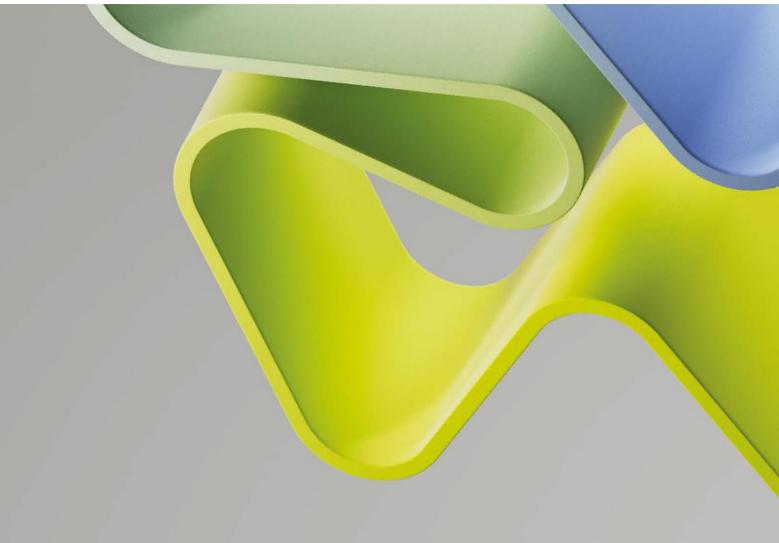
Evaluation of Life Sciences 2022-2024

Evaluation of medicine and health 2023-2024

Evaluation report

ADMINISTRATIVE UNIT: Møre and Romsdal Hospital Trust (HMR) INSTITUTION: Møre and Romsdal Hospital Trust (HMR)

December 2024



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Statement from Evaluation Committee Health Trust 2

This report is from Evaluation Committee Health Trust 2 which evaluated the following administrative units representing the hospital trusts in the Evaluation of medicine and health 2023-2024:

- Cancer Registry of Norway, Cancer Registry
- Lovisenberg Diaconal Hospital, Lovisenberg Diaconal Hospital
- Martina Hansens Hospital, Martina Hansens Hospital
- Møre and Romsdal Hospital Trust (HMR), Møre and Romsdal Hospital Trust (HMR)
- Division of Cardiovascular and pulmonary diseases, Oslo University Hospital and University of Oslo
- Division of Clinical Neuroscience, Oslo University Hospital and University of Oslo
- Division of Emergency and Critical Care, Oslo University Hospital and University of Oslo
- Division of Prehospital Services, Oslo University Hospital and University of Oslo
- Division of Cancer Medicine, Oslo University Hospital and University of Oslo

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

This report is the consensus view from committee Health Trust 2. All members of the committee have agreed with the assessments, conclusions and recommendations presented here.

Evaluation committee Health Trust 2 consisted of the following members:

Professor Martin Ingvar (Chair) Karolinska Institute

| Professor Ashley Blom | Professor Signe Borgquist |
|-------------------------------------|-------------------------------------|
| University of Sheffield | Aarhus University |
| Professor Vibeke Elisabeth Hjortdal | Professor Thomas Kubiak |
| University of Copenhagen | Johannes Gutenberg University Mainz |
| Professor Gavin Perkins | Professor Erica Villa |
| Warwick Medical School | University Hospital of Modena |

Geert van der Veen, Technopolis Group, was the committee secretary.

Oslo, December 2024

Profile of the administrative unit

The Helse Møre og Romsdal hospital trust (HMR) operates four hospitals in Kristiansund, Molde, Volda, and Ålesund. Research at HMR is primarily conducted within the clinics. The Section for Research and Innovation (SFI) administers internal research funding, with clinicians holding part-time research positions typically affiliated with SFI. Both SFI and the Section for Education are part of a department under the Administrative Director's Staff.

As of 2022, HMR's research staff included 48 senior physicians, 14 researchers and postdocs, four psychiatrists, four psychologists, one physician, and 45 PhD students.

