

Evaluation of Life Sciences 2022-2024

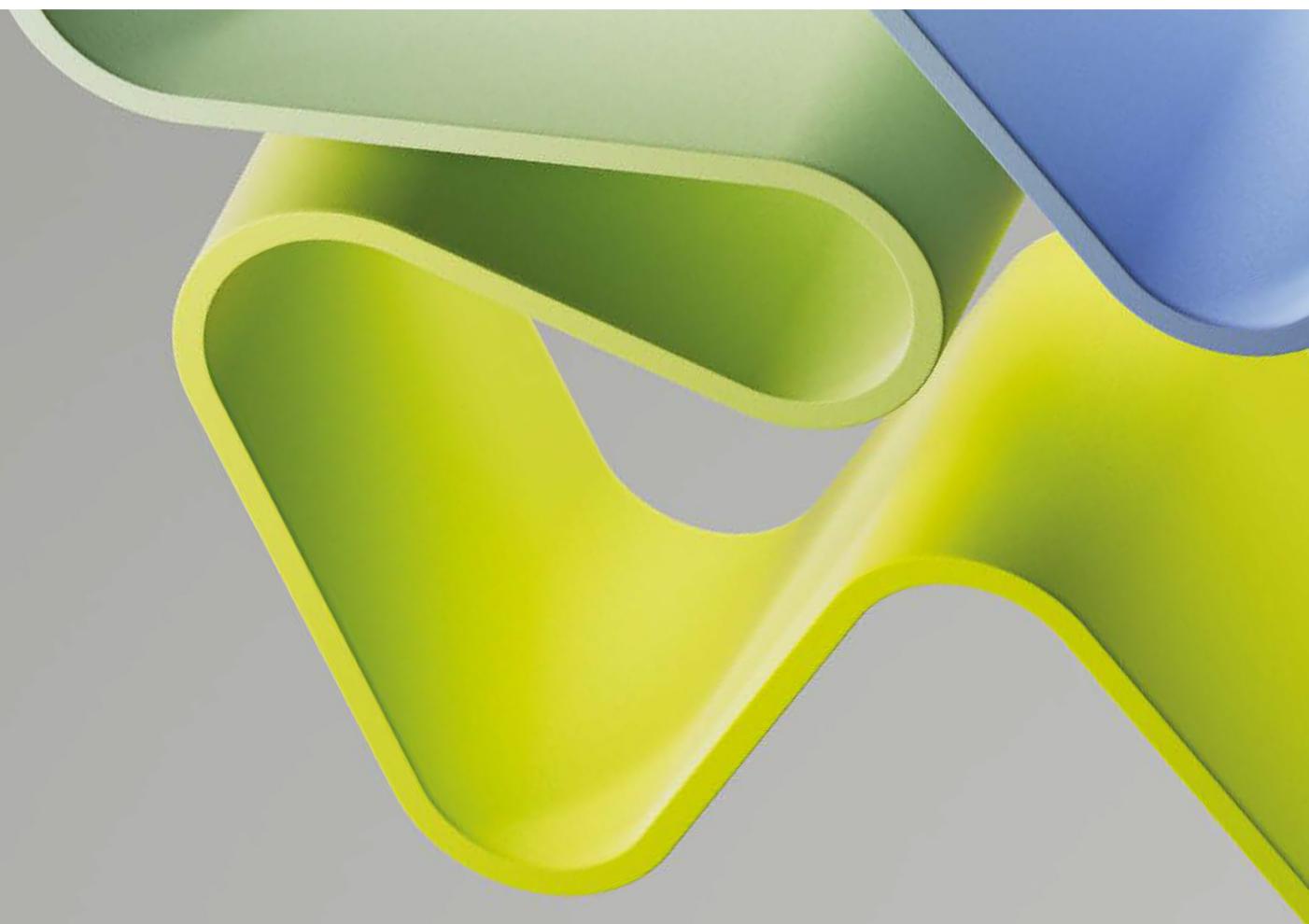
Evaluation of medicine and health 2023-2024

Evaluation report

**ADMIN UNIT: Center treatment of Rheumatic and
Musculoskeletal Diseases (REMEDY)**

INSTITUTION: Diakonhjemmet Hospital

December 2024



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Statement from Evaluation Committee Health trust 1

This report is from Evaluation Committee Health trust 1 which evaluated the following administrative units representing the hospital trust in the Evaluation of medicine and health 2023-2024:

- Regional Centre for Child and Adolescent, Regional Center for Child Adolescent Mental Health East and South
- Center for Psychopharmacology, Diakonhjemmet Hospital
- Center treatment of Rheumatic and Musculoskeletal Diseases (REMEDY), Diakonhjemmet Hospital
- Division of Paediatric and Adolescent Medicine, Oslo University Hospital and University of Oslo
- Division of head, neck and reconstructive surgery (HHA), Oslo University Hospital and University of Oslo
- Division of Mental Health and Addiction, Oslo University Hospital and University of Oslo
- Division of Gynaecology and Obstetrics, Oslo University Hospital and University of Oslo
- Modum Bad, Research Institute of Modum Bad
- Department of Research, Sunnaas Rehabilitation Hospital

The conclusions and recommendations in this report are based on information from the administrative units (self-assessment), digital meetings with representatives from the administrative units, bibliometric analysis and personnel statistics from the Nordic Institute for Studies of Innovation, Research, and Education (NIFU) and Statistics Norway (SSB), and selected data from Studiebarometeret (NOKUT). The digital interviews took place in Autumn 2024.

This report is the consensus view from committee Health trust 1. All members of the committee have agreed with the assessments, conclusions and recommendations presented here.

Evaluation committee Health trust 1 consisted of the following members:

Professor Johan Hellgren (Chair)
University of Gothenburg

Professor Oskari Heikinheimo
Helsinki University Hospital

Professor Nick Hardiker
University of Huddersfield

Professor Fiona Gaughran
King's College London

Professor Claudi Bockting
Amsterdam University Medical
Centre

Professor Li Felländer-Tsai
Karolinska Institute

Professor Ertan Mayatepek
University Hospital Düsseldorf

Dr Reda Nauseidaite, Technopolis Group, was the committee secretary.

Oslo, December 2024

Profile of the administrative unit

The Division of Rheumatology and Research (REMEDY) is part of the Diakonhjemmet Hospital. In terms of research staff REMEDY consists of nine professors, two associate professors, 11 senior researchers, 15 postdoc researchers, 23 PhD fellows, 11 clinical research staff and six administrative research staff. Women represent a majority in all categories. For the previously mentioned categories men represent 33% of professors, 0% of associate professors, 18% of senior researchers, 33% of postdoc researchers, 30% of PhD fellows, 18% of clinical research staff and 0% of administrative research staff. Since 2022, all research and innovation activities of the division are organised as a single research group, the REMEDY centre.

REMEDY's research strategy aims to position the administrative unit as Norway's leading rheumatology research institution and a global frontrunner in key areas. Their vision is to conduct patient-centric research that enhances clinical practice. This vision is realised through three main focus areas: conducting high-quality clinical trials to influence clinical practice and build healthcare competence, fostering innovation to generate valuable new knowledge for patients and society, and researching integrated patient care pathways to improve collaboration between specialist and primary healthcare services. These efforts are supported by a strong interdisciplinary research environment and active user involvement, ensuring that research remains relevant and impactful. To support these focus areas, strategic goals have been established in two complementary domains: organisation and financing, and competence and networking.

REMEDY has a longstanding policy of fostering national and international collaborations, which is crucial for advancing research and clinical trials. Nationally, it collaborates with clinical rheumatology departments and other clinical fields, forming the foundation for many multicentre trials and studies. The administrative unit also partners with rehabilitation institutions and primary healthcare providers, facilitating numerous successful trials. Academically, researchers hold part-time professor positions at various institutions and collaborate with major universities. The administrative unit also works with pharmaceutical companies, medical software developers, and life science companies on innovative projects. Engagement in academic societies and user organisations further enhances its impact. Since 2022, the administrative unit has a partnership with Oslo University Hospital, the University of Oslo, and other key institutions through the REMEDY centre, strengthening national collaborations in clinical rheumatology and rehabilitation. Internationally, the administrative unit collaborates with leading institutions like Harvard University, University of Manchester, and Karolinska Hospital, among others. These collaborations are vital for research development, innovation, and knowledge dissemination.

According to its self-assessment, in the future, REMEDY may leverage its extensive experience in leading large multicentre clinical trials and its strong national and international networks to enhance patient care and research. With a multidisciplinary team and diverse research methodologies, the administrative unit will continue to align with hospital strategies and integrate patient research partners. The focus on personalised medicine, remote monitoring, and AI for clinical decision support can

position the administrative unit at the forefront of digital health advancements. Meanwhile, the administrative unit faces suboptimal biobank facilities (currently being addressed), digital infrastructure gaps, and GDPR policy framework challenges. Funding uncertainties post-2030 pose a financial risk, and potential recruitment challenges could impact the administrative unit's ability to maintain its high standards. Additionally, as a non-government hospital, the administrative unit faces challenges in joining national healthcare initiatives and research collaborations, with IT disparities hindering seamless data sharing. Addressing these challenges will be crucial for sustaining its impact and advancing its research objectives.

Overall evaluation

The Centre for Treatment of Rheumatic and Musculoskeletal Diseases (REMEDY) has many scientists at all levels. All strategies listed in the form are consequent, internationally accepted and of high to highest qualities.

Overall, the organisation and composition of the research group are outstanding. The aim is to engage in ground-breaking research which will update current treatment recommendations.

The Center for Treatment of Rheumatic and Musculoskeletal Diseases has partnerships with other hospitals, a REMEDY Board, and strategic direction set by a Center executive Committee and the Center Management Committee (providing daily leadership with the Patient Advisory Board). The research group is very successful in ensuring grants from national and international sources.

The administrative unit's strategy is closely aligned with the broader hospital strategy, especially the objectives of developing the healthcare of the future.

The Center for Treatment of Rheumatic and Musculoskeletal Diseases has an excellent record when it comes to scientific quality, covering broad methodologies, including clinical trials, personalised interventions, biomarker identification, pain mechanisms and management, comorbidity strategies, remote care innovations, long-term outcomes, and empowerment- focused interventions. Through these initiatives, the centre employs varied theoretical and translational approaches, maximising knowledge about RMD treatment and fostering precision medicine. The group has been very productive, demonstrated through the dissemination of their work in high-impact journals such as the Lancet, JAMA, and the BMJ.

The strengths of the administrative unit include the ability perform large multicentre trials, extensive experience in project leadership, national and international networks and long-standing success in grant applications as well as strong recruitment to scientific positions.

The weakness of the administrative unit are suboptimal biobank facilities as well as gaps in digital infrastructure and research support functions and limited experience of Horizon Europe projects.

Recommendations

- REMEDY is a leading research constellation. REMEDY would benefit from clearly structured projects where members of the group take a leading position so that a publication in a top-quality journal reflects the contribution of the Norwegian partner.
- A risk analysis with respect to long term changes in external funding is recommended. Planning to be able mitigate rapid changes in external funding should be a prioritised area.
- REMEDY performs trials addressing patients' needs. The added value of a patient advisory board could be clearer adding to the strategy, research, structure and how this board is integrated into the overall REMEDY consortium. This includes a description of the diversity of patients involved in the advisory board.
- By planning, the administrative unit has great potential to remain in a leading position in the future and at the forefront both nationally and internationally.

1. Strategy, resources and organisation of research

1.1 Research strategy

Strategic goals related to institutional strategies and scientific priorities and strategies and scientific priorities related to the "specific aspects" indicated in the administrative unit's Terms of Reference (ToR) are:

1. Developing healthcare for the future.
 - Conducting patient-centred research that improves clinical practice.
 - Being an arena for innovative solutions and sustainable healthcare services.
 - Providing better healthcare services to more people.
2. To improve treatment of rheumatic and musculoskeletal diseases (RMDs) by randomised clinical trials assessing novel treatment and treatment strategies, in combination with research and innovation to untangle the causes and characteristics of RMDs.

REMEDY is conducting forefront trials in the clinical setting. These trials have great potential to improve clinical practice and develop up to date evidence-based treatment in the current health care setting.

