

Strategy for research in

Central Norway Regional Health Authority 2016-2020

Teaming up with you for
your health



Introduction

Research is one of four statutory tasks in the specialist healthcare service and in hospitals, in addition to patient treatment, education of health personnel, and training of patients and their relatives.

All hospitals are required to organize research activities within the framework of their clinical activities, addressing topics which are relevant for improving the quality of their practice, the population's state of health, and the organization of the services they provide. Due to its affiliation with the University, St. Olav's Hospital also has special responsibility for undertaking basic and translational research, development of advanced medical technology, training of researchers, and establishment of collaborative research networks in the region of Central Norway.

Innovation is not an explicit obligation under the law, but it nevertheless forms part of the Ministry of Health and Care's (MOHC) research strategy from 2006, and it has been part of the Government's assignment documents to the regional health authorities (RHA) since 2007. The RHAs have a joint strategy group for research together with MOHC. The RHAs have also committed to participate in a joint investment in innovation and business development, through the Coordination Committee for Innovation in the Healthcare Service. Routines for innovation have been established in the region of Central Norway, relying on the professional support from NTNU, SINTEF Technology Transfer Office and InnoMed SINTEF. The former shall stimulate product innovation, while the latter shall be a driving force for service innovation.

The healthcare service is facing a number of challenges in the coming years. In Central Norway Regional Health Authority "Strategy 2020", these are identified as:

1. The population's composition and needs are changing
2. Requirements for documentation of service quality are increasing
3. Health professionals are becoming a scarcity factor
4. Economic growth in the specialist healthcare service is being attenuated

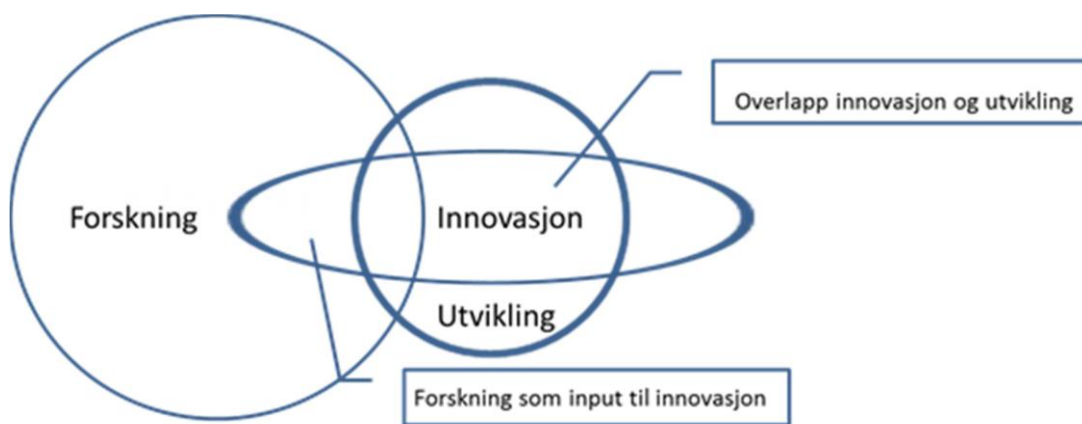
These challenges will individually and collectively generate the need for change in the health region. Appropriate changes can only be safely undertaken based on solid knowledge about the efficacy and efficiency of existing practice and its alternatives. Research, development and innovation are instrumental in solving these issues.

Strategy for research is one of three strategies that must be seen in context, the other two being strategy for innovation, and strategy for education and competence. The present research strategy substitutes the "Regional strategic plan for research and development in Central Norway Regional Health Authority, 2009-2014". The work is based on an analysis of the strengths and weaknesses in the region within the various areas, both internally and externally.

Central Norway has many highly specialized research groups that are very strong, also outside the health sector, and collaboration between these actors and the health organization can help to strengthen the latter's scientific capacity. Input from the various actors is combined with guidelines from national strategies and the health organization's needs. This in sum, gives us a basis for defining strategy points, where each of these should result in action plans for implementation.

Research, development and innovation are different activities that are closely integrated. Together with education and competence development, these areas are essential for the health care system's ability to provide high-quality service to the population, while at the same time being financially sustainable.

The connection between research, development and innovation is often referred to as the knowledge triangle, which can be illustrated as in the figure below. It shows that the areas partially overlap, the most important overlap being the one between development and innovation. In fact, it may be difficult to distinguish clearly between development and innovation, particularly for service innovations, which are often not commercialized. The latter constitute a large part of the innovative potential in the healthcare sector, and will undoubtedly play an important role in the restructuring and streamlining of clinical practice to meet the needs of the future. It has been documented that it takes a long time for new knowledge to result in a modification of clinical practice. Connecting the elements of the knowledge triangle more closely can help to reduce this time gap.



Prinsippskisse for forholdet mellom forskning, utviklingsarbeid og innovasjon

Source: NIFU, Report 22/2011.

Overall premises:

In Central Norway RHA's mission document for 2015, the following long-term goals are given:

The organizations in Central Norway RHA will increase the scope and implementation of clinical patient-oriented research, healthcare service research, global health research and innovations that contribute to increased quality, patient safety, cost-effectiveness and more holistic patient processes, through national and international collaboration and active participation from users. Increased number of patients who are offered participation in clinical studies.

