

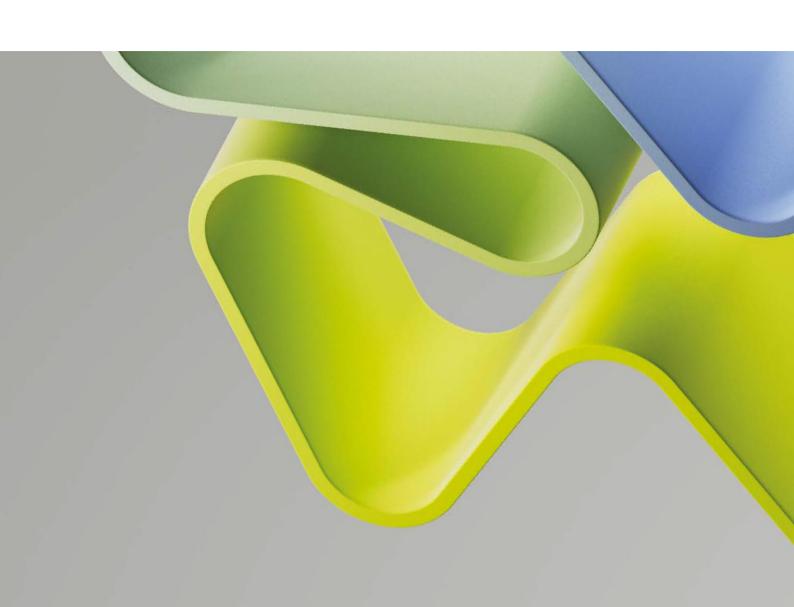
Evaluation of Life Sciences 2022-2024

Evaluation of medicine and health 2023-2024

Evaluation report

ADMIN UNIT: Faculty of Health Sciences (HV)
INSTITUTION: Oslo Metropolitan University - OsloMet

December 2024



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Statement from Evaluation Committee Higher Education Institutions 1

This report is from Evaluation Committee Higher Education Institutions 1 which evaluated the following administrative units representing the higher education sector in the Evaluation of medicine and health 2023-2024:

- Faculty of Health and Social Sciences, Høgskulen på Vestlandet (HVL)
- Faculty of Social and Health Sciences, Inland Norway University of Applied Sciences
- Faculty of Nursing and Health Sciences, Nord universitet
- Faculty of Health Sciences (HV), Oslo Metropolitan University OsloMet
- Faculty of Health, Welfare and Organisation, Østfold University College
- Department of Health and Care Sciences, UiT Artic University of Norway
- Department of Social Education, UiT Artic University of Norway
- Institute of Health and Society, University of Oslo (UiO)
- Faculty of Health Sciences, University of Stavanger (UiS)

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 Higher Education Institutions 1. All members of the committee have agreed with the assessments, conclusions and recommendations presented here.

Evaluation committee Higher Education Institutions 1 consisted of the following members:

Professor Falko Sniehotta (Chair) Heidelberg University

Professor Lars Göran Kecklund Professor Joakim Öhlen Stockholm University University of Gothenburg

Professor Maria Kristiansen Professor Nicola Shelton University of Copenhagen University College London

Professor Annette Boaz Professor Stephanie Taylor King's College London Queen Mary, University of London

Ivette Oomens, Technopolis Group, was the committee secretary.

Oslo, December 2024

Profile of the administrative unit

OsloMet-HV is organised under a dean and three vice-deans overseeing research, education, and innovation, with four departments led by department heads responsible for scientific and educational activities. Since 2012, the faculty established 25 research groups, which are managed at the department level, with group leaders focusing on shared interests, collaboration, and external funding while participating in a faculty forum. In terms of number of researchers in full-time equivalents, the faculty of Health Sciences (HV) consists of 51,9 professors, 149,9 associate professors, 5,6 postdoctoral fellows, 71,1 doctoral research fellows and 4,9 research assistants. Women represent a majority in all categories except postdoctoral fellows.

19 research groups of HV are evaluated: Genomics of Microbial Pathogens, Disease and Environmental Exposures, Midwifery, Clinical Interventions and Assistive Technology (CAT-group), CARE Research group, Intervention in Work and Everyday Life, Quality of Life, Empowerment, Public Health Nutrition, Medicines and Patient Safety, Acute/Critically III and Injured, Musculoskeletal Health, (Re)habilitation - Individual, Services and Society, Applied and Experimental Behaviour Analysis in Clinical Practice, Ageing Health and Welfare, Learning and Interaction, Experimental Studies of Complex Human Behaviour, Mental Health, and Behavioural Principles – from Animal Models to Human Cultures.

HV has its own strategy, the OsloMet-HV strategy 2018-2024. Strategic priority areas for research identified by OsloMet-HV are health and technology, education, and primary healthcare services. Priority areas have been followed up by the establishment of strategic networks: "Intelligent Health", "Network for educational research", "Network for primary care research" and "Network for health literacy research". Networks are established to strengthen research and development within priority areas and foster collaboration internally, as well as with external stakeholders in academia, and the public and private sectors. User involvement and needs-led research is a general strategic guideline for the research portfolio of OsloMet-HV. "The Bridge-Building initiative" has been established as a major initiative to develop methods and building experience within needs-led research. The initiative aims to link research closer to clinical practice.

According to its self-assessment, HV has a diverse research orientation and a research staff with diverse professional backgrounds. This facilitates multi- and interdisciplinarity, as well as inter-professionalism. The research both depends on and encourages close collaboration with all external partners that collectively provide and develop the healthcare system. These include the public specialist and general healthcare services, various actors in the private sector including those concerned with product and service developments, as well as service providers. Moreover, increased focus is given to collaboration through various health innovation-oriented clusters which provide a platform for development of the collective health ecosystem. At the national level, such collaborations are to a large extent formalised at the institutional level. At the international level, research collaboration is mainly scientifically motivated and initiated at the individual researcher or research group level.

Based on its self-assessment, in the future, HV might take advantage of its strong research activity within areas with high societal needs. Strong focus on user involvement and close

collaboration with field of practice gives high potential for innovation and quick uptake of innovative solutions. The future situation of HV may be impacted by external threats such as high competition for external funds for health research.

Overall evaluation

The Faculty of Health Sciences (HV) (OsloMet) is a young administrative unit covering a broad portfolio of educational programmes and research. Its strength lies in its practice-oriented, interdisciplinary research and education of high societal relevance. The organisation and quality of research is good given the high teaching loads and the broad scope in both research and education. Overall, research groups are of good quality but the international quality and synergies between groups could be improved. The Bridge-Building initiative represents a very important and relevant strategic initiative with strong potentials.

Success rates for acquisition of external funding are modest, from national and in particular international funding schemes. This is an important weakness. However, OsloMet-HV performs research in areas of high demand in close collaboration with the relevant fields of practice and with user involvement incorporated. Given developments in calls from national and international funding schemes, opportunities for substantially increasing external funding for this type of research should be high.

The close ties to the field of practices, in clinics, municipalities and communities, is a stronghold and OsloMet-HV has the potential to increase its role in the health research and innovation ecosystem even further. There is limited involvement in national and international research infrastructures which will impede the quality of research in fields requiring specific and costly equipment.

While relevant national collaborations are established, a weakness lies in the low degree of internationalisation. Increasing the quality of research is depending upon the culture shift that is taking place. The proportion of staff holding a PhD degree is increasing but the representation of international researchers is still very limited and there is a low proportion of younger researchers for future generational transitions and sustainability. Open science policies are well-implemented, and relevant initiatives have been taken towards ensuring diversity and equality. OsloMet-HV is showing progress towards creating incentives and organisational support for innovation while acknowledging the challenges in doing so as a young admin unit with limited innovation skills and infrastructures in place. OsloMet-HV is very well placed to contribute to the growing field of social innovation. Contributions towards master and PhD-level education and involvement of students in research are comprehensive and well-designed.