REMEDY has profound expertise in conducting randomised clinical trials and has many publications in top international medical journals. There is a massive inflow of external funding for new projects. All aiming at improved clinical practice and using resources wisely. REMEDY conducts many research projects at the forefront of innovation and up to date methodology with processes to develop new knowledge which will be beneficial for both society and patients. The results will be integrated in health care and the strategic goals including also follow-up will include management as well as validation of current treatments.

Many of the projects also follow patients in their clinical pathways. Treatment and rehabilitation pathways are followed to improve collaboration within the health care system also embracing primary care services. Over the years interdisciplinary research also includes basic science and mechanistic research. There is a broad connection to both international and national research constellations sharing the same strategic goals of innovative health care technologies with focus on a multidisciplinary approach. REMEDY has been very successful in focusing on long term financing and long-term funding to reach all the strategic goals. This has been aligned with the hospital's strategic plans and successful organisation of the research centre securing long term goals and financing.

The patient centered approach has been fundamental to transform the research to the forefront internationally and nationally.

The committee's evaluation

The Center for Treatment of Rheumatic and Musculoskeletal Diseases has a very good record when it comes to scientific quality, covering broad methodologies, including clinical trials, personalised interventions, biomarker identification, pain mechanisms and management, comorbidity strategies, remote care innovations, long-term outcomes, and empowerment- focused interventions. Through these initiatives, the centre employs varied theoretical and translational approaches, maximising knowledge about RMD treatment and fostering precision medicine. The group has been very productive, demonstrated through the dissemination of their work in high-impact journals such as the Lancet, JAMA, and the BMJ.

The committee's recommendations

- By planning especially when it comes to continuation of grants, the administrative unit has great potential to remain in a leading position in the future and at the forefront both nationally and internationally. Also managing staff turnover in the light of upcoming retirements.

1.2 Organisation of research

Diakonhjemmet Hospital is a non-profit corporation owned by the Diakonhjemmet Foundation. The hospital is responsible for general hospital services for approximately 150 000 inhabitants in three sectors of the western part of Oslo within the fields of internal medicine, surgery, mental health, and radiology, as well as laboratory services. It is the referral hospital for the entire Oslo area and the regional hospital for South-Eastern Norway for health services in the fields of rheumatology and rheumatic surgery.

The clinical services are organised as separate departments of inpatient and outpatient care, but research activities and clinical care are closely integrated. The administrative unit has a strong focus on educational training and knowledge transfer, exemplified through many combined clinical and academic fellowships. This has led to comprehensive synergies between the clinical and research activities within the administrative unit and rapid implementation of new research results into clinical practice.

Since 2022, all research and innovation activities of the Division of Rheumatology of Research has been organised as a single research group (REMEDY) focusing on rheumatic and musculoskeletal diseases, supported by the Norwegian Research Council and the Olav Thon Foundation.

The administrative unit provides support for research careers. Many senior researchers have received large external funding enabling them to fund PhD projects and post-doc positions. This has created opportunities to recruit younger researchers. The administrative unit supports participation in international meetings and congresses. There are weekly gatherings for their PhD students such as journal clubs to discuss current research. In 2022 a young researcher programme at REMEDY was started.

Most of the research time is allocated through competitive funding. This is often done in combination with clinical training facilitating periods of research (both full time and part time). Funds for planning and initiating research are also available. Every year senior physicians receive one month of academic time. This has enabled

many of them to reach the PhD level. There is also support for research visits and sabbaticals going abroad, mostly in Europe and the US. This is made possible through the researcher's international networks and EULAR grants.

The committee's evaluation

REMEDY has partnerships with other hospitals, a REMEDY Board, and strategic direction set by a Center executive Committee and the Center Management Committee (providing daily leadership with the Patient Advisory Board). In terms of staff, REMEDY consists of 9 Professors, 2 Associate Professors, 11 Senior Researchers, 15 Postdocs, and 23 PhD Fellows. The research group is very successful in ensuring grants from national and international sources.

The administrative unit's strategy is closely aligned with the broader hospital strategy, especially the objectives of developing the healthcare of the future.

The committee's recommendations

- It is recommended to explore how to mitigate the potential inherent political risks of the organisation i.e. reorganisational issues from governmental level or changes in financial support as well as strengthening the biobank facilities and gaps in infrastructure. Research support functions could benefit from assessment and oversight.

1.3 Research funding

Research funding of REMEDY stems from various sources. Apart from basic funding, there is also funding from industry and other private sector sources, commissioned research for the public sector, grants from Research Council of Norway (RCN), and from other national Sources (HSØ, DAM, Klinbeforsk) as well as international funding e.g. NIH, NSF, EU framework programmes (NORDFORSK) and other sources.

From 2018 to 2022 basic funding has gone from 13,5 to 17,3 MNOK. Funding from industry and the private sector has gone from 2,7 to 33,2 MNOK. From RCN funding has gone from 0 to 130,9 MNOK. Other national grant funding has gone from 7,9 to 27,4 MNOK and international funding has gone from 0,8 to 14,8 MNOK. Other funding has gone from 1,3 to 2,7 MNOK.

The committee's evaluation

There has been an exceptional growth, particularly in external funding, between 2018 and 2022. The budgets are not presented in detail which makes it difficult to undertake a more detailed analysis.

The committee's recommendations

- It is recommended to make a risk analysis of long-term base financing in light of the large external financing. It is reassuring to see organisation & finance as a separate domain with its own strategic goals. This is important as the majority of the group's resources appear to come from external sources.

1.4 Use of infrastructures

Researchers at the administrative unit have access to NorCRIN (Norwegian Clinical Research Infrastructure Network) and ECRIN (European Clinical Research Infrastructure Network) and participate in network-related activities. These infrastructures encompass both physical and digital components, facilitating comprehensive support and knowledge-sharing for clinical research. NorCRIN is a partnership consisting of the six university hospitals. Diakonhjemmet Hospital, which is not a university hospital, cannot be a partner. However, they are still actively participating in their network-related activities.

Diakonhjemmet Hospital, including the administrative unit also engages with Biobank Norway, a national biobank infrastructure project coordinated by Norwegian University of Science and Technology and a member of the European biobank research infrastructure, BBMRI.ERIC. Biobank Norway provide research infrastructure, knowledge-sharing and advice on biobanking and legislation to enhance biomedical research.

Diakonhjemmet Hospital supports the clear objectives and guidelines of the Norwegian Research Council, the EU, and the Ministry of Education and Research for the management of research data – "As open as possible, as closed as necessary." Diakonhjemmet Hospital will work towards an open and sharing culture, following the FAIR principles, while also ensuring compliance with relevant laws and regulations including personal data protection, the interests of researchers and Diakonhjemmet Hospital as the responsible research institution. Diakonhjemmet Hospital should have robust systems for data collection and management, including secure storage and sharing among project team members, as well as archiving and availability after the completion of projects. Diakonhjemmet Hospital should encourage and facilitate larger datasets for multiple research projects and projects with longer durations.

The committee's evaluation

REMEDY uses both national and international infrastructure and adheres to the FAIR principles.

The committee's recommendations

- While the administrative unit has some infrastructure and permanent positions dedicated to research that are financed through the administrative unit's budget, the research projects mainly depend on external funding. Since the external funding represents a large proportion of the budget, an analysis of future funding should be undertaken. Digital infrastructure gaps should be an area of focus for the future as well as improving the biobank facilities.

1.5 Collaboration

The administrative unit has established national research collaborations with all clinical rheumatology departments, and with many other clinical departments treating patients within dermatology, gastroenterology and orthopaedic surgery. These collaborations have been crucial for the division as these networks have been the foundation of many multicentre clinical trials and epidemiological studies

conducted within secondary health care. Similarly, the division has established collaborations with many rehabilitation institutions and primary health care providers, which has resulted in the successful conduct of numerous trials.

Within academia nationally, the administrative unit has researchers with part-time professor positions at four different academic institutions, and the administrative unit organises teaching for numerous student groups each year. Within other sectors, the administrative unit collaborates with pharmaceutical companies as study sites in clinical trials, with developers of innovative medical software, technical solutions and apps, and with life science companies regarding development of novel diagnostic tests. The administrative unit also benefits from extensive engagement within academic societies and collaborations with numerous user organisations.

In 2022, the administrative unit formed a formal partnership with Oslo University Hospital, the University of Oslo, the MAGIC Evidence Ecosystem Foundation and the Norwegian Rheumatism Association through the REMEDY centre. This partnership has further tightened the collaboration across these five institutions, leading to novel opportunities. The establishment of REMEDY also formalised the national collaborations into two consortia, one within clinical rheumatology and one within rehabilitation.

Internationally, the Division of Rheumatology and Research collaborates with a large number of institutions and societies. Examples include longstanding collaborations with leading hospitals and universities. Collaborations also extend to several large collaborations through Nordic (NORA, ScandRA), European (SQUEEZE) and worldwide (OMERACT) project consortiums and organisations.

The committee's evaluation

There is a well-structured programme for the development of emerging researchers, although the pathway for established researchers is less clear. There are many national and international ongoing collaborations. The added value of these numerous collaborations to the activities of the administrative unit are perceived as important. These collaborations have been critical to development and conduct of research and innovation, and for the dissemination of new knowledge to stakeholders.

The committee's recommendations

- Maintain national and international collaborations.

1.6 Research staff

There are 9 professors (67% female), 2 associate professors (100% female), 11 senior researchers (82% female), 15 post doc researchers (67% female), 23 PhD fellows (70% female), 11 Clinical research staff (82% female) and 6 administrative research staff (100% female).

The proportion of temporary positions is 1/9 professors, 6/11 senior researchers, 15/15 postdocs, 23/23 PhD fellows and 2/11 Clinical research staff. The temporary positions include staff with permanent clinical positions and temporary research positions funded by research grants.

The committee's evaluation

The research staff has numerous positions at all levels. The majority are women. There are no men in the administrative staff.

The committee's recommendations

- Attracting both men and women on all levels should be a focus in order to maintain a sustainable workforce.

1.7 Open Science

Diakonhjemmet Hospital supports the clear objectives and guidelines of the Norwegian Research Council, the EU, and the Ministry of Education and Research for the management of research data – "As open as possible, as closed as necessary." Diakonhjemmet Hospital will work towards an open and sharing culture, following the FAIR principles, while also ensuring compliance with relevant laws and regulations including personal data protection, the interests of researchers and Diakonhjemmet Hospital as the responsible research institution. Diakonhjemmet Hospital should have robust systems for data collection and management, including secure storage and sharing among project team members, as well as archiving and availability after the completion of projects. Diakonhjemmet Hospital should encourage and facilitate larger datasets for multiple research projects and projects with longer durations.

A large proportion of REMEDYs most cited papers are featured in open-access journals. Furthermore, researchers at the administrative unit primarily access research funds from the Regional Health authorities, Norwegian Research Council, the Dam Foundation and the European Union, with the stipulation that funded research must or are strongly encouraged to be published through open channels. In the near future, hospitals will gain access to archiving opportunities through the Norwegian knowledge archives.

The committee's evaluation

Open Science is well-considered, going beyond simply open access publishing.

The committee's recommendations

- Diakonhjemmet Hospital should encourage and facilitate larger datasets for multiple research projects and projects with longer durations.

2. Research production, quality and integrity

Introduction

The administrative unit specialises in research with a primary focus on rheumatic and musculoskeletal diseases. Rheumatic and musculoskeletal diseases are a diverse group of diseases with considerable impact on morbidity, quality of life, and mortality. Therefore, the administrative unit also publishes research related to rehabilitation, general medicine, cardiovascular diseases, public health, and occupational health.

Norway's Research Ethics Act requires all scientists to follow principles such as truth, respect, good consequences, justice, and aptitude. Researchers in the administrative unit have learned about these principles, including the Declaration of Helsinki, through research education at universities and through the prevailing culture in the institution, as well as within the administrative unit. Furthermore, the Health Research Act emphasises the formal responsibility of the institutions for all aspects of the research project, including arrangements that address ethical, privacy, and information security considerations, as well as internal control. The institution has implemented these laws and principles as part of internal control including a mandatory training course and procedures related to the conduct of research projects at the institution, to which the administrative unit adheres. This includes procedures regarding issues of research misconduct such as falsification, fabrication, plagiarism, and other serious violations of recognised research ethical norms which applies to work conducted at the hospital and work performed at other institutions where employees, in their capacity at Diakonhjemmet Hospital, have participated in the implementation of research projects.

