Forskningsrådet

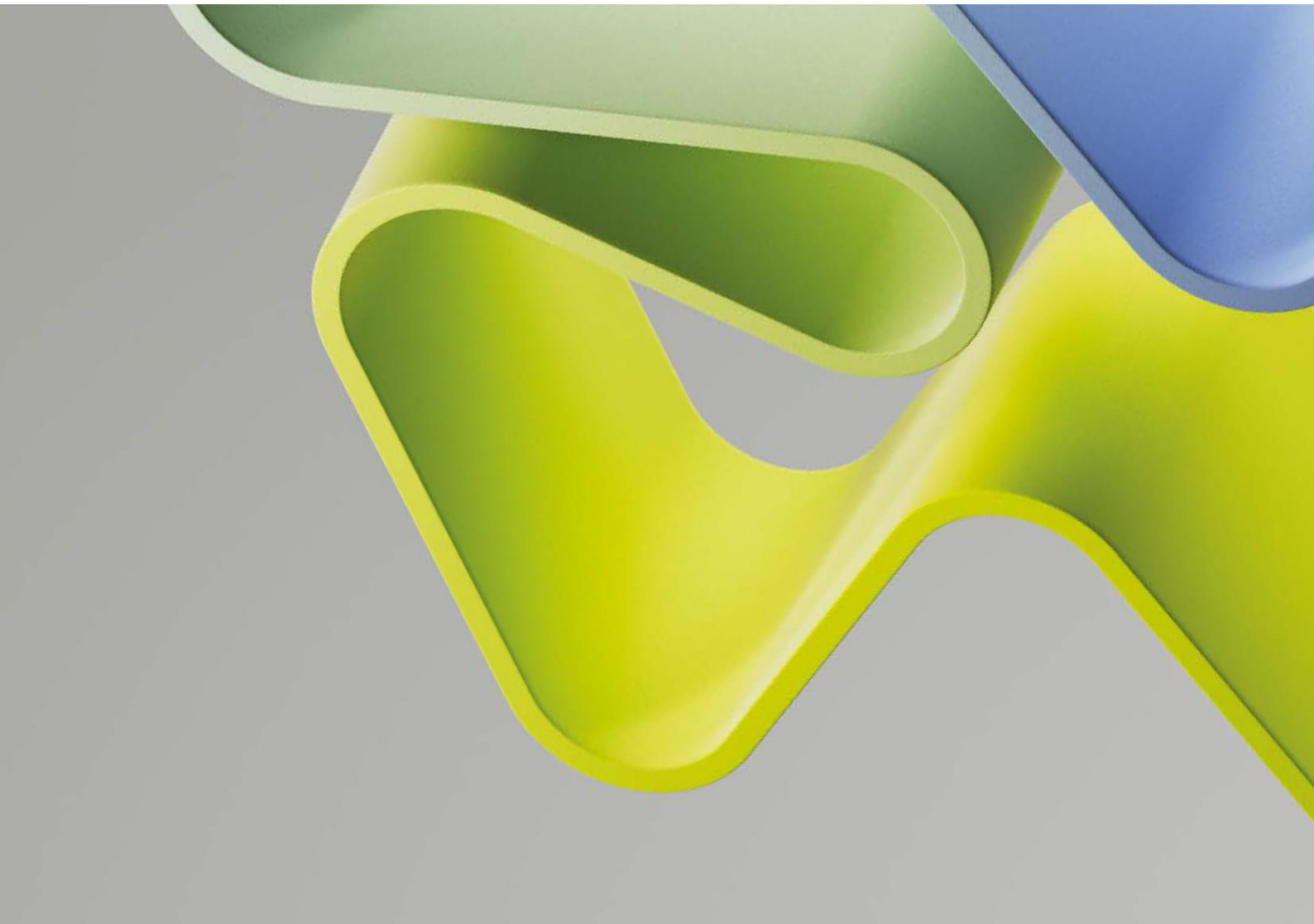
Evaluation of Life Sciences 2022-2024

Evaluation of medicine and health 2023-2024

Evaluation report

ADMINISTRATIVE UNIT: Division of Medicine
INSTITUTION: Oslo University Hospital and University of Oslo

December 2024



Contents

Statement from Evaluation Committee Health Trusts 3

This report is from Evaluation Committee Health trusts 3, which evaluated the following administrative units representing the hospital trust in the Evaluation of medicine and health 2023-2024:

- Akershus University Hospital, Akershus University Hospital (AHUS)
- Haukeland University Hospital, Haukeland University Hospital
- Division of Laboratory Medicine, Oslo University Hospital and University of Oslo
- Division of Medicine, Oslo University Hospital and University of Oslo
- Division of Radiology and nuclear medicine, Oslo University Hospital and University of Oslo
- Division of Surgery, Inflammatory Diseases and Transplantation, Oslo University Hospital and University of Oslo
- Division of Technology and Innovation, Oslo University Hospital and University of Oslo
- St. Olavs University Hospital, St. Olavs University Hospital
- Stavanger University Hospital, Stavanger University Hospital (SUH)

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 Health Trusts 3. All members of the committee have agreed with the assessments, conclusions and recommendations presented here.

Evaluation committee Health Trusts 3 consisted of the following members:

Professor Jørgen Frøkiær (Chair)
Aarhus University

Professor Geoff Bellingan
University College London Hospitals

Associate Professor Dirk Bender
Aarhus University

Professor Tomas Jernberg
Danderyd Hospital

Associate Professor Tuomo Meretoja
Helsinki University Hospital

Professor Shakila Thangaratinam
University of Liverpool

Professor Marie Wahren-Herlenius
Karolinska Institutet

Veerle Bastiaanssen, Technopolis Group, was the committee secretary.

