Forskningsrådet

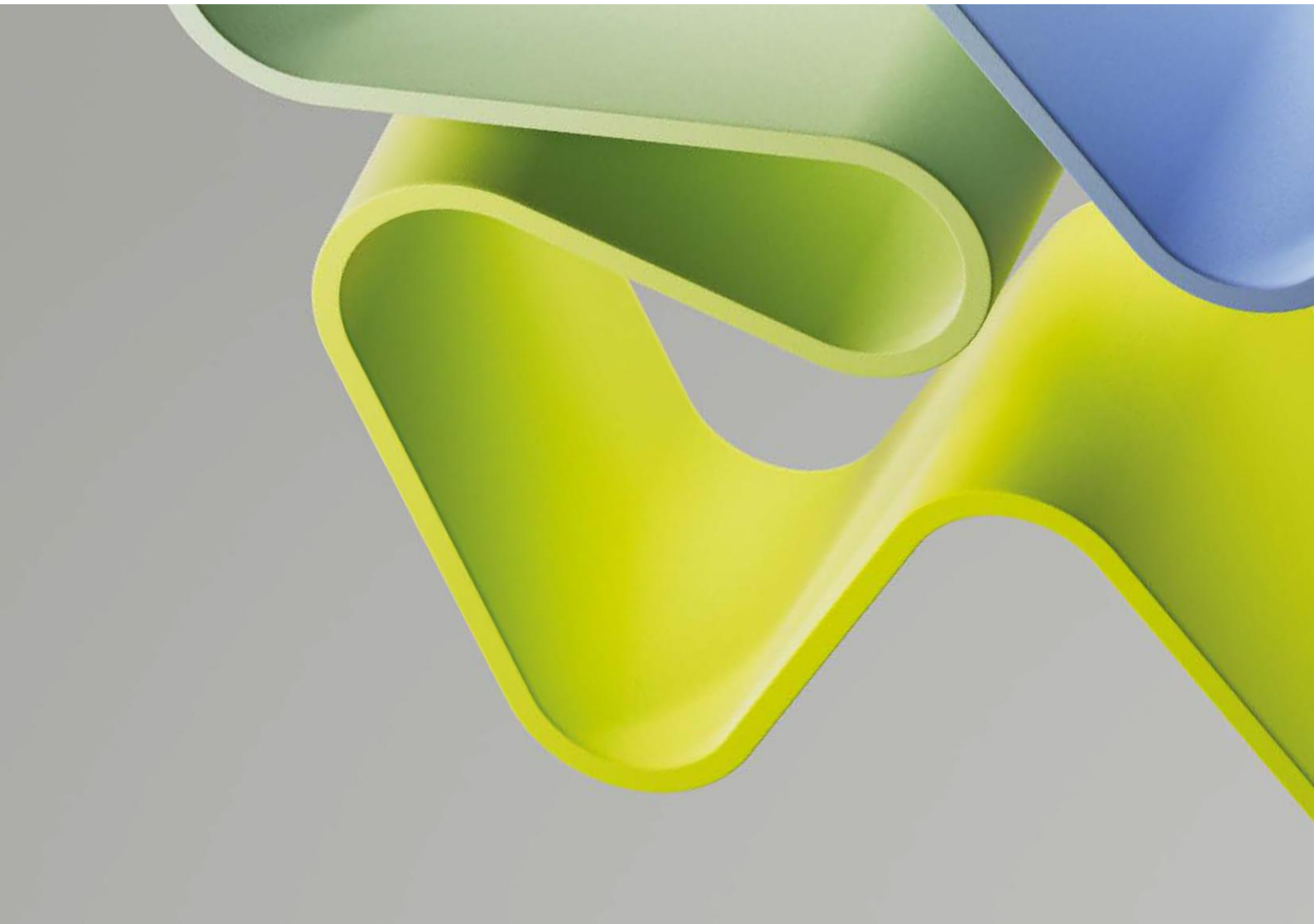
Evaluation of Life Sciences 2022-2024

Evaluation of medicine and health 2023-2024

Evaluation report

ADMINISTRATIVE UNIT: Division of Surgery, Inflammatory Diseases and Transplantation
INSTITUTION: Oslo University Hospital and University of Oslo

