

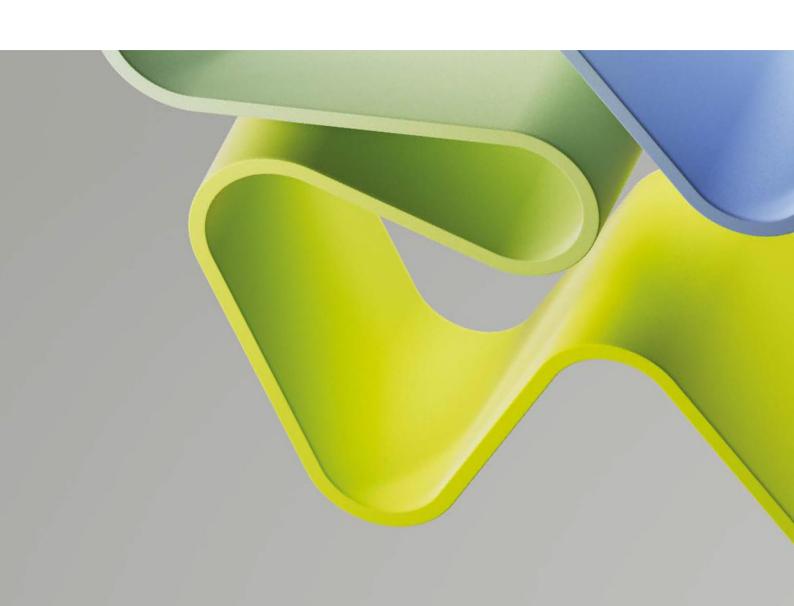
Evaluation of Life Sciences 2022-2024

Evaluation of medicine and health 2023-2024

Evaluation report

ADMINISTRATIVE UNIT: Lovisenberg Diaconal Hospital INSTITUTION: Lovisenberg Diaconal Hospital

December 2024



Contents

STATEMENT FROM EVALUATION COMMITTEE HEALTH TRUST 2	4
PROFILE OF THE ADMINISTRATIVE UNIT	5
OVERALL EVALUATION	6
RECOMMENDATIONS	7
1. STRATEGY, RESOURCES AND ORGANISATION OF RESEARCH	8
1.1 Research strategy	8
1.2 Organisation of research	9
1.3 Research funding	10
1.4 Use of infrastructures	11
1.5 Collaboration	11
1.6 Research staff	12
1.7 Open Science	13
2. RESEARCH PRODUCTION, QUALITY AND INTEGRITY	14
2.1 Research quality and integrity	14
3. DIVERSITY AND EQUALITY	16
4. RELEVANCE TO INSTITUTIONAL AND SECTORIAL PURPOSES	17
5. RELEVANCE TO SOCIETY	18
APPENDICES	20

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

Lovisenberg Diaconal Hospital (Lovisenberg) is a 240 bed non-university hospital providing medical and mental health services for the inhabitants of four City Districts in inner city Oslo. It comprises a surgical department (elective orthopaedic), head and neck and general surgery. The centre for mental health and substance abuse includes a mental health outpatient clinic for children, adolescents and their families (The Nic Waal Institute). Lovisenberg was founded in 1868 by pioneer and deaconess Cathinka Guldberg, the first trained nurse in Norway, who established the first nursing school in the country. Lovisenberg has a historically strong commitment to education and training of future healthcare professionals in evidence-based practice. Research was required by law in Norwegian specialist health service in 2001. Since then, research has been an integral part of the hospital's activities. The Research Department (ResDep) at Lovisenberg, a unit under Department for quality and patient safety was, however not established until in 2016. The research activities have grown rapidly since then. Now there are three research groups: the Clinical Health Research Alliance (ClinHealth), the MAGIC Evidence Ecosystem Foundation (MAGIC), and the Psychiatric Genetic Epidemiology (PaGE) group. The administrative unit's strategy for research at Lovisenberg aims to produce innovative and forward-thinking knowledge that enhances healthcare and boosts the research capabilities of their staff. The research is distinguished by frequent interdisciplinary collaboration within the clinical teams and the involvement of esteemed national and international partners. They explore a diverse array of topics, including aetiology,

epidemiology, the development and testing of new interventions, and longitudinal studies on patient experiences and treatment outcomes.

The research staff consists of 68 people (57 FTEs) including eight senior researchers (Five with affiliated positions as Professor at the University of Oslo). Initially, the research projects were financed mainly by internal funding, including The Lovisenberg Research Grant Fund. Today, the majority of the researchers and fellows is financed by external funding.