HMR's research activities are organized into eight groups: Obstetric and Paediatric Research Group Ålesund (OPERAA-HMR), Oncology Research Group (ORG), Radiology (RAD-HMR), Research Group of Neurology (Neur-HMR), Surgery Research Group (SUR-HMR), Orthopaedic Research HMR (ORTHO-HMR), Internal Medicine HMR (Imed-HMR), and Psychiatry Research Group (Psych-HMR).

During the evaluation period (2012–2022), HMR followed two key strategies: "Strategy for Research in Central Norway (2016–2020)" and "FIUK-plan for Møre and Romsdal Hospital Trust (2018–2022)." The main objectives were to enhance research competitiveness internationally, improve clinical practice, and elevate patient care. Key focus areas included integrating research into clinical practice, improving research quality, forming research groups, fostering collaboration, increasing user involvement, and securing funding. HMR's current strategy aligns with national goals to double clinical studies by 2025 and increase patient participation, with plans to expand health professionals' involvement and research collaborations by 2026.

Research at HMR aims to meet key hospital sector objectives, with an emphasis on publishing high-impact international research and strengthening research infrastructure. The trust supports collaborations and PhD projects in areas such as psychology, orthopaedics, and radiography. In its self-assessment, HMR emphasizes collaboration as central to addressing societal and healthcare challenges. Its research strategy prioritizes partnerships across various levels, reflecting government directives for regional hospitals to foster collaboration between sectors, hospital trusts, and primary healthcare providers.

HMR collaborates strategically through committees such as the Liaison Committee for Education, Research, and Innovation in Central Norway (Samarbeidsorganet), the Regional Collaboration Committee for Research and Innovation in Mid-Norway (SUFI), the Local Collaboration Committee for Research, Innovation, and Education in Møre og Romsdal County (LSO), and the Møre og Romsdal Healthcare Community.

Looking ahead, HMR could leverage internal strengths, such as research conducted by clinicians who integrate it directly into clinical settings, ensuring relevance to patient treatment. External opportunities include expanding collaborations with municipalities in health services research and innovation. However, challenges remain, such as the small proportion of researchers engaged in international networks and increased clinical workloads, which may constrain time available for research.

Overall evaluation

The evaluation committee's overall assessment, based on the terms of reference provided by the administrative unit, is that HMR Hospital is a well-organized administrative unit, excelling in patient care. However, it needs to further develop its research component to establish a balanced ecosystem for sustainable growth.

The administrative unit's organization is robust from a clinical perspective. To achieve comparable strength in research, it is essential to identify a strategic lead who can define relevant projects, secure funding, and attract junior researchers.

Throughout the evaluation period, HMR management has shown strong support for research by recruiting personnel and establishing supportive units. Despite this positive commitment, a significant gap remains between planned goals and actual outcomes. Bridging this gap will require substantial effort and investment. Another major challenge is the lack of sufficient funding, which continues to hinder development.

The future prospects of the administrative unit depend heavily on its ability to implement a strategic vision that elevates its research capabilities to the same level as its clinical excellence.

Recommendations

- Recognise the importance of fostering a global research organisation. This involves not only funding personnel but also cultivating a research culture and establishing a global framework that supports this vision. Efforts should focus on building strong relationships between units to enhance research efficiency and productivity. Additionally, strategic leadership is essential to implement the necessary changes effectively.
- Develop a strategic plan for research.
- Make every effort to build a more stable and comprehensive research organisation, focusing on a strategic planning that includes scientific personnel, identification of group leaders, acquisition of sufficient funding to allow for a much broader recruitment of medical and biotechnology personnel, so that the 50%/50% distribution of time between clinical and scientific work can be achieved.
- Appoint a group leader or a restricted group of persons in charge of the strategic decisions involving the group, also in order to identify cutting-edge projects that can contribute to promoting research.
- Focus efforts on significantly increasing funding, since this is crucial for fostering research and a fundamental factor for promoting growth. One suggestion is to intensify participation in larger-scale research consortia and explore funding opportunities at international levels.
- Include use of and participation in research infrastructures in the (future) general strategic plan regarding research (as recommended above), as this could constitute a fundamental mechanism of progress.
- Include a more strategic approach towards collaboration in the (future) general strategic plan regarding research (as recommended above), as this could constitute a fundamental mechanism of progress. It would be a huge help for the growth of research expertise to have relevant national and international collaborations with outstanding institutions. This cannot be, however, created from one day to the other.
- Include a more strategic approach towards developing research expertise in the (future) general strategic plan regarding research (as recommended above),
- Continue to comply with Open Science policies.
- Improve men/women balance in senior positions. The informatic and non-informatic tools developed by HMR should be further implemented and outcome defined. Higher attention to gender balance should be paid by management as inequalities are still quite marked.
- Continue the effort to elevate the level of research. This will also have positive effect on the relevance of HMR to institutional and sectorial purposes.
- HMR management should increase the effort to facilitate the creation of better interactions between professionals and patients' organisation in order to maximize the outcome of the implemented initiatives.