2.1 Research quality and integrity

This part includes one overall evaluation for each research group that the administrative unit has registered for the evaluation. The overall assessment of the research group has been written by one of the 18 expert panels that evaluated the registered research groups in EVALMEDHELSE. The expert panels are solely behind the evaluation of the research group(s). The evaluation committee is not responsible for the overall assessment of the research group(s) presented in this section.

REMEDY

The level of research of the REMEDY group is outstanding. This affects all the different points that need to be evaluated for this report. However, given the history of the working group, the number of scientists involved and the amount of funding, the lack of superior quality, top-level publications is a surprising gap. The group without any doubt has the resources to develop into one of Europe's premier research consortia – and they should focus on this.

3. Diversity and equality

Diakonhjemmet Hospital has an overall policy and action plan for equality and diversity which the administrative unit adheres to. The policy outlines the commitment to providing high-quality, tailored, and equitable healthcare services to all individuals, irrespective of various factors such as age, gender, sexual orientation, place of residence, socio-economic conditions, language, ethnic background, beliefs, health literacy, and functional ability. The organisation works systematically to prevent racism and discrimination affecting patients, relatives, or employees. Staff should be treated with equality, and the organisation recognises and leverages the strengths found in diversity. The action plan ensures systematic work on equality and diversity, including addressing discrimination, reporting gender-segregated data, and assessing part-time work. It promotes employee competence through training and workshops, highlights the hospital's attitude through communication strategies, and focuses on equitable health services. Additionally, it encourages diversity among employees through inclusive recruitment and leveraging language skills.

The committee's evaluation

While the self-assessment lists relevant equality and diversity policies, it lacks specific detail on how broader aspects of equality and diversity are actualised within the research environment, and how they are integrated into the research itself. The administrative unit appears to be working towards retaining a balance of people with reference to a range of protected characteristics (i.e. not confined to sex/gender), which sets the administrative unit apart.

The committee's recommendations

- It is recommended that a more detailed specification on how broader aspects of equality and diversity are addressed in both the research environment and how this is integrated into the research itself is undertaken.

4. Relevance to institutional and sectorial purposes

Introduction

The administrative unit has primarily focused on clinical research, while also making significant contributions to the knowledge base in general. In line with its research strategy, the administrative unit has conducted high-quality patient-centric research that have had a significant impact on clinical practice. The RCTs coordinated by the administrative unit have led to ground-breaking research changing national and international treatment recommendations. Also, non-pharmacological research, e.g., studies showing that exercise is beneficial for disease symptoms and well tolerated, has been conducted. In the last years, studies evaluating ways to achieve sustainable healthcare services for the future by utilising digital technology, machine learning and remote care have been initiated by the administrative unit.

The administrative unit's practices for innovation and commercialisation have developed over the years from sporadic initiatives into the current structured organisation. The administrative unit prioritises innovation, aligning with strategic goals outlined in its research strategy. Strategic goals also emphasise specifying the innovation potential in research projects and pursuing opportunities for innovation, contributing valuable insights to enhance patient outcomes and advance overall healthcare services.

The increasing number of applications for funding of innovation activity as well as the rise in innovation activities and projects clearly demonstrates a growing motivation among the research staff in being involved in, and in conducting, innovation and commercialisation activities. Two of the work packages have developed innovative projects focusing on task shifting among healthcare personnel, innovative remote healthcare services and follow-up and whether digital strategies can enhance patients' ability to cope with their disease. The administrative unit has one representative in the secretariat and has recently taken over the responsibility of this within the hospital's Innovation Board.

Diakonhjemmet hospital has two internal Research and Innovation Funds, and the administrative unit has received funding for several projects from these two funds. In 2022 the hospital's administration initiated a collaboration with a private company (Inven 2) that supports and facilitates commercialisation processes on behalf of the hospital.

The committee's evaluation

The self-assessment cites credible pathways to impact. However, there is little information on tangible, measurable benefit accruing from the research (improved health outcomes for populations outside the research projects would be an obvious metric to investigate). Likewise with commercialisation – there are robust potential pathways to commercialisation but no indication of measurable benefit, including financial gain for the administrative unit. The self-assessment lacks detail on how research staff are practically supported (beyond the policies) by the administrative unit to undertake innovation and commercialisation activities. The self-assessment lacks detail on engagement, involvement, and participation of citizens in the activities of the administrative unit.

The committee's recommendations

- Identify tangible measurable benefits stemming from the research. Indicate measurable benefits including financial gains from commercialisation pathways.

4.1 Health trusts

The significant individual and societal impact of rheumatic and musculoskeletal diseases underlines the need for comprehensive and coordinated actions to enhance patient outcomes.

The commitment to high-quality clinical intervention studies, reflects a dedication to generating evidence-based healthcare and contributing to transformative changes in clinical practice. Concurrently, the commitment to innovative research and method development underscores a dedication to creating novel, beneficial knowledge for the well-being of patients and society.

An important ambition, fulfilled in 2022, to become a Centre for Clinical Treatment Research with funding from the Norwegian Research Council highlights the administrative unit's robust research infrastructure and capacity for conducting clinical intervention studies.

Research within the administrative unit encompasses diverse aspects, such as personalised medicine, exploring the optimal utilisation of existing drugs for inflammatory diseases, innovative approaches for patient follow-up using new health technologies, alternative surgical methods, rehabilitation and exercise interventions, and remote monitoring and data capture contributing to a modern and efficient healthcare service in the field. Several results and publications are included in best practice guidelines and have contributed to changing treatment and clinical practice which is also highlighted in the impact cases.

The administrative unit places significant emphasis on patient research partner involvement in planning and implementing clinical studies, service, and product innovation, reflecting a commitment to ensuring that research results are perceived as meaningful and relevant to patients. The close collaboration and involvement of patient research partner and patient organisations also contribute to the expedited implementation of research findings.

The great amount of research projects conducted at the administrative unit enables master students and medical students to become involved in and writing their thesis on data from ongoing projects. At Oslo Metropolitan University, projects from the administrative unit are presented at a yearly meeting ("Mastertorg") where master students can choose from eligible research questions in ongoing projects. The administrative unit also has a long tradition of recruiting medical students as scientific assistants, leading to further recruitment into PhD programmes. Several master students from the University of Oslo and Oslo Metropolitan University have been recruited to PhD-positions at the administrative unit.

The committee's evaluation

REMEDY is centred around 'Patient-centric research that improves clinical practice.' The establishment of a robust interdisciplinary research environment and collaboration with national and international partners ensures a comprehensive approach to addressing research questions related to rheumatic and

musculoskeletal diseases. Additionally, the commitment to internal and external collaboration with various stakeholders, including healthcare institutions, academic societies and environments, industry, and business, demonstrates a holistic approach to fostering innovation and improving treatment.

The committee's recommendations

- It is recommended that the strategic orientation continues to secure integration of patient care pathways with high quality clinical trials with the approach to advance treatment and healthcare using the limited resources of healthcare wisely.

5. Relevance to society

Introduction

The administrative unit's research on rheumatic and musculoskeletal disorders directly resonates with national long-term plan for research and higher education, both the last plan from 2019-2028. As for the UN sustainable Development Goals (SDG), the administrative unit prioritises high quality health and medical research which advances scientific understanding (SDG 3), fosters treatment innovation (SDG 9) and educates healthcare professionals (SDG 4), with a sustainable approach supporting responsible consumption (SDG 12) and climate action (SDG 13). The administrative unit has several projects which aim to support the sustainability of the healthcare sector and reduce the carbon emissions associated with travelling to hospital visits including innovative remote care projects.

The committee's comments on impact case 1 - The ARCTIC trial – treatment strategies in rheumatoid arthritis

This impact case focuses on how ultrasound and MRI are used to diagnose the severity of inflammatory joint disease and also how ultrasound is used in conjunction with intraarticular injections. Improving the dosage of disease modifying drugs is also important in order to use resources wisely while maintaining treatment efficacy.

Underpinning research:

A randomised controlled trial (RCT) assessing whether a treatment strategy incorporating structured ultrasound assessment led to improved outcomes in rheumatoid arthritis (RA), compared with a conventional approach. Additionally, the study provided a unique opportunity to investigate the impact of modern treatment recommendations in an inception cohort of treatment-naïve early RA patients. The ARCTIC REWIND trial was designed in a continuum of the ARCTIC trial, assessing tapering and withdrawal of disease-modifying antirheumatic drugs in patients reaching remission.

The concrete impact of this case is a change in current recommendations regarding the use of ultrasound in the management of RA. Systematic ultrasound use in early RA follow-up, according to current recommendations, is not justified. The study revealed higher inflammatory activity in seronegative patients at diagnosis, challenging the perception of seronegative RA as less severe. This study also showed similar disease courses but slower treatment responses in seronegative patients. Further, ultrasound guidance did not outperform palpation guidance. The predictive value of MRI and ultrasound is questioned. Finally, the results of this research indicated that half-dose csDMARD therapy lacked non-inferiority for preventing flares over 12 months, advising against this approach.

The committee's comments on impact case 2 - The ESspA-study – paving the way for high intensity aerobic exercise in patients with inflammatory joint diseases

Inflammatory joint diseases (IJDs) are characterised by systemic inflammation, joint pain, fatigue and dysfunction, often alongside an array of comorbidities. Exercise recommendations have traditionally favoured gentle exercises. However, given the

elevated risk of cardiovascular diseases (CVD) following IJDs, cardiorespiratory exercise has emerged as a potential disease modifying treatment alternative, capable of modulating both inflammatory and CVD pathways.

The underpinning research was threefold: 1) Physical fitness in patients with axial spondylarthritis (axSpA) was explored in a cross-sectional study 2) Large multicentre RCT including 100 patients with axSpA 3) To examine the effects of HIIT on cardiorespiratory fitness, CVD risk and disease activity in patients with IJDs.

The concrete impact of this case is that axSpA patients had significantly lower VO₂ peak than matched healthy controls, disease activity was inversely associated with VO₂ peak in patients and cardiorespiratory fitness was associated with favourable levels of CV risk factors in patients and controls. There are significant, beneficial effects of high intensity interval training (HIIT) on disease activity, inflammation, physical function and CV-health. More effective non-pharmacological treatment for patients with IJD, targeting both inflammatory and CVD pathways were developed.

The committee's comments on impact case 3 - NOR- SWITCH – driving the switch from originator to biosimilar infliximab

Due to the high costs associated with biological drugs, healthcare systems in many countries have been unable to adopt such treatment for patients with immune mediated inflammatory diseases. The NOR-SWITCH study opened the doors to biosimilar medicines, about which there were previously much scepticism. The fact that the study had many participants, was fully funded through Norway's government and had no ties to the pharmaceutical industry helped give the study credibility. In countries with a weak economy, the patients have an equally great need for biological medicines but cannot afford them. The acceptance of biosimilars, which the NOR-SWITCH study helped bring about, is now changing that.

The NOR-SWITCH study examined switching from originator infliximab (a tumour necrosis factor inhibitor) to biosimilar CT-P13 regarding efficacy, safety, and immunogenicity.

This is a good impact case since the study was a randomised, non-inferiority, double-blind, phase 4 trial with 52 weeks follow-up. Switching from infliximab originator to CT-P13 was not inferior to continued treatment with originator according to a prespecified 15% non-inferiority margin. The study was not powered to show non-inferiority in individual diseases.

The committee's comments on impact case 4 - The NOR-DRUM trials – proactive therapeutic monitoring of tumour necrosis factor inhibitors in patients with immune-mediated inflammatory diseases

The randomised NOR-DRUM trials were the first to investigate TDM (therapeutic drug monitoring) effectiveness across all indications for the TNFi infliximab during induction and maintenance treatment. By showing a benefit of proactive TDM, results from these trials are already leading to a change in clinical practice.

The NOR-DRUM trials were the first randomised clinical trials to compare the effectiveness of proactive TDM to standard infliximab therapy across patients with immune-mediated inflammatory diseases. The NOR-DRUM A trial assessed the use of TDM during induction treatment, while the NOR-DRUM B trial assessed TDM

during maintenance treatment. Both trials were randomised, parallel-group, open-label clinical trials, carried out in 21 Norwegian hospitals.