The administrative unit's sectoral impact is relating to the needs of patients and their families. All research projects involve input and participation from users. MAGIC provides guidelines and evidence summaries via the MAGICapp platform, aiding healthcare practitioners in delivering evidence-based care across mental health, acute and chronic medical issues, and elective surgeries. PaGE's genetically informed research aims to reshape perspectives on conditions like autism and ADHD, informing national and international guidance to clinicians and families about how individuals with neurodevelopmental conditions can be supported to thrive. PaGE actively contributes to global collaborative genomic discovery efforts for conditions like anxiety, depression. bipolar disorder; efforts which inform the development and repurposing of therapeutic drugs and shedding light on the biology underlying these conditions. ClinHealth's broad research focus stems from the hospital's clinical activity within elective surgery, mental health and substance abuse, and internal medicine aiming to improve clinical care and patient's quality of life. MAGIC's evidence-based guidelines may cater to diverse patient needs and may support both patients and their families. MAGIC also contributes to systematic reviews and clinical guidelines to primary health care, hospitals, and academic institutes globally. Additionally, MAGIC is involved in teaching evidence-based medicine at the University of Oslo's Faculty of Medicine through the "KLOK" programme.

Overall evaluation

The overall assessment of the evaluation committee, considering the Terms of Reference provided by the administrative unit, is that the evaluation of the Lovisenberg Research Department demonstrates its alignment with its strategic aims, organizational structure, and submitted Terms of Reference (ToR). The unit excels in fostering patient-centred research, interdisciplinary collaborations, and impactful societal contributions.

1. Organisation and Strategic Goals

- The Lovisenberg Research Department effectively integrates research within clinical care, supported by three focused research groups (ClinHealth, MAGIC, PaGE).
- There is a strong alignment of research strategies with patient involvement, clinical outcomes, and evidence-based practice.
- Challenges persist in accessing external funding and infrastructure resources due to its status as a non-university institution.

2. Research Quality and Innovation

- Research quality is commendable, with outputs in top-tier journals and significant societal impacts.
- Innovations such as "living guidelines" (MAGIC group) enhance evidence-based medicine practices globally.
- However, synergies between research groups and the training of early-career researchers can be further developed.

3. Strengths and Weaknesses

- **Strengths**: Structured patient involvement, high-impact research outputs, interdisciplinary approaches, and robust national and international collaborations.
- **Weaknesses**: Limited permanent positions for junior researchers, fluctuating internal funding, and insufficient administrative support.

4. Future Prospects

- Opportunities lie in expanding collaborations, securing international funding (e.g., EU grants), and strengthening internal administrative and IT support for research.
- The continuation and formalization of open science policies, gender equality plans, and the introduction of a graduate school can support long-term research sustainability.

Recommendations

- Continue the adopted policies for setting research priorities and agenda, including the strong patient involvement.
- Consider expanding on involving early career researchers in agenda setting.
- Explore and expand synergies and collaborations between the research groups and research domains (particularly in terms of research involving the MAGIC group).
- Maintain the degree of patient involvement (and possibly expand in some areas, e.g. patient involvement in communication and dissemination activities).
- Facilitate access to scientific literature, for instance by cooperation with universities.
- Expand the dedicated research administration.
- Continue and, if possible, expand the intramural funding scheme, as it ensures
 continuity and sustainability in the research activities independent from external funds
 acquired.
- Consider measures to compensate for the fluctuating intramural research budget, such as introducing a base amount within the budget that is guaranteed if the percentage foreseen for research is not sufficient.
- Continue efforts to acquire national funding and increase efforts to get international funding and related research collaborations, particularly in terms of EU projects.
- Explore translating FAIR further by subjecting data sharing activities to monitoring and regular reporting.
- Maintain and where possible expand the current high number of collaborations.
- Increase exploration of funding opportunities and intensify grant-related activities linked to (international) collaborations.
- Consider introducing some permanent Postdoc Researcher positions or increasing the number of permanent Junior Researcher positions.
- Consider increasing support for early and mid-career researchers who pursue careers in academia.
- Lay down procedures on how to enforce the enactment of the existing Open Science Policy in a formalised manner.
- Introduce procedures for supporting for Open Access publication, such as a dedicated budget that can be applied for.
- Continuously monitor the effects of the adopted Gender Equality Plan. A broader perspective on diversity would add benefit.
- Continue with the focus on impact for patients and their families.

1. Strategy, resources and organisation of research

1.1 Research strategy

The Research Department of the Lovisenberg Diaconal Hospital (Lovisenberg), a non-university hospital, is the administrative unit governing and overseeing the research activities in the hospital. The hospital serves four city districts of Oslo and provides health care services in surgery (orthopaedics), medicine, and mental health (children, adolescents and their families).

Research activities are structured into three research groups: (1) the Psychiatric Genetic Epidemiology (PaGE) group; (2) the Clinical Health Research Alliance (ClinHealth); and (3) MAGIC Evidence Ecosystem Foundation (MAGIC Group).

Strategic priorities and strategies include: the promotion of patient involvement, e.g. in setting research themes and devising interventions; improving health care and interventions, particularly by the means of ongoing quality monitoring, training of early career researchers (PhD students and Postdoc level); putting to use the extensive clinical hospital data on file.

Diverse methods and data resources are adequately exploited, such as observational data from clinical care that lead to successfully implemented randomized controlled trials or standardized self-reports and patient-reported outcomes complementing biomedical outcomes. Focus is given to interdisciplinary research and research involving national and international collaborations. The former include activities that are built on existing registry and/or cohort data. Patient involvement plays a crucial role across the research process, with the patients' involvement implemented in a structured manner, also including patient involvement in setting research questions and advising projects from the very beginning. Unlike with the case of patient involvement, it is not entirely clear, how early career researcher can contribute to the setting of research agendas and priorities for research projects.