1. Strategy, resources and organisation of research

1.1 Research strategy

The strategic goals for HMR, as outlined in the self-assessment and two key documents, *"Strategy for Research in Central Norway (Helse Midt) 2016–2020",* a regional hospital trust strategy, and the *"Strategy and Action Plan for Research, Innovation, Education and Competence (FIUK Plan) for Møre and Romsdal Hospital Trust 2018–2022*", are to become internationally competitive in research and strengthen clinical practice and patient care.

The administrative unit has prioritized investment in professionals. HMR funded five associate professor positions to enhance research competence, foster collaboration with NTNU and other academic institutions, and ensure academic competence in teaching activities. Additionally, HMR established the Clinical Research Unit (CRU) and Biobank HMR as infrastructure for conducting clinical trials, supported by dedicated personnel.

In 2023, HMR funded its first two research group leaders in orthopaedics and psychiatry, indicating a growing focus on building professional research staff.

The committee's evaluation

HMR has shown a commendable commitment to increasing the role and impact of research. However, a lack of strategic vision remains a key limitation. While there has been significant investment in personnel, no full-time researchers are employed; most staff split their time between research (50%) and clinical duties. Units with notable scientific output, such as orthopaedics and psychiatry, have benefited from appointing research group leaders. However, opportunities for synergy across research domains remain underutilized.

The committee's recommendations

- Develop a comprehensive research strategy that includes cultivating a research culture and global framework.
- Strengthen relationships between units to enhance efficiency and productivity.
- Appoint strategic leadership to implement necessary changes.
- Create a strategic plan for research development.

1.2 Organisation of Research

Research is one of four statutory responsibilities of specialist healthcare services, alongside patient treatment, education of health personnel, and training for patients and relatives. Its primary aim is to strengthen clinical practice and healthcare services.

At HMR, research is integrated into clinical operations across several departments, including the Aalesund Hospital Clinic, Prehospital Services Clinic, Diagnostics Clinic, Nordmøre and Romsdal Hospital Clinic, Mental Health and Substance Abuse Clinic, Property and Technical Services Department, and the Cancer Treatment and Rehabilitation Clinic. At the administrative level, the Section for Research and Innovation (SFI) and the Section for Education operate under the Administrative Director's Staff. The Clinical Research Unit (CRU) facilitates interaction between clinical, research, and administrative components.

The committee's evaluation

Efforts to establish a cooperative and competitive research framework are evident, but significant human and technical investments are required to ensure long-term success.

The committee's recommendations

- Build a stable and comprehensive research organization, focusing on strategic planning that includes sufficient funding and personnel.
- Appoint group leaders or a core team to guide strategic decisions and identify innovative projects.

1.3 Research Funding

HMR research is primarily funded by the Ministry of Health and Care through the Central Norway Regional Health Authority, which launched two strategic funding programs for research. These programs are the primary sources of funding for research group goals.

The hospital's annual budget grew from 6,000 MNOK in 2018 to 7,450 MNOK in 2022, with only 0.33–0.4% allocated to research. Although external funding has shown consistent growth since 2018, no international funding has been obtained, and commercial contributions are not quantified.

The committee's evaluation

While the total funding is satisfactory, the percentage allocated to research is insufficient for increasing scientific output. Disparities in the ability to attract competitive funding exist across hospital units.