December 2024



Contents

STATEMENT FROM EVALUATION COMMITTEE HEALTH TRUSTS 3 4

PROFILE OF THE ADMINISTRATIVE UNIT 5

OVERALL EVALUATION 7

RECOMMENDATIONS 8

1. STRATEGY, RESOURCES AND ORGANISATION OF RESEARCH 9

1.1 Research strategy 9

1.2 Organisation of research 10

1.3 Research funding 10

1.4 Use of infrastructures 11

1.5 Collaboration 12

1.6 Research staff 12

1.7 Open Science 13

2. RESEARCH PRODUCTION, QUALITY AND INTEGRITY 14

2.1 Research quality and integrity 14

3. DIVERSITY AND EQUALITY 16

4. RELEVANCE TO INSTITUTIONAL AND SECTORIAL PURPOSES 17

4.3 Health trusts 17

5. RELEVANCE TO SOCIETY 19

APPENDICES 21

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 committee 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 organisational structure of the Division of Surgery, Inflammatory Diseases and Transplantation (KIT) is integrated into the organisational and leadership structures of OUS and UiO's Institute of Clinical Medicine. Strategic research leadership is coordinated at the division's top level, with the Head of Research holding a dual role at both the hospital and university, overseeing activities for both institutions. In terms of research staff, at OUS-KIT there are 65 senior physicians, eight physicians, 30 researchers and postdocs and 24 PhD students. At UiO-KIT there are 25 professors/associate professors, 14 researchers and postdocs and 6 PhD-students. Among all research staff, women occupy a minority of positions. The majority of the professors/associate professors holds combined positions as senior consultants.

The Division of Surgery, Inflammatory Diseases and Transplantation is comprised of four thematic research groups: Translational research group, Transplantation medicine, Rheumatology, Dermatology and Infectious Diseases (RHI) and Surgical research group. On a daily basis the research is organized into and operates within 25 subgroups.

KIT’s research strategy is closely aligned with the hospital's overarching research priorities through an annual "action plan" that reflects the institution’s strategic goals. Each year, the KIT research committee identifies key focus areas for implementation, such as international collaboration, patient involvement, career development, post-doctoral training, and grant writing support for junior researchers. These priorities are shaped by clinical and research needs and the input of KIT’s research groups. The implementation of this strategy is overseen by a dedicated research administrative leader in collaboration with the Head of Research at KIT and the research committee. Separate research councils for each of the four research groups ensure continuous monitoring and refinement of the strategy. To further support strategic goals, a specialised committee has been established to facilitate both investigator- and industry-led clinical trials, ensuring that KIT remains at the forefront of clinical research.

The work of KIT in relation to its sector can be seen through its collaborations. In terms of co-authorship, nationally KIT has a co-authorship of 57,7%. Internationally, the figure is however higher with 60% co-authorship in 2022. International collaborations often concern rare diseases, for which, according to KIT, international collaborations are crucial. These are linked, for instance ,with the participation in various European Reference Networks for rare diseases (“ERNs”) and the European and Nordic transplant registries. Moreover, the biobanking at KIT is comprehensive, encompassing a range of multi-material thematic biobanks (e.g. such as those for inflammatory diseases, liver diseases, and transplant-related biobanks) as well as tissue biobanks supported by the unit's high volume of surgical procedures (e.g., tumour tissue). These material collections facilitate translational laboratory research not only within UiO and OUS but also in other national and international laboratories. One international collaboration that KIT is a part of is the EU-SolidAct - a pan-European platform for pandemic research and preparedness. Together with INSERM France, the EU Health Commission and over 40 sites in 14 European countries, KIT participates in a master protocol that was designed to test medications in hospitalised patients in phase 2 and phase 3 clinical trials

Based on the self-assessment, in the future, KIT might take advantage of its comprehensive and multidisciplinary portfolio, translational from murine disease models all the way to implementation and phase II/III clinical trials and surgical trials. It might also take

advantage of other internal strengths such as the dedicated infrastructure for clinical trials with both medical and surgical services and the high inclusion-rate for ongoing trial due to integration with clinical service. Future challenges include capacity and inequity limitations for access to centralised hospital biobank services and the broadness of clinical services in KIT which means there is some thematic dispersion.

Overall evaluation

The administrative unit Division of Surgery, Inflammatory Diseases and Transplantation (KIT) of the Oslo University Hospital and University of Oslo is a combined high-profile clinical service and research unit with substantial high-quality research output. This evaluation was carried out in line with the Terms of Reference laid out by KIT and the Faculty of Medicine, University of Oslo.

The administrative unit lacks a unit-specific overarching research strategy. An annual re-aligning of the administrative unit's research strategy with the research strategy of the entire hospital does not seem appropriate nor provide a long-standing basis for strategical development of unit's research. Every research group have their own priorities and strategies, with no apparent cohesion between the groups within the administrative unit.

The administrative unit's funding and other resources seem quite adequate, and the share of external competitive funding is higher than in many other administrative units. Yet there might be room for additional funding from international and industry partnerships as well as EU funding. The administrative unit has a considerable number of research staff, some with combined hospital and university positions and many with hospital positions only. However, it is unclear why 56% of the research groups are led by women, yet only 17% of the professors are women.

The administrative unit's strengths are clearly the high-volume clinical service with integrated service-driven multidisciplinary research. Weaknesses include the above-mentioned dispersed research and little overarching co-ordination. Furthermore, the balance between clinical duties and dedicated research time remains a challenge, despite impressive funding.

The administrative unit's prospects seem very positive, especially if the threats and challenges can be overcome and a more cohesive administrative unit level research strategy can be formulated, acknowledged and implemented throughout the research-groups.