The administrative unit has implemented sustainable structures to ensure successful research activity aligned with the research agenda and overarching strategy. Resources are allocated adequately. However, being a non-university institution, the Lovisenberg Research Department faces considerable challenges and barriers when it comes to basic provision for successful research such as access to current literature or open access funds.

In terms of open science and reproducible research practices, the Lovisenberg has implemented a convincing strategy to foster open science, including in-house continuing education efforts on the matter to facilitate uptake of open science practices.

Lovisenberg's research yields considerable societal and policy impact, in terms of improving and setting standards of care and advancing evidence-based medicine by implementing novel approaches for the management and updating of clinical guidelines. In doing so, it explores new territory in an innovative manner (e.g., mental health care).

The committee's evaluation

Despite being a comparatively small and non-university administrative unit, the Lovisenberg Research Department excels at offering a compelling and coherent research strategy guided by a convincing vision.

The Lovisenberg Research Department has devised a convincing set of research priorities guided by the overarching vision to improve care. Research priorities are well aligned to the

unit's strength in clinical care and are well suited to build a sustainable research agenda for the years to come. The commitment towards early career research training and patient involvement is very well demonstrated. The organisation and governance of research activities within the hospital are well described and ensure a successful translation and further development of the research agenda.

Patient involvement and the research's proximity to care are very strong assets of the Lovisenberg Research Department: Patient involvement in research and exploiting research outcomes are taken seriously and have been successfully implemented at the structural level. The Lovisenberg Research Department can build upon a unique research ecosystem strongly rooted in clinical care with a research agenda that is very well aligned to the care and research environment.

The committee's recommendations

- Continue the adopted policies for setting research priorities and agenda, including the strong patient involvement.
- Consider expanding on involving early career researchers in agenda setting.
- Explore and expand synergies and collaborations between the research groups and research domains (particularly in terms of research involving the MAGIC group).

1.2 Organisation of research

The setup of the research groups is coherently aligned to the overarching research strategies. Some synergies across groups have been exploited (e.g., evidence-based medicine; inhouse continuous education efforts). Some support for early career researchers is described, such as a mentoring program for developing grant applications, support for international research visits, and training programs in scientific writing).

The Lovisenberg Research Department has successfully implemented structures and continuous activities to support its research agenda. These include the implementation of regular agenda-setting workshops involving patients, platforms for early career researchers, and continuous intramural education activities that allow for exploring synergies across research groups (e.g., continuous education on FAIR principles).

Patient involvement across the whole research process has a strong focus and is implemented in a convincing manner, with patients also being involved in setting research themes and questions.

Some important structures are not entirely sufficient to support the research agenda: These include the limited availability dedicated research administration, that, among others, could support the acquisition of grants and funding, as well as the local IT that is primarily devised to support care and is not entirely well suited to meet the needs of larger research projects. Major externally funded research projects (PaGE, MAGIC) had to use project funds to boost IT and administration support, which does not appear to be a sustainable solution. Moreover, access to current literature is limited, given the Lovisenberg Research Department is a non-university institution. This is identified as a major barrier for research.

The committee's evaluation

The research groups are set up in a convincing manner. Synergies across groups have not been fully explored and could lead to further valuable projects. In particular, the MAGIC groups research agenda could be more connected to the other groups (e.g., ClinHealth) –

also projects into translating evidence-based guidance into care with accompanying scientific evaluation could provide for a research theme, where novel synergies could unfold.

Patient involvement across the research process is very convincing and could easily serve as a model for other institutions.

Difficulties in the access to current literature and a comparably small, dedicated research administration to assist, for instance, in obtaining grants and managing projects, pose avoidable barriers to the research.

The committee's recommendations

- Maintain the degree of patient involvement (and possibly expand in some areas, e.g. patient involvement in communication and dissemination activities).
- Facilitate access to scientific literature, for instance by cooperation with universities.
- Expand the dedicated research administration. Building a dedicated research
 administration to support researchers in the acquisition of competitive funds, project
 administration, and legal issues (e.g., data protection and management) is highly
 recommended to expand on research activities and to increase external funding in the
 future.

1.3 Research funding

The Lovisenberg Research Department continuously invests a substantial proportion of internal hospital funds into its research activities exceeding the formally required 1% with 2% of the hospital's budget (14,314 MNOK in 2022). However, the amount available for research is mentioned to be highly dependent on the hospital's situation and, hence, fluctuating. These funds are complemented by substantial external funding (national/public funding organisations, and industry funding). The outline allocation of resources is convincing. A significant amount is devoted to training and career-building activities for early career researchers and Postdocs.

The Lovisenberg Research Department has succeeded in securing competitive national and/or international funding over the last five years. Its budget from external grants increased significantly from 10,061 MNOK in 2018 to 29,628 MNOK in 2022 (excluding the Horizon Europe support for the MAGIC Group). This included funding from the South-Eastern Norway Health Authority (21 research grants) and the Research Council of Norway (three major grants). Despite extensive international collaborations, international funding is limited. However, Lovisenberg hosts the MAGIC Group supported by Horizon Europe.

