Forskningsrådet

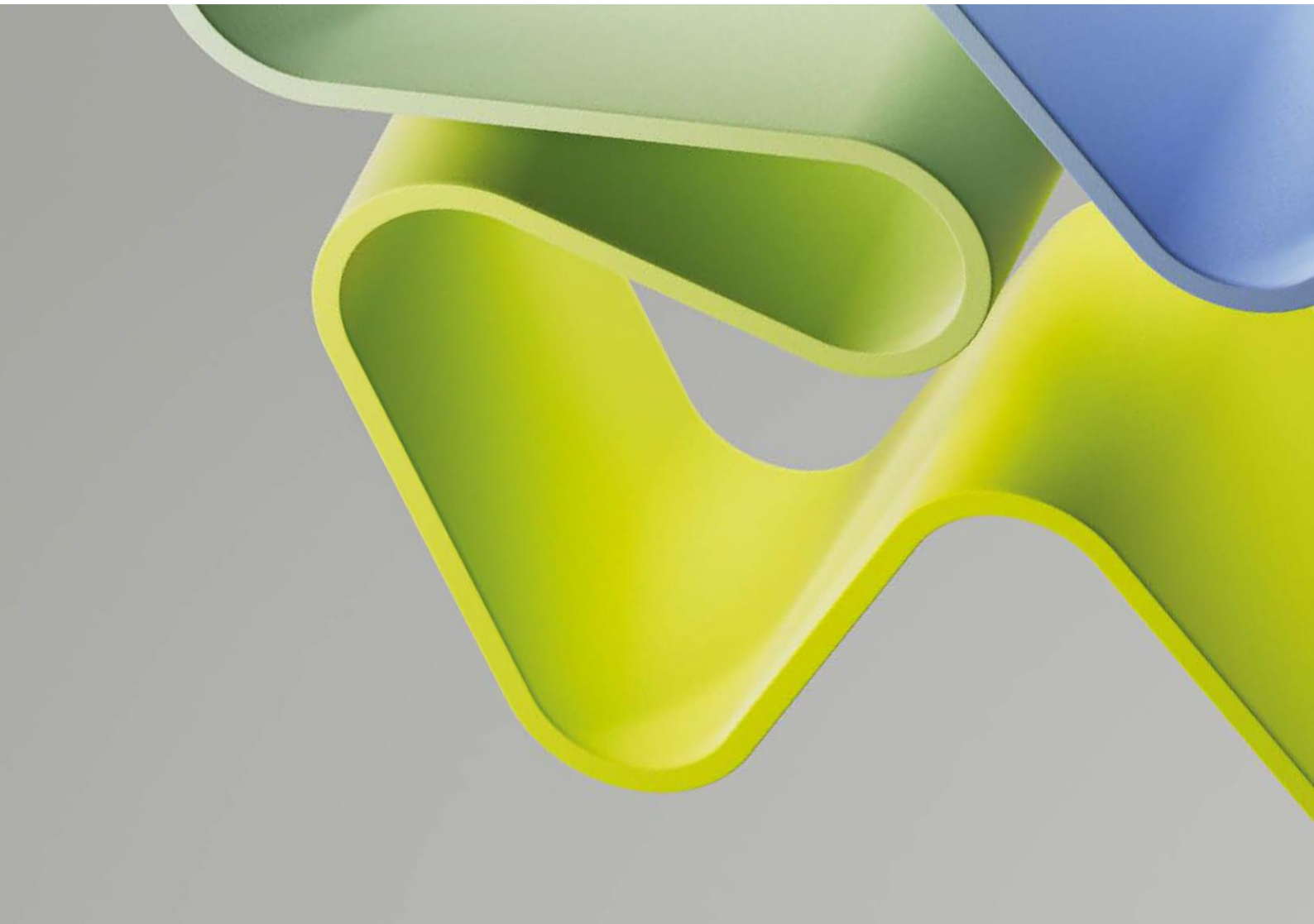
Evaluation of Life Sciences 2022-2024

Evaluation of medicine and health 2023-2024

Evaluation report

ADMINISTRATIVE UNIT: Martina Hansens Hospital
INSTITUTION: Martina Hansens Hospital

December 2024



Contents

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
University of Sheffield

Professor Signe Borgquist
Aarhus University

Professor Vibeke Elisabeth Hjortdal
University of Copenhagen

Professor Thomas Kubiak
Johannes Gutenberg University Mainz

Professor Gavin Perkins
Warwick Medical School

Professor Erica Villa
University Hospital of Modena

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

Oslo, December 2024

Profile of the administrative unit

Martina Hansens Hospital (MHH), is a private nonprofit hospital specialised in musculoskeletal diseases, located in Sandvika in the outskirts of Oslo, Norway. It is contracted by South-Eastern Norway Regional Health Authority and accepts patients from all over the country just like public hospitals.

With approximately 350 employees, MHH is a small hospital, but despite this, MHH has the largest elective orthopaedic and second largest rheumatologic department in Norway. Each year, close to 35.000 patients are treated as outpatients and approximately 4.500 surgeries are performed. The main object is to conduct outstanding research and patient treatment, which shall mutually strengthen each other" (Strategic plan for 2018-2022).

At the Martina Hansens Hospital (MHH) all researchers are organised in one research group, the Martina Hansens Hospital Clinic (MHH-C). The research activity is administered and monitored by the Research Board and the Research Coordinator. In terms of research staff, the administrative unit consists of 23 senior physicians, one physician, nine physiotherapists, one bioengineer, two occupational therapists, one health secretary, one radiographer and seven nurses. Women represent a majority in all categories except senior physicians (48%) and physicians (0%).