Recommendations

The committee suggests writing a detailed research strategy, specific to the administrative unit, based on the strengths and prospects of the unit, and more generally constructed on the research strategy of the entire hospital and university. Within the written strategy, the administrative unit should investigate possibilities of expanding the 50/50% research/clinical duties, to additional staff members. Moreover, it would be valuable if dedicated research time would be available also to the senior clinical staff, even without a specific position at the university. This might be possible with additional external funding for research, planned part-time positions and additional clinical staff hired with the part-time position funds.

The committee recommends expanding the administrative unit's participation in national and international infrastructures listed by the RCN evaluation. Especially the international infrastructures funded by the ministries, as well as ESFRI infrastructures, would make a valuable addition to the research entity of KIT. Further scientific collaboration should be investigated by looking into the possibility of developing more upper-level strategic international collaboration between the administrative unit and other high-impact institutions. This would probably provide the independent research groups with further opportunities of collaboration.

The committee recommends investigating the detailed reasons for clear gender imbalance in the senior research staff and especially the professors. It would be valuable to analyse and articulate the contextual background of this imbalance, whether historical or structural, in order to follow-up and eliminate possible structural obstacles. Furthermore, a strategic recruitment policy is encouraged, taking into account diversity, but also increasing the recruitment of medical and other life-science students into KIT research projects. This would enhance a long-standing recruitment and engagement of future researchers into the unit. Moreover, it would be crucial to expand this collaboration to other life-science disciplines, especially for the translational research groups.

1. Strategy, resources and organisation of research

1.1 Research strategy

Based on the administrative unit's self-assessment report, interview and the research group evaluation reports, the administrative unit's research entity comprises four thematic research areas (research groups): Surgical research, inflammatory diseases (rheumatology, dermatology and infectious diseases), abdominal organ transplantation and transplantation medicine, as well as laboratory-based inflammation-related research (translation). Within the four thematic areas there are 25 research groups led by group leaders. Coordination of research-related administrative processes is handled by five N3 heads of clinical departments together with a Head of Research and administrative research leader supported by a research committee.

Research activity in the administrative unit is closely linked with the clinical activity, focusing on improving patient care, diagnostics, therapeutic innovation – both in surgery and medicine. Several units have national service functions, allowing "comprehensive national coverage" cohorts and follow-up in relation to proof-of-concept and more established interventions (e.g. rheumatology, immunodeficiency, abdominal organ transplantation and advanced surgical interventions), assisted by biomarker discovery projects and translational laboratory research.

In the self-assessment report, it is stated that the "the research strategy of the unit is re-aligned with the overall hospital research strategy on an annual basis", by an annual "action plan" developed by the research committee of the unit, selecting priority areas for implementation throughout each calendar year (e.g. internationalization, patient involvement, career development, post-doctoral training, grant writing "clinics" to support junior researchers applying for research funds, etc.). Research priorities are dictated by clinical needs and priorities set by the research groups.

Implementation of the research strategy is coordinated by a dedicated research administrative leader, in addition to the Head of Research in KIT, with follow-up and refinement done by separate research councils for each of the four research groups. A separate committee has been established to promote and facilitate investigator and industry-led clinical trials. Strategic priorities and announcement for positions are done both at the administrative unit level and at the level of the research groups, coordinated by the research councils.

However, the documentation provided only includes the Oslo University Hospital overall research strategy paper for the years 2021-2025 which is very general and only three pages in length. Also, an action plan for research and innovation 2024-2027 is provided for the entire hospital. The annual action plans for the administrative unit (KIT) are only in Norwegian and seem to be project specific. The interview verified that the administrative unit does not have a written overarching research strategy specific to the administrative unit.

The committee's evaluation

In the light of the provided documentation and the interview, it seems that the administrative unit lacks a unit-specific overarching research strategy. An annual re-aligning of the administrative unit's research strategy with the research strategy of the entire hospital does not seem appropriate nor provide a long-standing basis for strategical development of unit's

research. Every research group have their own priorities and strategies, with no apparent cohesion between the groups within the administrative unit.

The committee's recommendations
As a recommendation, the committee suggests writing a detailed overarching and collating research strategy specific to the administrative unit, based on the strengths and prospects of the unit, and more generally based on the research strategy of the entire hospital and the university.

1.2 Organisation of research

The administrative unit is organized in two lines of command: the joint hospital leadership and the research group structure, with the formal research responsibilities positioned with the head of departments. The research entity comprises four thematic research areas (research groups): Surgical research, inflammatory diseases (rheumatology, dermatology and infectious diseases), abdominal organ transplantation and transplantation medicine, as well as laboratory-based inflammation-related research (translation). Within the four thematic areas there are 25 research groups led by group leaders. Coordination of research-related administrative processes is handled by five N3 heads of clinical departments together with a Head of Research and administrative research leader supported by a research committee. A total of 152 researchers, of which 46% are women, are reported to work in the administrative unit. Many of the researchers are in combined clinical and research positions. Surgical fellows have possibilities for paid 50/50% research and surgical residence fellowships. Short-term research exchange grants for mobility are provided.