The committee's evaluation

Research funding is set up diversely comprising intramural and external funding. The Lovisenberg Research Department invests a significant amount of intramural funds into research and has managed to succeed to acquire competitive external funding. International funding (international research consortia; EU) is still subpar. However, e.g. acting as host for the MAGIC group will open up opportunities to this end in the future.

The committee's recommendations

- Continue and, if possible, expand the intramural funding scheme, as it ensures
 continuity and sustainability in the research activities independent from external funds
 acquired.
- Consider measures to compensate for the fluctuating intramural research budget, such as introducing a base amount within the budget that is guaranteed if the percentage foreseen for research is not sufficient.
- Continue efforts to acquire national funding and increase efforts to get international funding and related research collaborations, particularly in terms of EU projects.

1.4 Use of infrastructures

Lovisenberg's Research Department does not participate in any national infrastructures for research listed in the Norwegian roadmap or European infrastructures (ESFRI). In terms of data infrastructure access, Lovisenberg has exploited the Norwegian Mother, Father, and Child Study, the Norwegian Patient Registry, and several state databases, in addition to the use of its clinical routine care data stemming from Lovisenberg's own clinical infrastructure. Lovisenberg's Research Department strives to adhere the FAIR principles on data management and sharing and encourages researchers to share data when possible if requested. Data sharing seems to occur mainly within research collaborations and research networks Lovisenberg is part of.

The committee's evaluation

The participation in and access to research infrastructures and data are adequate given the Lovisenberg's research areas and strategy deeply rooted in clinical care.

The Lovisenberg Research Department has successfully implemented clinical research infrastructures well suited to support its research. This is complemented access to larger data infrastructures and the implementation of policies to support the FAIR principles.

The committee's recommendations

 Explore translating FAIR further by subjecting data sharing activities to monitoring and regular reporting, building on the pathways to access to data collected in Lovisenberg's researchers for non-collaborating researchers that exist in the data management plan.

1.5 Collaboration

The Lovisenberg Research Department is actively engaged in many international and national academic collaborations including projects with leading research groups in Sweden, the UK, Australia and the US. This is evidenced in the Research Department's publications, with 59.2% of all publications in 2022 co-authored by international collaborators and 85.7% of all publications having national co-authors.

The committee's evaluation

Lovisenberg has engaged in a compelling number of successful research collaborations that resulted in substantial scientific output and impact very well aligned with the Administrative Unit's research strategy. It is convincingly demonstrated that collaborations enabled insights that would have not been able if the research had been done in isolation. This particularly holds for collaborations and resulted in important updates on clinical

guidance, the development and refinement of novel methods, and innovative concepts of care, such as the delivery evaluation of innovative intervention to address substance use in somatic patients. Moreover, the Administrative Unit's Impact Case demonstrate very well how the benefits of national and international collaborations have been successfully exploited and translated into research outcomes and impact.

Not all collaborations seem to have been supported by external funding.

The committee's recommendations

- Maintain and where possible expand the current high number of collaborations.
- Increase exploration of funding opportunities and to intensify grant-related activities linked to (international) collaborations. In particular, aiming for the lead of international research consortia may be area one should invest further efforts.

1.6 Research staff

The research staff consists of eight senior researchers (Five with affiliated positions as Professor at the University of Oslo, three with affiliated position as Assoc. Prof at UiO, total 8 FTEs), seven researchers (5 FTEs), four junior researchers (4 FTEs), 1,5 project coordinators (1,5 FTEs), 3 management/administration (2 FTEs), 24,5 doctoral research fellows (20 FTEs), 5 postdocs (4 FTEs), 8 clinicians with PhD (8 FTEs), one research nurse (1FTE), two bioengineers (2FTEs), three research assistants (1,5 FTEs). Most of the research done at the Lovisenberg is done by PhD students. It is striking that all Post Doctoral Research Fellows are on non-permanent contracts.

Women represent a majority in most categories, but not among – for example – professors and senior researchers.

There is support in key domains for early and mid-career researchers to pursue careers in academia.

The committee's evaluation

The research staff is set up convincingly ensuring a successful implementation of the research. The domain of research administration is not overly well equipped. There is a lack of permanent positions at the mid-career researcher level. There is an increasing gender imbalance increasing along career stages (see chapter 3).

The committee's recommendations

- Consider introducing some permanent Postdoc Researcher positions or increasing the number of permanent Junior Researcher positions. This could significantly contribute to the sustainability of the research group and its research activities. It may help overcome some of the barriers identified in relation to the research infrastructure (research administration support).
- Consider increasing support for early and mid-career researchers who pursue careers
 in academia (e.g., linking PhD students to a graduate school; career counselling;
 continuous education curricula; opportunities for academic teaching). Establishing a
 graduate school on site could be helpful to further advance career building and to
 support early and mid-career researchers.

1.7 Open Science

An Open Science policy has been implemented, including policies on (pre)registration of research, data and code sharing, and open-access publications. Projects funded by the RCN follow the RCN's regulations and policies pertaining to Open Science Support for both early career and senior researchers is implemented to support Open Access publications.