The strategic goals of the administrative unit MHH-Clinic (MHH-C) is to deliver high-quality research which meets ethical standards and transparency, with significance for patients because knowledge gaps are closed, and treatment methods are improved.

The primary goal of research at MHH is to generate new knowledge that improves patient care within the hospital sector. MHH researchers published 80 scientific articles between 2018 and 2022, with 19 led by MHH researchers as first authors. Several of these studies have influenced treatment protocols and updated national and international guidelines. In general, their policy is to encourage the researchers to collaborate with national and international partners, and to participate in reporting to national registries like the Norwegian Arthroplasty Registry, the Norwegian Knee Ligament Registry, the Norwegian Registry for Spine Surgery, The Norwegian Arthritis Registry, the Norwegian Vasculitis Registry and Biobank (NorVas) and the RevNatus registry. An example of a national collaboration with, among others, the University of Oslo is regarding the Double Bundle Anterior Cruciate Ligament Reconstruction Proposal where MHH aimed to make it possible to conduct a high-quality randomised controlled trial with involvement of different medical disciplines. MHH also collaborates internationally, for example with Linköping University in the area of Anti-neutrophil cytoplasmic autoantibody (ANCA)-associated vasculitis.

MHH is the largest elective orthopaedic department and the second largest rheumatology department in Norway, offering extensive patient populations ideal for clinical studies. With a substantial number of patients in each category, data collection is straightforward. The large patient base and positive research environment can possibly make MHH a compelling partner for multicentre collaborations. Additionally, for the same reasons, MHH is a source of data for national registries covering orthopaedic and rheumatologic conditions. These include the Norwegian Arthroplasty Register, the Norwegian Knee Ligament Registry, the Norwegian Spine Surgery Registry, the Norwegian Arthritis Registry, the Norwegian Vasculitis Registry and Biobank (NorVas), and the RevNatus Registry. There are also challenges that might impact the future situation of the administrative unit. Examples include the tight economic conditions which have been a limitation for building up a research unit the way that is wanted and if national and international regulations and laws gets too cumbersome, causing smaller and larger research projects to be too heavy and difficult to carry out.

Overall evaluation

The overall assessment of the evaluation committee, considering the Terms of Reference provided by the administrative unit, is positive.

Martina Hansens Hospital (MHH) has one single research grouping that focusses on Orthopaedic and Rheumatology interventional studies and participation in national registries. The interventional studies are largely multicentre randomised controlled trials and MHH is a major recruiter to these. Research is largely clinician led with good integration of research into routine clinical care. There is strong institutional commitment to clinical research and participation by a wide range of clinical staff is high. Where funding and clinical commitments allow, clinicians have protected time for research. Clinicians are encouraged to undertake doctoral degree training and this is facilitated by the hospital.

Research outputs are internationally excellent and have had marked impact on patient care both nationally and internationally. The case studies presented are exemplars of this.

MHH values Open Science and has a commitment to equality, diversity and inclusion (EDI) in research. However, MHH does not currently collect much data on Open Science and EDI metrics and thus the extent to which the commitment has led to transformational change is difficult to assess.

External grant funding is very low and thus research endeavours are financed out of the core hospital budget.

MHH has the potential to be internationally leading in the sphere of clinical research in musculoskeletal medicine, particularly in phase 3 randomised trials. However, for MHH to progress in the research sphere, the following issues will need to be addressed: securing external grant income at scale; developing and/or accessing methodological expertise in areas such as trial design, health economics, statistics, qualitative research and evidence synthesis; establishing a sustainable research infrastructure; and widening participation in trials to include nursing and allied health professionals as research leaders.

Overall, the committee wish to congratulate MHH on the strength of their research endeavours and particularly on the demonstrable impact of their research. The committee recognised that MHH is a private specialist hospital and in that context the current performance of MHH in research is commendable.

Recommendations

- Consider employing methodologists such as a statistician/ triallist, systematic reviewer, qualitative researcher and health economist. Alternatively, clinicians can be sponsored to undertake master's level University training in these fields. This will enable MHH to lead high quality collaborative research.
- Seek wider national collaboration in collecting large, pragmatic, preferably register-based randomised trials on common orthopaedic and rheumatologic conditions. Perhaps also include health-economic studies of the impact of the implementation of their research.
- The board would benefit from more diversity as it is strongly dominated by clinicians.
- Develop a strategy around securing external grant funding and have a framework in place to assist researchers in identifying potential sources of income and in writing high quality applications.
- If MHH seeks to become a leading partner in the field of high quality randomised controlled trials that are expensive to undertake, then MHH should prioritise working with more research-intensive partners to secure grants in excess of 10 MNOK, where MHH is the lead centre. Partnerships where MHH supplies the clinical expertise and University collaborators (such as the Oslo Clinical Trials Unit) supply the methodological expertise could realistically secure this level of funding. This would be transformative to MHH's research.
- Consider properly costing of the research in order to obtain a fuller understanding of the costs currently incurred and thus gaining insight in the grant income necessary to make this self-sustaining.
- Explore opportunities to make better use of infrastructures, especially national structures supporting medicine and health.
- Continue with the highly productive strategy of being a large-scale recruiter to national trials
- Seek to play a more leading role in the design of relevant trials. As MHH has very strong clinical academic expertise, it should, in the short term, seek partnership with academic institutions with strong methodological expertise to design, develop and obtain funding for RCTs that can be led from MHH. In the longer term MHH might consider growing the methodological expertise within MHH or within the wider hospital group it is currently joining.
- Give consideration to developing opportunities for nurses and allied health professionals to lead research.
- As stated elsewhere, give consideration to enhancing capabilities in either employing or access high quality methodological expertise.
- Expand research support services.
- Continue with existing policies of open data sharing and of contributing to registries.
- Monitor compliance rates with open access publication policies.
- Identify and apply for external funding to enable more high-quality research, possibly in collaboration with established University research groups.
- Consider how best to obtain access to high quality methodological expertise.
- Consider whether strengthening research governance infrastructure is feasible. MHH should routinely collect data on research participation, grant funding and research outputs by gender, age, ethnicity, disability and less than full-time working.
- Routinely collect data on research participation, grant funding and research outputs by gender, age, ethnicity, disability and less than full-time working.