The committee's evaluations
The staffing for research seems adequate, with the 50/50% research/clinical duty positions for surgical fellows being an excellent opportunity for young clinicians in training to pursue both a clinical career and a scientific training in form of PhD. In the light of the provided documentation, it seems that this arrangement is only provided for surgical trainees and no other clinicians or consultants. Strategic recruitment of future talents relevant to the specific research focus and strategy should be secured.

The committee's recommendations
The committee recommends that the administrative unit investigates possibilities of expanding the 50/50% research/clinical duties, into other staff members as well. Furthermore, it would be valuable if dedicated research time would be available also for the more senior clinical staff, even without a specific position at the university. This might be possible with additional external funding for research, planned part-time positions and additional clinical staff hired with the part-time position funds. The committee also recommends strategic recruitment of focused research talents, as the administrative unit's overarching research strategy evolves.

1.3 Research funding

The administrative unit's self-assessment report describes a very extensive external competitive funding portfolio. The total research budget of the administrative unit is 135

MNOK per year, of which 83 MNOK is external funding and 53 MNOK is institutional funding from OUS and UiO. The administrative unit reports that their external competitive funding has increased substantially in the later years of the evaluation period, being 90 MNOK in 2022. A total of 244 MNOK of external funding has been granted for a total of 243 projects. Yearly, the majority of the funding comes from competitive national funding (HSØ). However, the administrative unit has also been able to acquire EU-funding for at least three projects. Of the total reported R&D budget, approximately 10% comes from international sources.

The committee's evaluation

In the light of the provided documents, it seems that the administrative unit's funding in total is quite adequate, and the share of external competitive funding is higher than in many other administrative units. Yet there might be room for additional funding from international and industry partnerships as well as EU funding.

The committee's recommendation

The committee recommends investigating possibilities of expanding the funding base towards more EU and other international funding, as well as industry partnerships. This might provide possibilities for more dedicated research time for senior clinicians and recruitment of additional clinicians to fill the gap.

1.4 Use of infrastructures

The administrative unit is not hosting or participating in any of the national infrastructures listed in the Norwegian roadmap, nor in any of the listed international infrastructures. In the self-assessment, the administrative unit lists several other national infrastructures, which they manage or partner with, including multiple national registries, programmes of microbiota medicine and an advisory unit for juvenile onset rheumatology. International infrastructures listed in the self-assessment include the Nordic liver transplant registry (hosted by KIT), several ERN registries and participation in several EU-funded projects. No participation is listed for ESFRI infrastructures. FAIR-principles are sought to be complied with, but the administrative unit recognizes several challenges in successfully adhering with the principles.

The committee's evaluation

The national and international infrastructures in which the administrative unit participates, are valuable and important although not listed in the Norwegian roadmap or funded by the ministries. However, it seems that there is room for expanding participation and aiming at hosting infrastructures listed in the roadmaps. In the self-evaluation or in the interview, it wasn't clear why participation in these infrastructures is not considered important by the administrative unit.

The committee's recommendations

The committee recommends expanding the administrative unit's participation in national and international infrastructures listed by the RCN evaluation. Especially the international infrastructures funded by the ministries, as well as ESFRI infrastructures would make a valuable addition to the research entity of KIT.

1.5 Collaboration

The administrative unit, or more specifically the research groups, present an extensive network of both national and international collaborations. Internationally, EU-projects, Nordic collaborations and participation in ERNs are most prominently demonstrated.

The administrative unit presents a strong international collaboration in their self-assessment report as illustrated by a considerable share of publications with international co-authors. Approximately 60% of the administrative unit's publications have international co-authors in the recent years.

Prominent examples of the international collaboration include hosting the EU-SolidAct platform with more than 40 sites in 14 European countries, as well as participating in the EU PainFACT consortia. Further examples include participation in European Reference Network (ERN) for rare inherited and congenital anomalies, with 39 full member hospital in 12 EU countries. Several other examples are listed in the self-evaluation report for national and international collaboration of the administrative unit's research groups and researchers.

In the light of the self-assessment report and the interview, it seems that all of the collaboration in research group or researcher led, with no apparent higher-level collaboration of the entire administrative unit with other institutions as such.

The committee's evaluation

The administrative unit's national and international collaboration is developed and maintained by the different research groups, rather than the administrative unit, as stated in the self-assessment report. This is rather typical for research collaboration and not a hindrance, yet strategical participation in the international infrastructures listed in the prior chapter might produce some upper-level collaboration between institutions rather than the solitary research groups. All of the international collaborations listed are Nordic or European, and there seems to be room for expanding the collaboration to other continents.