Recommendations

The evaluation committee wishes to extend the following recommendations to the administrative unit:

- The admin unit should continue to play to its strength through documenting and showcasing its impact in the field of practice-oriented, interdisciplinary research addressing key societal challenges. A strong emphasis on developing and showcasing methods and interventions that result in implementable, testable and scalable innovations in healthcare is therefore highly recommended.
- The focus on collaborative research with close ties to a range of public and private stakeholders within the healthcare field should be continued and expanded. Ensuring efficient infrastructures, longer-term strategic partnerships and collaborations nationally and internationally, and expanding the Bridge-Building initiative is recommendable.
- The research strategy should be based on measurable and monitorable research quality indicators. The indicators should be followed up regularly with the purpose of ensuring the quality of research. It is important to make sure that indicators of success are useful and adapted to an interdisciplinary context.
- It is important to strengthen incentives and research support to foster more highquality research under the umbrella of the research strategy. A wider set of criteria should be developed to allocate research time and reduce teaching loads.
- To increase the quality of research and increase external funding, the evaluation report should feed into a collaborative process involving all research groups. The aim of the process is to enhance synergy and collaboration across groups. This process should also include international scientific benchmarking in the respective fields.
- Internationalisation and researcher mobility options should be given high priority, for example through initiatives such as guest professorships, exchanges and sabbaticals, also for younger researchers.
- Increasing external funding is of utmost importance. More incentives and grant
 writing support targeted to national and in particular international funding schemes
 should be implemented. Targeted recruitment of international researchers with a
 proven track record in international funding schemes is recommended.
- A dedicated process to ensure career tracks for younger researchers is highly recommended given the low level of younger researchers and challenges in succession planning.
- Stronger emphasis should be given to developing methodologies for user involvement.
- The action plan for diversity should be updated and expanded into a more multifaceted strategy.
- A broad notion of innovation and integration of this into performance reviews and merit criteria is recommended.

1. Strategy, resources and organisation of research

1.1 Research strategy

Oslo Metropolitan University received university status rather recently (2018) based on a process focusing on increasing the robustness and productivity of the fragmented research at the university. Building upon this, the OsloMet Strategy 2024 was implemented in 2018 with the strategic goal of developing the research groups and enhance the quality of research. Increasing the number of professors and staff with PhD level qualifications while covering the needs of the broad portfolio of teaching and research taking place are among the main goals. Furthermore, supporting research careers, developing research leadership skills, enhance both scientific productivity and quality, and increasing participation in national and international research collaborations have been key focus areas. A range of incentives were set up to encourage researchers to apply for external funding.

The Faculty of Health Sciences (OsloMet-HV) at Oslo Metropolitan University provides education for a large group of practitioners spanning across a very wide range of professions, the key strategic goal has been to perform research that is relevant for the educational programmes in close collaboration with the relevant field of practice. Thus, the strategic aim is to ensure practice-oriented research and innovation in order to develop, streamline, and improve healthcare services. The research has as a strategic guideline principles of user involvement and needs-led approaches in order to increase relevance and avoid redundancy. The Bridge-Building Initiative is a cornerstone in this through its focus on developing methods and competence in needs-led research through 10 internally funded PhD candidates research in the period 2018-2022. Additional strategic guidelines consist of clinical research and trials, innovation and sustainability. Overall, the focus is on practice-oriented research for innovation and improvement of practice and health.

The main fields of research and innovation consist of health and technology, education and primary healthcare services. Strategic networks have been established for selected priority areas, namely "Intelligent health", "Network for educational research", "network for primary care research", and "Network for health literacy research. Impacts on research, policy and society are planned to contribute to the development of sustainable healthcare services in Norway, and advancing the international research front while being a visible partner in societal debates.

In terms of resources, OsloMet-HV has limited financial resources at its disposal, amounting to 6-10 PhD fellowships per year and limited (4-5 million NOK) strategic funding for collaborative projects with the field of practice, funding most of the PhD candidates associated with the Bridge-Building initiative. The timeframe of strategic projects is 1-3 years with the exception of the Bridge-Building initiative.

The committee's evaluation

Given its very recent origin, the Faculty of Health Sciences (HV) (OsloMet) has so far taken a range of very important steps towards its strategic goal of increasing the quality of research. The admin unit is one of the largest health education institutions in Norway, it is centrally located in a wider ecosystem based on extensive collaborations, and its emphasis on user-oriented research and methodological developments in this field is very pertinent.

The practice-oriented, broad portfolio of research and education is at the same time a strength and a challenge. Through providing research-based education for a range of professionals in healthcare within Norway, the Faculty of Health Sciences (HV) (OsloMet) is the key player in shaping practices for future sustainability of healthcare while ensuring ongoing dialogue with diverse field of practices undergoing rapid changes these years. Societal challenges, including population aging, multimorbidity, a shrinking healthcare workforce, social inequality in health, digital health technologies and the necessary shift to more primary care and community-based healthcare, call for the practice-oriented, interdisciplinary research and education taking place at OsloMet-HV, and funding streams, including national (RCN) and international (EU) are likely to increase in these complex and important areas. The opportunities for OsloMet-HV to enhance its research activity in these areas of high demands through close collaboration with the field of practice and user involvement is correspondingly high. At the same time, the broad portfolio of educational programmes with a large volume of students, and the position as a unit at a young university poses challenges related to creating a culture of research, and recruitment being driven by educational needs rather than research needs. Staff has limited time for applying for external funding due to heavy teaching loads, and there is a limited number of positions available both at the PhD and the postdoctoral levels. Limited research infrastructure, modest success rates for acquisition of external funding, and the reality of competing for funding at different terms than older universities are additional important challenges. Collaboration with a range of fields of practice is resource demanding, and requires appropriate incentives and infrastructures, such as shared positions, access to shared locations and flexible research areas/spaces for co-design, and assistance in establishing and maintaining partnerships.

The committee's recommendations

- The admin unit should continue to play to its strengths through documenting and showcasing its impact in the field of practice-oriented, interdisciplinary research revolving around key societal challenges. To do so, pairing up with other research-intensive organisations in Oslo and more widely is important, as it unlocks new synergies and the sharing of expertise. Furthermore, it is recommended to highlight and strengthen the emphasis on user engagement and broad local as well as regional partnerships in the strategy, for example through user- and advisory boards representing a broad range of users.
- It is important to continue to focus on learning how to collaborate effectively and ensuring infrastructure that facilitates and create incentives for participatory, collaborative research.
- While many important project-based collaborations have emerged, it is important to increasingly move from these resource-intensive, smaller-scale and short-term projects to more long-term, strategic partnerships as part of implementing the research strategy. This entails focusing resources on fewer but larger-scale collaborations and ensuring their wide availability for researchers across OsloMet-HV. Priority should be given to long-term strategic partnerships that align with the four themes in the strategy, widely conceptualised to allow for academic freedom and spin-off research, with resources dedicated to creating infrastructure that reflect clinical and municipal rationales, needs and resources for engaging in research.
- The process of shifting culture is complex and requires continuous focus and encouragement, not least as budget cuts and high competition for funding affects the possibility to successfully achieve this goal. It is important to strengthen incentives and research support to encourage more high-quality research within the realm of the ambitious and pertinent research strategy. A wider set of criteria should

be developed to allocate research time, e.g. including societal impact and engagement criteria, institutional contributions, awards and merits in teaching and innovation.

- The research strategy should be based on measurable and monitorable research
 quality indicators. The indicators should be followed up regularly and discussed in
 the research groups, with the purpose of ensuring the quality of research. While
 working on indicators or metrics for success for groups and individuals, it is
 important to make sure that these are useful and adapted to an interdisciplinary
 context.
- It is important to ensure broad involvement of researchers, and in particular early career researchers, in the development and implementation of the strategy.

1.2 Organisation of research

Headed by a dean and three vide-deans, OsloMet-HV is organised into four departments: Department of Behavioural Sciences; Department of Life Sciences and Health; Department of Nursing and Health Promotion; and Department of Rehabilitation Science and Health Technology. Departments are divided into sections with heads of sections having personnel management responsibility for research staff. The process of organising research activities into formal research groups was initiated in 2012 and has resulted in a total of 25 research groups including the newest group that was established in 2023. A total of 19 groups are included in the evaluation.

It is the authority of the department head to establish, merge or discontinue research groups based on a set of criteria established at the faculty level. A forum for research group leaders has been established. Research group leaders are allocated extra research time, and each group has a plan for publishing, research projects, proposal development, and dissemination and outreach. Networks centred around strategic priority areas for research (user involvement, health and technology, primary healthcare, education, health literacy) have been established to foster synergy. OsloMet has four centres of research excellence, one of these affiliated with OsloMet-HV. Researcher training is provided with two PhD programmes, merged into one from 2024. A Doctoral Degree Committee and a Research and Development Committee are set up to support research, development and innovation. There is administrative support at the local R&D section at OsloMet-HV and at the R&D department at the institutional level, with the latter providing more specialised support.