This is a good impact case since it studies biologic drugs with TNF inhibitors (TNFi) being the cornerstone therapies, having improved outcomes of inflammatory diseases. Many patients do not respond to treatment or lose response over time. Response to TNFi is related to serum drug levels and formation of anti-drug antibodies, which vary significantly among patients given the same dose. Thus, prescribing a standard dose in all patients may lead to both under- and overtreatment of patients.

Appendices

Evaluation of Medicine and health 2023-2024

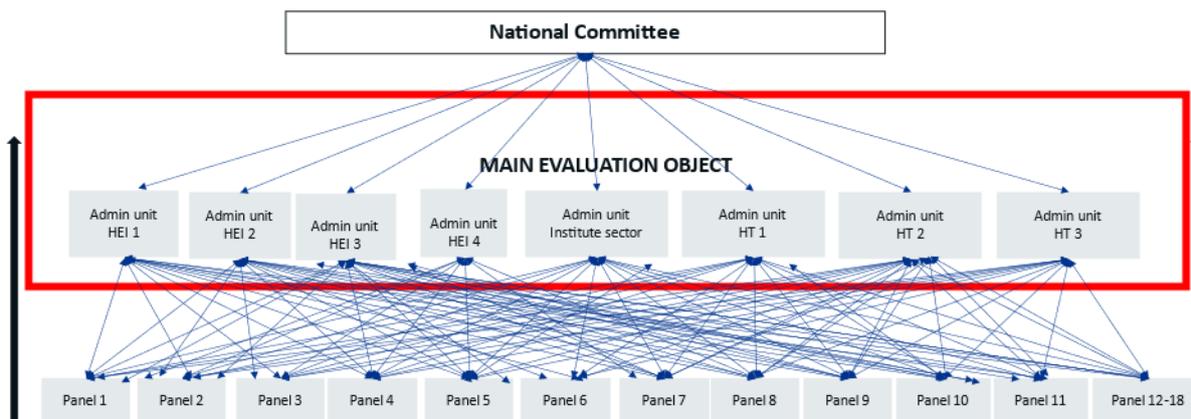
By evaluating Norwegian research and higher education we aim to enhance the quality, relevance, and efficiency. In accordance with the statutes of the Research Council of Norway (RCN), the RCN evaluates Norwegian professional environments to create a solid and up-to-date knowledge base about Norwegian research and higher education in an international perspective.

The evaluation of life sciences is conducted in 2022-2024. The evaluation of medicine takes place in 2023-2024. The evaluation of biosciences was carried out in 2022-2023. The primary aim of the evaluation of life sciences is to reveal and confirm the quality and the relevance of research performed at Norwegian Higher Education Institutions (HEIs), the institute sector and the health trusts. The evaluation shall result in recommendations to the institutions, the RCN and the ministries.

Evaluation of medicine and health (EVALMEDHELSE) 2023-2024

The evaluation of medicine and health includes sixty-eight administrative units (e.g., faculty, department, institution, center, division) which are assessed by evaluation committees according to sectorial affiliation and other relevant similarities between the units. The administrative units enrolled their research groups (315) to eighteen expert panels organised by research subjects or themes and assessed across institutions and sectors.

Organisation of evaluation of medicine and health 2023-2024



The institutions have been allowed to adapt the evaluation mandate (Terms of Reference) to their own strategic goals. This is to ensure that the results of the evaluation will be useful for the institution's own strategic development. The administrative unit together with the research group(s) selects an appropriate benchmark for each of the research group(s).

The Research Council of Norway has commissioned an external evaluation secretariat at Technopolis Group for the implementation of the evaluation process.

Each institution/administrative unit is responsible for following up the recommendations that apply to their own institution/administrative unit. The Research Council will use the results from the evaluation in the development of funding instruments and as a basis for advice to the Government.

The web page for the evaluation of medicine and health 2023-2024: [Evaluation of medicine and health sciences \(forskingsradet.no\)](https://forskingsradet.no)

Se vedlagte adresseliste

Vår saksbehandler / tlf.	Vår ref.	Deres ref.	Sted
Hilde G. Nielsen/40922260	23/3056	[Ref.]	Lysaker 28.4.2023

Invitasjon til å delta i fagevaluering av medisin og helsefag (EVALMEDHELSE) 2023-2024

Vi viser til varsel om oppstart av nye evalueringer sendt institusjonenes ledelse 9. november 2021 (vedlegg 2).

Porteføljestyret for livsvitenskap har vedtatt å gjennomføre fagevaluering av livsvitenskap 2022-2024 som to evalueringer:

- Evaluering av biovitenskap (EVALBIOVIT) (2022-2023)
- Evaluering av medisin og helsefag (EVALMEDHELSE) (2023-2024)

Hovedmålet med fagevalueringen av livsvitenskap 2022-2024 er å vurdere kvalitet og rammebetingelser for livsvitenskapelig forskning i Norge, samt forskningens relevans for sentrale samfunnsområder. Evalueringen skal resultere i anbefalinger til institusjonene, til Forskningsrådet og til departementene. Den forrige fagevalueringen av biologi, medisin og helsefag ble gjennomført i 2010/2011 (vedlegg 3).

Fagevaluering av livsvitenskap retter seg mot UH-sektor, helseforetak og instituttsektor (vedlegg 4). Forskningsrådet forventer at aktuelle forskningsmiljøer deltar i evalueringene, selv om beslutning om deltagelse gjøres ved den enkelte institusjon. Videre ber vi om at deltakende institusjoner setter av tilstrekkelig med ressurser til å delta i evalueringsprosessen, og at institusjonen oppnevner minst én representant som kontaktperson for Forskningsrådet.

Invitasjon til å delta i fagevaluering av medisin og helsefag (2023-2024)

Fagevaluering av medisin og helsefag er organisert over to nivåer (vedlegg 4, side 11). Internasjonale ekspertpaneler vil evaluere forskergrupper på tvers av fag, disiplin og forskningssektorer (UH, institutt og helseforetak) etter kriteriene beskrevet i kapittel 2 i evalueringsprotokollen (vedlegg 4).

Panelrapporten(e) for forskergruppene vil inngå i bakgrunnsdokumentasjonen til forskergruppen(e)s administrative enhet (hovedevalueringsobjektet i evaluering), og som vil bli evaluert i internasjonale

sektorspesifikke evalueringskomiteer. Evalueringskriteriene for administrative enheter er beskrevet i kapittel 2 i evalueringsprotokollen (vedlegg 4).

Innmelding av administrative enheter og forskergrupper – frist 6. juni 2023

Administrative enheter (hovedevalueringssubjektet i evalueringen) – skjema 1

Forskningsrådet inviterer institusjonene til å melde inn sine administrative enhet/er ved å fylle ut skjema 1. Definisjonen av en administrativ enhet i denne evalueringen er å finne på side 3 (kap 1.1) i evalueringsprotokollen (vedlegg 4). Ved innmelding av administrativ/e enhet/er anbefaler Forskningsrådet institusjonene til å se innmelding av administrativ enhet/er i sammenheng med tilpasning av mandat for den administrative enheten (Appendix A i evalueringsprotokollen).

Forskergrupper – skjema 2

Forskningsrådet ber de administrative enheter om å melde inn forskergrupper i tråd med forskergruppedefinisjonen (kap 1.1) og minimumskravene beskrevet i kapittel 1.2 i evalueringsprotokollen. Hver administrative enhet melder inn sin/e forskergruppe/r ved å fylle ut Skjema 2. Vi ber også om at forskergruppene innplasseres i den tentative fagpanelinndelingen for EVALMEDHELSE (vedlegg 5).

Forskningsrådet vil ferdigstille panelstruktur og avgjøre den endelige fordelingen av forskergruppene på fagpaneler etter at alle forskergrupper er meldt inn. Mer informasjon vil bli sendt i slutten av juni 2023.

Invitasjon til å foreslå eksperter – skjema 3

Forskningsrådet inviterer administrative enheter og forskergrupper til å spille inn forslag til eksperter som kan inngå i evalueringskomitéene og i ekspertpanelene. Hver evalueringskomité vil bestå av 7-9 komitémedlemmer, mens hvert ekspertpanel vil bestå av 5-7 eksperter.

Obs. Det er to faner i regnearket:

- FANE 1 – forslag til medlemmer til evalueringskomitéene. Medlemmene i evalueringskomitéene skal inneha bred vitenskapelig kompetanse, både faglig kompetanse og andre kvalifikasjoner som erfaring med ledelse, strategi- og evalueringsarbeid og kunnskapsutveksling.
- FANE 2 – forslag til medlemmer til ekspertpanelene. Medlemmene i ekspertpanelene skal være internasjonalt ledende eksperter innen medisin og helsefaglig forskning og innovasjon.

Utfylte skjemaer (3 stk):

- innmelding av administrative enhet/er (skjema 1)
- innmelding av forskergruppe/er (skjema 2)
- forslag til eksperter (skjema 3)

sendes på epost til evalmedhelse@forskningsradet.no **innen 6. juni 2023.**

Tilpasning av mandat – frist 30. september 2023

Forskningsrådet ber med dette administrative enheter om å tilpasse mandatet (vedlegg 4) ved å opplyse om egne strategiske mål og andre lokale forhold som er relevant for evalueringen.

Tilpasningen gjøres ved å fylle inn de åpne punktene i malen (Appendix A). Utfylt skjema sendes på epost til evalmedhelse@forskningsradet.no innen 30. september 2023.

Digitalt informasjonsmøte 15. mai 2023, kl. 14.00-15.00.

Forskningsrådet arrangerer et digitalt informasjonsmøte for alle som ønsker å delta i EVALMEDHELSE.

Påmelding til informasjonsmøtet gjøres her: [Fagevaluering av medisin og helsefag \(EVALMEDHELSE\) - Digitalt informasjonsmøte \(pameldingssystem.no\)](#) .

Nettsider

Forskningsrådet vil opprette en nettside på www.forskningsradet.no for EVALMEDHELSE hvor informasjon vil bli publisert fortløpende. [Her](#) kan dere lese om Fagevaluering av biovitenskap (EVALBIOVIT) 2022-2023. Fagevaluering av medisin og helsefag vil bli gjennomført etter samme modell.

Spørsmål vedrørende fagevaluering av medisin og helsefag kan rettes til Hilde G. Nielsen, hgn@forskningsradet.no eller mobil 40 92 22 60.

Med vennlig hilsen
Norges forskningsråd

Ole Johan Borge
avdelingsdirektør
Helse

Hilde G. Nielsen
spesialrådgiver
Helse

Dokumentet er elektronisk godkjent og signert og har derfor ikke håndskrevne signaturer.

Kopi

Helse- og omsorgsdepartementet
Kunnskapsdepartementet

Vedlegg

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2. Nye fagevalueringer – varsel om oppstart november 2021
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8. Skjema 3 – Forslag til internasjonale eksperter til evalueringskomiteene og ekspertpanelene
9. Appendix A – word format

Evaluation of life sciences in Norway 2022-2023

LIVSEVAL protocol version 1.0

By decision of the Portfolio board for life sciences April 5., 2022

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The Research Council of Norway
Visiting address: Drammensveien 288
P.O. Box 564
NO-1327 Lysaker

Telephone: +47 22 03 70 00

Telefax: +47 22 03 70 01

post@rcn.no

www.rcn.no

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Oslo, 5 April 2022

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1 Introduction

Research assessments based on this protocol serve different aims and have different target groups. The primary aim of the evaluation of life sciences is to reveal and confirm the quality and the relevance of research performed at Norwegian Higher Education Institutions (HEIs), and by the institute sector and regional health authorities and health trusts. These institutions will hereafter be collectively referred to as Research Performing Organisations (RPOs). The assessments should serve a formative purpose by contributing to the development of research quality and relevance at these institutions and at the national level.

1.1 Evaluation units

The assessment will comprise a number of *administrative units* submitted for evaluation by the host institution. By assessing these administrative units in light of the goals and strategies set for them by their host institution, it will be possible to learn more about how public funding is used at the institution(s) to facilitate high-quality research and how this research contributes to society. The administrative units will be assessed by evaluation committees according to sectoral affiliation and/or other relevant similarities between the units.