The committee's recommendations

The committee recommends investigating into the possibility of creating more upper-level strategical international collaboration between the administrative unit and other high-impact institutions. This would probably provide the independent research groups with further opportunities of collaboration and potentially increase the research level.

1.6 Research staff

Approximately 150 research employees are accounted for in the administrative unit, with altogether 46% of them being women. The share of women in the senior research staff is much smaller, being 17% of professors and 28% of senior physicians. However, women lead 14 of the 25 (56%) research groups.

In addition to the specific research staff listed in the self-assessment report, considerable number of clinicians contribute to research output despite having no dedicated research time. Further additional 40 technical-/lab-/nurse- researchers are excluded from the figures but contribute significantly to the research activities.

The committee's evaluation
The total research staff number seems quite adequate. It is unclear why 56% of the research groups are led by women, yet only 17% of the professors are women. Historical recruitment may explain the unbalanced gender composition at the professorial level, and it is important that adequate career development support is given to the junior scientists and group leaders so that investigators of both female and male gender are given equal opportunities. Clinicians contributing to research activities without dedicated research time is a rather universal phenomenon but might be looked into in more detail.

The committee's recommendations
The committee recommends investigating the detailed reasons for clear gender imbalance in the senior research staff and especially the professors. It would be valuable to analyse and articulate the contextual background of this imbalance, whether historical or structural, in order to follow-up and eliminate possible structural obstacles. Dedicated career development programmes for both or underrepresented sexes could be considered.

1.7 Open Science

The administrative unit endorses OUS and UiO open science policies, recommending publishing in open access journals or publication deposition in openly available repositories. The administrative unit reports a significant increase in the proportion of open-access publications since 2016. The NIFU report on open access publication shows that approximately 80% of administrative unit's publications are openly available. The administrative unit describes in their self-assessment report that a national repository for scientific publications should be available for all sectors in 2024.

The administrative unit reports in their self-assessment that OUS has taken a restricted position as to GDPR interpretations vs Norwegian data privacy rules. This leads to some controversy between the OUS position to GDPR especially regarding deposition of raw data, such as genetic or transcriptomic data, which remain unsolved.

The committee's evaluation
The open science policy and its implementation at the administrative unit seems sufficient. Proportion of open-access publications is very significant, being approximately 80% in the recent years. The concerns and controversies regarding GDPR, and data protection as opposed to open science, are universal and will probably require further European and Global discussion and elaboration.

The committee's recommendations
The committee has no recommendations regarding further actions on open science.

2. Research production, quality and integrity

Introduction

The research focus areas of the administrative unit are thematically organized around the clinical patient groups seen at the unit (KIT). Research areas are broadly split into surgical research including transplantation, and into a portfolio of inflammatory diseases, including translational laboratory research.

Surgical research at KIT has two main components: a) Provision of surgical material for translational research performed at other units of the hospital and b) surgical research performed at KIT, related to methodological innovations.

The inflammatory research at KIT is also divided into two main components: a) clinical research based on large patient cohorts and b) translational laboratory-based research.

The policy for research integrity is described in the self-assessment report as following of institutional guidelines and involvement in OUS-UiO Commission on research integrity. The main preventative measure is described as comprising of training, guidelines and specifically inclusion of all researchers in research groups and “lone” researchers not being allowed in the unit.

2.1 Research quality and integrity

This part presents the overall evaluation of each research group that this administrative unit has registered for the evaluation. These evaluations of the research groups have been written by one of the 18 expert panels that have evaluated the registered research groups in EVALMEDHELSE. The panels carry the sole responsibility for their evaluations. The evaluation committee is not responsible for the assessments at research group level.

Rheumatology, Dermatology, and Infectious Diseases / Clinical Immunology (RHI)

The organisational support in terms of biorepository infrastructure and apparent access to laboratory access is to be commended. However, no clear evidence of cutting-edge technologies (e.g. polyomic processing) was presented. These are increasingly critical in the study of complex, heterogeneous conditions (which are the focus of this research group) and would enable fuller exploitation of their potent biorepositories. Similarly, bioinformatics support is not evident. They do, however, have multiple international collaborations with world-leading groups. Together, this likely explains why the group are seen to be collaborators rather than leaders of the highest impact research outputs, do not yet enjoy major international external funding and why the societal impacts are limited (to for example newsletters rather than multiple examples of transformational clinical care endeavours).

Surgical Research Group

As strengths, the sub-groups have unique access to large patient populations, outstanding national and Nordic registers, and biobanks of surgical specimens. Aside from intra-institutional collaboration, the sub-groups have major national and international partners, including world-renowned universities. The total number of supervised PhDs is high. As a weakness, there is an imbalance in the share of women in almost all personnel categories. The acquired external funding (mainly from national sources) is short for the hiring of full-

time research personnel. International funding is low. The self-assessment report lists further challenges due to limited research time, lack of basic funding for supporting research personnel, shortage of adequate working space and the lack of user-friendly clinical and research database.