- Continue with current strategy which is well suited to the strengths of MHH and is resulting in high quality impactful research.
- Collect data to measure progress towards SDG 5.
- Continue with strategy of participating in high quality multicentre randomised controlled trials.
- Give consideration to investing in more robust governance around research and to investing in methodological (particularly trials) expertise, as research infrastructure is sparse, particularly when seen in the context of the high-quality research produced.

1. Strategy, resources and organisation of research

1.1 Research strategy

Martina Hansens Hospital is a private non-profit hospital publicly contracted by the South-Eastern Norway Regional Health Authority. The hospital is relatively small with only 350 employees, but in the specialist areas of elective orthopaedic surgery and rheumatology, the departments are among the largest in Norway. As such, it performs large numbers (>4500) of common orthopaedic operations such as joint replacements and arthroscopy.

The majority of the research capacity is provided by clinicians, with little methodological expertise available in the hospital. The hospital's strategy with regard to capacity building is to recruit employees interested in research as well as hiring research-oriented support personnel. Among the research active clinicians are medical doctors, physiotherapists, occupational therapists and nurses. The support personnel also include different professionals, including a bioengineer. All researchers are organised in one research group. The research activity is monitored by the research board according to good clinical practice. The board members are predominantly from a clinical background but do include one patient representative and a part-time research coordinator.

Currently, the research group consists of eleven employees with PhDs and seven who are currently undertaking doctoral training. Unusually, for a private institute, employees with PhDs have 10% of their employed time allocated to research activities. Senior clinical researchers act as supervisors of junior researchers, who apply for grants to support research activity. The support personnel carry out research-related work as part of their usual working routine. The research organisation is partly core-funded and partly project-based (PhD students with external funding). Research staff are gender balanced at a senior level with 11/24 (46%) senior research active clinical staff being female. Amongst other personnel groups there is a strong female preponderance of 19/21 (90%) female staff.

The strategy of the research group is based on the notion that research is a core activity that contributes to the success of the hospital as a leading and preferred musculoskeletal centre for patients as well as for specialist staff. According to this concept, outstanding research and patient treatment will mutually strengthen each other. The research group aims to include national and international collaborations of PhD projects within different areas of rheumatology and elective orthopaedic surgery, in addition to quality assurance and interdisciplinary studies involving physiotherapists, occupational therapists and nurses. The strategy to obtain these goals involves 1) Seeking to secure both external and internal funding. 2) Recruitment and motivation of healthcare workers to participate in research. 3) Participating in both national and international randomised controlled trials and observational studies that are led by major university partners and other leading research bodies.

The stated benchmark is to deliver research of a high academic standard, which meets ethical standards and transparency, with clinical significance in closing knowledge gaps and in improving the treatment methods of patients.

The committee's evaluation

MHH clearly takes research seriously, allocates meaningful resources to underpin high quality research and promotes a strong culture of valuing research as a key component of good clinical care. In many ways this is an exemplar for other small specialist hospitals. The organisation into a single unit is sensible due to the small scale of the total research

endeavour and the concentration on elective musculoskeletal care. The policy of targeting participation in large multi-centre endeavours has led to MHH contributing to very high-quality projects and programmes. The ongoing commitment to upskilling staff by facilitating doctoral training is to be applauded.

In-house expertise is limited to clinical areas with no methodologists employed by the organisation. The most successful research centres have multidisciplinary teams of methodologists and clinicians allowing the design and delivery of the best quality trials. Without this, MHH will struggle to lead on major trials.

The committee's recommendations

- Consider employing methodologists such as a statistician/ triallist, systematic reviewer, qualitative researcher and health economist. Alternatively, clinicians can be sponsored to undertake master's level University training in these fields. This will enable MHH to lead high quality collaborative research.
- Seek wider national collaboration in collecting large, pragmatic, preferably register-based randomised trials on common orthopaedic and rheumatologic conditions. Perhaps also include health-economic studies of the impact of the implementation of their research.

1.2 Organisation of research

Research at MHH is organised in a single research group that reports to a research board. The board has 8 members of whom 7 are clinicians and one is a patient representative. The Chief Executive Officer of the hospital is one of the members. A newly created position on the board is the role of Research Administrator which is held by an Orthopaedic Surgeon. The role profile is wide and includes preparing research ethics and grant applications as well as co-ordinating research. Meetings are held every 4-8 weeks and an annual Research Symposium is held for all staff.

Senior researchers are allocated 10% of their time for research, whilst research activities for junior staff are interwoven with their clinical duties. As almost all research is in health services delivery, including 16 current randomised trials, this complementarity of clinical work and research activity is possible.

The committee's evaluation

The organisation into a single research group reporting to a research board is the sensible option. The research board lacks diversity as it is strongly dominated by clinicians. Research infrastructure is satisfactory, but will need strengthening, if the amount of research undertaken increases over time.

The committee's recommendations

- The board would benefit from more diversity as it is strongly dominated by clinicians.

1.3 Research funding

There is an acknowledgement that research is funded from the hospital's central budget, but the amount has not been quantified exactly, as the hospital states it is too difficult to determine as research work is intertwined with clinical work. In fact, it would not be too

difficult to estimate based on directly allocated time, per patient estimates of trial costs and widely available full economic costing formulae.