A set of criteria for allocation of research time for full, associate and assistant professors is in place. When first employed, associate professors are awarded 35% and full professors 45% research time for three years. Continued allocation depends on research productivity that is evaluated in three-year cycles. Research group leaders are awarded an addition 15% research time. All staff in academic position may apply for additional research time for a specific project These applications are prioritised at the department level once a year.

The admin unit is in the process of developing research mobility options. Available options include mobility funding, seed funding for internationalization activities including networking and research stays, and several institutional agreements with research institutions internationally.

Shared positions and agreements for regulate collaborations between the admin unit and collaborating institutions have been set up, and regular meetings and representation in committees across institutions have been implemented to increase synergies.

Efforts to increase synergies between research and education include extended management meetings, mutual meetings across R&D, PhD and education, and representation of external partners in the committees and at the faculty board. The Bridge-Building initiative, aiming to link research, education and clinical practice; the Health Science Student Research Programme motivating master students for a career in research; and the membership of health science focused clusters to create collaborative spaces for members from academia, and public and private health sectors within life sciences, are key structures on the organisation of research.

The committee's evaluation

The committee finds that the organisation of research at OsloMet-HV is overall welldesigned and reflects the broad portfolio of research and education taking place. That said, there is a need for an enhanced focus on creating stronger research groups, potentially through merging some of the groups with clear potentials for synergies or through increased collaboration between groups. Furthermore, improved conditions for collaboration across the different campuses through for example co-location, and incentivising alignment with the research strategy and collaborative approaches even further is advisable. A clear potential lies in strengthening the ties to the field of practices with both clinical fields (hospitals, primary healthcare services) and the municipal field being lower-hanging fruits. Strengthening support, including grant application support, network opportunities, and research infrastructures for groups to - collaborative - engage even more in particular in the municipal and clinical fields would be important. The continuation of the high-level engagement to create more longer-term partnerships with clinical and municipal fields is of high importance, as the project-and-person-driven collaborations are very demanding, leading to a waste of resources, often more short-term projects with limited potential for implementation and long-term impact, and a lack of sharing of insights and relationships build in these collaborative research-practice endeavours.

The committee's recommendations

- It is important to foster the best possible conditions for the large number of research groups while both respecting the freedom of research, ability to pursue new ideas and emerging fields, and the strategic priorities through alignment with the four themes of the strategy. It is recommended that resources for collaboration between research groups are prioritised. To do so, this evaluation report could form the basis for a collaborative process involving all research groups focusing on exploring potentials and barriers for more synergy and collaboration across groups. This process should include international scientific benchmarking in the respective fields, e.g. through a seminar series with international leaders for each field invited to discussions of cutting-edge areas and collaborations.
- Along the same lines, it is recommended to increase activities within the research group leader forum that currently has meetings and seminars four times a year.
 Activities could focus on joint research, grant writing, career development, mentorship and research leadership skills.
- The committee recommends that there is continuous emphasis on ensuring that teaching load is evenly distributed to ensure that more researchers are successful in funding and research.
- Improving internationalisation and research mobility options is important. This should include guest professorships or visiting researcher options for international leading researchers, focusing on ensuring (external and internal) funding for

recruitment packages, and showcasing the potentials of key infrastructure and resources, for example the comprehensive Norwegian population-based registries and/or partnerships with local public and private healthcare stakeholders internationally. Sabbaticals and other mobility options for younger researchers should be strengthened.

Support from the R&D section and the R&D department should be appropriately
utilised in particular in terms of support for grant applications and research
management for younger researchers. Locating these resources even more closely
to the research groups and the overall departmental level could improve uptake and
access to support among researchers and give R&D professionals even more
insight into support needs.

1.3 Research funding

OsloMet-HV is challenged by limited external funding from national and in particular international funding sources including EU based funding. Few proposals have been submitted to international sources in the evaluation period.

The committee's evaluation

The challenge of the grants obtained from national private foundations is that they do not cover indirect costs. Another challenge relates to the fact that the admin unit so far has funded a majority of its research via internal funding. While this makes sense in a build-up phase, focusing on building networks and engaging in collaborative projects, the next steps towards enhancing research productivity and quality calls for a higher number of external grant applications with higher success rates, thereby reducing the in-kind contribution to external projects and freeing up resources for, for example, the Bridge-Building Initiative.

The committee's recommendations

- It is important to increase incentives and grant writing support targeted to
 international funding schemes, and in particular EU funding sources including
 Horizon Europe, ERC, Marie Curie, but also more low-hanging fruits including
 NordForsk calls and COST-Action programmes enabling international networking
 and career development for younger researchers.
- Researchers should be encouraged to join as expert reviewers through for example CORDIS under the European Commission as this engagement in the internal processes of international grant reviews improve knowledge and competence.
- To enhance success, it is key to ensure more availability of grant writing support at departmental levels, emphasising joint large-scale applications with participation of several research groups (e.g. through seed-funding and administrative support in the grant writing process) and applications based on strategic partnerships with external partners.
- It is recommended to continue the internal process of approval by Head of
 Department acknowledging the dilemma related to approving/disapproving based on
 whether receiving the grant can be afforded. Transparent criteria for this process
 should be widely disseminated. Internal funding should be considered in areas with
 high potential and close alignment with strategic objectives.
- The admin unit should consider establishing a position/function as e.g. deputy head of research and career development at departmental level. The focus should be to

- ensure consistent focus on identifying high-potential research groups, supporting synergies between groups and engage in dialogue with funders.
- Given competing demands, it is important to consider creating more incentives for researchers to enable more efficient and successful grant writing, e.g. through increased buy-out, reduced workload and/or grant writing seminars and support.
- It is important to increase recruitment of international researchers with a proven track record in international funding schemes. Recruitment should also involve support for integration, collaboration and knowledge-sharing within and across research groups.

1.4 Use of infrastructures

OsloMet-HV is currently not involved in the national infrastructures outlined in the Norwegian roadmap for research infrastructures. This participation has not been prioritised in the evaluation period as the focus has been to develop a basic infrastructure for research internally at the admin unit. Also, there is no involvement in the European (ESFRI) infrastructures. There are a number of laboratories available in-house including for movement analysis, artificial intelligence, clinical trials, and analytical labs for biochemical, molecular and cellular biology analysis. Several biobanks are owned by the admin unit, and researchers have access to data from different national health registries, population cohorts and additional biobanks. Access to infrastructure for more basic clinical and animal research is available for some researchers through their collaborations with the University of Oslo. Infrastructure for, for example, health services research and clinically oriented research is provided through researchers' collaborations with hospitals. Access to infrastructure via national and international networks, incl. COST-networks, are briefly mentioned but not elaborated on. The self-assessment mentions that researchers have experienced limitation due to lack of access to critical infrastructure. The FAIR-principles are imbedded into the management of research data.

The committee's evaluation

While the lack of emphasis on involvement in national and international research infrastructures made sense in the build-up phase of the admin unit, it is vital that more resources are dedicated to ensuring formal access to the wider range of infrastructure needed across the admin unit. As it appears now, access is primary granted to project/individual-driven collaborations which does not ensure systematic, open and flexible access to infrastructure for the wider group of researchers. While ensuring access to infrastructure is definitely challenging given the very wide range of research conducted at the admin unit, this infrastructure is vital for fundraising and quality purposes, not least as the admin unit seeks to position itself in areas that are quickly evolving, highly competitive and increasingly demand novel and high-tech infrastructures, such as personalised medicine and artificial intelligence in healthcare While the unit does not aspire to be leading in the field of technologies, some fields do require specific and costly equipment.

The committee's recommendations

• The focus on practice-oriented research for innovation within and improvement of healthcare services is very timely and aligns well with priorities in the "Long term plan of research and education". It is likely that funding will increase for this type of research. A strong emphasis on developing and showcasing methods and interventions that results in implementable, testable and scalable innovations in healthcare is therefore highly recommended.