The administrative units will be invited to submit data on their *research groups* to be assessed by expert panels organised by research subject or theme. See Chapter 3 for details on organisation.

<i>Administrative unit</i>	An administrative unit is any part of an RPO that is recognised as a formal (administrative) unit of that RPO, with a designated budget, strategic goals and dedicated management. It may, for instance, be a university faculty or department, a department of an independent research institute or a hospital.
<i>Research group</i>	Designates groups of researchers within the administrative units that fulfil the minimum requirements set out in section 1.2. Research groups are identified and submitted for evaluation by the administrative unit, which may decide to consider itself a single research group.

1.2 Minimum requirements for research groups

- 1) The research group must be sufficiently large in size, i.e. at least five persons in full-time positions with research obligations. This merely indicates the minimum number, and larger units are preferable. In exceptional cases, the minimum number may include PhD students, postdoctoral fellows and/or non-tenured researchers. *In all cases, a research group must include at least three full-time tenured staff.* Adjunct professors, technical staff and other relevant personnel may be listed as group members but may not be included in the minimum number.

- 2) The research group subject to assessment must have been established for at least three years. Groups of more recent date may be accepted if they have come into existence as a consequence of major organisational changes within their host institution.
- 3) The research group should be known as such both within and outside the institution (e.g. have a separate website). It should be able to document common activities and results in the form of co-publications, research databases and infrastructure, software, or shared responsibilities for delivering education, health services or research-based solutions to designated markets.
- 4) In its self-assessment, the administrative unit should propose a suitable benchmark for the research group. The benchmark will be considered by the expert panels as a reference in their assessment of the performance of the group. The benchmark can be grounded in both academic and extra-academic standards and targets, depending on the purpose of the group and its host institution.

1.3 The evaluation in a nutshell

The assessment concerns:

- research that the administrative unit and its research groups have conducted in the previous 10 years
- the research strategy that the administrative units under evaluation intend to pursue going forward
- the capacity and quality of research in life sciences at the national level

The Research Council of Norway (RCN) will:

- provide a template for the Terms of Reference¹ for the assessment of RPOs and a national-level assessment in life sciences
- appoint members to evaluation committees and expert panels
- provide secretarial services
- commission reports on research personnel and publications based on data in national registries
- take responsibility for following up assessments and recommendations at the national level.

RPOs conducting research in life sciences are expected to take part in the evaluation. The board of each RPO under evaluation is responsible for tailoring the assessment to its own strategies and specific needs and for following them up within their own institution. Each participating RPO will carry out the following steps:

- 1) Identify the administrative unit(s) to be included as the main unit(s) of assessment
- 2) Specify the Terms of Reference by including information on specific tasks and/or strategic goals of relevance to the administrative unit(s)

¹ The terms of reference (ToR) document defines all aspects of how the evaluation committees and expert panels will conduct the [research area] evaluation. It defines the objectives and the scope of the evaluation, outlines the responsibilities of the involved parties, and provides a description of the resources available to carry out the evaluation.

- 3) The administrative unit will, in turn, be invited to register a set of research groups that fulfil the minimum criteria specified above (see section 1.2). The administrative unit may decide to consider itself a single research group.
- 4) For each research group, the administrative unit should select an appropriate benchmark in consultation with the group in question. This benchmark can be a reference to an academic level of performance or to the group's contributions to other institutional or sectoral purposes (see section 2.4). The benchmark will be used as a reference in the assessment of the unit by the expert panel.
- 5) The administrative units subject to assessment must provide information about each of their research groups, and about the administrative unit as a whole, by preparing self-assessments and by providing additional documentation in support of the self-assessment.

1.4 Target groups

- Administrative units represented by institutional management and boards
- Research groups represented by researchers and research group leaders
- Research funders
- Government

The evaluation will result in recommendations to the institutions, the RCN and the ministries. The results of the evaluation will also be disseminated for the benefit of potential students, users of research and society at large.

This protocol is intended for all participants in the evaluation. It provides the information required to organise and carry out the research assessments. Questions about the interpretation or implementation of the protocol should be addressed to the RCN.

2 Assessment criteria

The administrative units are to be assessed on the basis of five assessment criteria. The five criteria are applied in accordance with international standards. Finally, the evaluation committee passes judgement on the administrative units as a whole in qualitative terms. In this overall assessment, the committee should relate the assessment of the specific tasks to the strategic goals that the administrative unit has set for itself in the Terms of Reference.

When assessing administrative units, the committees will build on a separate assessment by expert panels of the research groups within the administrative units. See Chapter 3 'Evaluation process and organisation' for a description of the division of tasks.

2.1 Strategy, resources and organisation

The evaluation committee assesses the framework conditions for research in terms of funding, personnel, recruitment and research infrastructure in relation to the strategic aims set for the administrative unit. The administrative unit should address at least the following five specific aspects in its self-assessment: 1) funding sources, 2) national and international cooperation, 3) cross-sector and interdisciplinary cooperation, 4) research careers and mobility, and 5) Open Science. These five aspects relate to how the unit organises and actually performs its research, its composition in terms of leadership and personnel, and how the unit is run on a day-to-day basis.

To contribute to understanding what the administrative unit can or should change to improve its ability to perform, the evaluation committee is invited to focus on factors that may affect performance.

Further, the evaluation committee assesses the extent to which the administrative unit's goals for the future remain scientifically and societally relevant. It is also assessed whether its aims and strategy, as well as the foresight of its leadership and its overall management, are optimal in relation to attaining these goals. Finally, it is assessed whether the plans and resources are adequate to implement this strategy.

2.2 Research production, quality and integrity

The evaluation committee assesses the profile and quality of the administrative unit's research and the contribution the research makes to the body of scholarly knowledge and the knowledge base for other relevant sectors of society. The committee also assesses the scale of the unit's research results (scholarly publications, research infrastructure developed by the unit, and other contributions to the field) and its contribution to Open Science (early knowledge and sharing of data and other relevant digital objects, as well as science communication and collaboration with societal partners, where appropriate).

The evaluation committee considers the administrative unit's policy for research integrity and how violations of such integrity are prevented. It is interested in how the unit deals with research data, data management, confidentiality (GDPR) and integrity, and the extent to which independent and critical pursuit of research is made possible within the unit. Research integrity relates to both the scientific integrity of conducted research and the professional integrity of researchers.

2.3 Diversity and equality

The evaluation committee considers the diversity of the administrative unit, including gender equality. The presence of differences can be a powerful incentive for creativity and talent development in a diverse administrative unit. Diversity is not an end in itself in that regard, but a tool for bringing together different perspectives and opinions.

The evaluation committee considers the strategy and practices of the administrative unit to prevent discrimination on the grounds of gender, age, disability, ethnicity, religion, sexual orientation or other personal characteristics.

2.4 Relevance to institutional and sectoral purposes

The evaluation committee compares the relevance of the administrative unit's activities and results to the specific aspects detailed in the Terms of Reference for each institution and to the relevant sectoral goals (see below).

Higher Education Institutions

There are 36 Higher Education Institutions in Norway that receive public funding from the Ministry for Education and Research. Twenty-one of the 36 institutions are owned by the ministry, whereas the last 15 are privately owned. The HEIs are regulated under the Act relating to universities and university colleges of 1 August 2005.

The purposes of Norwegian HEIs are defined as follows in the Act relating to universities and university colleges²

- provide higher education at a high international level;
- conduct research and academic and artistic development work at a high international level;
- disseminate knowledge of the institution's activities and promote an understanding of the principle of academic freedom and application of scientific and artistic methods and results in the teaching of students, in the institution's own general activity as well as in public administration, in cultural life and in business and industry.

In line with these purposes, the Ministry for Research and Education has defined four overall goals for HEIs that receive public funding. These goals have been applied since 2015:

- 1) High quality in research and education
- 2) Research and education for welfare, value creation and innovation
- 3) Access to education (esp. capacity in health and teacher education)
- 4) Efficiency, diversity and solidity of the higher education sector and research system

The committee is invited to assess to what extent the research activities and results of each administrative unit have contributed to sectoral purposes as defined above. In particular, the committee is invited to take the share of resources spent on education at the administrative units into account and to assess the relevance and contributions of research to education, focusing on the master's and PhD levels. This assessment should be distinguished from an

² <https://lovdata.no/dokument/NLE/lov/2005-04-01-15?q=universities>

assessment of the quality of education in itself, and it is limited to the role of research in fostering high-quality education.

Research institutes (the institute sector)

Norway's large institute sector reflects a practical orientation of state R&D funding that has long historical roots. The Government's strategy for the institute sector³ applies to the 33 independent research institutes that receive public basic funding through the RCN, in addition to 12 institutes outside the public basic funding system.

The institute sector plays an important and specific role in attaining the overall goal of the national research system, i.e. to increase competitiveness and innovation power to address major societal challenges. The research institutes' contributions to achieving these objectives should therefore form the basis for the evaluation. The main purpose of the sector is to conduct independent applied research for present and future use in the private and public sector. However, some institutes primarily focus on developing a research platform for public policy decisions, others on fulfilling their public responsibilities.

The institutes should:

- maintain a sound academic level, documented through scientific publications in recognised journals
- obtain competitive national and/or international research funding grants
- conduct contract research for private and/or public clients
- demonstrate robustness by having a reasonable number of researchers allocated to each research field

The committee is invited to assess the extent to which the research activities and results of each administrative unit contribute to sectoral purposes and overall goals as defined above. In particular, the committee is invited to assess the level of collaboration between the administrative unit(s) and partners in their own or other sectors.

The hospital sector

There are four regional health authorities (RHF) in Norway. They are responsible for the specialist health service in their respective regions. The RHF are regulated through the Health Enterprises Act of 15 June 2001 and are bound by requirements that apply to specialist and other health services, the Health Personnel Act and the Patient Rights Act. Under each of the regional health authorities, there are several health trusts (HF), which can consist of one or more hospitals. A health trust (HF) is wholly owned by an RHF.

Research is one of the four main tasks of hospital trusts.⁴ The three other main tasks are to ensure good treatment, education and training of patients and relatives. Research is important if the health service is to keep abreast of stay up-to-date with medical developments and carry out critical assessments of established and new diagnostic methods,

³ [Strategy for a holistic institute policy \(Kunnskapsdepartementet 2020\)](#)

⁴ Cf. the Specialist Health Services Act § 3-8 and the Health Enterprises Act §§ 1 and 2

treatment options and technology, and work on quality development and patient safety while caring for and guiding patients.

The committee is invited to assess the extent to which the research activities and results of each administrative unit have contributed to sectoral purposes as described above. The assessment does not include an evaluation of the health services performed by the services.

2.5 Relevance to society

The committee assesses the quality, scale and relevance of contributions targeting specific economic, social or cultural target groups, of advisory reports on policy, of contributions to public debates, and so on. The documentation provided as the basis for the assessment of societal relevance should make it possible to assess relevance to various sectors of society (i.e. business, the public sector, non-governmental organisations and civil society).

When relevant, the administrative units will be asked to link their contributions to national and international goals set for research, including the Norwegian Long-term Plan for Research and Higher Education and the UN Sustainable Development Goals. Sector-specific objectives, e.g. those described in the Development Agreements for the HEIs and other national guidelines for the different sectors, will be assessed as part of criterion 2.4.

The committee is also invited to assess the societal impact of research based on case studies submitted by the administrative units and/or other relevant data presented to the committee. Academic impact will be assessed as part of criterion 2.2.

3 Evaluation process and organisation

The RCN will organise the assessment process as follows:

- Commission a professional secretariat to support the assessment process in the committees and panels, as well as the production of self-assessments within each RPO
- Commission reports on research personnel and publications within life sciences based on data in national registries
- Appoint one or more evaluation committees for the assessment of administrative units.
- Divide the administrative units between the appointed evaluation committees according to sectoral affiliation and/or other relevant similarities between the units.
- Appoint a number of expert panels for the assessment of research groups submitted by the administrative units.
- Divide research groups between expert panels according to similarity of research subjects or themes.
- Task the chairs of the evaluation committees with producing a national-level report building on the assessments of administrative units and a national-level assessments produced by the expert panels.

