the clinic to ensure that research results are interpreted and implemented effectively in healthcare
- Facilitate combined positions to ensure that research is clinically relevant and patient treatment is evidence-based
- Develop and share expertise nationally and internationally
- Take a leading role in national and international organizations and facilitate employees in handling key functions
- Seek collaboration with academic institutions and facilitate the teaching of healthcare professionals within our field
- Contribute to strengthening overall research at Diakonhjemmet Hospital

## Action plan

- Facilitate employees to be appointed to academic adjunct positions at higher education institutions
- Facilitate the hiring of more individuals with core expertise within the focus areas
- Ensure that scientific competence and research activity are emphasized in the appointment of clinical positions
- Participate in national and international networks, such as MUSS, Nordic and European registry collaborations, EULAR, GRAPPA, ASAS, PROMiNET, OARSI, OMERACT, and others
- Facilitate educational/research stays at leading institutions abroad
- Contribute to allowing foreign researchers to have research stays at the clinic
- Establish partnerships with other hospitals and research institutions
- Establish partnerships with pharmaceutical companies' research and development departments