Oslo, December 2024

Profile of the administrative unit

The organisation of research at the Division of Medicine is structured along two axes. First, each of the 11 departments within the Division of Medicine (the Clinic) has its own Head of Research and Development (FOU leader), reporting to the Department Head and tasked with fostering research within the department. Second, the Clinic has established "Research Groups" in collaboration with the Institute of Clinical Medicine, University of Oslo (UiO), to further enhance research efforts. These groups follow a standard operating procedure (SOP) outlining their minimum size, scope, tasks, and responsibilities. The Division of Medicine has about 1,250 employees, with only 18 professors and 10 associate professors, all holding dual appointments at Oslo University Hospital and the University of Oslo. These academics drive most of the research, though many senior physicians also contribute as independent researchers.

The Division of Medicine is comprised of eight research groups: Geriatrics (MED_GER), Endocrinology (MED_ESF), Heart Research (MED_HJE), Respiratory medicine (MED_LUM), Renal & Acute Medicine (MED_NYR-AME), Infectious diseases (INF), Gastroenterology (MED_GAS)) and Digital Health (MED_DIG).

The work of the administrative unit follows a plan that is to define some of the specific and overarching measures that shall (i) contribute to pointing out future directions, and (ii) to facilitate continuous high-level research. Some of the mandates that define the strategic plan include that all departments shall aim to actively increase the number of clinical studies and number of patients included in their subject areas – both for investigator initiated and industry-initiated studies, and to strengthen the knowledge in planning and execution of studies – by the establishment of «project outpatient clinics» where established researchers in the clinic can guide and advice others in study design and applications.

The work of the administrative unit in relation to its sector can be illustrated by its collaborations, both nationally and internationally. As an example of an important national collaboration the administrative unit name the topic Obesity in which the partner institutions are Vestfold Hospital Trust, Dept. of Obesity and Nutrition in Tonsberg. The project aims to evaluate the effectiveness of non-surgical weight loss and maintenance methods in a randomised controlled trial (RCT) involving adolescents (ages 12-18) with obesity. The administrative unit, through the Dept. of Digital Health, has been involved since the project's inception, contributing to the planning of the pilot study and RCT. Internationally, the administrative unit named StressProffen©™ – “digital stress management in cancer” - as an example of an important collaboration. The collaboration includes the Mayo Clinic, the College of Medicine and the Dept. of Psychiatry in Minnesota. Through the collaboration, researchers from the Mayo Clinic have contributed with their expertise, throughout content development and efficacy testing, as well as actively participated in peer reviewed publications and presentations.

Based on the self-assessment, in the future, the administrative unit might take advantage of internal strengths such as the considerable experience, knowledge and competence within the area of digital health research. Above that, the administrative unit has significant clinical activity, data material, and scientific expertise to improve research in healthcare services. The administrative unit might also take advantage of external opportunities such as the increased funding from the EU Horizon programme as well as the government goal of doubling clinical trials nationally within the five-year period of 2021-2025. Future challenges that may impact the administrative unit include insufficient IT solutions for research projects, including software, medical equipment, and storage solutions for sensitive data and for

cross-regional projects and limited funding for advanced medical-technical equipment for research.

Overall evaluation

This evaluation was carried out in line with the Terms of Reference laid out by the Division of Medicine, Oslo University Hospital and University of Oslo. The evaluation committee considered the Terms of Reference, self-assessment, and an oral interview provided by the administrative unit in question, together with background documents provided by the Research Council of Norway and evaluation reports of the research groups within this administrative unit for the assessment made in this report.

The Division of Medicine performs clinical research including translational research, epidemiological studies, and clinical interventional studies. The Division is part of the OUH and UiO and refers to strategic documents of these two organisations but does not have well developed own strategies to guide development or priorities. Rather, the Division lets individual groups lead the way resulting in substantial diversity and a setting in which mutual benefits from shared resources and structures do not materialize.

Infrastructural support for innovation and commercialisation is available through several mechanisms both at the hospital, the university and locally. Several examples of successful innovation and commercialisation within the Division of Medicine are given, and research at the administrative unit contributes to development of new diagnostic methods, treatment and health care technologies. For some areas, eg eHealth and cardiology, this is clearly described, but for others this is less obvious. Collaboration with national and international partners is described as a priority at the administrative unit and have to some degree been established both nationally and internationally with enterprises of different character.

The Administrative unit attracts funding from national and international competitive sources such as EU, Regional Health Authorities and The Research Council Norway. The share of basic funding is however larger than external/competitive funding, and funding/contracts from industrial partners is surprisingly small given this is a large clinical division of internal medicine.

The number of professors appears to be high in relation to PhD students and postdocs, with little research time for each professor. This does not seem to be a strategic way of promoting high quality science. Within the OUH and UiO organisations there are programs and grants for career development and mobility, but there are no special efforts described at the administrative unit level.

The Division of Medicine uses local and national infrastructures, and policies and strategies for open access publishing and data management are well developed and available. The Administrative unit publishes their vast majority of science as open access. Access to sensitive data is however a challenging topic for clinical research here in the same way as for many others.

Notable strengths of the Division include clinical activity and scientific expertise, a section of digital health research in strong development, inventions and commercialisation.

Notable weaknesses of the Division include the fragmentation of the research, relative low percentage of external funding and little industrial funding.

Recommendations

The Division of Medicine is recommended to take the time to develop core strategies and generate strategic documents for its future development and build. Without common platforms or plans for strategic development there is little to hold the groups together, which could otherwise be reorganised to dock with strategically more suitable structures. The committee advises to revisit the question of how clinical research, innovation and commercialisation at the administrative unit contributes towards development, assessment and implementation of new diagnostic methods, treatment, and healthcare technologies in a broader perspective as a basis for developing a common strategy. The Administrative unit has been successful regarding innovations and commercialisation, especially in the field of digital health interventions. A possibility could be to consider further developing and expanding these activities by strategic prioritisation.