Transplantation Medicine

This is a group that is conducting world-leading research and producing outputs that are of the highest standard. The research environment is outstanding and enables the group to lead on and conduct excellent research. The output profile is of outstanding quality and the group have made an extensive contribution to the economic and societal development in Norway and internationally. The grading shows the performance of the group is of high quality and well-balanced across all dimensions.

3. Diversity and equality

The administrative unit describes increasing emphasis on diversity, equality and inclusion, with both OUS and UiO having policies and action plans to enforce diversity. The administrative unit specifically highlights that currently 56% of research group leaders are women.

The committee's evaluation

The diversity, equality and inclusion policies of the institutions are in order. Yet, it is unclear why 56% of the research groups are led by women, yet only 17% of the professors are women. It is unclear to the committee if there is a structural reason for this, or is it historically determined and will be balanced on its own in the future. The latter was implied in the interview, but the specifics remain unclear.

The committee's recommendations

The committee recommends investigating the detailed reasons for clear gender imbalance in the senior research staff and especially the professors. It would be valuable to analyse and articulate the contextual background of this imbalance, whether historical or structural, in order to follow-up and eliminate possible structural obstacles.

4. Relevance to institutional and sectorial purposes

In the self-assessment report, the administrative unit describes that most research is linked to sector-specific objectives with the close integration of clinical work, teaching and research at KIT. Similarly, the close integration of the University of Oslo and the Oslo University Hospital, leads to a sector specific impact for the higher education sector regarding teaching, training and research.

The administrative unit has selected five impact cases highlighting the key characteristics of research at KIT, with predominant contribution to increasing the scientific knowledge base, relevant to patient care and treatment, thus implicitly serving institutional and sectoral purposes. A key example of such relevance is the abdominal organ transplant service hosted by the administrative unit. This is a national service, being the only Norwegian centre performing abdominal organ transplantation. The service integrates a national kidney failure register and liver transplant register, with a high coverage and follow-up, as well as linked biobanking.

Regarding innovation, the administrative unit describes a strong culture of innovation in its self-assessment report. Early-stage innovation is supported by the UiO Growth House and late-stage innovation by Inven2 technology transfer office. A highlight of surgical innovation is presented with the transplant oncology case and treatment of hepatotropic liver metastasis with techniques adopted from liver transplantation. The administrative unit describes that the most important innovations over the course of the evaluation period have been service innovations rather than commercialisations. Indeed, the administrative unit reports that the research staff has high motivation for service and patient pathway improvement, but lower motivation for commercialisation activities. According to the self-assessment report, this may be due to complex rules regarding conflicts of interest.

The committee's evaluation

The administrative unit's relevance to institutional and sectorial purposes seems clear regarding the presented impact cases. In their self-assessment report the motivation among the research staff in doing innovation and especially commercialisation is not clearly described, although the administrative unit describes an ongoing campaign to foster these activities. Indeed, it seems that the innovation and commercialisation potential and incentives are not yet fully realized but there seems to be strong willingness and strive towards achieving more. The UiO Growth House is a welcome addition to the portfolio.

The committee's recommendations

The committee recommends probing the hurdles of innovation that are reported in the self-assessment (bureaucracy, policies, complex rules etc). Commercialisation may not be the most important aim of innovation and research at OUS and UiO, yet it should be made possible and easier for the researchers.

4.1 Health trusts

The self-assessment report describes several examples of clinical research and innovation at the administrative unit in which research ideas are developed from bed-to-bench and back-to-bed. These include for example multiple intervention trials and national lead in clinical microbiota medicine with associated biobanks. The administrative unit participates in medical student training and recruits' students for conducting their MD thesis at the unit.

Special emphasis is given to a nursing study research group, leading to collaboration with Oslo Metropolitan University's nurse training program. The self-assessment report also describes a weakness, being the modest involvement of the translational research groups with a master training in other life-sciences. The UiO Medical Student Research Program (MSRP) provides an optional pathway for medical student to have funding and to develop a research project during medical studies. Several students have conducted their MSRP project at the administrative unit over the years.

The committee's evaluation

In the light of the self-assessment report, there seems to be room for further increasing the involvement of medical and other life-science students in research conducted at KIT. The scope of involvement of the medical student research program students in KIT research activities remains uncertain and this could be low-hanging fruit to recruit medical students for involvement in KIT research.

The committee's recommendations

The committee recommends actions to increase medical and other life-science students' involvement in KIT research projects. This would enhance a long-standing recruitment and engagement of future researchers into the unit. Moreover, it would be crucial to expand this collaboration to other life-science disciplines, especially for the translational research groups.

5. Relevance to society

As described in the earlier chapters, the administrative unit is an integrated health service provider (OUS) and an academic research institute (OUS and UiO). This inherently implies that the research conducted at the administrative unit is largely integrated into services, which is one of the long-term strategic orientations of the Norwegian government's research policy. The administrative unit's research is also closely related to SDG target 3.3 (communicable diseases) as well as SDG target 3.4 (non-communicable diseases).