The committee's recommendations

- Significantly increase funding to foster research growth.
- Actively participate in larger-scale research consortia and explore international funding opportunities.

1.4 Use of Infrastructures

HMR participates in NorCRIN, a national clinical research infrastructure, and the International Agency for Research on Cancer but is not represented in ESFRI infrastructures. HMR has started implementing FAIR principles and is committed to their adoption.

The committee's evaluation

Expanding national and international infrastructure participation would benefit HMR.

The committee's recommendations

• Incorporate infrastructure use into the overall research strategic plan to accelerate progress.

1.5 Collaboration

HMR collaborates with universities such as Volda University College (two PhD candidates), Molde University College, OsloMet, NTNU, and Bergen University (two PhD candidates).

National studies include the BIOSTOP Study, Matrix Work Package 3: Patient-Centred Care, and the Marine Protein Hydrolysate BIA project. HMR also participates in international projects, including COVIDMENT, Nordic NEC Registries, VIP1, and the IMAGINE study on breast cancer diagnostics using AI.

Following government directives, HMR collaborates with several regional committees, such as the Liaison Committee for Education, Research, and Innovation in Central Norway (Samarbeidsorganet).

The committee's evaluation

The volume of collaborations is average and mostly clinical, with limited involvement of leading research centers.

The committee's recommendations

• Adopt a strategic approach to collaboration, focusing on partnerships with leading national and international institutions to enhance research expertise.

1.6 Research Staff

HMR employs 116 researchers, including 60 in temporary positions (45 are PhD students). However, the overall interest in PhD programs is low. PhD students divide their time equally between clinical and research activities, resulting in extended timelines to completion.

The staff is predominantly aged 40–60 (~85%), with most PhD students aged 40–50 (~70%). Women are well-represented among PhD candidates and researchers/postdocs. Clinical researchers typically have 20% research time, increasing to 40% for some starting in 2024. Research group leaders have 50% research appointments.

The committee's evaluation

The staff numbers are adequate, but clinical demands limit their ability to engage intensively in research.

The committee's recommendations

• Develop a strategic plan to cultivate research expertise and increase participation in research activities.

1.7 Open Science

HMR adheres to national open science strategies, including the *National Strategy on Access to and Sharing of Data* and the Research Council of Norway's open-access policies. Most publications (81.2%) are open access.

HMR has established data collection initiatives, such as the BAROBS study, and a medical quality register for prosthetic joints, both aligned with national data-sharing strategies. A Data Access Committee (DAC) reviews and approves research data protocols, ensuring compliance with ethical and scientific standards.

The committee's evaluation

HMR demonstrates strong adherence to open science practices.

The committee's recommendations

• Continue compliance with open science policies.

2. Research production, quality and integrity

2.1 Research quality and integrity

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

Internal Medicine Research Group (Imed-HMR)

The level of research of the Imed-HMR has so far been moderate to low. This affects all the different points that need to be evaluated for this report. However, there are indications that management is aware of this and the possible reasons and is working to raise the level of scientific management.

Research Group of Neurology (Neur-HMR)

This young group conducts research across a variety of topics and is in the early stages of development. It is producing good clinically oriented research, despite the limited number and seniority of full-time researchers in this group. The group has access to some research infrastructure, and the leader of the group has a formal 40% research post. The group's research is collaborative, with much of the research undertaken through multicentre studies led by other organisations. A particular challenge recognised by the group is retaining personnel within post-doctoral research positions since members often return to full-time clinical practice following their PhD. This is a significant threat to the development, consolidation, and sustainability of the research undertaken. It risks the research developing opportunistically, rather than being strategically driven.

Obstetric and Paediatric Research Group Ålesund (OPERAA-HMR)

The strengths of OPERAA-HMR's are its solid institutional funding and the integration of paediatrics and obstetrics and gynaecology within the same group. A weakness is that most members are primarily involved in clinical appointments with limited protected academic time. There is a lack of clear structure and common strategy. In addition, most projects are on a local or national level, which hinders the group's visibility and impact on an international level.