21,4% of the publication do not come with Open Access. 33,7% of publications were licensed and published under a Gold Open Access model. For 44,9% of the publications, access in ensured via an archiving option. Open Access has notably increase over the past years. In 2013, the majority (56.6%) of publications were not Open Access.

A suitable Data Management plan is in place as are procedures for data access to ensure confidentiality while also offering opportunities for data sharing.

The committee's evaluation

The Open Science policy adopted by the Lovisenberg Research Department is convincing and covers key domains of open science. Appropriate regulations for the management of research data, data management and data protection / confidentiality are in place. The Open Access output and its increase since 2013 demonstrate the viability of the policy.

While support for Open Access publication is mentioned, it is not entirely clear what procedures are in place to facilitate Open Access publication (and what Open Access outlets and models are eligible and preferred), such as a dedicated Open Access budget researchers can apply for (irrespective of project funding).

The committee's recommendations

- Lay down procedures on how to enforce the enactment of the existing Open Science Policy in a formalised manner.
- Introduce procedures for supporting Open Access publication in order to increase the number of Open Access Publications, such as a dedicated budget that can be applied for. To this end, it may be helpful to participate or be included as user in consortial contracts of university libraries with academic Open Access publishers.

2. Research production, quality and integrity

Introduction

Scientific focus areas are clinical research to improve care with a strong focus on mental health, surgery and the implementation of innovative approaches, such as digital solutions for rapid assessments, the development and refinement of evidence-based clinical guidelines, and psychiatric genetic epidemiology. Dedicated patient involvement is a strong cross-cutting theme across scientific focus area (with the exception of the development of evidence-based guidelines). The research production is compelling given the size of the Administrative Unit and its research groups with a substantial increase in publications until 2022 (53 publications in 2013 to 98 publications in 2022), particularly in the domains of mental health (psychology, psychiatry), general medicine, and the surgical sciences and a solid mean citation score over the past years.

Convincing polices to ensure research integrity have been adopted that include a solid Data Management plan and the requirement for (pre)registering research, procedures to ensure data protection and for the ethical review of studies.

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 Clinical Health Research Alliance (ClinHealth) - overall assessment

ClinHealth has a strong multidisciplinary research team, which has engaged several motivated and dedicated senior researchers with national and international networks. They indicate extensive competence in clinical studies. The close collaboration with the municipal health service strengthens the group further in terms of opportunities to develop seamless healthcare services between specialist and municipal health services. The group develops research driven proposals and has been able to secure highly competitive external grants. The medium size of the hospital and relatively short pathway to its leadership, makes it an ideal laboratory for projects that seek to test new types of health care service. The group consists of skilled researchers from different professions. It uses and has competence in a variety of research designs. Compared to other non-academic/non-university hospitals, the group appears to have relatively strong links with universities. One challenge for researchers is their dual role (with 50% clinical work), which may be detrimental to research activity e.g. when required to substitute for clinical colleagues. The topics of research nodes are well defined, but there may be potential for more co-operation between the research nodes. The group's budget appears to have a dependency on hospital activity, and there is a potential risk of budget cuts or restrictions (e.g. on the scope of the research). ClinHealth has the potential to increase collaborative activity with established and relevant international groups. The group has been creative in its approach to dissemination, for example posting video content on YouTube.

Research Group MAGIC Evidence Ecosystem Foundation (MAGIC) - overall assessment

MAGIC is an international research group dedicated to evidence-based medicine. It is a highly productive group which includes world's leaders within this research area. Internationalisation is strong and verifiable, e.g., researchers' affiliations, international grants, collaborative papers. Locally, the relationship between MAGIC and its host institution (Lovisenberg) needs to be further clarified, particularly in terms of interaction with other research groups on the site. In the same way, in terms of training, the number of PhDs is relatively low given the number of researchers. The articles highlighted in the self-assessment are mostly commentaries or educational papers. The research dimension of production (original articles) is not highlighted in the self-assessment paper.

Production of research with a social impact is the group's strong point, mainly through its commitment to improving patient care and advancing evidence-based practices. The impact of this activity is not argued, but the involvement of users in the research process is not explicitly stated in the self-assessment.

Research Group Psychiatric Genetic Epidemiology (PaGE) - overall assessment

The Psychiatric Genetic Epidemiology (PaGE) group at Lovisenberg Diaconal Hospital is a research hub for psychiatric genetic epidemiology at the hospital. This is a small research group that is entirely funded through awards from the Norwegian South-East Regional Health Authority. There is some organisational support for the production of excellent research, which is evidenced by the listed outputs in leading international journals. However, the contribution of the group in leading those research outputs, and the lack of detail on the societal impacts or user engagement in research limits the academic and non-academic significance of the group.

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

The Committee supports and endorses the assessment of the research groups by the expert panel. The involvement of end users, as mentioned in the expert assessment of the MAGIC groups would be an important point to consider in future clinical guideline research. Moreover, systematically including patients and the patients' perspective in the clinical guideline processes will not only add to the research but would also add to the strong patient involvement theme of the Administrative Unit.