Comments on impact case 1 - Liver transplantation as a treatment option in non-resectable colorectal liver metastases

Non-resectable colorectal cancer liver metastases (CRLM) are a treatment challenge with poor outcome on traditional conservative treatment. The OUS research group has demonstrated that liver transplantation could be considered an effective and safe treatment option for CRLM in stringently selected patients. A stepwise research program from pilot study in 2005 to Oslo-score and a sequel study started in 2012 which showed a 5-year survival rate of 83%. Further research development includes the RAPID concept to increase liver graft availability. Key references include several *Ann Surg, Brit J Surg* and *JAMA Surg* articles.

The impact of the research group in developing the concept of transplantation oncology and providing scientific proof on the safety and efficacy of liver transplantation for non-resectable CRLM is undoubtedly clinically highly important. This research track initiated at the OUS has expanded into a global research field.

Comments on impact case 2 - Covid-19: - identifying predisposing factors and vaccine side effect that changed treatment guidelines and vaccine policies

A nationwide RCT with biobanking from the early steps of the Covid-19 pandemic. These provided clinically important novel data on immunopathogenic mechanisms and predisposing factors. Moreover, the research project discovered the underlying mechanisms for the severe adverse effects of one of the SARS-CoV-2 vaccines. Early RCTs with biobanking were part of the WHO solidarity project. Genetic susceptibility to severe Covid-19 was established and published and the research group was the first to report on vaccine-induced immune thrombotic thrombocytopenia and the underlying pathophysiology. Key references include articles published in *NEJM, Ann Intern Med* and *J Intern Med*.

The Covid-19 pandemic had huge global societal impact. Research aimed at Covid-19, and in part the research described here, highlights the great societal impact of rapid concerted and collaborative medical research to further understanding, treatment and ending of the pandemic. Furthermore, the conducted research provides important experience regarding the scientific approach to future pandemics.

Comments on impact case 3 - Colorectal cancer screening – From clinical Trials to Population Screening

A development from a small feasibility study to large population-based clinical trials and further population screening is described. A gradual research track from small feasibility studies in endoscopy, to large-scale RCT on colorectal cancer screening from 1990s to 2020s. The main trials and key references include: the NORCCAP trial of 100,000

Norwegians in the early 2000s, the NordICC trial on colonoscopy screening, the EPoS trials to test the best surveillance methods and the AI-driven colonoscopy trials. These have been published in high-impact journals such as *NEJM, Gut, Ann Intern Med* and *Science*.

The series of sequential clinical epidemiology and clinical trials have provided highly impactful data on colorectal cancer prevention strategies on a population level. Worldwide collaboration, long-term follow-up and inclusion of political decision-makers have led to an implementation of population-level colorectal cancer screening since 2022 in the Norwegian society.

Comments on impact case 4 - Systemic sclerosis: clinical management and disease awareness

An OUS/UiO research group has conducted multidisciplinary research on systemic sclerosis (SSc) since 2012 with a long-term aim of improving management and clinical outcomes of SSc. The research group has reported the first SSc studies from Norway with population-based observational clinical epidemiology, disease trajectory and natural history data. An SSc registry was implemented to prospectively follow-up on SSc patients. Consequently, controlled interventional studies were set up in collaboration with UCLA to investigate treatment possibilities for gastrointestinal tract (GIT) disease as well as interstitial lung disease (ILD). Results of the research have been published in *Rheumatology, J Am Coll Cardiol* and *Ann Rheum Dis* among others.

Although SSc is an uncommon disease entity, it has a very poor prognosis and disease trajectory, warranting impactful research. A national SSc management guideline was published in 2020 based on the research group's work. Evaluation of ILD and pulmonary hypertension, in addition to treatment of severe GIT symptoms have been the result of the research groups work.

Comments on impact case 5 - Kidney transplantation – improved selection, survival and quality of life

The research group's studies have aimed at overall improvement of long-term outcomes in kidney transplantation patients. The group has performed research especially to improve patient-level assessment of renal function and to improve patient- and graft-survival by individualised medication. A specific trial conducted by the group is a pilot-study of SGLT2-inhibitor in kidney transplants which has led to an ongoing larger-scale RCT on renal protection of SGLT2-inhibitor. Other key-studies include individualized dosing of immunosuppressive drugs, trial on treatment of CMV disease in solid organ transplants, studies on post-transplant diabetes mellitus, HRQoL studies in kidney transplant patients and studies on GFR estimation. These studies have been published in *Diabetes Care, Kidney Med* and *Transplantations*, among others.

All of these studies have high impact on the treatment, follow-up and outcomes of kidney transplant patients. Improving the kidney transplant treatment pathway has also significant impact on decreasing treatment costs as well as environmental burden of especially dialysis.