- The Bridge-Building initiative is an important and novel research infrastructure that should be maintained, prioritised and extended.
- Continued involvement in life science clusters, creation of joint positions and shared facilities is recommended.
- A priority should be given to building longer-term strategic partnerships with a manageable range of clinical and others (public and private) collaborators with formal agreements of shared infrastructures included.
- The admin unit should prioritise external funding applications that include substantial funding for research infrastructure, jointly utilised with clinical and non-clinical partners.
- It is important to balance the scope of research conducted with the challenges of securing adequate research infrastructure for e.g. specific testing. Enhanced collaboration with the technological faculty and other specialised environments, national and internationally, could lead to better access and synergies between the user-led research of OsloMet-HV and technological strong environments.
- It is important to see the strong population-based registries, cohorts and biobanks, clinical trials, and the networks created through user-led research as vital infrastructures for sharing with others and as strong-holds of the admin unit.
 Ensuring agreements on data sharing, open access and linkage between data sources is important to keep in focus.

1.5 Collaboration

OsloMet-HV is connected to and embedded in a range of collaborations within the healthcare ecosystem in Norway. These include both public and private partners. The collaborative profile of the admin unit thus adequately reflects the strong emphasis on user-and practice-based research and the educational portfolio of the admin unit. Cross-sectorial and interdisciplinary dimensions are clearly evident, and collaborations have been formalised through both general institutional agreements and more specific faculty level agreements. Institutions, municipalities, clusters and private sector partners are involved in the formal agreements. Formalised meeting points at various institutional levels have been set up to foster collaborations, and other approaches, such as joint participation in councils and advisory boards, and involvement of external partners in either research group-based or PhD student level research projects are also implemented. International collaborations are less evident, however some educational collaborations have been established internationally with the primary aim of facilitating student exchange.

The committee's evaluation

The committee finds that the admin units has come some way in establishing collaborations nationally, however less so internationally. The strategy taken reflects the broad set of scientific and educational profiles of the admin unit, and it caters to the need for establishing collaborations that combine both educational and research objectives. The admin unit has been successful in creating regional collaborations and there has been an increase in its role within the larger health innovation ecosystem. There is a strong potential for taking an even more central role, regionally but also internationally, given that the admin unit holds a very substantial and diverse expertise in areas of high demand, including for the development of innovative and sustainable community-oriented healthcare facilities. There is a continued need for attention to striking the right balance between having a wide, bottom-up and dynamic portfolio of collaborations vis-à-vis more selected longer-term investment in particular collaborations that is often necessary for reaching the full potential

of collaborative, user-driven research for impact beyond short-term projects and to avoid more narrow, project/person-driven collaborations with more risks and less value for the wider admin unit.

The committee's recommendations

- It is important to encourage participation of more researchers in the strategic, longer-term formal collaborations.
- Collaborations should be expanded to include more national and international
 partners, including institutions with formal agreements aimed at student exchange.
 Mobility of researchers, seed funding leading to joint grants applications and
 educational activities, and short-term outplacements, including hyflex for inclusion of
 people with caregiving responsibilities, should be integrated in collaboration
 agreements.

1.6 Research staff

As of October 2022, OsloMet-HV had a total research staff of 409 full time equivalents following a steady increase over the past 10 years. The share of personnel holding a PhD has doubled from 25% in 2012 to 52% in 2021. Of these, 12% had a degree from outside of Norway (2021 data), a share that has not changed. There has been an increase in the proportion of staff having professor or associate professor qualifications, and the share of personnel at full professor level was 15% in 2022, rising from 6% in 2012. The number of doctoral research fellows is limited but has increased from 33 FTE in 2012 to 71 in 2022 following the introduction of the PhD programme in Health Sciences. The admin unit has very few postdoctoral fellows employed (5.6 FTE). In terms of gender, women are over-represented at all levels, except the small group of postdoctoral fellows.

The committee's evaluation

The admin unit is showing good progress in terms of increasing the proportion of staff holding a PhD degree. The representation of international researchers is still very limited, warranting a stronger focus in the upcoming years. Likewise, the low proportion of younger researchers, in particular at the postdoctoral level, represents a very important challenge for succession planning as more senior researchers retire/leave the admin unit. Although the profile of the disciplines and educational programmes of the admin unit is skewed towards women in particular, there needs to be a recurrent focus on recruiting more males at all levels except for the postdoctoral. Both in terms of recruitment of younger researchers, international staff and more males (note: since no data available beyond the binary notion of sex), competition is high, but strategies should be put in places to ensure a more proactive approach to creating a diverse research staff profile that is extends well into the future.

The committee's recommendations

• It is important to focus on enhancing recruitment, and most importantly retention, of younger researchers at the PhD and the postdoctoral levels through various measures targeting both individuals, research group leaders and organisational processes. Networking (e.g. networks for postdoctoral fellows), mentorship programmes, flexible working arrangements, joint positions, and re-entry to the admin unit for those now working in practice (e.g. through creating and maintaining an alumni network) are some approaches to ensure the generational transition and representation across diverse groups.

The focus on international recruitment and retention should be strengthened. This
includes use of search committees, enhanced focus on casting a wider net, also in
terms of DEI dimensions, and support for integration of incoming staff and their
families e.g. through language support, access to informal and formal networks
within the Norwegian research ecosystem, and creation of employee resource
groups for international staff.

1.7 Open Science

OsloMet-HV adheres to the open science policy through for example recommending publishing in open access journals, having Publish and Read Agreements with leading academic publishers, covering publication in gold journals, and requiring all peer-reviewed articles and conference "articles" to be made available through its open archive. The admin unit is committed to the NOR-CAM national guidance for the assessment and evaluation of research, aligning with The San Francisco Declaration on Research Assessment. Publication in gold open access has increased from 32% in 2013 to 54% in 2022. Preregistration of research plans, protocols and trials is encouraged and the self-assessment report states that this is increasingly performed. There is an institutional policy for managing, storing and making research data accessible, and the FAIR principles are listed as guiding principles. Data management plans must be in place for research projects. Use involvement in research and needs-led research are key priorities.

The committee's evaluation

The approach to open science policies is appropriately reflecting the stage that the admin unit is in as a rather new university focusing on building up research competence. The Bridge-Building initiative and the Health Literacy Population Survey Bank, jointly owned by the admin unit, are promising initiatives in this field. While the progress is very promising, the committee finds that OsloMet-HV has an unique opportunity to further position itself as the leading environment for 1) user-driven, participatory research in the field of innovative and sustainable healthcare services including in clinical and community-based fields, and 2) new approaches to interdisciplinary and needs-led randomised controlled trials/cluster trials within public-private partnerships centred on (clusters of) municipalities.

The committee's recommendations

- Stronger emphasis should be given to developing methodologies for public and private involvement in research and innovation.
- The Bridge-Building initiative should be continued and strengthened as an approach to promote user involvement in research.
- The admin unit should develop expertise in the field of user- and needs led research in municipal settings and more widely within public-private partnerships with broad participation of diverse stakeholders including citizens.

2. Research production, quality and integrity

Introduction

The purpose of research at the admin unit is stated to be three-fold: to support the broad portfolio of educational programmes, to address societal challenges and to advance the international research front. The strategy for building and strengthening the research environments has so far resulted in more than a doubling of the research production, citation scores are increasing and the increased collaborations in particular with national collaborators are reflected in the bibliometric analyses of co-published publications. While the research performed span areas as diverse as bioengineering, ergotherapy, physiotherapy, orthopaedic engineering, radiotherapy, pharmacy, nursing, dental technology and social education, the admin unit also covers additional areas including public nutrition, behavioural analyses and management. This broad span of research production is not reflected in the bibliometric analysis, which is a weakness, however publications within nursing science represent the bulk of the research produced. As rightly stated in the self-assessment report, the broadness of research topics is both a strength and a weakness. Weaknesses pertain to the risk of resources being scattered and challenges in building strong research environments at the international forefront. Strengths relate to the potential inherent in conducting interdisciplinary, interprofessional and collaborative research within areas of high societal importance. In the 2018-2022 period, the strategic priority areas are: health and technology, primary healthcare services, educational research, and health literacy.

Relevant policies for research integrity are in place including assignment of responsibilities for adherence to ethical guidelines at different management levels, and the establishment of a Science Ombud acting as an independent and impartial authority for academic staff in cases of issues and disputes concerning good scientific practice, research integrity and ethics. A research ethics committee is established at the institutional level and research ethics training is mandatory for scientific staff.