External funding is sought from charitable funders, the pharmaceutical industry and grant funding bodies. This is used to support both doctoral theses and post-doctoral research. Average annual funding is 2 MNOK, of which 600 000 NOK was from a single South-Eastern Norway Regional Authority grant on digital home monitoring; ca. 382 000 NOK was from ministries and underlying directorates; ca. 187 000 NOK from industry and ca. 937 000 NOK from the public sector.

The committee's evaluation

Considering the quantity and quality of the research undertaken by MHH, it is surprising that MHH only manages to attract 2 MNOK per annum of external funding. This would imply that the hospital is not recovering its costs of undertaking research.

The committee's recommendations

- Develop a strategy around securing external grant funding and have a framework in place to assist researchers in identifying potential sources of income and in writing high quality applications.
- If MHH seeks to become a leading partner in the field of high quality randomised controlled trials that are expensive to undertake, then MHH should prioritise working with more research-intensive partners to secure grants in excess of 10 MNOK, where MHH is the lead centre. Partnerships where MHH supplies the clinical expertise and University collaborators (such as the Oslo Clinical Trials Unit) supply the methodological expertise could realistically secure this level of funding. This would be transformative to MHH's research.
- Consider properly costing of the research in order to obtain a fuller understanding of the costs currently incurred and thus gaining insight in the grant income necessary to make this self-sustaining.

1.4 Use of infrastructures

MHH does not currently participate in any of the national research structures listed in the Norwegian roadmap for research infrastructure, nor in any ministry or European infrastructure.

The committee's evaluation

It is understandable that MHH as a very specialised hospital will not have research interests that align with many of the national research infrastructures, but those pertaining to health are within scope and participation in them could enhance the research opportunities available to MHH and give access to additional resource.

The committee's recommendations

- Explore opportunities to make better use of infrastructures, especially national structures supporting medicine and health.

1.5 Collaboration

MHH-C´s policy is to encourage the researchers to collaborate with national and international partners, and to participate in reporting to national registries like the Norwegian Arthroplasty Registry, the Norwegian Knee Ligament Registry, the Norwegian Registry for Spine Surgery, The Norwegian Arthritis Registry, the Norwegian Vasculitis Registry and Biobank (NorVas) and the RevNatus registry.

The strong emphasis on collaboration includes multi-centre trials led by university departments and industry funded studies.

Participation in these studies has allowed researchers at MHH to co-author high-quality scientific papers with clear impact on patient care. The policy has also resulted in patients treated at MHH having the opportunity to be enrolled in these studies with the resultant benefits to their care. Meaningful contributions to collaborative clinical studies have led to a virtuous circle of MHH being invited to participate in further multi-centre studies. Currently MHH are collaborating on twenty-one multi-centre studies.

Examples of national collaborations with university and hospital partners include: The Double Bundle Anterior Cruciate Ligament Reconstruction Trial; Rifampin combination therapy in staphylococcal prosthetic joint infections: a randomized controlled trial; and Time-dependent improvement in functional outcome following Oxford medial uni-compartmental knee arthroplasty.

Examples of national collaborations with hospital partners include: The MultiKnee trial: The effectiveness of exercise therapy and education plus cognitive behavioural therapy, alone or in combination with total knee arthroplasty in patients with knee osteoarthritis; physical therapy vs surgical decompression for lumbar spinal stenosis: A multicentre randomized controlled trial; and a population-based Systemic Lupus Erythematosus cohort study from the South- Eastern Norway Regional Health Authority.

The committee's evaluation

MHH collaborates effectively with a range of clinical and academic partners to deliver high quality impactful randomised trials and to support a number of national registries in musculoskeletal medicine. MHH is normally a collaborating partner and is seldom the lead partner in these multicentre collaborations.

The committee’s recommendations

- Continue with the highly productive strategy of being a large-scale recruiter to national trials
- Seek to play a more leading role in the design of relevant trials. As MHH has very strong clinical academic expertise, it should, in the short term, seek partnership with academic institutions with strong methodological expertise to design, develop and obtain funding for RCTs that can be led from MHH. In the longer term MHH might consider growing the methodological expertise within MHH or within the wider hospital group it is currently joining.

1.6 Research staff

MM has 45 staff (24 medical doctors and 19 nurses and allied health professionals, 1 secretary and 1 bioengineer) who have some research element to their roles. It is striking that there is only one staff member leading research who is non-clinical and that there are

no methodologists employed in research by MHH. Research activity is interwoven with clinical duties as most research consists of recruitment to clinical trials. Senior clinical staff are allocated 10% of their time to undertake research. Medical staff (doctors) with a research component to their role are gender balanced, but other staff groups undertaking research activities are almost exclusively female. Employees who receive external grant funding can have some clinical time bought out by these grants if and when operational constraints of delivering a busy clinical service allow. Research outputs by research active medical doctors is substantial.

The committee's evaluation

The research outputs are good, and research opportunities are also good considering MHH is a private provider of healthcare. The organisation promotes research outputs by doctors and research participation by a range of clinical staff. There is less evidence of research outputs (scientific papers and conference presentations by nurses and allied health professionals).

The committee's recommendations

- Give consideration to developing opportunities for nurses and allied health professionals to lead research.
- As stated elsewhere, give consideration to enhancing capabilities in either employing or access high quality methodological expertise.
- Expand research support services.

1.7 Open Science

MHH states a commitment to Open Science including open access to publications, open data sharing and access to educational resources. MHH contributes to payment of costs for open access of publication. There is however a large body of published work that is not Open Access (33.7%). MHH-C contributes to data sharing and has templates for agreements to be used internally and in collaborations with other institutions. Data is regularly shared with national audits such as the National Joint Replacement Registry. Guidelines for research activity at MHH are available.