Oncology Research Group (ORG-HMR)

The oncology research group (ORG) was established only in 2022 through developing an application for research funding from Norway Cancer Society. A very small and young group based at Helse Møre and Romsdal and with extreme complex composition and research resources ("research being a natural part of clinical activity"): Apart from the leader, head of Research at The Clinic for Cancer Treatment and Rehabilitation (KKR), the group includes 2 researchers, 3 research nurses, 1 PhD candidate and a statistician, (5 have a temporary position). There is an established collaboration with 1 Associate Professor and 2 PhD students employed by the Norwegian University of Science and Technology (NTNU), Department of Health Sciences Ålesund (IHA). Furthermore ORG also

includes 2 x 40% (Kristiansund, all others Ålesund) + 1 x 20 % research coordinators. All, apart from the statistician, are employed by KKR. Their mission is to "be internationally competitive and to strengthen clinical practice and patient treatment", with a balance between self-initiated studies and participation in studies that are coordinated elsewhere, also using biobank material. Specialist areas are cancer (radiation therapy), rheumatology (ultrasound for diagnostics and treatment). Basic and grant funding internal and national resources (2.6 MNOK 2018 versus 2.6 MNOK 2022; pay per patient). HMR provides a range of local support for research and innovation activities and feedback on research applications. The ORG is involved in education at bachelor, master and PhD level but difficult to estimate the current contribution to education. The research projects are ambitious but diverse and the limited list of 5 publications are apart from 1 of moderate international quality (2 not senior neither first author). There is no user-oriented publication nor products (including patents, software or process innovations) which contribute to the research group's societal impact.

Orthopaedic Research Group (ORTHO-HMR)

The Orthopaedic HMR research group has good support and generous funding from the hospital trust via SRI, providing logistical and administrative support. The group is small but has had a sound development and a good scientific production. Including several clinical publications in high-impact journals. The biomechanical lab is of high national standard. Recruitment seems to be good. It is impressive that the group has succeeded in raising local support for research in a small hospital. One of the success factors has no doubt been extensive national networking. The group seems to have the capacity to attract increased national and international funding, by increasing their already successful cooperation with other units. The societal impact should be strengthened.

Psychiatry Research Group (Psych-HMR)

A strength of the research group for psychiatry is the applied research focus, including developing new methods for treating OCD and anxiety. Other strengths are the programme of research on the Bergen OCD treatment, the group's teaching and training students at both PhD and master's levels, and the collaborations with institutions like the University of Bergen/Bergen Centre for Brain Plasticity and the Norwegian University of Science and Technology (NTNU) in both projects and education. Weaknesses consist of: the research group is currently involved in a number of research projects, but it is difficult to discern their contributions in each project. Researchers from the group are lead authors on 9 out of the 15 articles, generally in journals with good impact factors; and Psych-HF seems to have a clear focus on the implementation of the methods they are involved in developing. The research group does not appear to have direct contact with treatment centres (user involvement).

Radiology Research Group (RAD-HMR)

This is a small but ambitious diagnostic radiology group involving both medical and technical researchers. The institutional location is unclear as they cover 4 (soon 3) hospitals with what is described as two teams. They aim at improving both educational and research output quality and seem to have good institutional backup. The obtained funding is however very limited both in volume and types of sources. The external cooperation is limited. The research and publication quality are average, there is some societal contributions but no user involvement in the societal dimension.

Surgery Research Group (SUR-HMR)

As a young and diverse research group, their contribution to research is significant. The societal contribution is education for medical students and master students, improvement in clinical pathways for different groups of patients, and support in decision-making in clinical settings, development of clinical tools and methods. Patient education as part of treatment, increasing health literacy and reducing stigma against obesity by information to the public via media and patient organisations. Increase the knowledge of global medicine.

The research group's benchmarks are set to fulfil the research strategy for HMR by practising clinical research, bringing research back to clinical practice, and actively including and recruiting colleagues into research.

As a young and diverse research group, the Surgery Research Group's contribution to research is significant. As a young, diverse and small research group it has difficulty in attracting major funding. To expand and increase their scientific level, they probably need to be more specific on their main goal and develop a strategy for that and needs more organisational support such as funding and research infrastructure.