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).

Acute critically ill and injured

The purpose of the research group is highly relevant, as there is a need for the scientific knowledge about emergency care for patients both inside and outside of hospitals, prehospital triage, prehospital treatment of patients with stroke or severe mental illness, and finally, enhancing the patient's journey through acute critical treatment. Likewise, there is need for the knowledge sharing that the group aims to provide. The research group's diverse composition of clinicians and theoreticians, as well as a very clear research agenda that is closely linked to the education and further training of paramedics, makes it reasonable to expect that the research group can achieve its goals.

The research group has doubled in size in two years and has already produced research results ranging from scientific publications to public dissemination in the form of podcasts and learning materials in the form of an app. It is too early to assess the research group's scientific results very critically, but the group shows very positive signs and has the potential, based on the group's previous activities and described strategy and goals, to become a significant research group in prehospital emergency care, both nationally and internationally.

Ageing, Health and Welfare

The group plays a central role in the Faculty of Health Science's education programmes, receives seemingly adequate and appropriate infrastructure support. The unit has achieved an extensive and diverse portfolio of public and foundation funding and collaborates widely with other researchers as well as with diverse patient and clinical groups and advocacy organisations.

The unit has an ambitious but appropriate stated role to conduct research that enables healthy, active, functional aging in society through a combination of community health research, health interventions and implementation, health services, and innovation. Additional themes and areas of focus include prevention, early intervention, rehabilitation, and increased use of health technology.

The groups research portfolio is strong and includes diverse study designs and types of projects, including intervention trials, surveys, and observational studies around coherent theme of approaches to improve long-term functioning of older adults. The unit reports a similarly strong set of peer-reviewed publications in moderately high quality journals, with unit faculty generally playing a leadership role.

On the whole, this is a very productive research group, with a strong portfolio of diverse projects with diverse external funding, and high quality publications that places it as an international-class unit.

Applied and Experimental Behaviour Analysis in Clinical Practice

The panel was impressed with the quality of work arising from this fairly small, well organised group. The group was clearly pursuing interesting, fruitful projects as well as targeting and succeeding to publish in highly regarded journals. Some of their work is known internationally and is likely to contribute to the ways in which, and timing, for how societies choose to intervene to allay the challenges faced by autistic people. Thus, there is societal contribution. However, there was not any significant external funding. This would be likely to boost productivity, collaboration and the reach of the work. There was also not obvious evidence of user involvement, though some of the information was purely in Norwegian and so was not accessible to the reviewers.

Behavioural principles - from animal models to human cultures

Strengths of the research group are the group's endeavour to combine expertise from bumblebee and rat model studies to human cultural phenomena is innovative, and the fact that the group's stated goals are ambitious, and their benchmarks may strengthen the research group's research outputs and research standing in future. Weaknesses relate to the organisation of this group as a coherent and collaborative research collective beyond individual laboratories is unclear, the lack of external funding was acknowledged, the wider societal contribution by this research group is stated but not yet evidenced clearly and the

user involvement from relevant stakeholders and policy makers is under-developed at present.

CARE research group

The good quality of research outputs and the substantive contributions by the research group members are the main strengths of this research group. The organisational environment and management routines are still being developed. Sufficient documentation is not available about the group's interactions with users and stakeholders, or its significant societal contributions.

Clinical interventions and assistive technology (CAT-group)

The research group is nationally unique. Its interdisciplinary results have already had an impact on the academic knowledge among certified prosthetists and orthotists, but breakthrough publications are still missing. Considering the high potential of new cutting-edge instruments for the evaluation of rehabilitation among handicapped patients, it is reasonable to expect publications of novel discoveries in leading international journals in the future. Although the research group has been successful in working with private prosthetics and orthotics companies, funding from industry and other external funding has been so far limited. The immediate recruitment of PhDs after the dissertation is a sign of the success of the PhD program. The investment in PhD education pays off for society, although only a minority of PhDs will continue a full-time academic career.

Disease and Environmental Exposures (DEEx)

The competence in microbiology, drug delivery, metabolism and molecular laboratory techniques as evidenced by several articles in peer-reviewed international journals – is a strength of the group. Importantly, the group has a strong ability to translate such knowledge into their teaching activities, including active involvement in the development of a new master's programme in pharmacy, and they are therefore central to the teaching at the faculty. It is also noteworthy that they have developed a drug interaction database that is used in the Norwegian health care sector, indicating the utility of their research to society. The relatively low research output, both in terms of quality and quantity, as compared to a similarly sized and funded international research group represents a weakness. Another weakness is that none of the PIs have successfully attracted major external grants, meaning that the group operates essentially solely on internal funding.

Empowerment (RGE)

The panel considered that the Empowerment Research Group (RGE) is performing well in its research activities at national level but not performing above expectations on any dimensions. It is well-resourced with senior researchers but would benefit from additional doctoral candidates. Strategies for recruitment, mobilisation and internationalisation are lacking and so to also are reports of the faculty's expectations of the research group. RGE's strategy to strengthen collaboration with external stakeholders is however highly appropriate. The benchmark would benefit from being completed with targeted levels of achievement. The group is engaged in education related to its research through running a Master programme. Its members' involvement in PhD training and supervision appears to be good but could have been reported in more detail. Research funding is dominated by basic (core) funding, only 10% of total funding coming from external sources. RGE members are active in diverse research fields, to some extent these fields are related, but

this breadth might lead to a lack of sharpness in the research approach. The listed projects are largely doctoral student theses with interesting objectives but might not be expected to reach international high scientific quality. Reported articles are published in established peer-review journals and members of RGE are well positioned as authors. RGE appears primarily to be a national research base with little international collaboration and predominantly working on studies with a qualitative design. Effectiveness or implementation research appears to be lacking. The research group has made some contributions regarding user-oriented publications and products. Whether this also has made a societal impact is however hard to evaluate as little evidence was provided.

Experimental Studies of Complex Human Behaviour

The documentation of the organisation of the group is rather vague. The group appears to have an excellent ability to train and mentor students. However, despite very ambitious goals to be a leading national and international group, regarding research it has had no external funding. The research group has published 107 papers in national and international peer reviewed journals yet despite how they frame them, the publications tend not to be in high impact journals. Even thinking about citations, the document mentions one paper beings cited 121 times in more than a decade as evidence of impact – so this is clearly a paper they regard as very highly cited – though this is not an exceptional number of citations (under 10 annually on average). The research group has contributed substantially to conferences both in Norway and internationally with a total of 180 paper presentations and posters, and more than 15 invited presentations.

The group seems to have had some societal impact in the Covid period and does see itself as having impact over consumer choices. However, this it is difficult to discern the applicability of its work, which appears to have a narrow focus. The work seems to be rather unidisciplinary, rather than transdisciplinary, with a narrow set of methods. Thus, despite its ambitious goals, it seems to produce work that does not easily translate into societal impact. User involvement is not evident.

Genomics and Microbial Pathogens (GenMicroPat)

Their competence in microbial genomics and sequencing – as evidenced by several articles in peer-reviewed international journals – is a strength of the group. The relevance of their competence and network to society is highlighted by their rapid ability to provide the first fully assembled SARS-CoV2 genome when the Covid-19 pandemic hit Norway. The group has a strong commitment to teaching at the institution and actively contributes to teaching at all levels. The relatively low scientific impact of the research output as compared to similarly sized and funded international research groups is a weakness. Another weakness of the environment is the low degree to which the principal investigators (PIs) have secured external funding.

Intervention in work and everyday life (IWE)

The group's research outputs are of excellent quality in any national and international comparison. The organizational environment and management structures are adequate for supporting the production of excellent research. The group is well integrated into national and international collaborative networks in the respective field. There is clear evidence of users being involved in the research process, however, the potential for wider societal contributions is not fully used.

Learning and interaction

There is a very loose description of how this group is run, and much is made of two scientific anthologies that the group published in 2019 and 2023 but with little detail to describe these. The group has had a rather ambitious strategy but it is not clear that it has been fulfilled. However, the group has quite a lot of funding and has conducted a population wide health literacy survey with considerable external funding and has other publications. To some extent the evaluation of this group may not reflect its true standing, but rather how it describes itself.