MHH acknowledges that economic constraints might be a limiting factor in compliance with Open Access policies and that these instances are assessed individually on an ongoing basis.

The committee's evaluation

The committee applauds the commitment that MHH has made to Open Science and the efforts made around data sharing and open access publication. However, the committee notes that MHH still publishes a large body of research that is not Open Access.

The committee's recommendations

- Continue with existing policies of open data sharing and of contributing to registries.
- Monitor compliance rates with open access publication policies.

2. Research production, quality and integrity

Introduction

The scientific focus of MHH is on multi-centre randomised controlled trials in Orthopaedic Surgery and Rheumatology as well as participation in National Registries.

The policies for research integrity promote and uphold open science, data sharing, good clinical practice in research and scientific rigour. The Research Board has oversight of research conduct within the organisation and as almost all researchers are clinicians they are regulated in their conduct by their respective regulatory and professional bodies.

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).

Research group Martina Hansens Hospital Research Group

The research group is perfectly fulfilling the hospital's strategy to execute high-quality research as an essential part of patient care. According to the leading concept, outstanding research and patient treatment will mutually strengthen one another. Research is considered a core activity that contributes to the success of the hospital as a leading and preferred musculoskeletal centre for patients as well as for specialist staff. Several prominent publications of the research group have changed clinical practice worldwide, remarkably by narrowing the indications for orthopaedic surgery. The selected strategy of the hospital is respectable. The challenges are linked to tight economic frames and a shortage of time allocated for research. The hospital provides the basic core funding. The research group has acquired additional funding mainly from various national sources.

The committee's comments on the assessment of the research group

The research group has undertaken some very high-quality research that has changed the practice of musculoskeletal medicine. High-quality clinical research is regarded as an essential part of patient care. This accords with the concept that outstanding research and patient treatment will mutually strengthen one another. Research is considered a core activity that contributes to the success of the hospital as a leading and preferred musculoskeletal centre for patients as well as for specialist staff.

The strategy is to participate in multi-centre randomised controlled trials of international importance and registry studies. Several prominent publications of the research group have changed clinical practice worldwide, remarkably by narrowing the indications for orthopaedic surgery. Although some, studies are led by staff at MHH, the majority are led by external partners. MHH is often the largest contributor to recruitment and sometimes leads work packages in these multi-centre collaborations. Registry studies are aided by good relations with central national registry staff who facilitate MHH usage and collaborate on outputs providing statistical expertise which MHH might not have in-house. It is

encouraging to see that research is led by both established researchers and by doctoral students and that doctoral training is actively encouraged by the institution.

Most research is led by medical doctors; however other professional groups are encouraged to lead research including grant applications.

The major challenges in research faced by MHH are linked to economic constraints and a shortage of time allocated for research. The hospital provides the basic core funding to pump prime research activity. The research group has acquired additional funding mainly from various national sources, although the level of this remains relatively modest.

The biggest weakness is the lack of methodological expertise. This precludes MHH designing and developing world class high value grant applications which would be transformative to their research endeavours and allow MHH to take a leading role in more multi-centre trials. Currently this is overcome by collaborating with established University Trials Centers, but more could be made of these opportunities.

In general, the quality and quantity of research produced by MHH is extremely good for the amount of resource available.

Research governance appears to rely predominantly on a single individual. This is a high-risk strategy. Staff are GCP trained and individual PIs are responsible for the research integrity in their trials and are held accountable. Establishment of a small research governance office to oversee all site files, regulatory compliance, finance and training would provide greater assurance.

The committee's recommendations

- Identify and apply for external funding to enable more high-quality research, possibly in collaboration with established University research groups.
- Consider how best to obtain access to high quality methodological expertise.
- Consider whether strengthening research governance infrastructure is feasible.

3. Diversity and equality

MHH states a commitment to equality, diversity and inclusion in research. All medical staff are given the opportunity to undertake research and have time allocated for this if they so desire. Non-medical clinical staff are encouraged to participate in and lead research, but it is reported that participation in research by nurses and allied health professionals is lower than participation by medical staff. It is acknowledged that some research activities need to be undertaken in employees' own time due to the precedence of clinical work and resource limitations.

The committee's evaluation

MHH does not collate data on research participation by protected characteristics such as gender, age, ethnicity and disability. Nor is there data on participation and opportunity to participate for staff that work less than full-time. As this data is not available, it is not possible to assess whether MHH successfully ensures that EDI considerations are met.

The committee's recommendations

- Routinely collect data on research participation, grant funding and research outputs by gender, age, ethnicity, disability and less than full-time working.

4. Relevance to institutional and sectorial purposes

The most impactful studies have been published in leading international journals and are highly likely to change clinical practice world-wide. A common theme is establishing the level one clinical evidence to underpin common surgical interventions compared to best non-operative care. Interestingly, a number of studies have not shown a benefit of surgical intervention and thus should lead to an increase in the use of non-operative alternatives. Examples of this include: physiotherapy versus arthroscopic partial menisectomy for degenerative tears and a study of conservative versus arthroscopic treatment for rotator cuff tears of the shoulder. There have also been seminal trials in the medical management of rheumatoid arthritis.

As MHH is a private hospital, the inclusion of undergraduate students in trials is not particularly relevant, but it is encouraging to see the strong support and encouragement that MHH provides to clinicians to undertake doctoral level studies.

The committee's evaluation

MHH undertakes research that is highly relevant to the sector, the wider population and is generalisable world-wide. As these are predominantly multi-centre randomised controlled trials the level of evidence is extremely good.

The committee’s recommendations

- Continue with current strategy which is well suited to the strengths of MHH and is resulting in high quality impactful research.