3. Diversity and equality

Women are mostly represented in the PhD (all temporary positions) and researchers/post doc subgroups.

Despite the absence of a specific document on diversity and equality, HMR has taken several initiatives to promote diversity and prevent discrimination. E.g., when advertising vacant positions, HMR actively encourages application irrespective of all possible characterizing features of the applicants. An anonymous internal system for reporting deviations in present. Furthermore, in 2023 HMR appointed a work environment committee to implement constant monitoring of work environment conditions.

The committee's evaluation

The gender balance could be improved. Although most initiatives have been recent, there is enough to demonstrate HMR' sensitive position to these issues.

The committee's recommendations

• Improve men/women balance in senior positions. The informatic and non-informatic tools developed by HMR should be further implemented and outcome defined. Higher attention to gender balance should be paid by management as inequalities are still quite marked.

4. Relevance to institutional and sectorial purposes

HMR states that their focus on clinical research has been their strongest contribution to towards development, assessment and implementation of new diagnostic methods, treatment, and healthcare technologies.

HMR researchers are greatly involved in the training of medical students, post-doc and PhDs (for whom they are supervisors). Additionally, some of the research units hold lectures, state-of the art courses, some specific for PhD students.

Research opportunities for students are still limited, as many of the HMR's units have only recently started research. However, opportunities were provided through interpersonal contacts. A simulation unit and a study hall for the students serve as contact points.

The committee's evaluation

The growth in expertise in research is a feature that can positively influence all the other aspects.

The committee's recommendations

• Continue the effort to elevate the level of research. This will also have positive effect on the relevance of HMR to institutional and sectorial purposes.

5. Relevance to society

To fulfil the Norwegian Long-term plan for research and higher education, HMR has lately increased the investment in research and in infrastructures (like the Clinical Research Unit, that are thought to be a relevant tool to promote research.

For the UN Sustainable Development Goals, HMR is contributing to research on long-term effect of gastric bypass and on the Bergen4-day treatment of obsessive-compulsive disorders. HMR indicates that a number of novel patients-centred studies has been initiated.

The committee's evaluation

implementation.

While there is evidence of a great deal of good intentions to improve what already exists, many actions are still in an early phase, and it is difficult to predict the actual results so far. It would be relevant to know the outcome of some of the reported initiatives below in terms of numbers of patients treated and improvement of their health, e.g. the impact of CRU

The committee's recommendations

 HMR management should increase the effort to facilitate the creation of better interactions between professionals and patients' organisation in order to maximize the outcome of the implemented initiatives.

Comments on impact case 1: Bergen 4-day treatment

With the integration of research and clinical practice for the Bergen 4-Day Obsessive-Compulsive DisorderOCD Treatment (B4DT) at Helse Møre og Romsdal Hospital Trust, the Bergen Centre for Brain Plasticity significantly advanced mental health care, especially for OCD and anxiety disorders, by cutting therapy time from months to four days.

It represents an innovative paradigm shift in treating Obsessive- Compulsive Disorder (OCD), demonstrating exceptional efficacy in a markedly short period, introducing an efficient and effective new treatment approach for OCD and anxiety disorders that led to 6 articles in peer-reviewed journals

The Bergen 4-Day OCD Treatment (B4DT), has made a distinct and material

contribution to mental health care, particularly in the treatment of OCD, social phobia, and panic disorder.

Comments on impact case 2: The EULAR points to consider for use of antirheumatic drugs before pregnancy and during pregnancy and lactation

This impact case has improved and systematised the knowledge about the use of antirheumatic medication in pregnant women with inflammatory rheumatic diseases, and how it may affect the health of the mother, foetus and child. It is based on a systemic literature search (SLR) on pregnancy exposure data from several registries was reviewed, for the period 2008-2015, with an additional search for some medications 2006-2008. An expert consensus was reached to help clinicians in the treatment of pregnant women with

rheumatic diseases aiming at inactive disease and at the same time avoid exposure to teratogenic treatment. This led to 3 publications in peer-reviewed journals.