The Division of Medicine is recommended to try and increase the amount of external funding to open new possibilities for research projects. Increasing the collaborative efforts with industrial partners may be a productive opportunity. Although many collaborations exist, further strategic partnerships with leading universities or companies with interest in clinical research could strengthen the environment at the Division of Medicine, both in academic and funding perspectives. The committee recommends the administrative unit to focus research time financed by the division to fewer positions, with more research time per position, for attaining higher quality. Externally funded research time could increase possibilities for advanced projects. Time for research should be safe-guarded, as clinical practise tends to intrude.

Advocating national investments in infrastructure that is useful also to clinical research could be a way forward for more relevant support at the national level, and following the development in the field of sharing patient-derived data will be important to promote collective benefit of data sharing when possible. Systematic and regular assessment of statistics for sex balance and other measures for diversity and equal opportunities at different positions will be important for understanding career opportunities and progression for all personnel at the division.

1. Strategy, resources and organisation of research

1.1 Research strategy

The Division of Medicine is large and diverse in its scope, with research groups covering most of the internal medicine subspecialities. The Division seeks to maintain this direction also going forward and describes its strategy as being researcher-driven in which each group has its individual profile and works towards its own long-term goals. Most research is within translational studies, epidemiology or clinical interventional trials, with the presented plan aiming to define some of the specific and overarching measures to i) contributing to pointing out future directions and ii) to facilitate continuous high-level research. The strategic plan is presented as six bullet points:

- For all departments to increase the number of clinical studies and number of patients included in their subject area – both for investigator-initiated and industry-initiated studies
- To prioritise clinical studies and innovation-projects as part of patient care
- To establish an increased number of clinical studies in collaboration with primary health care and industry partners
- To strengthen the knowledge in planning and execution of clinical studies by establishing “project outpatient clinics” in which senior researchers guide and advice others in study design and applications
- To take into account that costs for industry-funded studies may arise before resources are available
- To involve users, such as representatives of patient or next of kin, in all studies

The Administrative unit also aligns with the strategic plans and documents of UiO and OUH.

The committee’s evaluation

The Division of Medicine is part of the UiO and OUH and refers to strategic documents of these two organisations. However, the Division does not seem to have strategic documents or plan other than six presented bullet points that define what for some aspects in a very wide sense, but not how or who or when. The Division appears not to practise much of strategic development, but rather let individual groups lead the way resulting in a diverse setting in which potential mutual benefits from shared resources and structures do not develop.

The committee’s recommendations

The committee recommends the Division takes the time to develop core strategies and strategic documents of the plans. Without common platforms or plans for strategic development there is little to hold the groups together, and these may as well be reorganised to dock with strategically more suitable structures. Further, it is recommended to develop more incentives for both internal and external collaboration.

1.2 Organisation of research

The organisations of OUH and UiO are highly integrated. At UiO, the Faculty of Medicine has organised its activity at OUH within the Institute of Clinical Medicine, which parallels the

organisation of OUH. As a result, the research leadership is coordinated at the top level of the divisions. The Head of Division normally holds a shared position and thus manages both OUH and UiO activities. There is also a Head of Research at the divisions, who holds a shared position. Regular meetings are held with the Heads of Research, led by the Director of Research, Innovation and Education at OUH and the Head of the Institute of Clinical Medicine. OUH and UiO are also closely connected through common research groups further down in the organisation, and many additional scientists with shared positions as clinicians and researchers. The Division of Medicine has 24 research groups.

Research time for employees with combined positions is regulated through an agreement between UiO and OUH so that two days per week should be reserved for research and teaching. The practice is agreed locally with the Head of department. There are also regulated possibilities for sabbaticals. Mobility is highly prioritised and supported by grants for outgoing and incoming scientists at different levels.

For career development, UiO offers many possibilities; the postdoctoral programme at the Faculty of Medicine offers courses in career development, Communicating science, Research management, Supervision and Grant application writing and a Peer mentoring scheme. There are also Research leadership programs and Innovation programs.

The committee's evaluation

The Administrative unit is part of the UiO and OUH organisations, which are highly integrated to support clinical research and translation of new knowledge. Research time is regulated for shared positions. Within these organisations there are programs and grants for career development and mobility. There are no special efforts described at the administrative unit level.

The committee's recommendations

The structure for research appears to support its performance, but there are little efforts for increasing interaction between units or developing common programs or facilities, which could be considered. The committee advice to safeguard time for research, as clinical practise tends to intrude. Externally funded research time could increase possibilities for advanced projects, and to increase efforts for obtaining such is recommended.

1.3 Research funding

The Division of Medicine receives basic funding for research as well as funding via external sources and competitive calls. The average basic funding per year last 5 years has been 66 MNOK, while external/competitive funding has been 53 MNOK. External/competitive funding includes funding from national sources such as Regional Health Authorities, The Research Council Norway, and industrial partners. Funding from industrial partners is not very substantial.

The Administrative unit also attracts some international funding, predominantly from European sources such as EU FP7, Horizon 2020 and Eurostars.

The committee's evaluation

The Administrative unit attracts funding from national and international competitive sources such as EU, Regional Health Authorities and The Research Council Norway. The share of

basic funding is however larger than external/competitive funding, and funding/contracts from industrial partners is surprisingly small given this is a large clinical division of internal medicine.

The committee's recommendations

The committee recommends trying to increase the amount of external funding to open new possibilities for research projects. Increasing the collaborative efforts with industrial partners may be a productive opportunity.

1.4 Use of infrastructures

The Division of Medicine reports no participation or use of the Norwegian roadmap for research infrastructures, in the international infrastructures funded by the ministries, or European (ESFRI) infrastructures.

Researchers at the Administrative unit has access to infrastructures and core facilities at UiO and OUH on the same terms as other researchers employed or affiliated to these organisations. The biobank infrastructure at OUH, the national clinical trial infrastructure NorCrin, the Services for sensitive data (TSD) and the Bioinformatic core facility at OUH are given as examples of facilities important to researchers at the administrative unit.

UiO and OUH aim to manage data according to FAIR principles. There are however still uncertainties and challenges in successfully adhering to these regarding sharing of sensitive health data. These concerns relate to legal restrictions, GDPR compliance and the availability of secure data systems.