5. Relevance to society

The Norwegian Long-term plan for research and higher education sets out three overall objects and six thematic priorities for Norwegian research and education. Among the objects are “High quality and accessibility in research and higher education” and among the thematic priorities is “Health”.

The seventeen UN Sustainable Developmental Goals includes “To ensure healthy lives and promote well-being for all ages” (SDG 3), “To ensure inclusive and equitable quality education and promote lifelong learning opportunities for all” (SDG 4), “To achieve gender equality and empower all women and girls (SDG 5) and “To build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation” (SDG 9).

The committee's evaluation

Previous and current research performed by MHH-C have contributed to high-quality publications with impact on clinical practise, hence meeting this long-term plan of the Norwegian government. As stated above, the research is likely to change clinical practice and result in improved clinical outcomes for large numbers of patients with common musculoskeletal conditions. As some high-quality studies have shown equivalence or superiority of non-surgical care, it is likely that these will become more widely adopted with consequent changes in health economic benefits.

MHH have certainly provided evidence to support meeting SDG 3; are making strides towards SDG 4 by their inclusive approach to research; have a commitment to achieving SDG 5 within research and education but have not provided the data to support this ambition; and are beginning to build a sustainable infrastructure around research in line with SDG 9.

The committee’s recommendations

- Collect data to measure progress towards SDG 5.
- Continue with strategy of participating in high quality multicentre randomised controlled trials.
- Give consideration to investing in more robust governance around research and to investing in methodological (particularly trials) expertise, as research infrastructure is sparse, particularly when seen in the context of the high-quality research produced.

Comments on impact case 1: Exercise therapy or arthroscopic partial meniscectomy for degenerative meniscal tear in middle aged patients: randomised controlled trial with two-year follow-up

140 middle-aged patients with degenerative meniscal tears were during October 2009-September 2012 recruited from two Norwegian orthopaedic hospitals, Ullevål University Hospital (54 patients) and Martina Hansens Hospital (MHH-C) (86 patients). The patients were randomized (1:1) to treatment with either surgery or exercise therapy. The surgery was performed as an arthroscopic procedure (“keyhole” surgery) with excision of meniscal tissue and the exerciser therapy program included physiotherapist-assisted strengthening exercises twice or three times a week over a period of 12 weeks. The follow-ups at 3, 6, 12 and finally 24 months included patient reported outcomes measures (PROMs) and physical

performance and muscle strength tests. No difference in patient reported outcomes between the intervention groups 2 years following treatment.

The published article received wide media attention at the time of publication with a high altmetric score and has subsequently been highly cited. This procedure was very common prior to this trial and has now largely been abandoned world-wide.

Comments on impact case 2: Extended Ultrasound Examination of Large Vessels in Patients with Giant Cell Arteritis.

Giant Cell Arteritis (GCA) is the most common form of vasculitis. The incidence of GCA in Norway is one of the highest worldwide. The long-term complications associated with the disease are severe; Up to 37% of GCA patients will suffer from visual disturbances, 24% will become blind and 7% will suffer from stroke. The primary treatment of GCA consists of high doses of corticosteroids. It is expected that 86% of GCA patients will suffer from corticosteroid side effects. It is essential to identify large vessel involvement in patients with GCA as these patients require higher cumulative doses of corticosteroids and immunosuppressive agents.

This study compared extended ultrasound examination with limited ultrasound and showed that extended ultrasound identified more patients with large vessel involvement. The project has shown that extended ultrasound examination identified more patients with large vessel involvement than the limited ultrasound method. This is now included in international rheumatology guidelines.

Appendices

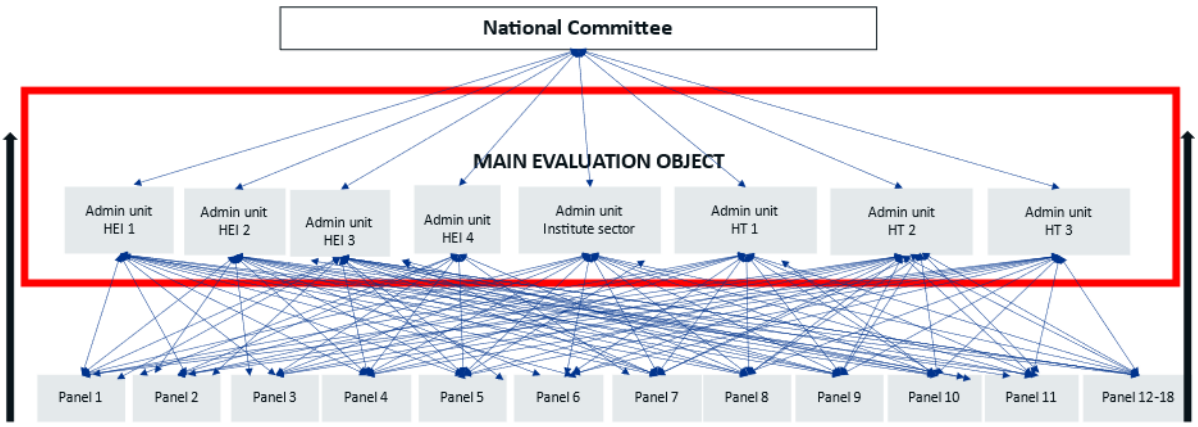
Evaluation of Medicine and health 2023-2024

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

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

Evaluation of medicine and health (EVALMEDHELSE) 2023-2024
The evaluation of medicine and health includes sixty-eight administrative units (e.g., faculty, department, institution, center, division) which are assessed by evaluation committees according to sectorial affiliation and other relevant similarities between the units. The administrative units enrolled their research groups (315) to eighteen expert panels organised by research subjects or themes and assessed across institutions and sectors.