Medicines and Patient Safety

The research group shows a dynamic internationalisation strategy, including welcoming external researchers, setting up or participating in networks, steering working groups, and taking part in European projects with no funding to date, according to the table provided. This research group seems to compensate for its relatively low critical mass with a dynamic training policy (Master, PhD) and effective participation in international research networks. The mentioned publications demonstrate the group's thematic coherence, the quality of production (top journals in the field), and international partnerships (e.g., co-authorships). The social contribution is obvious. Interactions with care providers and patients e.g. during the research process, are particularly noteworthy.

Mental Health

Strengths of the Mental Health research group are the PhD-students that are involved in many projects, different project groups within the research group cover specific themes described in the faculty's overall strategies. Thus, the research group is of benefit for the host institution. The group also collaborates with other groups in many projects. Weaknesses concern the fact that there is no clearly formulated benchmark concerning the aims of the research. In general, there are relatively few quantifiable benchmarks. Many of the projects seems to be projects that group members were already working on when they joined the group. Thus, the overall scope of the research group appears diverse and the options for internal collaborations might be relatively low. A more aligned overall research scope for the group might be beneficial. Contributions to society are not clearly described and there has seemingly been a high rate of staff turnover.

Midwifery science

The research group in midwifery science has several strengths, including main group of researchers in this field, extensive collaborative links with others in this discipline, many midwifery courses, extensive networks, research links with maternity units, development of future researchers, strong research focus, evidence-based practice, research dissemination, carefully planned and designed studies. They struggle to implement and measure economic and societal contribution, limited resources, funding success relative to the effort made, methodological support, high workload and burnout, limited scope, and sample size. Expanding their collaboration with other disciplines, organisational research and grant writing support, closer links with policy and guideline makers will help to address many of the above challenges.

Musculoskeletal Health (MuskHealth)

MUSK has a focus on conducting 'high-quality clinical, epidemiological, cost-utility and qualitative research covering musculoskeletal conditions and this is apparent in the group's funding and publications. With regards funding, the group relies heavily on core funding

although it has explored other funding avenues with some successes. There are also some fluctuations in other funding, although the funding for PhD students and post-doctoral students seems solid. The listed studies in the self-assessment and output suggest group expertise in specific areas under the broader musculoskeletal health umbrella aim. The group is productive. Outputs are steady over the period and the group has ownership and clear contributions to the publications listed. This is particularly noteworthy given the heavy involvement in teaching by group members. Papers are published in entirely appropriate subject-facing and clinical journals, although some of these are at the more modest end of impact. There is evidence of very solid support to PhD students and there are sixteen current candidates listed in the self-assessment. The group also seems to have considerate input into the Physiotherapy Master's degree programme at the university and to other courses. It is apparent that this is an issue which constraints the research potential within the group, as there is clearly a heavy teaching workload for members. The topic of musculoskeletal conditions and its management is of international significance and consequently this group is working in a highly topical area. The group has international links and there is some synergy here in specific topics with potential for international funding. The group could do more to involve users in the entire pipeline of its research.

Public Health Nutrition

The panel evaluated that the organisational environment was modest to support the research excellence of this group. Whilst the research was nationally acceptable, it would fall below the standards of world-class research, and group members contributed modestly to the research activities and publications. The group's contribution to economic and societal impact was on par with what is expected from groups in the same research field, but societal partners only played a modest part in the research process. The research activities of this research group are, to some extent, hampered by the significant focus on education, and the lack of a clear ambition and strategy to grow their research activities and impact. Whilst the group publishes papers, also in collaboration with other Norwegian research groups, the research grant income is low. The group is aiming to address knowledge gaps related to diet and lifestyle and risk of noncommunicable diseases, as well as strategies for its communication and prevention. It would be helpful for the group to develop strengths in areas where they can be competitive. Expertise in technology-based approaches and their involved in the Intelligent Health strategic initiative sounds exciting, but the group needs a clear plan to grow their expertise and reputation in this area. At the moment they cover a wide spectrum of expertise within the field of nutrition, from nutrition biology to policy, which can be an advantage, especially considering their decentralised management approach. But the broad nutrition focus can also hinder key expertise development, and targeted investment in research infrastructure. Considering their focus on education, but also on public health nutrition, there should be opportunities for this group to deliver societal impact. The group has an interesting impact case study in Africa, there is mention of group members being involved in several scientific committees, boards, and councils, and they have been engaged with Nordic Nutrition Recommendations 2023. However, the self-assessment lacks clear examples of further impact, and user involvement to make impact happen.

Quality of Life

The group's organisational environment with its composition and management structures, are adequate for supporting the production of excellent research. The group makes important contributions to research in the specific area of quality of life, and some of the

group's research outputs are published in internationally recognised journals. However, societal partners and users have had relatively modest part in the research process.

(Re)habilitation - individual, services and society

The research group was established in 2012, stemming from a Master programme in rehabilitation and habilitation. The group is interdisciplinary and draws on contributions from health sciences, social sciences, and humanities. Its roots are intertwined with a collaborative initiative forged within the Research and Development (R&D) investment domain focused on Rehabilitation and Habilitation at the Department of Health Sciences at HiO. The ambition was to create a collaborative and cutting-edge research environment in the field of rehabilitation. The focus of the research is what the group describes as a "humanistic and social science" perspective on rehabilitation. The self-assessment argues that this approach is relevant at a time when health sciences are increasingly "focused on efficiency, measurable effects, and technology". The group want to consider the human aspect of illness, injury, and disability, as well as the societal impact on health.

The self-assessment describes the strength of the group as being "its wide range of topics in the field of rehabilitation", covering many different issues within rehabilitation, which are considered to be crucial for understanding the complexity of the field. It argues that there are great opportunities in utilising the group's collective expertise. Knowledge in one research field can shed light on new aspects and nuances in another, helping to identify knowledge gaps and develop new ideas, thus strengthening research in the field of rehabilitation.

There are also challenges. Group members are involved in disparate projects, which can make it difficult to find common research themes that bring everyone together. Many of the projects seem isolated from each other, which the group believes "can make it difficult to find research themes that bring everyone together". The group's potential could be better harnessed by focusing on common research projects that involve many of the group members. The group believes this would strengthen their ability to attract external funding. Members are often invited into projects with a mixed-method design, which broadens knowledge, but the self-assessment argues that there is a risk of undervaluing qualitative data and research.

3. Diversity and equality

OsloMet-HV has diversity as a fundamental value which is further anchored in the main university strategy (Strategy 24). Based on this, the admin unit has adopted a strategy seeking to increase diversity in terms of ethnicity, gender, and functional level. A diversity action plan spanning the period 2020-2023 is currently being revised. A local action plan has been developed but expired in 2022. Focus is mainly on diversity in recruitment processes through a diversity statement in job advertisements. Guidelines for harassment and bullying have been developed, and courses focusing on diversity and sexual harassment are offered to all employees.

The committee's evaluation

While some steps have been taken towards ensuring diversity and equality, including protection against discrimination and ensuring equal treatment and opportunities for employees, the committee finds that more emphasis and organisational resources are needed in this field. Updating the action plan of OsloMet-HV is crucial and should be done as soon as possible. As diversity and equality are shaped by a complex structural network, we recommend that inspiration is sought to increase leadership, policy and practice with reference to the large body of work in diversity, equity and inclusion strategies and their implementation, for example from organisations such as INSEAD. Insights into how ethnic and functional levels are incorporated into the policies and practices are not evident in the self-assessment.

The committee's recommendations

- The action plan for diversity should be updated. A more multifaceted strategy, encompassing individual and structural levels, needs to be developed and implemented.
- While acknowledging the rules and regulations around collecting individual data, opportunities for data-driven strategies could be explored. These should include clear performance indicators at all levels of the admin unit, and encompass all career steps including advertisement, nominating, recruitment and retention pathways.
- Measures to enhance diversity and equality should be enhanced, for example through nominating sponsors and assigning allyship at the highest possible leadership level, establishing mentorship opportunities and supporting employee resource group for e.g. ethnic, sexual or gender minorities.
- Strategies should acknowledge intersecting identities and their multiple effects on academic careers.
- Courses on diversity and harassment should be mandatory.