Committee members and members of the expert panels will be international, have sufficient competence and be able, as a body, to pass judgement based on all relevant assessment criteria. The RCN will facilitate the connection between the assessment levels of panels and committees by appointing committee members as panel chairs.

3.1 Division of tasks between the committee and panel levels

The expert panels will assess research groups across institutions and sectors, focusing on the first two criteria specified in Chapter 2: 'Strategy, resources and organisation' and 'Research production and quality' The assessments from the expert panels will also be used as part of the evidence base for a report on Norwegian research within life sciences (see section 3.3).

The evaluation committees will assess the administrative units based on all the criteria specified in Chapter 2. The assessment of research groups delivered by the expert panels will be a part of the evidence base for the committees' assessments of administrative units. See figure 1 below.

The evaluation committee has sole responsibility for the assessments and any recommendations in the report. The evaluation committee reaches a judgement on the research based on the administrative units and research groups' self-assessments provided by the RPOs, any additional documents provided by the RCN, and interviews with representatives of the administrative units. The additional documents will include a standardised analysis of research personnel and publications provided by the RCN.

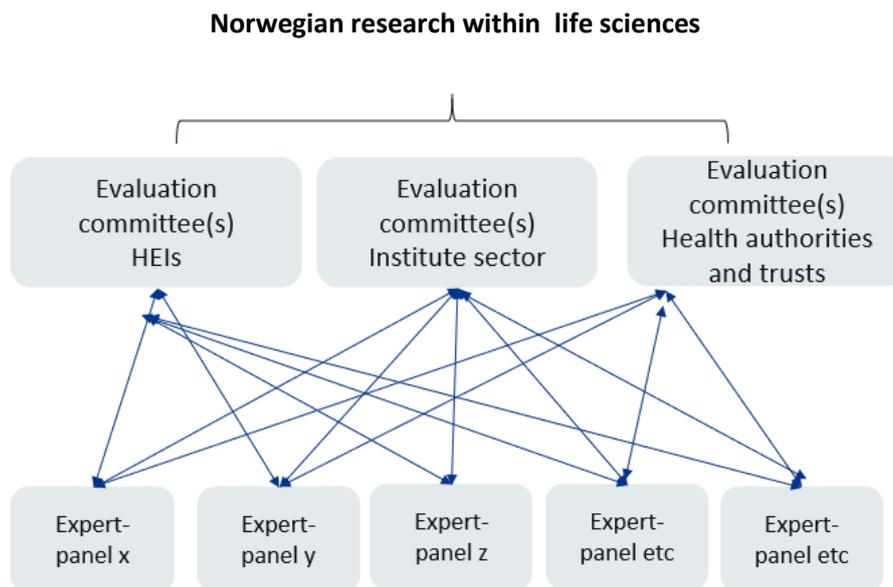


Figure 1. Evaluation committees and expert panels

The evaluation committee takes international trends and developments in science and society into account when forming its judgement. When judging the quality and relevance of the research, the committees shall bear in mind the specific tasks and/or strategic goals that the administrative unit has set for itself including sectoral purposes (see section 2.4 above).

3.2 Accuracy of factual information

The administrative unit under evaluation should be consulted to check the factual information before the final report is delivered to the RCN and the board of the institution hosting the administrative unit.

3.3 National level report

Finally, the RCN will ask the chairs of the evaluation committees to produce a national-level report that builds on the assessments of administrative units and the national-level assessments produced by the expert panels. The committee chairs will present their assessment of Norwegian research in life sciences at the national level in a separate report that pays specific attention to:

- Strengths and weaknesses of the research area in the international context
- The general resource situation regarding funding, personnel and infrastructure
- PhD training, recruitment, mobility and diversity
- Research cooperation nationally and internationally
- Societal impact and the role of research in society, including Open Science

This national-level assessment should be presented to the RCN.

Appendix A: Terms of References (ToR)

[Text in red to be filled in by the Research-performing organisations (RPOs)]

The board of [RPO] mandates the evaluation committee appointed by the Research Council of Norway (RCN) to assess [administrative unit] based on the following Terms of Reference.

Assessment

You are asked to assess the organisation, quality and diversity of research conducted by [administrative unit] as well as its relevance to institutional and sectoral purposes, and to society at large. You should do so by judging the unit's performance based on the following five assessment criteria (a. to e.). Be sure to take current international trends and developments in science and society into account in your analysis.

- a) Strategy, resources and organisation
- b) Research production, quality and integrity
- c) Diversity and equality
- d) Relevance to institutional and sectoral purposes
- e) Relevance to society

For a description of these criteria, see Chapter 2 of the life sciences evaluation protocol. Please provide a written assessment for each of the five criteria. Please also provide recommendations for improvement. We ask you to pay special attention to the following [n] aspects in your assessment:

1. ...
2. ...
3. ...
4. ...
- ...

[To be completed by the board: specific aspects that the evaluation committee should focus on – they may be related to a) strategic issues, or b) an administrative unit's specific tasks.]

In addition, we would like your report to provide a qualitative assessment of [administrative unit] as a whole in relation to its strategic targets. The committee assesses the strategy that the administrative unit intends to pursue in the years ahead and the extent to which it will be capable of meeting its targets for research and society during this period based on available resources and competence. The committee is also invited to make recommendations concerning these two subjects.

Documentation

The necessary documentation will be made available by the **life sciences** secretariat at Technopolis Group.

The documents will include the following:

- a report on research personnel and publications within life sciences commissioned by RCN
- a self-assessment based on a template provided by the life sciences secretariat
- **[to be completed by the board]**

Interviews with representatives from the evaluated units

Interviews with the **[administrative unit]** will be organised by the evaluation secretariat. Such interviews can be organised as a site visit, in another specified location in Norway or as a video conference.

Statement on impartiality and confidence

The assessment should be carried out in accordance with the *Regulations on Impartiality and Confidence in the Research Council of Norway*. A statement on the impartiality of the committee members has been recorded by the RCN as a part of the appointment process. The impartiality and confidence of committee and panel members should be confirmed when evaluation data from **[the administrative unit]** are made available to the committee and the panels, and before any assessments are made based on these data. The RCN should be notified if questions concerning impartiality and confidence are raised by committee members during the evaluation process.

Assessment report

We ask you to report your findings in an assessment report drawn up in accordance with a format specified by the life sciences secretariat. The committee may suggest adjustments to this format at its first meeting. A draft report should be sent to the **[administrative unit]** and RCN by [date]. The **[administrative unit]** should be allowed to check the report for factual inaccuracies; if such inaccuracies are found, they should be reported to the life sciences secretariat no later than two weeks after receipt of the draft report. After the committee has made the amendments judged necessary, a corrected version of the assessment report should be sent to the board of **[the RPO]** and the RCN no later than two weeks after all feedback on inaccuracies has been received from **[administrative unit]**.

Appendix B: Data sources

The lists below shows the most relevant data providers and types of data to be included in the evaluation. Data are categorised in two broad categories according to the data source: National registers and self-assessments prepared by the RFOs. The RCN will commission an analysis of data in national registers (R&D-expenditure, personnel, publications etc.) to be used as support for the committees' assessment of administrative units. The analysis will include a set of indicators related to research personnel and publications.

- **National directorates and data providers**
- Norwegian Directorate for Higher Education and Skills (HK-dir)
- Norwegian Agency for Quality Assurance in Education (NOKUT)
- Norwegian Agency for Shared Services in Education and Research (SIKT)
- Research Council of Norway (RCN)
- Statistics Norway (SSB)

National registers

- 1) R&D-expenditure
 - a. SSB: R&D statistics
 - b. SSB: Key figures for research institutes
 - c. HK-dir: Database for Statistics on Higher Education (DBH)
 - d. RCN: Project funding database (DVH)
 - e. EU-funding: eCorda
- 2) Research personnel
 - a. SSB: The Register of Research personnel
 - b. SSB: The Doctoral Degree Register
 - c. RCN: Key figures for research institutes
 - d. HK-dir: Database for Statistics on Higher Education (DBH)
- 3) Research publications
 - a. SIKT: Cristin - Current research information system in Norway
 - b. SIKT: Norwegian Infrastructure for Bibliometrics
(full bibliometric data incl. citations and co-authors)
- 4) Education
 - a. HK-dir/DBH: Students and study points
 - b. NOKUT: Study barometer
 - c. NOKUT: National Teacher Survey
- 5) Sector-oriented research
 - a. RCN: Key figures for research institutes
- 6) Patient treatments and health care services
 - a. Research & Innovation expenditure in the health trusts
 - b. Measurement of research and innovation activity in the health trusts
 - c. Collaboration between health trusts and HEIs
 - d. Funding of research and innovation in the health trusts
 - e. Classification of medical and health research using HRCS (HO21 monitor)

Self-assessments

1) Administrative units

- a. *Self-assessment covering all assessment criteria*
- b. Administrative data on funding sources
- c. Administrative data on personnel
- d. Administrative data on the division of staff resources between research and other activities (teaching, dissemination etc.)
- e. Administrative data on research infrastructure and other support structures
- f. SWOT analysis
- g. Any supplementary data needed to assess performance related to the strategic goals and specific tasks of the unit

2) Research groups

- a. *Self-assessment covering the first two assessment criteria (see Table 1)*
- b. Administrative data on funding sources
- c. Administrative data on personnel
- d. Administrative data on contribution to sectoral purposes: teaching, commissioned work, clinical work [will be assessed at committee level]
- e. Publication profiles
- f. Example publications and other research results (databases, software etc.)
The examples should be accompanied by an explanation of the groups' specific contributions to the result
- g. Any supplementary data needed to assess performance related to the benchmark defined by the administrative unit

The table below shows how different types of evaluation data may be relevant to different evaluation criteria. Please note that the self-assessment produced by the administrative units in the form of a written account of management, activities, results etc. should cover all criteria. A template for the self-assessment of research groups and administrative units will be commissioned by the RCN from the life sciences secretariat for the evaluation.

Table 1. Types of evaluation data per criterion

Criteria	Evaluation units	Research groups	Administrative units
Strategy, resources and organisation		Self-assessment Administrative data	Self-assessment National registers Administrative data SWOT analysis
Research production and quality		Self-assessment Example publications (and other research results)	Self-assessment National registers
Diversity, equality and integrity			Self-assessment National registers Administrative data
Relevance to institutional and sectoral purposes			Self-assessment Administrative data
Relevance to society			Self-assessment National registers Impact cases
Overall assessment		<i>Data related to: Benchmark defined by administrative unit</i>	<i>Data related to: Strategic goals and specific tasks of the admin. unit</i>



Evaluation of Medicine and Health (EVALMEDHELSE) 2023-2024

Self- assessment for administrative units

Date of dispatch: **15 September 2023**
Deadline for submission: **31 January 2024**

Institution (name and short name): _____

Administrative unit (name and short name): _____

Date: _____

Contact person: _____

Contact details (email): _____

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Introduction

The primary aim of the evaluation is to reveal and confirm the quality and the relevance of research performed at Norwegian Higher Education Institutions (HEIs), the institute sector and the health trusts. These institutions will henceforth be collectively referred to as research performing organisations (RPOs). The evaluation report(s) will provide a set of recommendations to the RPOs, the Research Council of Norway (RCN) and the responsible and concerned ministries. The results of the evaluation will also be disseminated for the benefit of potential students, users of research and society at large.

You have been invited to complete this self-assessment as an administrative unit. The self-assessment contains questions regarding the unit's research- and innovation related activities and developments over years 2012-2022. All submitted data will be evaluated by international evaluation committees. The administrative unit's research groups will be assessed by international expert panels who report their assessment to the relevant evaluation committee.

Deadline for submitting self- assessments to the Research Council of Norway – 31 January 2024

As an administrative unit you are responsible for collecting completed self-assessments for each of the research groups that belong to the administrative unit. The research groups need to submit their completed self-assessment to the administrative unit no later than 26 January 2024. The administrative unit will submit the research groups' completed self-assessments and the administrative unit's own completed self-assessment to the Research Council within 31 January 2024.

Please use the following format when naming your document: name of the institution and short name of the administrative unit, e.g. *NTNU_FacMedHealthSci* and send it to evalmedhelse@forskningsradet.no within 31 January 2024.

For questions concerning the self-assessment or EVALMEDHELSE in general, please contact RCN at evalmedhelse@forskningsradet.no.