Organisation of evaluation of medicine and health 2023-2024



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

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

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

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

Forskningsrådet

Se vedlagte adresseliste

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

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

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

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

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

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

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

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

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

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

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

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

Administrative enheter (hovedevalueringsobjektet i evalueringen) – skjema 1

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

Forskergrupper – skjema 2

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

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

Invitasjon til å foreslå eksperter – skjema 3

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

Obs. Det er to faner i regnearket:

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

Utfylte skjemaer (3 stk):

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

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

Tilpasning av mandat – frist 30. september 2023

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

Forskningsrådet

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

Digitalt informasjonsmøte 15. mai 2023, kl. 14.00-15.00.
Forskningsrådet arrangerer et digitalt informasjonsmøte for alle som ønsker å delta i EVALMEDHELSE.

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

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

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

Med vennlig hilsen
Norges forskningsråd

Ole Johan Borge	Hilde G. Nielsen
avdelingsdirektør	spesialrådgiver
Helse	Helse

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

Kopi
Helse- og omsorgsdepartementet
Kunnskapsdepartementet

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

The Research Council of Norway

Evaluation of life sciences in Norway 2022-2023

LIVSEVAL protocol version 1.0

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

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

Telephone: +47 22 03 70 00
Telefax: +47 22 03 70 01
post@rcn.no
www.rcn.no

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

Oslo, 5 April 2022

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

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

1.3 The evaluation in a nutshell

The assessment concerns:

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

The Research Council of Norway (RCN) will:

- provide a template for the Terms of Reference[1] for the assessment of RPOs and a national-level assessment in life sciences
- appoint members to evaluation committees and expert panels
- provide secretarial services
- commission reports on research personnel and publications based on data in national registries
- take responsibility for following up assessments and recommendations at the national level.

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

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

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

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

1.4 Target groups

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

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

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

2 Assessment criteria

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

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

2.1 Strategy, resources and organisation

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

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

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

2.2 Research production, quality and integrity

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

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

2.3 Diversity and equality

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

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

2.4 Relevance to institutional and sectoral purposes

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

Higher Education Institutions

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

The purposes of Norwegian HEIs are defined as follows in the Act relating to universities and university colleges[2]

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

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

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

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

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

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

Research institutes (the institute sector)

Norway's large institute sector reflects a practical orientation of state R&D funding that has long historical roots. The Government's strategy for the institute sector[3] applies to the 33 independent research institutes that receive public basic funding through the RCN, in addition to 12 institutes outside the public basic funding system.

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

The institutes should:

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

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

The hospital sector

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

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

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

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

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

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

2.5 Relevance to society

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

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

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

3 Evaluation process and organisation

The RCN will organise the assessment process as follows:

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

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

3.1 Division of tasks between the committee and panel levels

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

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

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

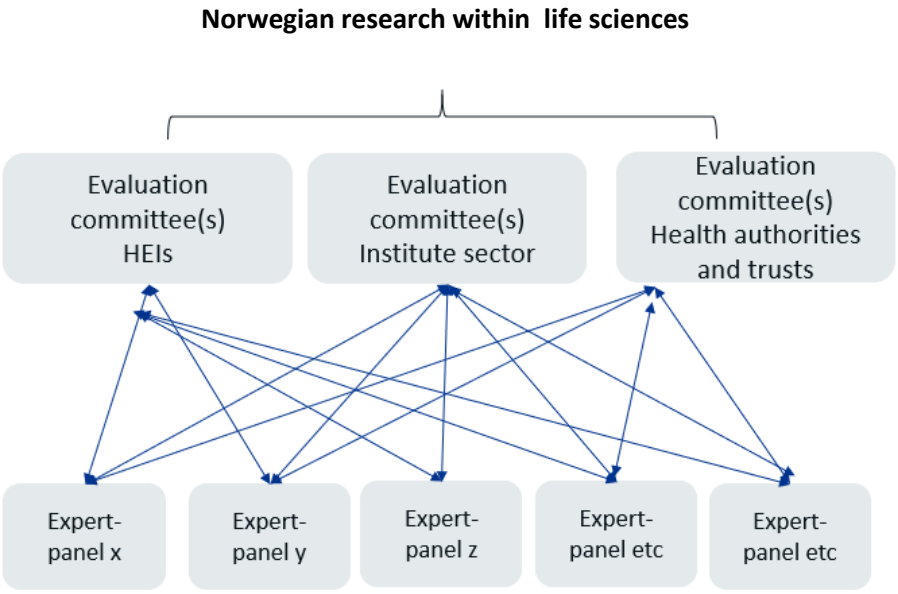

Figure 1. Evaluation committees and expert panels

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

3.2 Accuracy of factual information

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

3.3 National level report

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

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

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

Appendix A: Terms of References (ToR)

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

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

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

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

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

1. …
2. …
3. …
4. …

…

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

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

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

The documents will include the following:

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

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

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

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

Appendix B: Data sources

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

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

National registers

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

Self-assessments

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

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

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

Table 1. Types of evaluation data per criterion

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

Evaluation of Medicine and Health (EVALMEDHELSE) 2023-2024

Self- assessment for administrative units

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

Institution (name and short name):_____
Administrative unit (name and short name): _____
Date:_____
Contact person:_____
Contact details (email):_____

Content

Introduction

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

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

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

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

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

Thank you!

Guidelines for completing the self-assessment

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

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

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

1.Strategy, resources and organisation

1.1 Research strategy

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

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

Table 1. Administrative unit`s strategies

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

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

1.2 Organisation of research

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

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

1.3 Research staff

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

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

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

Table 2. Research staff

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

1.4 Researcher careers opportunities

a) Describe the structures and practices to support researcher careers and help early-career researchers to make their way into the profession.

b) Describe how research time is distributed among staff including criteria for research leave/sabbaticals (forskningstermin/undervisningsfri).

c) Describe research mobility options.