In Norway, the recommendation was implemented in the digital national guidelines authored by the National Service for Pregnancy and Rheumatic Diseases.

Comments on impact case 3: Clinical Research Unit

The development of a Clinical research unit (CRU-HMR stage I) that enabled professional and continuous support to researchers and clinical researchers. The research support includes trained research staff, basic laboratory and biobank services, technical equipment, and treatment areas. This CRU supports academic-clinical and clinical research with staff and space. After some years of planning, implementation of biobank activities was added to the project plan. This was in close collaboration with the regional Biobank1.

The CRU led to two Doctoral theses and 4 publications in peer-reviewed journals.

The CRU gave patients the opportunity to be a part of research located near their home and further led to:

- Improved data collection due to trained research staff, vital to results.
- Improved support to the clinicians.
- Educating and part of the innovative medicine.
- Collaboration with pharmaceutical industry give patient's access to new drugs several years before others and for some the only way to cure.

Comments on impact case 4: BAROBS Bariatric surgery observation study

The results of observational studies on long-term (five and 10 years) follow-up after bariatric surgery have changed the recommendation for standard follow-up from five to 10 years in the national quality register for bariatric surgery One of the main findings is that 50% of the patients had been in need for medical imaging and 18% of the patients of abdominal surgery after the gastric bypass operation, either because of suspected internal herniation or gallstone disease.

It was also found that self-rated health and quality of life were improved in more than 2/3 of the patients 5 years after surgery. Only 8% had a decline in self-rated health 5 years after surgery. This knowledge has been useful for patients considering bariatric surgery.

Data from BAROBS has been available for medical students and master students for their thesis. By the end of 2023 four master students and 20 medical students have written their thesis on a wide range of topics related to obesity and bariatric surgery.

Appendices

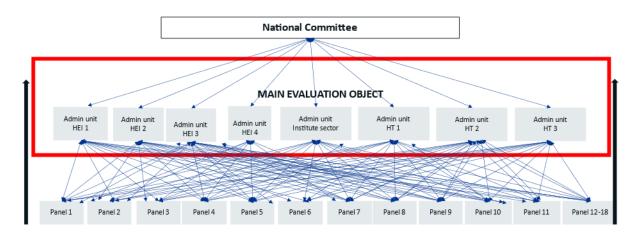
Evaluation of Medicine and health 2023-2024

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: <u>Evaluation of medicine and</u> <u>health sciences (forskningsradet.no)</u>



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

Forskningsrådet

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 <u>etter</u> at alle forskergrupper er meldt inn. Mer informasjon vil bli sendt i slutten av juni 2023.

Invitasjon til å foreslå eksperter – skjema 3

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

Obs. Det er to faner i regnearket:

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

Utfylte skjemaer (3 stk):

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

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

Tilpasning av mandat – frist 30. september 2023

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



Tilpasningen gjøres ved å fylle inn de åpne punktene i malen (Appendix A). Utfylt skjema sendes på epost til <u>evalmedhelse@forskningsradet.no</u> 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: <u>Fagevaluering av medisin og helsefag</u> (EVALMEDHELSE) - Digitalt informasjonsmøte (pameldingssystem.no).

Nettsider

Forskningsrådet vil opprette en nettside på <u>www.forskningsradet.no</u> for EVALMEDHELSE hvor informasjon vil bli publisert fortløpende. <u>Her</u> 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, <u>hgn@forskningsradet.no</u> 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

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- 4. Fagevaluering av livsvitenskap 2022-2024 Evalueringsprotokoll
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- 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



Evaluation of life sciences in Norway 2022-2023

LIVSEVAL protocol version 1.0

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

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Oslo, 5 April 2022

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1 Introduction

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

1.1 Evaluation units

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

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

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

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

1.3 The evaluation in a nutshell

The assessment concerns:

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

The Research Council of Norway (RCN) will:

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

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

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

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

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

1.4 Target groups

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

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

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

2 Assessment criteria

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

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

2.1 Strategy, resources and organisation

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

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

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

2.2 Research production, quality and integrity

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

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

2.3 Diversity and equality

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

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

2.4 Relevance to institutional and sectoral purposes

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

Higher Education Institutions

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

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

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

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

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

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

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

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

Research institutes (the institute sector)

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

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

The institutes should:

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

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

The hospital sector

There are four regional health authorities (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.