The committee's evaluation

The Division of Medicine uses local and national infrastructures but reports no participation in the Norwegian roadmap for research infrastructures (although NorCrin is mentioned elsewhere), the international infrastructures funded by the ministries, or European (ESFRI) infrastructures. The Division of Medicine aims to manage data according to FAIR principles, but there are challenges for sensitive data.

The committee's recommendations

The committee recommends the administrative unit considers using national infrastructure that is useful to research at the unit as to make use of national investments. NorCrin could be such a structure if it is not yet used. Local infrastructure with relevance for clinical research appears insufficiently adopted to the administrative units needs and further development could be considered.

1.5 Collaboration

The Division of Medicine aims to have international collaboration as part of all ongoing and new research proposals as part of their general policy. The collaborations described include many national public entities as partners such as hospitals and universities, but also some private enterprises/companies. Several collaborative projects within e-health are brought

forward, such as a collaboration with Vestfold Hospital Trust (eBATTLE Obesity) that seeks to test the effect of non-surgical treatment methods for weight loss and weight maintenance in an RCT in adolescents with obesity, a collaboration with the University of Twente using eCHANGE designed to facilitate weight maintenance following initial weight loss, a collaboration with University of South-East Norway (EPIO) that is focused on living well with chronic pain by self-management, a collaboration with Tromsö university (DiAchieve) relating to lifestyle for improved self-management, metabolic control, and remission of type 2 diabetes, and a collaboration with the Mayo clinic using the StressProffen digital stress management program in cancer. Collaborations are also in place for gastrointestinal disease (IBSEN III/IBD, NORDTREAT/IBD), cardiovascular disease (IDA/blood pressure, BETAMI trial/beta blockade following acute myocardial infarction, NORSCREEN/atrial fibrillation, GARFIELD/atrial fibrillation, and ARISTOTLE, ENGAGE-AF, AUGUSTUS, ODYSSEY OUTCOMES - phase III studies on new cardiovascular drugs)**.**

International collaborators include the Mayo clinic and the Duke Clinical Research Institute in the US, as well as several European and Nordic universities.

The committee's evaluation

Collaborations with national and international partners is a priority at the administrative unit and have been established both nationally and internationally with enterprises of different character. Several examples are given for eHealth studies and cardiovascular conditions, but many areas of the division are not brought forward. These collaborations are important for a competitive edge in grant applications and are sometimes a necessity.

The committee's recommendations

Although many collaborations exist, further strategic partnerships with leading universities or companies with interest in clinical research could strengthen the environment at the Division of Medicine. This could be important both in relation to academic and funding perspectives.

1.6 Research staff

In figures from 2022, the Division of Medicine has a total of ≈1250 employees across the health care worker spectrum. Of these, 65 appear to be senior physicians (40% women) and only 5 physicians. Postdocs/researchers total 28 (71% women), and PhD students 31 (65% women). The division appears to have only one full time employed professor (male), but 18 professors in 20% positions (sex information not given), and 10 associate professors in 20% positions (sex information not given).

The committee's evaluation

The number of professors appears to be very high in relation to PhD students and postdocs. To appoint 28 professors with 20% research time each does not seem a strategic way of promoting high quality science. The gender balance in PhD students and postdocs/researchers is skewed towards women. The self-assessment lacks information for assessing the gender balance of the 28 positions at the professorial level, while the only full time employed professor is a man.

The committee's recommendations

The committee recommends the administrative unit to focus research time financed by the division to fewer positions, with more research time per position, for attaining higher quality. The Administrative unit is also recommended to assemble statistics for the gender balance at the professorial level and reflect on the low percentage of males interested in joining the division for a PhD or postdoc.

1.7 Open Science

The policy of open access at UiO emphasizes that high-quality scientific knowledge must be both visible and accessible to be effective in social and working life, in education and for research. UiO has further adopted a rights retention policy to strengthen the opportunity for employees and students to freely choose which channels they publish in, while the publications can be made openly available. UiO and OUH recommend that all employees to publish in journals with open access, or those that permit articles to be deposited and made openly available in institutional repositories. A national repository for scientific publications is under development and should be available to all sectors in 2024.

UiO and OUH aim to manage data according to international standards, such as FAIR principles. As open as possible, as closed as necessary is a lead principle in terms of access to data, with special considerations for sensitive data which is a challenging topic for clinical research. Both UiO and OUH have developed guidelines for data management, and the university library offers courses in sharing and archiving data.

The committee's evaluation

Policies and strategies for open access publishing and data management are well developed and available, and the administrative unit publishes their vast majority of science as open access. Access to sensitive data is a challenging topic for clinical research.

The committee's recommendations

The committee recommends following development in the field of sharing patient-derived and sensitive data. Sharing data when possible is important to promote collective benefit and make the most of limited resources.

2. Research production, quality and integrity

The Division of Medicine at OUH/UiO encompasses clinically and translationally oriented research in disciplines of internal medicine. During the study period 2012-2022 the division has increased it scientific output from around 300 to around 400 published articles per year. The share of 10% most cited articles has fluctuated somewhat over those years, with a mean of 12.9%. The share of articles generated in international collaboration has increased from ≈43% to ≈55%.

At the division, policies and guidelines for research integrity developed at OUH and UiO are followed. There is a Commission on Research Integrity and a Research ombudsman as a service to researchers at UiO and OUH. Preventive measures includes courses for PhD students and supervisors, experience and examples of cases are annually presented by the Ombudsman and by the Chair of the Commission on Research Integrity in a "Forskningsedarforum" meeting between the heads of research in the divisions. It is also OUH research committee. The Ombudsman and by the Chair of the Commission on Research Integrity are also regularly invited to give seminars in the divisions. Further, research integrity and the responsibilities of leaders and project leaders is regularly discussed between the hospital and division management teams.

2.1 Research quality and integrity

This part includes one overall evaluation of 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 have 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).