4. Relevance to institutional and sectorial purposes

The admin unit describes its main sector-specific contribution as educating large groups of health professionals with the BA programmes in nursing and pharmacy being the largest programmes in Norway. OsloMet-HV is the sole provider of a few programmes. Additionally, contributing to supporting knowledge-based healthcare services is a key aim of the admin unit. The training of researchers within several disciplines with rather young/recent research traditions building of research competence at PhD level is furthermore important. Notably, the initiation of the programme for strategic research leadership for candidates internally as well as from partner institutions across sectors, represent an important step towards fostering productive interdisciplinary and intersectoral research networks. The admin unit is also a partner of the Norwegian Centre for Clinical Cancer Research and has in this respect developed a master's degree-level educational course providing training in clinical trials. The initiative to establish a leading international research environment in health education with a focus on the use of digital technology in health education, represents another important step. The "Behind the headlines" project aimed at helping students critically appraise health information is aimed at promoting evidence-based practices more widely.

The admin unit has an innovation team established at the institutional level functioning as a knowledge transfer office including in-house legal resources. The admin unit focuses on social innovation through close collaborations with healthcare services. This close collaboration enables the initiation of innovation projects in close collaboration with users. However, the innovation efforts are still relatively new/recent with the commitment being made in 2020 and the innovation team established in 2021. Practices and procedures have been established, and the number of Disclosure of Invention forms has increased since then. Nevertheless, the admin unit states that the culture for innovation is still immature and building, and that innovation strategies are not a main priority for staff due to lack of reward and academic merit. The self-assessment report further highlights the lack of incentives, and the need for a platform for building an innovation culture. Internal courses in innovation are offered, and there is a dedicated vice-dean for innovation working in collaboration with the pro-rector with special responsibility for societal impact and cooperation within the innovation forum.

The committee's evaluation

The evaluation committee finds that some of the initial important first steps towards building a culture of innovation at OsloMet-HV have been taken. It is still very early in the process, and the committee fully supports the reflections made in the self-evaluation report, highlighting the challenges with creating incentives for innovation. It should be added, that increasing the quality and productivity of research in a rather young university in itself is a challenging task, and adding innovation on top of this only increases complexity for staff with a high teaching load and less experience with research and innovation. The high-level initiatives, including assigned responsibilities and fora at the institutional level, are promising steps taken. The broad conceptualisation and the emphasis on social innovation is also very positive as it enables focus on the range of innovations beyond products and technologies that the disciplines, groups and collaborations at the OsloMet-HV are well-positioned to do. The admin unit highlights a broad range of relevant and important innovation and commercialisation results including the LaPS study as part of the World

Health Organisation guideline for labour care; the Pathways software to manage early intensive behavioural intervention; and the GRAIN project developing gluten-free wholegrain bread and buns with a clinical trial included.

The committee's recommendations

- It is important to maintain and highlight the broad definition of innovation, both in internal communications to staff and when engaging with partners and funders. A notion of innovation that highlights social innovation is relevant to a broader range of staff than the narrower, tech/product-based understanding of the concept.
- It is recommended to consider including innovation in the merit criteria as an incentive. Again, this should be a broad and inclusive notion of the concept, with adequate reflection of complexities in social innovation and documentation of impact in e.g. community-oriented healthcare fields.
- Models to increase competencies and incentives for engaging in innovation could be developed based on universities with a longer history but within similar eco-systems, e.g. Danish universities (University of Copenhagen) which has established pipelines, hubs, awards, merit criteria, bridge-building initiatives, and strategy plans.
- One of the key strengths of OsloMet-HV is the very diverse and substantial group of alumni working across sectors and field in Norway. Considering using this alumni group as ambassadors and entry-points in e.g. the private sector, including small and medium sized businesses, interest organisations, municipalities and hospitals, could create a network to be used for both research (including intervention and implementation science), innovation and ultimately in increasing impact.

4.1 Higher education institutions

The research at OsloMet-HV contributes towards educational programmes at all levels covering a wide range of health professionals. Ongoing research is integrated into educational content, e.g. as examples of methods or in relation to theoretical perspectives. Diverse modes of dissemination are used to form a knowledge base that reaches beyond the admin unit, e.g. through book authorship. PhD candidates are members of research groups working closely with senior staff who tech and contribute to PhD courses.

The Health Science Student Research Programme has been established. The aim is to identify and develop research talent and foster research competence. Students perform projects in collaboration with research groups. Master programme students are invited to align their master's project with ongoing research projects that are listed in a digital folder, and there is a market space for potential master thesis projects where external partners present research needs to be addressed by students in collaboration with faculty and the specific external partner. Master thesis results are regularly published in scientific journals with students and supervisors as co-authors.

The committee's evaluation

The committee finds that the current strategies and initiatives to contributions towards master and PhD-level education are very comprehensive and appropriate given the current maturity of the admin unit and in the context of resources available. Also, the opportunities for master students to become involved in research activities are wide-ranging.

The committee's recommendations

The admin unit is very active in the involvement of students in research. The
committee recommends that this approach is continued as it is seen in the context
of competing demands and the need for prioritizing and developing research and
funding in the upcoming years.

5. Relevance to society

Introduction

OsloMet-HV has as its priority to stimulate knowledge-based innovation and development of public services with particular focus on the healthcare sector and society at large. Interdisciplinary needs-led research and user involvement are highlighted as a broad approach to collaboration with internal and external partners. A key focus area of importance for societal relevance is the formal collaboration with municipalities to ensure high quality and relevant research for this important sector. This contributes to the objective in the Norwegian long-term plan for research and higher education as it strengthens competitiveness and innovation capacity in the public sector.

Furthermore, the admin unit contributes to the UN Sustainable Development Goal number 3 pertaining to health through a focus on, amongst others, sustainability in healthcare services and education of professionals delivering high-quality, evidence-based healthcare. Additionally, health literacy is a strategic initiative of OsloMet-HV, contributing to the national "Strategy to increase health literacy" as well as several white and green papers at a national level. Other key areas of high relevance to society at large and national strategies include development and evaluation of complex interventions; the master level course in clinical trials; research within the wider field of life sciences; research focused on high need areas including mental health, musculoskeletal health and aging; personalised medicine; and areas within health and technology focusing on artificial intelligence in healthcare.

The committee's comments on impact case 1: Viral outbreak readiness

This impact case focuses on immediate implementation of whole genome SARS-CoV2 sequencing, viral phylogenetic analysis and contact tracing of health care workers to detect within-hospital SARS-CoV2 outbreaks in real time. Data was used to direct infection control measures when the COVID19 pandemic came to Norway, and the project was successful in publishing first in the field, thereby demonstrating the joint strengths of using viral genomics and epidemiological data to detect or refute hospital outbreaks.

The impacts of the project are clear, important and convincing, spanning across the local, national and international levels. Notably, the project resulted in the dissemination of knowledge of technical applicability and virus characteristics within academic and hospital environments, and importantly also engaged the National Institute of Public Health (Norway), who then decided to follow the same sequencing approach in the national surveillance. The produced know-how was also adopted by other public health authorities and initiatives globally. In addition, one PhD thesis and two scientific papers were outputs of the research efforts.

The committee's comments on impact case 2: Implementation falls prevention interventions

This impact case concerns the implementation of effective fall prevention interventions in both clinical practice, teaching and research. The project consists of a staged and logic approach initiated by the identification of barriers and facilitators to evidence-based practice leading to the development and feasibility testing of an implementation intervention cocreated with relevant stakeholders. This intervention is currently evaluated in a large cluster-randomized trial in 25 city districts/municipalities across Norway.

The impacts of the project are convincingly outlined and relevant. The co-creation process and the focus on implementation, besides dissemination of the research in scientific papers, have combined led to important impacts, mostly in a national context. This includes the produced standardised, evidence-based checklist including screening procedures and suggestions for interventions to prevent falls linked to detected risk factors. The checklist is now implemented in the city districts of Oslo and used among older citizens in Oslo Municipality. Additional important impacts include the development of a national advice for falls prevention through collaboration with the Norwegian Directorate of Health.