1.5 Research funding

a) Describe the funding sources of the administrative unit. Indicate the administrative unit´s total yearly budget and the share of the unit's budget dedicated to research.

b) Give an overview of the administrative unit's competitive national and/or international grants last five years (2018-2022).

Table 3. R&D funding sources
Please indicate R&D funding sources for the administrative unit for the period 2018-2022 (average NOK per year, last five years).

For Higher Education Institutions: Share of basic grant (grunnbevilgning) used for R&D[1] **For Research Institutes and Health Trusts: Direct R&D funding from Ministries (per ministry)**	
Name of ministry	NOK

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

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

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

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

1.6 Collaboration

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

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

Table 4a. The main national collaborative constellations with the administrative unit
Please categorise the collaboration according to the most important national partner(s): 5-10 institutions in the period 2012-2022. Please delete lines which are not in use.

National collaborations

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

Table 4b. The main international collaborative constellations with the administrative unit
Please categorise the collaboration according to the most important international partner(s): 5-10 international institutions in the period 2012-2022. Please delete lines which are not in use.

International collaborations

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

Impacts and relevance of the collaboration	

1.7 Open science policies

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

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

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

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

1.8 SWOT analysis for administrative units

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

Internal	**Strengths**	**Weaknesses**
External	**Opportunities**	**Threats**

2. Research production, quality and integrity

2.1 Research quality and integrity

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

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

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

2.2 Research infrastructures

a) Participation in national infrastructure

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

Table 5. Participation in national infrastructure

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

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

b) Participation in international infrastructures

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

Table 6. Participation in international infrastructure

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

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

c) Participation in European (ESFRI) infrastructures

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

Table 7. Participation in infrastructures on the ESFRI Roadmap
Please give a description of up to 5 participations that have been most important to your administrative unit.

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

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

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

3. Diversity and equality

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

Table 8. Administrative unit policy against discrimination
Give a description of up to 5 documents that are the most relevant. If the administrative unit uses the strategies, policies, etc. of a larger institution, then these documents should be referred to.
Please delete lines which are not in use.

No.	**Name**	**Valid period**	**Link**
1			

4. Relevance to institutional and sectorial purposes

4.1 Sector specific impact

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

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

4.2 Research innovation and commercialisation

a) Describe the administrative unit's practices for innovation and commercialisation.

b) Describe the motivation among the research staff in doing innovation and commercialisation activities.

c) Describe how innovation and commercialisation is supported at the administrative unit.

Table 9. Policies for innovation including IP policies, new patents, licenses, start-up/spin-off guidelines
Describe up to 5 documents of the administrative unit's policies for innovation, including IP policies, new patents, licenses, start-up/spin-off guidelines, etc., that are the most relevant. If the administrative unit uses the strategies, policies, etc. of a larger institution, then present these documents. Please delete lines which are not in use.

No.	Name	Valid period	Link
1			

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

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

4.3 Higher education institutions

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

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

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

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

4.4 Research institutes

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

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

4.5 Health trusts

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

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

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

5. Relevance to society

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

5.1 Impact cases

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

Impact case guidelines

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

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

Timeframes

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

Page limit

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

Maximum number of cases permitted per administrative unit

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

Naming and numbering of cases

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

Publication of cases

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

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

Please write the text here

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

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

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

2. Underpinning research (indicative maximum 500 words)
This section should outline the key research insights or findings that underpinned the impact, and provide details of what research was undertaken, when, and by whom. This research may be a body of work produced over a number of years or may be the output(s) of a particular project. References to specific research outputs that embody the research described in this section, and evidence of its quality, should be provided in the next section. Details of the following should be provided in this section:

- The nature of the research insights or findings which relate to the impact claimed in the case study.
- An outline of what the underpinning research produced by the submitted unit was (this may relate to one or more research outputs, projects or programmes).
- Dates of when it was carried out.
- Names of the key researchers and what positions they held at the administrative unit at the time of the research (where researchers joined or left the administrative unit during this time, these dates must also be stated).
- Any relevant key contextual information about this area of research.

3. References to the research (indicative maximum of six references)
This section should provide references to key outputs from the research described in the previous section, and evidence about the quality of the research. All forms of output cited as underpinning research will be considered equitably, with no distinction being made between the types of output referenced. Include the following details for each cited output:
- Author(s)
- Title
- Year of publication
- Type of output and other relevant details required to identify the output (for example, DOI, journal title and issue)
- Details to enable the panel to gain access to the output, if required (for example, a DOI or URL).

All outputs cited in this section must be capable of being made available to panels. If they are not available in the public domain, the administrative unit must be able to provide them if requested by RCN or the evaluation secretariate.

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

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

The following should be provided:
- A clear explanation of the process or means through which the research led to, underpinned or made a contribution to the impact (for example, how it was disseminated, how it came to influence users or beneficiaries, or how it came to be exploited, taken up or applied).

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

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

Institution	Administrative unit	Name of research group	Expert panel
Martina Hansens Hospital	Martina Hansens Hospital	Martina Hansens Hospital Research group	Panel 3b-3

Scales for research group assessment

Use whole integers only – no fractions!

Organisational dimension

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

Quality dimension

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

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

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

Societal impact dimension

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

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

Methods and limitations

Methods

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

The documentary inputs to the evaluation were:

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

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

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

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

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

Limitations

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

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

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

Norges forskningsråd
Besøksadresse: Drammensveien 288
Postboks 564
1327 Lysaker

Telefon: 22 03 70 00
Telefaks: 22 03 70 01

post@forskningsradet.no
www.forskningsradet.no

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