Center for Clinical Heart Research (CCHR)

The CCHR has initiated and completed several large-scale clinical trials and has received high international recognition for its research activities. The group has very good international visibility and group members play a prominent role in the European Society of Cardiology. Societal impact from this group is very strong. The quality of outputs and contribution to research are internationally recognised.

Department of Endocrinology (ESF)

This research environment for this group is good thus providing adequate support in producing excellent research. The group has a role in leading on several research projects that indicates a considerable role in the research process. The output profile of the group indicates a quality that is recognised nationally as strong and occasionally reaches internationally recognised levels (typically top-tier speciality journals). The group have made a considerable contribution to societal impact, involving partners across their portfolio of research activities. The grading shows the performance of the group is well-balanced and consistent across all dimensions with some aspects reaching international recognition.

Department of Digital Health Research (MED_DIG)

DIG has a clear organisational structure, with well-articulated strategic aims and support from a multidisciplinary team. There appears to be alignment with the host's institutional strategies and objectives and DIG appears to add value to the work of the hospital. The host organisation provides significant core funding which puts DIG at an advantage over other groups. There appears to be a functioning pipeline for Doctoral candidates, with appropriate supervisory arrangements for both PhD and master's level students. Given the importance of the topics covered, and DIG's experience in this space, the income is perhaps lower than might be expected, with no clear signs of significant upturn, and no robust strategies in place for recovery. The breadth of membership is a strength of DIG, as are its focus on engagement, and the range of lasting international partners. The quality of published output is variable, largely at a level of international relevance, which perhaps reflects the diverse nature (clinical and technical) of the source projects. Although the artifacts of research are made readily available, there is little evidence documented of tangible benefit. There is a clear citizen/service user focus across DIG's portfolio, although the benefits and the degree of engagement, participation and involvement is unclear, as are the systems and processes to support the meaningful inclusion of stakeholders.

Department of Infectious Diseases OUS/UiO (INF)

The strong evidence for contribution to international policy (e.g. WHO guidelines) alongside an impressive internationalisation record makes their societal impact world-class. Their exchange and support of student training as well as their facilitation of cervical screening in Sub-Saharan Africa is to be commended. Research outputs are numerous in some of the best journals, but the lack of first/last authorship is conspicuous and indicates a strong collaborative spirit rather than leadership of world-leading research. The co-location of research laboratories and clinical facilities is a strength which has been supported by the organisation as has accessibility to international-class immunology technologies.

Oslo Renal Research Group & Acute Medicine Research Group (MED_NYR-AME)

The research environment is good to enable the production of excellent research. The group takes a leading role in several projects and plays a very considerable role in the research process. The output profile of the group indicates a quality that is internationally excellent in terms of originality, significance and rigour but falls short of the highest standards of excellence. The group have made a very considerable real-life societal impact in Norway and has considerable user involvement across its research portfolio.

Research group Department of Geriatric Medicine (GER)

GER is a well-established and successful group that is involved in high-quality work, teaching and research with important societal impact. Consequent work towards societal contribution and user involvement in all stages of the research is necessary. Especially the involvement of patients should be increased given the public attention of disorders in the elderly.

Research group for Experimental and Clinical Respiratory Medicine (MED_LUM)

The self-assessment for this group was not well written and, in some places, lacked detail and this has contributed to the lower grading. From the information provided, the research environment for this group is not supportive to enable the production of excellent research. Research funding is very modest and future sustainability of this group does not look good – no real definitive plans are included. The group contributes to the research process at a low level and the output profile is consistent with quality that is nationally acceptable and meets the definition of research but falls well short of the highest standards of excellence. The group have made modest contributions to economic, societal and/or cultural development in Norway, although they contribute to clinical guidelines, and there is little evidence to suggest that societal partners are actively involved in the research process. The grading shows the performance of the group is, overall, well below the international level.

Research Group for Gastroenterology (DepGas_Gastro)

On the whole, OUH DepGas_Gastro is a well-organised, well-staffed department for clinical research. Benchmarks are relevant and the achievements of the last year showed that the goals are achievable. National and International collaboration is good as well as teaching involvement. The supporting infrastructures are good. To increase the scientific level additional effort should be put in place in order to achieve top rank level.

3. Diversity and equality

The Administrative unit acknowledges the governmental strategy of counteracting any form of discrimination, be it based on ethnicity, religion, sex or sexual orientation. Diversity in the clinic is prioritised, with the example given of explicit encouragement for applications from females for top-leadership positions to promote more equal gender distribution at high executive levels. The action plan of UiO includes to actively work towards ensuring that all employees are given equal rights and opportunities for professional development regardless of ethnicity, functional ability, age, sex and sexual orientation. The action plan of the faculty of Medicine includes promoting scientific progress, sustainability, innovation and value creation, and be a good workplace for everyone.

The NIFU analysis of the Division of Medicine at OUH/UiO reveals a balanced sex representation within or almost within a 40-60% interval for the positions described. During the study period, the mean age of most groups has decreased somewhat, and the share of persons older than 62 years is less than 40% for all groups. There are currently no physicians or senior physicians with a foreign PhD, and the share of researchers/postdocs with a foreign PhD has decreased somewhat over the study period.

The committee's evaluation

There are strategic documents and action plans regarding diversity and equal opportunities at the national, university and hospital level, that are followed and applied by the administrative unit. However, the NIFU analysis indicates little or no recruitment of individuals with a foreign PhD to the senior positions. Even though the analysis is blunt, and there are potential explanations besides not providing equal opportunities – such that international students are recruited at an earlier stage and after performing a PhD in Norway are recruited to more senior position – it is indicative of difficulties in international recruitment.

The committee's recommendations

The committee recommends the administrative unit to perform an in-depth analysis of career opportunities and progression for personnel with an international background, and in the evaluation take into account not only individuals with a foreign PhD, but also any foreign background. The committee also recommends that statistics for gender balance and other measures for diversity and equal opportunities at different positions should be followed up and evaluated regularly to monitor the development for consideration of interventions.