The description of the impact of the PaGE's group research does indeed lack detail. While significant research output has been documented, the group might benefit from a stronger alignment with the overarching research strategy of the Administrative Unit in terms of the goal of translating research into care and improving healthcare.

3. Diversity and equality

Policies to promote gender equality has been implemented including a dedicated Gender Equality plan. The share of women involved in the Administrative Unit's research has increased modestly from 41% in 2013 to 55% in 2022. There is an obvious gender imbalance increasing with seniority of the research team members, with less women in senior positions. The self-assessment identifies only 20% of professors as women, while 75.5% of PhD students and 100% of Postdocs are women. Increasing diversity in a broader sense (e.g., ethnicity, socioeconomic background, encouraging fist-generation students to pursue a career in academia) has not been systematically explored.

The committee's evaluation

A solid Gender Equality Plan has been adopted. However, gender imbalances can still be observed calling for gender equality actions to be expanded. Diversity with other respects (ethnicity, socioeconomic background) and its opportunities has not been fully explored. Aiming for diversity not only is an important goal to improve in equality, this also offers important opportunities to recruit high-potential individuals best fit for research, and, thus, is an important building block of excellence in research

The committee's recommendations

- Continuously monitor the effects of the adopted Gender Equality Plan. Investigating
 (institution specific) barriers and facilitating conditions for women in research may be
 helpful and would allow to devise and introduce further actions to improve gender
 equality.
- A broader perspective on diversity would add benefit. In particularly, introducing measures to attract high potential individuals with non-academic background (firstgeneration students) would be a promising avenue to pursue.

4. Relevance to institutional and sectorial purposes

Contribution to Clinical Research, Innovation, and Commercialisation

The administrative unit demonstrates a strong commitment to advancing clinical research, innovation, and commercialization, contributing to the development and implementation of diagnostic methods, treatments, and healthcare technologies:

ClinHealth Group: Prioritizes healthcare outcomes, including innovations in pain and fatigue management. It emphasizes sustainability in healthcare and critically evaluates treatment efficacy, reducing reliance on ineffective methods.

MAGIC Group: Develops evidence-based clinical guidelines via the MAGICapp platform, which is licensed globally, supporting economic growth and the dissemination of trustworthy healthcare solutions. This group's emphasis on education and the global exchange of methodologies strengthens healthcare systems and societal well-being.

These groups collectively enrich research culture, promote education, and create tangible impacts on healthcare delivery and policy development.

PaGE Group: Focuses on psychiatric genetic epidemiology, significantly reshaping approaches to neurodevelopmental conditions like autism and ADHD. This group contributes to refining diagnostic methodologies and translating research findings into actionable clinical education materials.

Contribution to Education Quality

The administrative unit substantially contributes to educational programs across multiple institutions with high numbers of successful students on PhD, Master's, and bachelor's levels. Senior researchers, many of whom hold dual academic positions, actively recruit and mentor students, ensuring robust integration between education and clinical research. This approach enhances the academic and professional development of students and aligns educational efforts with cutting-edge research.

Opportunities for Student Involvement in Research

Lovisenberg offers ample opportunities for student participation in research, supported by structured processes. These initiatives have resulted in extensive student engagement, with many utilizing available research opportunities for thesis work or quality improvement projects, further contributing to institutional and sectorial goals.

The committee's recommendations

N/A

5. Relevance to society

The administrative unit's sectoral impact is relating to the needs of patients and their families. All research projects involve input and participation from users. Moreover, fruitful collaborations have been established in research and dissemination, as outlined in Impact Case 2 on the Rapid Communications program, addressing SDG 17 (establishing partnerships to attain goals).

The committee's evaluation

With its research rooted in care and its strategic goals that emphasize extensive patient involvement, the research agenda of the Lovisenberg Research Department has significantly contributed to improving care, including care for conditions that pose major public health challenges, such as neurodevelopmental disorders. Moreover, with the work done by the MAGIC group evidence.based medicine practice will experience a significant boost.

The research conducted in the Administrative Unit's research groups aligns very well with UN Sustainable Development Goals, in particular with the goals of promoting ensuring good health and well-being (SDG 3) by addressing major public health challenges and themes and improving care and of reducing inequalities in access to quality healthcare (SDG 10) by reaching out to at risk and/or difficult-to-reach populations.

The committee's recommendations

• Continue with the focus on impact for patients and their families.

Comments on impact case 1: A trend towards earlier and more standardized identification of neurodevelopmental conditions in Norway and beyond is influenced by Lovisenberg research

This case clearly demonstrates sustained impact of Lovisenberg research for clinical care, e.g. in terms of setting standards for diagnosis and assessment of autism and the identification of risk factors for attention deficit hyperactivity syndrome.

The underpinning research took place from 2012 to 2022 and focused on autism and attention deficit hyperactivity syndrome as key neurodevelopmental disorders. Research covered the evaluation and refinement of assessment tools for the screen for autism, the investigation of factors contributing to the underdiagnosis of autism and of correlates and determinants of ADHS, such as maternal gestational age.