Thank you!

Guidelines for completing the self-assessment

- Please read the entire self-assessment document before answering.
- The evaluation language is English.
- Please be sure that all documents which are linked to in the self- assessment are in English and are accessible.
- The page format must be A4 with 2 cm margins, single spacing and Calibri and 11-point font.
- The self-assessment follows the same structure as the [evaluation protocol](#). In order to be evaluated on all criteria, the administrative unit must answer all questions.
- Information should be provided by link to webpages i.e. strategy and other planning documents.
 - Provide information – provide documents and other relevant data or figures about the administrative unit, for example strategy and other planning documents.
 - Describe – explain and present using contextual information about the administrative unit and inform the reader about the administrative unit.
 - Reflect – comment in a reflective and evaluative manner how the administrative unit operates.
- Data on personnel should refer to reporting to DBH on 1 October 2022 for HEIs and to the yearly reporting for 2022 for the institute sector and the health trusts. Other data should refer to 31 December 2022, if not specified otherwise.
- Questions in 4.3c should **ONLY** be answered by administrative units responsible for the Cand.med. degree programme, cf. [Evaluation of the Professional programme in Medicine \(NOKUT\)](#).
- It is possible to extend the textboxes when filling in the form. **NB!** A completed self- assessment cannot exceed 50 pages (pdf file) excluding question 4.3.c. The evaluation committees are not requested to read more than the maximum of 50 pages. Pages exceeding maximum limit of 50 pages **might not** be evaluated.
- Submit the self- assessment as a pdf (max 50 pages). Before submission, please be sure that all text are readable after the conversion of the document to pdf. The administrative unit is responsible for submitting the self-assessment of the administrative unit together with the self-assessments of the belonging research group(s) to evalmedhelse@forskningsradet.no within **31 January 2024**.

Please note that information you write in the self- assessment and the links to documents/webpages in the self- assessment are the only available information (data material) for the evaluation committee.

In exceptional cases, documents/publications that are not openly available must be submitted as attachment(s) to the self- assessment (pdf file(s)).

1.Strategy, resources and organisation

1.1 Research strategy

Describe the main strategic goals for research and innovation of the administrative unit. You may include the following:

- How are these goals related to institutional strategies and scientific priorities?
- Describe how the administrative unit's strategies and scientific priorities are related to the "specific aspects that the evaluation committee should focus on" indicated in your Terms of Reference (ToR)
- Describe the main fields and focus of research and innovation in the administrative unit
- Describe the planned research-field impact; planned policy impact and planned societal impact
- Describe how the strategy is followed-up in the allocation of resources and other measures
- Describe the most important occasions where priorities are made (i.e., announcement of new positions, applying for external funding, following up on evaluations)
- If there is no research strategy – please explain why

Table 1. Administrative unit`s strategies

For each category present up to 5 documents which are most relevant for the administrative unit. Please delete lines which are not in use.

Research strategy		
No.	Title	Link
1		
2		
3		
4		
5		
Outreach strategies		
No.	Title	Link
1		
2		
3		
4		
5		
Open science policy		
No.	Title	Link
1		
2		
3		
4		
5		

1.2 Organisation of research

a) Describe the organisation of research and innovation activities/projects at the administrative unit, including how responsibilities for research and other purposes (education, knowledge exchange, patient treatment, researcher training, outreach activities etc.) are distributed and delegated.

b) Describe how you work to maximise synergies between the different purposes of the administrative unit (education, knowledge exchange, patient treatment, researcher training, outreach activities etc.).

1.3 Research staff

Describe the profile of research personnel at the administrative unit in terms of position and gender. Institutions in the higher education sector should use the categories used in DBH, <https://dbh.hkdir.no/datainnhold/kodeverk/stillingskoder>.

RCN has commissioned reports from Statistics Norway (SSB) on personnel for the administrative units included in the evaluation. These reports will be made available to the units early November 2023.

Only a subset of the administrative units submitted to the evaluation is directly identifiable in the national statistics. Therefore, we ask all administrative units to provide data on their R&D personnel. Institutions that are directly identifiable in the national statistics (mainly higher education) are invited to use the figures provided in the report delivered by Statistics Norway. Please delete lines which are not in use.

Table 2. Research staff

	Position by category	No. of researcher per category	Share of women per category (%)	No. of researchers who are part of multiple (other) research groups at the admin unit	No. of temporary positions
No. of Personell by position	Position A (Fill in)				
	Position B (Fill in)				
	Position C (Fill in)				
	Position D (Fill in)				

1.4 Researcher careers opportunities

- a) Describe the structures and practices to support researcher careers and help early-career researchers to make their way into the profession.
- b) Describe how research time is distributed among staff including criteria for research leave/sabbaticals (forskningstermin/undervisningsfri).
- c) Describe research mobility options.

1.5 Research funding

- a) Describe the funding sources of the administrative unit. Indicate the administrative unit's total yearly budget and the share of the unit's budget dedicated to research.
- b) Give an overview of the administrative unit's competitive national and/or international grants last five years (2018-2022).

Table 3. R&D funding sources

Please indicate R&D funding sources for the administrative unit for the period 2018-2022 (average NOK per year, last five years).

For Higher Education Institutions: Share of basic grant (grunnbevilgning) used for R&D¹	
For Research Institutes and Health Trusts: Direct R&D funding from Ministries (per ministry)	
Name of ministry	NOK

National grants (bidragsinntekter) (NOK)	
From the ministries and underlying directorates	
From industry	
From public sector	
Other national grants	
Total National grants	
National contract research (oppdragsinntekter)² (NOK)	
From the ministries and underlying directorates	
From industry	

¹ Shares may be calculated based on full time equivalents (FTE) allocated to research compared to total FTE in administrative unit

² For research institutes only research activities should be included from section 1.3 in the yearly reporting

From public sector	
Other national contract research	
Total contract research	
International grants (NOK)	
From the European Union	
From industry	
Other international grants	
Total international grants	
Funding related to public management (forvaltningsoppgaver) or (if applicable) funding related to special hospital tasks, if any	
Total funding related to public management/special hospital tasks	
Total all R&D budget items (except basic grant)	

1.6 Collaboration

Describe the administrative unit's policy towards national and international collaboration partners, the type of the collaborations the administrative unit have with the partners, how the collaboration is put to practice as well as cross-sectorial and interdisciplinary collaborations.

- Reflect of how successful the administrative unit has been in meeting its aspirations for collaborations
- Reflect on the importance of different types of collaboration for the administrative unit: National and international collaborations. Collaborations with different sectors, including public, private and third sector
- Reflect on the added value of these collaborations to the administrative unit and Norwegian research system

Table 4a. The main national collaborative constellations with the administrative unit

Please categorise the collaboration according to the most important national partner(s): 5-10 institutions in the period 2012-2022. Please delete lines which are not in use.

National collaborations

Collaboration with national institutions – 1 -10	
Name of main collaboration or collaborative project with the admin unit	
Name of partner institution(s)	
Sector of partner/institution(s)/sectors involved	
Impacts and relevance of the collaboration	

Table 4b. The main international collaborative constellations with the administrative unit

Please categorise the collaboration according to the most important international partner(s): 5-10 international institutions in the period 2012-2022. Please delete lines which are not in use.

International collaborations

Collaboration with international institutions – 1-10	
Name of main collaboration or collaborative project with the admin unit	
Name of partner institution(s)	
Sector of partner/institution(s)/sectors involved	

Impacts and relevance of the collaboration	
--	--

1.7 Open science policies

a) Describe the institutional policies, approaches, and activities to the Open Science areas which may include the following:

- Open access to publications
- Open access to research data and implementation of FAIR data principles
- Open-source software/tools
- Open access to educational resources
- Open peer review
- Citizen science and/or involvement of stakeholders / user groups
- Skills and training for Open Science

b) Describe the most important contributions and impact of the administrative unit's researchers towards the different Open Science areas cf. 1.7a above.

c) Describe the institutional policy regarding ownership of research data, data management, and confidentiality. Is the use of data management plans implemented at the administrative unit?

1.8 SWOT analysis for administrative units

Instructions: Please complete a SWOT analysis for your administrative unit. Reflect on what are the major internal Strengths and Weaknesses as well as external Threats and Opportunities for your research and innovation activities/projects and research environment. Assess what the present Strengths enable in the future and what kinds of Threats are related to the Weaknesses. Consider your scientific expertise and achievements, funding, facilities, organisation and management.

Internal	Strengths	Weaknesses
External	Opportunities	Threats

2. Research production, quality and integrity

2.1 Research quality and integrity

Please see the bibliometric analysis for the administrative unit developed by NIFU (available by the end of October, 2023).

a) Describe the scientific focus areas of the research conducted at the administrative unit, including the unit's contribution to these areas.

b) Describe the administrative unit's policy for research integrity, including preventative measures when integrity is at risk, or violated.

2.2 Research infrastructures

a) Participation in national infrastructure

Describe the most important participation in the national infrastructures listed in the Norwegian roadmap for research infrastructures (Norsk veikart for forskningsinfrastruktur) including as host institution(s).

Table 5. Participation in national infrastructure

Please present up to 5 participations in the national infrastructures listed in the Norwegian roadmap for research infrastructures (Norsk veikart for forskningsinfrastruktur) for each area that were the most important to your administrative unit.

Areas in roadmap	Name of research infrastructure	Period (from year to year)	Description	Link to website

b) Participation in international infrastructures

Describe the most important participation in the international infrastructures funded by the ministries (Norsk deltakelse i internasjonale forskningsorganisasjoner finansiert av departementene).

Table 6. Participation in international infrastructure

Please describe up to 5 participations in international infrastructures for each area that have been most important to your administrative unit.

Project	Name	Period (from year to year)	Description	Link to infrastructure

c) Participation in European (ESFRI) infrastructures

Describe the most important participation in European (ESFRI) infrastructures (Norske medlemskap i infrastruktur i ESFRI roadmap) including as host institution(s).

Table 7. Participation in infrastructures on the ESFRI Roadmap

Please give a description of up to 5 participations that have been most important to your administrative unit.

Social sciences and the humanities				
Name	ESFRI-project	Summary of participation	Period (from year to year)	Link

d) Access to research infrastructures

Describe access to relevant national and/or international research infrastructures for your researchers. Considering both physical and digital infrastructure.

e) FAIR- principles

Describe what is done at the unit to fulfil the FAIR-principles.

3. Diversity and equality

Describe the policy and practices to protect against any form of discrimination and to promote diversity in the administrative unit.

Table 8. Administrative unit policy against discrimination

Give a description of up to 5 documents that are the most relevant. If the administrative unit uses the strategies, policies, etc. of a larger institution, then these documents should be referred to. Please delete lines which are not in use.

No.	Name	Valid period	Link
1			

4. Relevance to institutional and sectorial purposes

4.1 Sector specific impact

Describe whether the administrative unit has activities aimed at achieving sector-specific objectives or focusing on contributing to the knowledge base in general. Describe activities connected to sector-specific objectives, the rationale for participation and achieved and/or expected impacts. Please refer to chapter 2.4 in the [evaluation protocol](#).

- Alternatively, describe whether the activities of the administrative unit are aimed at contribution to the knowledge base in general. Describe the rationale for this approach and the impacts of the unit's work to the knowledge base.

4.2 Research innovation and commercialisation

- a) Describe the administrative unit's practices for innovation and commercialisation.
- b) Describe the motivation among the research staff in doing innovation and commercialisation activities.
- c) Describe how innovation and commercialisation is supported at the administrative unit.

Table 9. Policies for innovation including IP policies, new patents, licenses, start-up/spin-off guidelines

Describe up to 5 documents of the administrative unit's policies for innovation, including IP policies, new patents, licenses, start-up/spin-off guidelines, etc., that are the most relevant. If the administrative unit uses the strategies, policies, etc. of a larger institution, then present these documents. Please delete lines which are not in use.

No.	Name	Valid period	Link
1			

Table 10. Administrative description of successful innovation and commercialisation results

Please describe up to 10 successful innovation and commercialisation results at your administrative unit in the period 2012-2022. Please delete lines which are not in use.