4. Relevance to institutional and sectorial purposes

The Administrative unit has the major goal to broaden and strengthening the knowledge base within the disciplines of internal medicine, based on the need for understanding disease pathophysiology for diagnostic and therapeutic purposes. The unit acknowledges the need to continuously evaluate and implement new diagnostics and therapy as a fundamental basis for care of all patients, with systematic research as a pillar of specialised health care.

Support from the OUH department of innovation and the Intervention centre as well as Health 2B – an arena established by OUH, Norway Health Tech and Oslo Science Park for public-private collaboration - is available for the process of innovation and commercialisation, and from the UiO Technology transfer office through Inven2. Inven2 can handle the full value chain of innovation, clinical trials and industry collaboration.

Motivation among personnel at the administrative unit appears good in terms of innovation and commercialisation, with several examples given including an innovation to safely transport patients with serious infections (eg Ebola), digital health interventions and hospital-at-home programs for chronic pulmonary-related illness (eg ALS). The starting point for sharing net income of innovations at OUH is a tripartite model, with Inven2, the hosting clinic/environment and the inventor receiving equal shares.

Clinical studies and innovation projects are prioritized as part of patient care at the administrative unit, which also adheres to the OUH practices for innovation and commercialisation. There are internal resources such as central division staff and research-based innovation units within the division to encourage innovation, in addition to the central resources at OUH and UiO.

The committee's evaluation

The Administrative unit drives activities such as clinical interventional trials aimed at achieving sector-specific objectives, but also contributes to the general physiology and biology knowledge base by its research. Infrastructural support for innovation and commercialisation is readily available through several mechanisms both at the hospital, the university and locally. Many examples of successful innovation and commercialisation are given.

The committee's recommendations

The Administrative unit has been successful regarding innovations and commercialisation, especially regarding digital health interventions. The Administrative unit could consider further developing and expanding these activities by strategic prioritisation.

4.1 Health trusts

Clinical research at the administrative units contributes to new diagnostic methods, treatment and health care technologies. Examples given include cardiology with participation in developing treatment guidelines and writing international expert consensus papers, the development and implementation of an app for stress management in cancer survivors as well as randomised controlled trials for treatment of Covid-19.

The University of Oslo is the major educational institution in the country, and the administrative unit describes that research plays a crucial role in providing quality education to medical students and candidates enrolled in the PhD program in medicine. With a focus on PhD candidates, the administrative unit also describes how ongoing projects exposes these to the latest methodologies and theoretical advances. Collaborations with other national and international institutions and other sectors further provide a broad outlook and an interdisciplinary perspective.

For students in the regular educational programmes interested in science, there are many opportunities. There is student-involvement program with a possibility to seek a 2-year leave from studies for research, and multiple opportunities for health workers to engage in master projects. During medical studies, all students work on a project assignment of 20 ECT. This gives them insight into scientific methodology and critical source assessment, as well as planning, and performing a scientific study or an innovation project. The medical student research program is optional and offers funding and research training, admitting up to 20 students per year. The program begins with one full-time year, followed by two part-time years with 50% research in parallel with their medical studies. Around half of those in the MSRP continue to build on the research project to a PhD.

The committee's evaluation

Research at the Administrative unit appears to contribute to development of new diagnostic methods, treatment and health care technologies. For some areas, this is clearly described (eg digital health apps), but for others this is not clearly outlined.

The role of faculty for teaching in the basic educational programmes of UiO (med school, health professionals) seems limited and it is not clear how research at the unit contributes to the quality of education at this level. Rather, emphasis seems to be in the PhD education.

For students in the basic educational programmes of UiO who want to engage in science there however seems to be many options.

The committee's recommendations

This step of the evaluation is focused on strategies, giving the opportunity for self-assessment and reflection. The committee advises to revisit the question of how clinical research, innovation and commercialisation at the administrative unit contributes towards development, assessment and implementation of new diagnostic methods, treatment, and healthcare technologies in a broader perspective as a basis for developing a common strategy.

The committee also advices the leadership of the administrative unit to invent and document what educational activities teachers at the administrative unit are engaged in at the basic educational level as a basis for future strategy.

5. Relevance to society

The Administrative unit declares to seek orientation of its research according to the national priorities and long-term plans for research and higher education. In particular, the administrative unit wants to prioritise the following elements:

- to strengthen clinical research in collaboration with users, industry partners and public sector
- to strengthen translational research as a link between basic science and clinical activity
- to advance possibilities for data management, data analysis and data sharing
- to continuously monitor career of researchers and make targeted recruitment to academia

Examples are then brought forward for Covid-19 research, antimicrobial resistance and female genital schistosomiasis. However, the impact cases are on stress management, NOAC treatment, HIV and TBC (even if the title reads Covid-19), inflammatory bowel disease and orthogeriatric service. While all the projects and impact cases have high relevance to society and UN sustainable development goals 3) to ensure healthy lives and promote well-being for all at all ages; and 4) to provide inclusive and equitable quality education and promote lifelong learning opportunities for all, the representation is not coordinated or strategically aligned.

Comments on impact case 1 - *StressProffen* – Stress-management in Cancer
Being diagnosed with cancer and going through treatment is often associated with substantial physical and psychosocial challenges, and coping can be difficult. Studies have shown that cognitive behavioural stress-management interventions can reduce stress, anxiety and depression, and improve quality of life. Such interventions are however not always available due to lack of professional personnel, geographical limitations or finances. The current impact case relates to the development and use of the evidence-informed, user-centred digital stress-management intervention app *StressProffen*. The app contains 10 modules related to cognitive-behavioural stress-management for cancer survivors with a combination of educational material and related exercises. Randomized, controlled trials on the use of the app show that the intervention group experience significantly reduced stress, depression and fatigue, as well as improved quality of life in comparison with controls, also during longer follow-up. For the future, there are plans to translate its use to other areas.