Norwegian research within life sciences

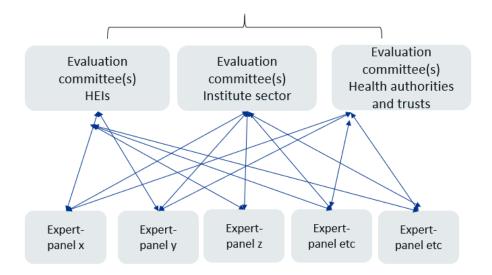


Figure 1. Evaluation committees and expert panels

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
 - 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.

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

Table 1. Types of evaluation data per criterion

F

Evaluation of Medicine and Health (EVALMEDHELSE) 2023-2024

Self- assessment for administrative units

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

Institution (name and short name):____

Administrative unit (name and short name): _____

Date:_____

Contact person:

Contact details (email):

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Introduction

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

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

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

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

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

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

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 <u>evaluation protocol</u>. In order to be evaluated on all criteria, the administrative unit must answer <u>all</u> 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 <u>ONLY</u> be answered by administrative units responsible for the Cand.med. degree programme, cf. <u>Evaluation of the Professional programme in Medicine</u> (NOKUT).
- It is possible to extend the textboxes when filling in the from. <u>NB!</u> 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 <u>might not</u> 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

1

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

| | 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, <u>https://dbh.hkdir.no/datainnhold/kodeverk/stillingskoder</u>.

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. <u>Please delete lines which are not in use.</u>

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

Table 2. Research staff

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 (forvalt | ingsoppgaver) or (if applicable) funding related to |
| special hospital tasks, if any | |
| | |
| Total funding related to public | |
| management/special hospital tasks | |
| | |

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. <u>Please delete lines which are not in use.</u>

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. <u>Please delete lines which are not in use</u>.

International collaborations

| Collaboration with internation | 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 |
|------------------------------|
| d relevance of the |
| collaboration |
| conaboration |

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 | research | 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. | 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 <u>evaluation protocol</u>.

- 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. <u>Please delete lines</u> 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. <u>Please delete lines which are not in use.</u>

| N | lo. | Name of innovation and commercial results | 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) <u>ONLY</u> for administrative units responsible for the Cand.med. degree programme, cf. <u>Evaluation of</u> 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:

 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 |
|--|---|--|--------------|
| Helse Møre og Romsdal hospital trust | Helse Møre og Romsdal hospital trust | Internal Medicine Research Group HMR (Imed-HMR) | Panel 3b-3 |
| Helse Møre og Romsdal hospital trust | Helse Møre og Romsdal hospital trust | Obstetric and Paediatric Research Group Ålesund (OPERAA-HMR) | Panel 3a-1 |
| Helse Møre og Romsdal hospital trust | Helse Møre og Romsdal hospital trust | Oncology Research Group (ORG) | Panel 3a-2 |
| Helse Møre og Romsdal hospital trust | Helse Møre og Romsdal hospital trust | Orthopaedic Research Group HMR (ORTHO-HMR) | Panel 3b-3 |
| Helse Møre og Romsdal hospital trust | Helse Møre og Romsdal hospital trust | Radiology Research Group (RAD-HMR) | Panel 3a-2 |
| Helse Møre og Romsdal hospital trust | Helse Møre og Romsdal hospital trust | Research Group of Neurology (Neur-HMR) | Panel 3b-1 |
| Helse Møre og Romsdal hospital trust | Helse Møre og Romsdal hospital trust | Surgery Research Group (SUR- HMR) | Panel 3b-1 |

Scales for research group assessment

Use whole integers only - no fractions!

Organisational dimension

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

Quality dimension

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

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

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

Societal impact dimension

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

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

Methods and limitations

Methods

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

The documentary inputs to the evaluation were:

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

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

Following the documentary review, the Committee interviewed the Administrative Unit in an hourlong 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.

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