Appendices

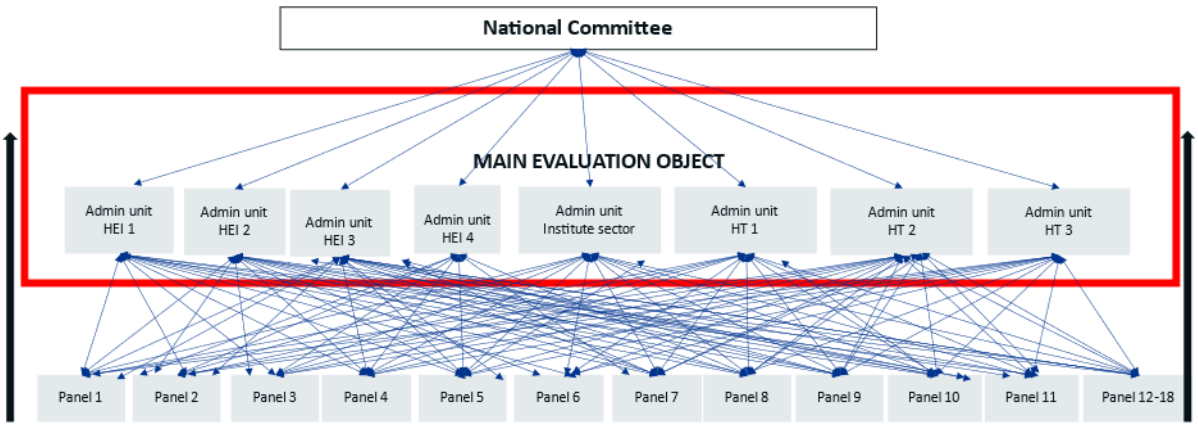
Evaluation of Medicine and health 2023-2024

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.

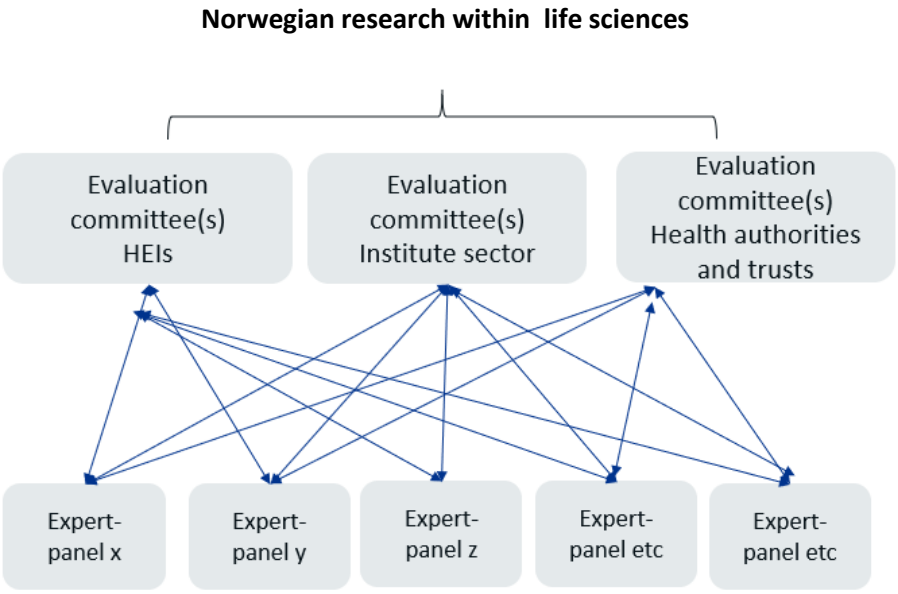


Figure 1. Evaluation committees and expert panels

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 3
Guidelines for completing the self-assessment 4
1. Strategy, resources and organisation 5
1.1 Research strategy 5
1.2 Organisation of research 7
1.3 Research staff 7
1.4 Researcher careers opportunities 8
1.5 Research funding 8
1.6 Collaboration 9
1.7 Open science policies 11
1.8 SWOT analysis for administrative units 11
2. Research production, quality and integrity 12
2.1 Research quality and integrity 12
2.2 Research infrastructures 12
3. Diversity and equality 13
4. Relevance to institutional and sectorial purposes 14
4.1 Sector specific impact 14
4.2 Research innovation and commercialisation 14
4.3 Higher education institutions 15
4.4 Research institutes 15
4.5 Health trusts 15
5. Relevance to society 16
5.1 Impact cases 16

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 Surgery, Inflammatory Diseases and Transplantation	Rheumatology, dermatology, and infectious diseases / clinical immunology (RHI)	Panel 3b-3
Oslo University Hospital	Division of Surgery, Inflammatory Diseases and Transplantation	Surgical research group	Panel 3b-3
Oslo University Hospital	Division of Surgery, Inflammatory Diseases and Transplantation	Transplantation medicine	Panel 3b-2
Oslo University Hospital	Division of Surgery, Inflammatory Diseases and Transplantation	Translational research group	Panel 2c

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 978-82-12-04078-6 (pdf)