Key references include papers in appropriate journals like Cancer, Cancer Med, Transl Behav Med and Psycho-Oncology.

The impact of the research relates to the spread and use of *StressProffen*; it is available for individual download via the company dHealth AS and is also offered to cancer survivors through cancer coordinators in Norwegian municipalities. *StressProffen* is available in Norwegian and English and is also being offered through studies for health care providers, students (eg in Uganda) and additional cancer survivors (eg studies in preparation at the Mayo clinic). The app has also inspired the design and development of other apps, eg ZuperSmart, a digital stress-management intervention for children ages 6-12.

Comments on impact case 2 - Studies on the efficacy and safety of Non-vitamin K oral anticoagulants (NOACs) influencing the transition from warfarin to NOAC and resulting in health benefits to patients and society

Cardiovascular events are a leading cause of death world-wide. Preventive measures in terms of diet, smoking habits, exercise but also pharmacological intervention decreases the risk of events. Warfarin, a vitamin K antagonist, was long the drug of choice, but the introduction of non-vitamin K oral anticoagulants (NOACs), have completely changed the field. With less dosing problems, more efficient treatment to a wider group of patients has been possible. The Administrative unit has contributed to studies to show the efficacy and safety of NOACs as participant in studies including patients, and in some studies in leading roles for subgroup analyses of eg understanding whether NOACs are beneficial for persons at risk of all ages.

Key references include co-authorship of papers in leading journals like N Engl J Med and Circulation, and first and/or last authorships in Eur Heart J, Eur Heart J Cardiovascl Pharmacother, Eur Heart J Qual Care Clin Clin Outcomes and Heart.

The impact of the research on NOACs per se has been game changing for anti-coagulant therapy, but the contribution of the administrative unit appears more as participants than in a leading role in the field.

Comments on impact case 3 -COVID-19 Research

The title of this impact case is somewhat misleading as the underpinning research description is mostly on organization and strategy, and projects in HIV and TBC and none of the given references to the research under point 3 is on Covid 19. That said, contributions were made to Covid-19 research during the pandemic, and the more longstanding and central projects driven in the groups are of high quality. The studies are aimed at generating data to support personalized medicine in chronic infections by studying immune mechanisms, diagnostics and host-directed therapy. The dept has been sponsor for several phase I/II randomized clinical trials and collects patient data for registries and samples for biobanking from different cohorts.

Key references include papers in well recognized international journals like Vaccine, PLoS One, AIDS, J Infect Dis, Nat Comm and Front Immunol.

The impact of the research is not described in depth, but it appears to have contributed to clinical management practice, guidelines and policy making both locally and globally for optimal treatment, better quality of life and good utilization of resources.

Comments on impact case 4 - Inflammatory Bowel Disease in Southwestern Norway (IBSEN) I and III

Inflammatory bowel disease (IBD) is a chronic inflammatory disease of the digestive tract with highly variable severity and outcome. IBSEN I represents a population-based Norwegian cohort established in the 1990:ies with regular follow ups until today. The deep clinical phenotyping and longitudinal outline has given valuable information on the disease heterogeneity and disease course, the importance of early mucosal healing as a treatment goal to reduce long term complications, identification of prognostic clinical factors for severe disease outcome, the occurrence of extra intestinal manifestations in IBD, comorbidity in terms of cancer, and impact of IBD on health-related quality of life and work disability. IBSEN III has been started with a new cohort initiated during 2017-2019 and will allow comparison between older and new treatment regimes. IBSEN III also has an extended goal of biological specimen collection for identifying diagnostic and prognostic biomarkers.

Key references include papers in prominent journals in the field such as Gut, Inflamm Bowel Dis, Gastroenterology and J Chrons Colitis.

The impact of the research is well apparent in clinical practice; epidemiological data from the IBSEN studies are used as background for estimation of needs in IBD care and treatment, planning of health care resources. Further, IBSEN has impacted IBD care at all stages, shaping practices for decades.

Comments on impact case 5 - The effect of a pre- and postoperative orthogeriatric service on cognitive function in patients with hip fracture: randomized controlled trial (Oslo Orthogeriatric Trial)

Hip fractures are common in the elderly, and often associated with decreased cognitive function. This impact case describes a randomised controlled clinical trial (the Oslo orthogeriatric trial, OOT) performed 2009-2012 to evaluate the effect of orthogeriatric care for patients acutely admitted for surgical repair of a hip fracture. The primary outcome, better cognitive function four months after surgery, was not met, but merged data with the Trondheim Fracture Trial, which was planned in concert with OOT, demonstrated a positive effect on mobility up to twelve months after surgery in patients admitted directly to an orthogeriatric care unit from the emergency unit. These patients also in general performed better on activities of daily living.

Key references include papers in well-respected journals like J Clin Invest, BMC Med, BMC Geriatr.

The impact of the research relates to orthogeriatic care now being considered gold standard following surgical repair of an acutely admitted hip fracture. It has been implemented at several hospitals in Norway and internationally.

Appendices

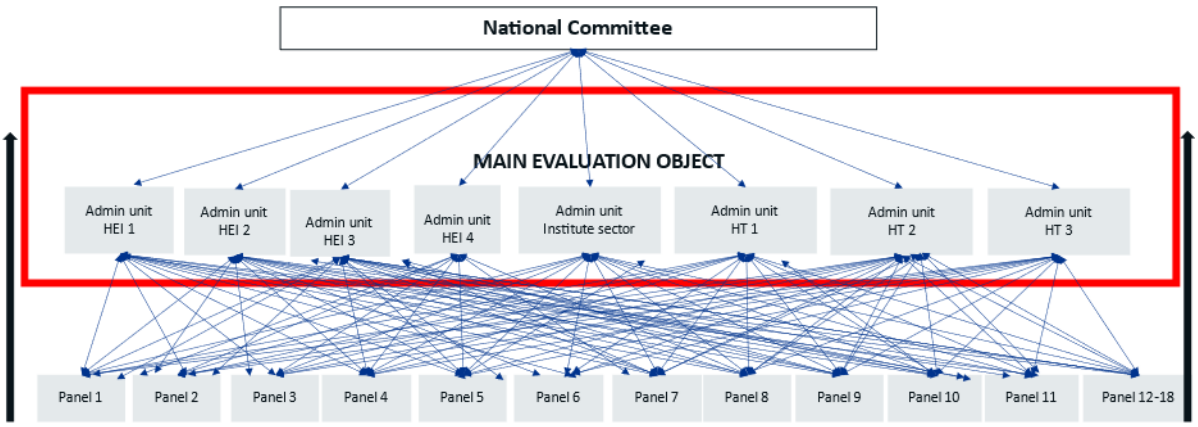
Evaluation of Medicine and health 2023-2024

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 (forskningsradet.no)]

Forskningsrådet

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 (hovedevalueringsobjektet 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.