The outcomes of the case are impressive: Research outcomes were published in renowned academic journals. These include specialty journals of the field and general interested journals targeting a broader audience (e.g., *Lancet*). Research outcomes also had a substantial impact on guideline and policy papers. The research done in this impact case contributed significantly to national and international guidelines for the assessment and diagnosis of autism and has shaped the refinement and standardisation of autism assessment. Outcomes have been integrated within clinical training curricula. This has been complemented with a third route of impact by communication activities targeting stakeholders, including patients and parents.

Comments on impact case 2: Advancement in Understanding and Enhancing Treatment for Advanced Shoulder Conditions by Lovisenberg Research: Easing Pain and Restoring Functionality

This case focuses on the surgical treatment of a specific shoulder condition (superior labral tears). It had profound impact on care and surgery practice, as it documented that surgeries may be ineffective and unnecessary for this condition.

The underpinning research has been carried out from 2012 to 2022. Building on findings from clinical data, an innovative double blind randomized-controlled trial on the surgical treatment of superior labral tears was conducted. The RCT was of highest methodological standards including the registration of the trial and publication of the protocol, and, notably, included a placebo control (sham surgery). Moreover, the RCT is a prime example of clinical trials rooted in observational studies and care.

The research impact is demonstrated in a set of publications in renowned academic journals of the field. Notably, the innovative research design gained considerable attention evidence by a set of editorials and commentaries on the sham surgery that serves as placebo control.

The impact of the research is significant along several avenues: It gives reason to rethink current surgical practices and will help surgeons, health care professionals, and patients when surgery is considered to avoid unnecessary surgeries. It will, thus, have sustained impact on care and surgical practice, both nationally and internationally. Moreover, the innovative trial design is likely to set methodological standards in the field.

Case 3: BMJ Rapid Recommendations

This case is rooted in the collaboration between Lovisenberg's Magic group and the academic journal BMJ that allowed for the rapid publication of clinical guidelines and timely guideline updates ("living guidelines").

The underpinning research that has been done from 2016 to 2022 (since 2017 with researcher employed at the Administrative Unit) is ground in the Magic group's ecosystem for evidence synthesis and its tools (MagicApp). Since 2016, a total of 22 rapid communications on guidelines and guideline updates have been published in BMJ. Notably, this period covers the Covid-19 pandemic and related guidance is a prime example of the suitability of the "living guideline" principle and the rapid communications format.

The case has significant impact on clinic care by the timely publication of clinical guidelines and related updates across a range of domains. The case demonstrates very well the viability of the concept of "living guideline" that can conveniently integrate novel evidence and contribute to evidence-based care. Moreover, the rapid communications platform provides a transparent and feasible way to give both, health care professionals and lay people access to the current evidence.

Appendices

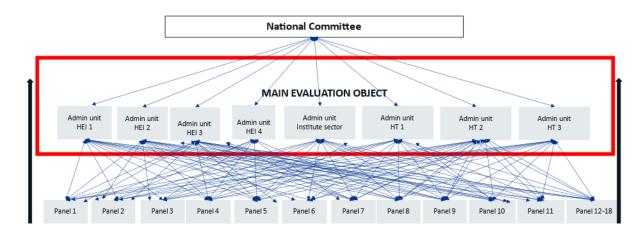
Evaluation of Medicine and health 2023-2024

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

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

Evaluation of medicine and health (EVALMEDHELSE) 2023-2024

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



Organisation of evaluation of medicine and health 2023-2024

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

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

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

The web page for the evaluation of medicine and health 2023-2024: <u>Evaluation of medicine and health sciences (forskningsradet.no)</u>



Se vedlagte adresseliste

Vår saksbehandler / tlf. Vår ref. Deres ref. Sted

Hilde G. Nielsen/40922260 23/3056 [Ref.] Lysaker 28.4.2023

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

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

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

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

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

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

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

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

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



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

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

Administrative enheter (hovedevalueringsobjektet i evalueringen) – skjema 1

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

Forskergrupper - skjema 2

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

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

Invitasjon til å foreslå eksperter – skjema 3

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

Obs. Det er to faner i regnearket:

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

Utfylte skjemaer (3 stk):

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

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

Tilpasning av mandat – frist 30. september 2023

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



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

Nettsider

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

Spørsmål vedrørende fagevaluering av medisin og helsefag kan rettes til Hilde G. Nielsen, 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
- 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



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 2022

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

Telephone: +47 22 03 70 00 Telefax: +47 22 03 70 01

post@rcn.no www.rcn.no

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

Oslo, 5 April 2022

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

1 Introduction

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

1.1 Evaluation units

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

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

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

1.2 Minimum requirements for research groups

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

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

1.3 The evaluation in a nutshell

The assessment concerns:

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

The Research Council of Norway (RCN) will:

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

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

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

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

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

1.4 Target groups

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

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

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

2 Assessment criteria

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

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

2.1 Strategy, resources and organisation

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

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

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

2.2 Research production, quality and integrity

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

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

2.3 Diversity and equality

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

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

2.4 Relevance to institutional and sectoral purposes

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

Higher Education Institutions

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

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

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

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

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

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

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

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

Research institutes (the institute sector)

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

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

The institutes should:

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

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

The hospital sector

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

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

³ Strategy for a holistic institute policy (Kunnskapsdepartementet 2020)