The committee's comments on impact case 3: Understanding pain and promoting responsible use of OTC analysis in adolescents

This impact case concerns the increase of the public's and in particular health professionals', parents' and adolescents' knowledge about pain, pain management, and responsible use of over the counter (OTC) analgesics in adolescents. The project encompasses four diverse and interlinked dimensions focusing on 1) public education to improve knowledge of responsible use of OTC analgesics in adolescents through dissemination in various media, 2) educating health personnel, 3) monitoring adolescents' use of OTC analgesics, and 4) influencing health authorities and pharmaceutical industry to ensure that information on the correct use of and risks associated with the use of OTC analgesics is easily available and adapted to young people. The underpinning research for this impact case started in 2009 and was followed by a number of collaborative studies using e.g. mapping, surveys, and qualitative methodology.

The argument is convincingly made for a significant national impact of the project as results from the studies are used continuously to spread knowledge about responsible OTC analgesics use among adolescents, parents, health professionals and health authorities. Dissemination has been extensive and impressive, thereby increasing impact. This includes dissemination through e.g. TV and radio debates, public media articles, parental meetings in schools, and a campaign run by the Directorate of Social Affairs and Health to increase knowledge and improve competencies. More than 20 scientific papers have been published, and additional dissemination for wider impact has been ensured through conference presentations nationally and internationally, education of several researchers within the project, teaching activities, and the incorporation of questions about the use of OTC analgesics in the annual Norwegian Young Data survey, and the Young Data Junior Survey. The lead researcher, Skarstein, has also supported the Norwegian Medical Product Agency in its work to ensure that medical companies provide more precise and informative texts within the leaf letter that follows packages with OCT analgesics. Overall, this is a very convincing impact case with substantial impacts, although international aspects of these impacts are less evident.

The committee's comments on impact case 4: Impact on the education and professional role development of paramedics

This impact case focuses on the development of a new professional role, the state authorized Paramedicines (paramedics), and the education of these professionals in Norway. It extends the establishment of the first Norwegian bachelor's degree for paramedics by OsloMet in 2011. The underpinning research is ambitious, wide and comprehensive. Examples include research into training of paramedics in identifying a broader range of acute stroke symptoms through a smartphone application (GameSTROKE), documenting the safety of including paramedic students in patient-related and non-patient related work, student-led simulation training, video streaming between caller and dispatcher in medical emergency calls, and safety during ambulance transits. In

addition, three universities and one Emergency Medical Services provider in four Nordic countries collaborated on an exemplary curriculum for a bachelor's degree education for paramedics.

This case convincingly describes several significant and important impacts, both nationally and, albeit to a lesser extent, internationally. Impacts worth highlighting include the development of a new professional role, the state authorized Paramedicines (paramedics), and the education of these professionals in Norway. Additionally, results have impacted the teaching of paramedic students and competence enhancement of paramedics in clinical work in ambulance services, also within Norway. The Paramedic association has arranged discussions and seminars centred around the focus of the project, and dissemination has been conducted via scientific articles, journals for professionals and public newspapers. Internationally, the case has impacted on the establishment of a bachelor's program in paramedic sciences in Denmark, led to initiatives focusing on paramedic educational competencies in Finland, and resulted in a Nordic collaboration aiming to develop a common content for the bachelor's degrees in paramedic. The video streaming project and other activities have also led to the establishment of a further education program in emergency medical dispatch which started in 2022. While these impacts are significant and important, impact beyond the Nordic context is not evident in the outline of the case.

The committee's comments on impact case 5: "Healthy Start": A nutrition education material that facilitates a healthy transition and integration for newly resettled immigrants

This impact case focuses on nutrition materials targeting newly resettled immigrants and professionals working with this group. It builds on a research-practice collaboration involving stakeholders from the public sector, academia, and non-governmental organizations. The underpinning research leading to the development of the material followed the "Intervention Mapping" approach, and it combined theoretical and practical aspects related to food and nutrition. Furthermore, it incorporated principles of cultural sensitivity and was reviewed following the Suitability Assessment of Material approach. Two projects were financed, and the qualitative and quantitative evaluation indicated that the material has a positive impact.

One of the strengths of this impact case is the degree of stakeholder engagement throughout the project, involving e.g. the Agency of Health, advisors of the Introduction programme, and non-governmental organizations such as Diabetesforbundet, Flerkulturelt råd for Oslo og Akershus, and Bydelsmødre. Another strength is the work systematically conducted to anchor and expand the use of the material. This systematic approach and focus on broad engagement have reinforced the impacts of the project. Impacts are overall relevant, credible and well argued for. The case has contributed to knowledge-based health services for newly resettled immigrants, and towards closing the gap in health communication for this group. Furthermore, impacts are seen related to promoting food security and integration by facilitating the transition into a new food environment, and through contributing to knowledge-based education and capacity-building among Public Health Nutrition professionals. In conclusion, this impact case clearly exemplifies research with important local, regional and national impact, however with less international impact.

Appendices

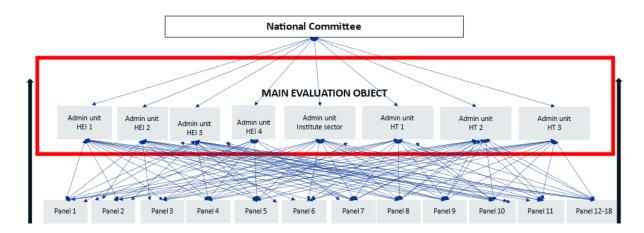
Evaluation of Medicine and health 2023-2024

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

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- 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

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Oslo, 5 April 2022

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1 Introduction

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

1.1 Evaluation units

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

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

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

1.2 Minimum requirements for research groups

1) The research group must be sufficiently large in size, i.e. at least five persons in 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

7

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

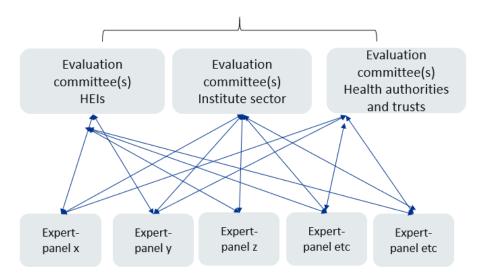


Figure 1. Evaluation committees and expert panels

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):	

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Introduction

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

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

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

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

Please use the following format when naming your document: name of the institution and short name of the administrative unit, e.g. NTNU_FacMedHealthSci and send it to 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

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

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

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

International collaborations

Collaboration with internation	al 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
OsloMet	Faculty of Health Sciences	Acute critically ill and injured	Panel 4c
OsloMet	Faculty of Health Sciences	Ageing, Health and Welfare	Panel 4f
	Faculty of Health Sciences	Applied and Experimental Behaviour Analysis in	Panel 4f
OsloMet		Clinical Practice	
	Faculty of Health Sciences	Behavioural principles – from animal models to	Panel 5b
OsloMet		human cultures	
OsloMet	Faculty of Health Sciences	CARE Research group	Panel 4a
	Faculty of Health Sciences	Clinical Interventions and assistive technology (CAT-	Panel 3b-3
OsloMet		group)	
OsloMet	Faculty of Health Sciences	Disease and Environmental Exposures (DEEx)	Panel 2a
OsloMet	Faculty of Health Sciences	Empowerment	Panel 4a
	Faculty of Health Sciences	Experimental Studies of Complex Human Behavior	Panel 4f
OsloMet		(ESCOHub)	
OsloMet	Faculty of Health Sciences	Genomics and Microbial Pathogens (GenMicroPat)	Panel 2a
OsloMet	Faculty of Health Sciences	Intervention in work and everyday life (IWE)	Panel 4a
OsloMet	Faculty of Health Sciences	Learning and Interaction	Panel 4f
OsloMet	Faculty of Health Sciences	Medicines and Patient Safety	Panel 4c
OsloMet	Faculty of Health Sciences	Mental health	Panel 5b
OsloMet	Faculty of Health Sciences	Midwifery science	Panel 3a-1
OsloMet	Faculty of Health Sciences	Musculoskeletal Health (MuskHealth)	Panel 4d
OsloMet	Faculty of Health Sciences	Public Health Nutrition	Panel 4b
OsloMet	Faculty of Health Sciences	Quality of life	Panel 4a
OsloMet	Faculty of Health Sciences	(Re)habilitation - individual, services and society	Panel 4d

Scales for research group assessment

Use whole integers only - no fractions!

Organisational dimension

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

Quality dimension

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

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

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

Societal impact dimension

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

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



Methods and limitations

Methods

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

The documentary inputs to the evaluation were:

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

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

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

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

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

Limitations

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

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

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



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