Forskningsrådet

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	Hilde G. Nielsen
avdelingsdirektør	spesialrådgiver
Helse	Helse

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

Kopi
Helse- og omsorgsdepartementet
Kunnskapsdepartementet

Vedlegg
1. Adresseliste
2. Nye fagevalueringer – varsel om oppstart november 2021
3. Erfaringer med oppfølging av fagevaluering av biologi, medisin og helsefag 2010/2011
4. Fagevaluering av livsvitenskap 2022-2024 – Evalueringsprotokoll
5. Tentativ panelinndeling EVALMEDHELSE mai 2023
6. Skjema 1 – Innmeldingsskjema Administrative enheter
7. Skjema 2 – Innmeldingsskjema Forskergrupper
8. Skjema 3 – Forslag til internasjonale eksperter til evalueringskomiteene og ekspertpanelene
9. Appendix A – word format

The Research Council of Norway

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

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

The report can be downloaded at
www.forskningsradet.no/publikasjoner

Oslo, 5 April 2022

ISBN 978-82-12-Klikk her for å fylle ut (xxxxx-x). (pdf)

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.

Administrative unit	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.
Research group	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 Reference[1] 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 colleges[2]

- 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 sector[3] 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 (RHFs) in Norway. They are responsible for the specialist health service in their respective regions. The RHFs 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 (HFs), 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 mains 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.

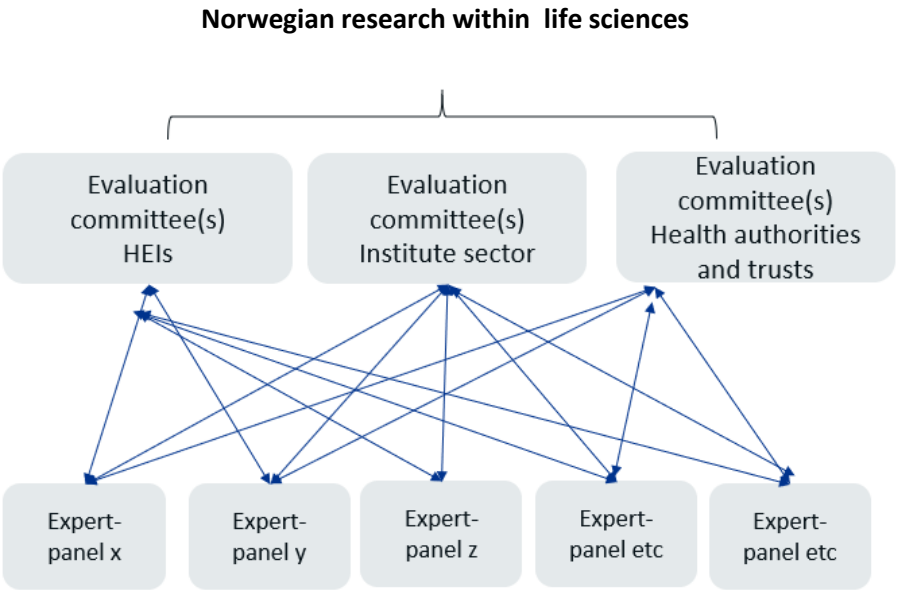


Figure 1. Evaluation committees and expert panels

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

Evaluation units / Criteria	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	*Data related to:* *Benchmark defined by administrative unit*	*Data related to:* *Strategic goals and specific tasks of the admin. unit*

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):_____

Content

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 from. **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&D[1] **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 infrastrukturer 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.

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:

1. Summary of the impact (indicative maximum 100 words)
This section should briefly state what specific impact is being described in the case study.

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:

- 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.
- 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.

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:
- 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).

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.

4. Details of the impact (indicative maximum 750 words)
This section should provide a narrative, with supporting evidence, to explain:

- How the research underpinned (made a distinct and material contribution to) the impact;
- The nature and extent of the impact.

The following should be provided:
- 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
Oslo University Hospital	Division of Medicine	Center for Clinical Heart Research (CCHR)	Panel 3b-2
Oslo University Hospital	Division of Medicine	Department of digital health research (MED_DIG)	Panel 4d
Oslo University Hospital	Division of Medicine	Department of Geriatric medicine (GER)	Panel 3b-1
Oslo University Hospital	Division of Medicine	Dept Endocrinology (ESF)	Panel 3b-2
Oslo University Hospital	Division of Medicine	Dept. of infectious diseases (INF)	Panel 3b-3
Oslo University Hospital	Division of Medicine	Oslo renal research group & acute medicine research group (MED_NYR-AME)	Panel 3b-2
Oslo University Hospital	Division of Medicine	Research group for gastroenterology (DepGas_Gastro)	Panel 3b-3
Oslo University Hospital	Division of Medicine	The research group for experimental and clinical respiratory medicine (MED_LUM)	Panel 3b-2

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 leadin**g 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

Publikasjonen kan lastes ned fra
www.forskningsradet.no/publikasjoner

Design: [design]
Foto/ill. omslagsside: [fotokreditt]

ISBN 978-82-12-03994-0 (pdf)