No.	Name of innovation and commercial results	Link	Description of successful innovation and commercialisation result.
1			

4.3 Higher education institutions

a) Reflect how research at the administrative unit contributes towards master and PhD-level education provision, at your institutions and beyond.

b) Describe the opportunities for master students to become involved in research activities at the administrative unit.

c) **ONLY** for administrative units responsible for the Cand.med. degree programme, cf. [Evaluation of the Professional programme in Medicine \(NOKUT\)](#).

- Reflect on how research at the administrative unit contributes towards the quality of the Cand.med. degree programme at your institutions and beyond.
- Describe the different opportunities for students on the Cand.med. degree programme to become involved in research activities at the administrative unit, and the extent to which students use those opportunities.

4.4 Research institutes

a) Describe how the research and innovation activities/projects at the administrative unit contribute to the knowledge base for policy development, sustainable development, and societal and industrial transformations more generally.

b) Describe the most important research activities with partners outside of research organisations.

4.5 Health trusts

a) Reflect on how the administrative unit's clinical research, innovation and commercialisation contribute towards development, assessment and implementation of new diagnostic methods, treatment, and healthcare technologies.

b) Reflect on how research at the unit contributes towards the quality of relevant education programme at your institutions or beyond.

c) Describe the different opportunities for students on relevant educational programmes to become involved in research activities at the administrative unit, and the extent to which students use those opportunities.

5.Relevance to society

Reflect on the administrative unit's contribution towards the Norwegian Long-term plan for research and higher education, societal challenges more widely, and the UN Sustainable Development Goals.

5.1 Impact cases

Please use the attached template for impact cases. Each impact case should be submitted as an attachment (pdf) to the self-assessment.

Short version

Impact case guidelines

Each case study should include sufficiently clear and detailed information to enable the evaluation committee to make judgements based on the information it contains, without making inferences, gathering additional material, following up references or relying on members' prior knowledge. References to other sources of information will be used for verification purposes only, not as a means for the evaluation committee to gather further information to inform judgements.

In this evaluation, impact is defined as an effect on, change or benefit to the economy, society, culture, public policy or services, health, the environment or quality of life, beyond academia.

Timeframes

- The impact must have occurred between 2012 and 2022
- Some of the underpinning research should have been published in 2012 or later
- The administrative units are encouraged to prioritise recent cases

Page limit

Each completed case study template will be limited to **five pages** in length. Within the annotated template below, indicative guidance is provided about the expected maximum length limit of each section, but institutions will have flexibility to exceed these so long as the case study as a whole remains no longer than **five pages** (font Calibri, font size 11). Please write the text into the framed template under the sections 1–5 below. The guiding text that stands there now, can be deleted.

Maximum number of cases permitted per administrative unit

For up to 10 researchers: one case; for 10 to 30 researchers: two cases; for 30-50 researchers: three cases; for 50-100 researchers: four cases, and up to five cases for units exceeding 100 researchers.

Naming and numbering of cases

Please use the standardised short name for the administrative unit, and the case number for the unit (1,2,3, etc) in the headline of the case. Each case should be stored as a separate PDF-document with the file name: [Name of the institution and name of the administrative unit] [case number]

Publication of cases

RCN plans to publish all impact cases in a separate evaluation report. By submitting the case the head of the administrative units consents to the publication of the case. Please indicate below if a case may not be made public for reasons of confidentiality.

If relevant, describe any reason to keep this case confidential:

Please write the text here

[Name of the institution and name of the administrative unit] [case number]

Institution:
Administrative unit:
Title of case study:
Period when the underpinning research was undertaken:
Period when staff involved in the underpinning research were employed by the submitting institution:
Period when the impact occurred:

<p>1. Summary of the impact (indicative maximum 100 words) This section should briefly state what specific impact is being described in the case study.</p>
<p>2. Underpinning research (indicative maximum 500 words) This section should outline the key research insights or findings that underpinned the impact, and provide details of what research was undertaken, when, and by whom. This research may be a body of work produced over a number of years or may be the output(s) of a particular project. References to specific research outputs that embody the research described in this section, and evidence of its quality, should be provided in the next section. Details of the following should be provided in this section:</p> <ul style="list-style-type: none"> - The nature of the research insights or findings which relate to the impact claimed in the case study. - An outline of what the underpinning research produced by the submitted unit was (this may relate to one or more research outputs, projects or programmes). - Dates of when it was carried out. <ul style="list-style-type: none"> - Names of the key researchers and what positions they held at the administrative unit at the time of the research (where researchers joined or left the administrative unit during this time, these dates must also be stated). - Any relevant key contextual information about this area of research.
<p>3. References to the research (indicative maximum of six references) This section should provide references to key outputs from the research described in the previous section, and evidence about the quality of the research. All forms of output cited as underpinning research will be considered equitably, with no distinction being made between the types of output referenced. Include the following details for each cited output:</p> <ul style="list-style-type: none"> - Author(s) - Title - Year of publication - Type of output and other relevant details required to identify the output (for example, DOI, journal title and issue) - Details to enable the panel to gain access to the output, if required (for example, a DOI or URL). <p>All outputs cited in this section must be capable of being made available to panels. If they are not available in the public domain, the administrative unit must be able to provide them if requested by RCN or the evaluation secretariate.</p>
<p>4. Details of the impact (indicative maximum 750 words) This section should provide a narrative, with supporting evidence, to explain:</p> <ul style="list-style-type: none"> - How the research underpinned (made a distinct and material contribution to) the impact; - The nature and extent of the impact. <p>The following should be provided:</p> <ul style="list-style-type: none"> - A clear explanation of the process or means through which the research led to, underpinned or made a contribution to the impact (for example, how it was disseminated, how it came to influence users or beneficiaries, or how it came to be exploited, taken up or applied).

- Where the submitted administrative unit's research was part of a wider body of research that contributed to the impact (for example, where there has been research collaboration with other institutions), the case study should specify the particular contribution of the submitted administrative unit's research and acknowledge other key research contributions.
- Details of the beneficiaries – who or what community, constituency or organisation has benefitted, been affected or impacted on.
- Details of the nature of the impact – how they have benefitted, been affected or impacted on.
- Evidence or indicators of the extent of the impact described, as appropriate to the case being made.
- Dates of when these impacts occurred.

5. Sources to corroborate the impact (indicative maximum of ten references)

Institution	Administrative unit	Name of research group	Expert panel
Diakonhjemmet Hospital	Center treatment of Rheumatic and Musculoskeletal Diseases (REMEDY)	Centre for Treatment of Rheumatic and Musculoskeletal Diseases (REMEDY)	Panel 3b-3

Scales for research group assessment

Use whole integers only – no fractions!

Organisational dimension

Score	Organisational environment
5	An organisational environment that is outstanding for supporting the production of excellent research.
4	An organisational environment that is very strong for supporting the production of excellent research.
3	An organisational environment that is adequate for supporting the production of excellent research.
2	An organisational environment that is modest for supporting the production of excellent research.
1	An organisational environment that is not supportive for the production of excellent research.

Quality dimension

The quality dimension consists of two judgements: 1) Research and publication quality, and 2) Research group's contribution. The first judgement is defined as follows:

Score	Research and publication quality	Supporting explanation
5	Quality that is outstanding in terms of originality, significance, and rigour.	The quality of the research is world leading in terms of quality, and is comparable to the best work internationally in the same area of research. The publications submitted provide evidence that the work of the group meets the highest international standards in terms of originality, significance, and rigour. Work at this level should be a key international reference in its area.
4	Quality that is internationally excellent in terms of originality, significance and rigour but which falls short of the highest standards of excellence.	The quality of the research is internationally excellent. The research is clearly of an international standard, with a very good level of quality in terms of originality, significance, and rigour. Work at this level can arouse significant interest in the international academic community, and international journals with the most rigorous standards of publication (irrespective of the place or language of publication) could publish work of this level.
3	Quality that is recognised internationally in terms of originality, significance and rigour.	The quality of the research is sufficient to achieve some international recognition. It would be perceived nationally as strong and may occasionally reach an internationally recognised level in terms of originality, significance and rigour. Internationally recognised journals could publish some work of this level.
2	Quality that meets the published definition of research for the purposes of this assessment.	The international academic community would deem the research to be nationally acceptable, but below world standards. Legitimate nationally recognised peer-reviewed journals could publish work of this level.
1	Quality that falls below the published definition of research for the purposes of this assessment ¹ .	The quality of the research is well below international level, and is unpublishable in legitimate peer-reviewed research journals.

¹ A publication has to meet all of the criteria below:

Societal impact dimension

The societal impact dimension is also composed of two judgements, defined as presented in the table below.

Score	Research group's societal contribution, taking into consideration the resources available to the group	Score	User involvement
5	The group has contributed extensively to economic, societal and/or cultural development in Norway and/or internationally.	5	Societal partner involvement is outstanding – partners have had an important role in all parts of the research process, from problem formulation to the publication and/or process or product innovation.
4	The group's contribution to economic, societal and/or cultural development in Norway and/or internationally is very considerable given what is expected from groups in the same research field.	4	Societal partners have very considerable involvement in all parts of the research process, from problem formulation to the publication and/or process or product innovation.
3	The group's contribution to economic, societal and/or cultural development in Norway and/or internationally is on par with what is expected from groups in the same research field.	3	Societal partners have considerable involvement in the research process, from problem formulation to the publication and/or process or product innovation.
2	The group's contribution to economic, societal and/or cultural development in Norway and/or internationally is modest given what is expected from groups in the same research field.	2	Societal partners have a modest part in the research process, from problem formulation to the publication and/or process or product innovation.
1	There is little documentation of contributions from the group to economic, societal and/or cultural development in Norway and/or internationally.	1	There is little documentation of societal partners' participation in the research process, from problem formulation to the publication and/or process or product innovation.



Methods and limitations

Methods

The evaluation is based on documentary evidence and online interviews with the representatives of Administrative Unit.

The documentary inputs to the evaluation were:

- Evaluation Protocol Evaluation of life sciences in Norway 2022-2023
- Administrative Unit's Terms of Reference
- Administrative Unit's self-assessment report
- Administrative Unit's impact cases
- Administrative Unit's research groups evaluation reports
- Panel reports from the Expert panels
- Bibliometric data (*NIFU Nordic Institute for Studies of innovation, research and education*)
- Personnel data (*Statistics Norway (SSB)*)
- Funding data – The Research Council's contribution to biosciences research (*RCN*)
- Extract from the Survey for academic staff and the Student Survey (*Norwegian Agency for Quality Assurance in Education (NOKUT)*)

After the documentary review, the Committee held a meeting and discussed an initial assessment against the assessment criteria and defined questions for the interview with the Administrative Unit. The Committee shared the interview questions with the Administrative Unit two weeks before the interview.

Following the documentary review, the Committee interviewed the Administrative Unit in an hour-long virtual meeting to fact-check the Committee's understanding and refine perceptions. The Administrative Unit presented answers to the Committee's questions and addressed other follow-up questions.

After the online interview, the Committee attended the final meeting to review the initial assessment in light of the interview and make any final adjustments.

A one-page summary of the Administrative Unit was developed based on the information from the self-assessment, the research group assessment, and the interview. The Administrative Unit had the opportunity to fact-check this summary. The Administrative Unit approved the summary without adjustments. ***(Adjust the text if the AU asked for corrections. Include the AU request and explain what adjustments were made).***

Limitations

(Choose one of the three options below and delete the others. Feel free to elaborate slightly if necessary. For example, if you choose option 3, explain the missing information. Note that the Committee can provide detailed feedback and suggestions on improving the evaluation in the Memorandum to the RCN. This section has to remain concise and only summarise whether the information was or was not sufficient.)

- (1) The Committee judged the information received through documentary inputs and the interview with the Administrative Unit sufficient to complete the evaluation.

- (2) The Committee judged that the Administrative Unit self-assessment report was insufficient to assess all evaluation criteria fully. However, the interview with the Administrative Unit filled gaps in the Committee's understanding, and the information was sufficient to complete the evaluation.
- (3) The Committee judged that the Administrative Unit's self-assessment report was insufficient to assess all evaluation criteria fully, and some information gaps remained after the interview with the Administrative Unit.

Norges forskningsråd

Besøksadresse: Drammensveien 288
Postboks 564
1327 Lysaker

Telefon: 22 03 70 00

Telefaks: 22 03 70 01

post@forskningsradet.no

www.forskningsradet.no

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