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

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

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

2.5 Relevance to society

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

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

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

3 Evaluation process and organisation

The RCN will organise the assessment process as follows:

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

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

3.1 Division of tasks between the committee and panel levels

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

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

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

Norwegian research within life sciences

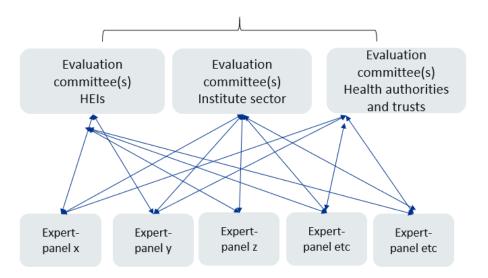


Figure 1. Evaluation committees and expert panels

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

3.2 Accuracy of factual information

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

3.3 National level report

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

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

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

Appendix A: Terms of References (ToR)

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

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

Assessment

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

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

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

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

...

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

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

Documentation

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

The documents will include the following:

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

Interviews with representatives from the evaluated units

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

Statement on impartiality and confidence

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

Assessment report

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

Appendix B: Data sources

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

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

National registers

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

Self-assessments

1) Administrative units

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

2) Research groups

- a. Self-assessment covering the first two assessment criteria (see Table 1)
- b. Administrative data on funding sources
- c. Administrative data on personnel
- d. Administrative data on contribution to sectoral purposes: teaching, commissioned work, clinical work [will be assessed at committee level]
- e. Publication profiles
- 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	Research groups	Administrative units	
Criteria			
Strategy, resources and	Self-assessment	Self-assessment	
organisation	Administrative data	National registers	
		Administrative data	
		SWOT analysis	
Research production and quality	Self-assessment	Self-assessment	
	Example publications (and other	National registers	
	research results)		
Diversity, equality and integrity		Self-assessment	
		National registers	
		Administrative data	
Relevance to institutional and		Self-assessment	
sectoral purposes		Administrative data	
Relevance to society		Self-assessment	
		National registers	
		Impact cases	
Overall assessment	Data related to:	Data related to:	
	Benchmark defined by	Strategic goals and specific tasks	
	administrative unit	of the admin. unit	



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

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

Introduction

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

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

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

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

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

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

Thank you!

Guidelines for completing the self-assessment

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

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

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

1. Strategy, resources and organisation

1.1 Research strategy

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

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

Table 1. Administrative unit's strategies

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

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

1.2 Organisation of research

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

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

1.3 Research staff

Describe the profile of research personnel at the administrative unit in terms of position and gender. Institutions in the higher education sector should use the categories used in DBH, 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. <u>Please delete lines which are not in use</u>.

Table 2. Research staff

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

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 (forvaltr	ingsoppgaver) or (if applicable) funding related to
special hospital tasks, if any	
special hospital tasks, if any	
special nospital tasks, if any	
Total funding related to public	

1.6 Collaboration

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

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

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

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

National collaborations

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

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

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

International collaborations

Collaboration with 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		

Ir	mpacts 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	research	Period (from year to year)	Description	Link to website

b) Participation in international infrastructures

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

Table 6. Participation in international infrastructure

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

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

c) Participation in European (ESFRI) infrastructures

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

Table 7. Participation in infrastructures on the ESFRI Roadmap

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

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

d) Access to research infrastructures

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

e) FAIR- principles

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

3. Diversity and equality

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

Table 8. Administrative unit policy against discrimination

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

No	Valid period	Link

4. Relevance to institutional and sectorial purposes

4.1 Sector specific impact

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

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

4.2 Research innovation and commercialisation

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

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

No.	Name	Valid period	Link
1			

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

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

4.3 Higher education institutions

- a) Reflect how research at the administrative unit contributes towards master and PhD-level education provision, at your institutions and beyond.
- b) Describe the opportunities for master students to become involved in research activities at the administrative unit.
- c) <u>ONLY</u> for administrative units responsible for the Cand.med. degree programme, cf. <u>Evaluation of the Professional programme in Medicine (NOKUT).</u>
 - 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
Lovisenberg Diaconal Hospital	Lovisenberg Diaconal Hospital	Clinical Health Research Alliance (ClinHealth)	Panel 4d
Lovisenberg Diaconal Hospital	Lovisenberg Diaconal Hospital	MAGIC Evidence Ecosystem Foundation (MAGIC)	Panel 4c
Lovisenberg Diaconal Hospital	Lovisenberg Diaconal Hospital	Psychiatric Genetic Epidemiology (PaGE) group	Panel 4e

Scales for research group assessment

Use whole integers only - no fractions!

Organisational dimension

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

Quality dimension

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

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

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

Societal impact dimension

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

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



Methods and limitations

Methods

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

The documentary inputs to the evaluation were:

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

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

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

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

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

Limitations

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

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

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



Norges forskningsråd

Besøksadresse: Drammensveien 288

Postboks 564 1327 Lysaker

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

post@forskningsradet.no
www.forskningsradet.no

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

Design: [design]

Foto/ill. omslagsside: [fotokreditt]

ISBN 978-82-12-04072-4 (pdf)