Health&Care21 (HelseOmsorg21 – HO21) is a national research and innovation strategy that was completed in spring 2014. This also lays down guidelines for the health organizations' research and innovation activities. The goal of HO21 is threefold: to contribute to good public health; to stimulate cutting-edge research; to promote industry development and national economic development. This implies that HO21 must contribute to a knowledge-based health and care service, characterized by high quality, patient safety, and efficiency, contributing to better public and individual health.

Regional strategy for research

The “Strategy for research” adopted by Central Norway RHA is a means of achieving our ambitions to provide the population with equal healthcare services of good quality now and in the future. The strategy document is to be used as a basis for planning and organizing research at an overall level, thereby ensuring a targeted and holistic effort within research in the region. Since it has been documented that research-intensive hospitals also implement new knowledge more quickly, the research strategy will be an important basis for the region's priorities in the years to come.

Strategic challenges

The challenges in the specialist healthcare service are both internal and external. In line with HO21, it is necessary to strengthen the collaboration between sectors and at all levels in order to deal with these challenges. The integrated university hospital in Trondheim, which is based on a close formal collaboration between St. Olavs Hospital and NTNU's Faculty of Medicine, is of paramount importance, providing Central Norway with a distinctive strength for medical research. Moreover, many other parts of NTNU, as well as SINTEF, have at their disposal large human and material resources with great potential for health-related science. In particular, the technological research environments at NTNU have time and again demonstrated great creativity and ability to translate new ideas into practical solutions. The hospital sector should establish a closer collaboration with universities, colleges and other actors in the region.

Several of the professional environments in the regional medical community are small and fragmented in such a way that their ability to engage in large-scale research is limited. These groups must be strengthened and urged to seek collaborative partners, thereby increasing their possibility to conduct high-impact research.

A lack of understanding of common goals can be an obstacle to research, so although clinical work is prioritized in the hospital, experienced clinicians should be encouraged to engage in research. Acquisition of research competence starts with PhD education, but it is a goal that the research career continues beyond this, through postdoctoral and research positions. Assessments as to whether the balance in the number of different positions is satisfactory, must be done continuously.

Overall goal for research

The research in Central Norway RHA must be internationally competitive and contribute to improved clinical practice and patient treatment.

In order to achieve this goal, research activity in and around all health organizations must be strengthened, by recruiting new researchers and increasing research production. Increased national and international cooperation will be necessary. Central Norway RHA will facilitate large international competitive intervention studies with participation from the entire region.

Investment areas

Central Norway RHA's focus areas are based on the need for more knowledge. These must be defined in line with overall guidelines, and responding to the need for new knowledge which can contribute to a strengthening of the service. The following areas will be prioritized during this period:

- Clinically relevant and patient-oriented research
- Research on quality and patient safety
- Healthcare service research incl. interaction, logistics and service development
- Translational research¹
- Medical technology
- Global Health Research

Measures

A number of measures will be required to reach the target, with a particular focus on the exploitation of those areas where the region has its special strengths. The measures presented below were defined by taking into account the requirements and strategies made by higher authorities as well as a broad review of the research actors in the region. Each measure represents an action plan that will apply during the strategy period. Strong research environments must contribute to raising the level of the research in the entire region.

User involvement

Based on national guidelines for user participation in health research, Central Norway RHA must ensure active participation by users. The assignment document requires justification whenever user participation is absent in the planning and implementation of clinical research or healthcare service research. Central Norway RHA must therefore ensure that users contribute actively to the development of prioritized research areas. Thus, user representatives must:

- Be involved in the region's research committee
- Participate in benefit assessments of project applications
- Contribute to the training of user representatives
- Assess direct user participation in research projects

Resource use

Assessments carried out by NIFU and CRiStin show that Central Norway RHA has a lower production of research credits than its share of the population would indicate. Some of this can be explained by the fact that Central Norway RHA uses a relatively higher proportion of its research funds for infrastructure. The amount of funds available for application is limited, and thus subject to fierce competition. In order to utilize the infrastructure for effectively, Central Norway RHA must have the ambition for a real growth in research activity during the strategy period.

- Central Norway RHA will increase the research budget with 3 per cent annually, based on the 2015 research budget (beyond the price adjustment). This amounts to

¹ Translational research is research that contributes to the transfer of results from basic medical research to diagnostics and patient treatment.

Collaboration between basic research and clinical research is important in order to test the relevance of experimental findings to clinical activities and bring experience from the clinic back to the laboratory.

approximately MNOK 10-12 per year in real growth.

- From their basic allowance, the health organizations must increase their research budgets annually by a corresponding amount, according to the resource needs index in the income distribution. This means an annual growth of over MNOK 6 for St. Olav, about MNOK 3 for Helse Møre og Romsdal, and approximately MNOK 1.5 for Helse Nord-Trøndelag. The hospital pharmacies in Central Norway have a different economic model and are therefore not subject to this requirement.

Price growth comes in addition to this increase. This indicates a real growth in the period from 2016 to 2020 of MNOK 112, and distributed so that the growth is relatively greater in the smaller organizations. In this way, one will help to reduce the gap in research activity between the organizations.

In addition, the goal from the previous strategy of externally funded projects corresponding to one percent of the health region's turnover, is maintained.

Infrastructure²

There is a well-developed infrastructure for research in the regional health organizations and NTNU. It is essential that the infrastructures are in line with the research priorities, and a regular assessment of needs must be carried out. In particular, the availability of basic infrastructure must be ensured in all health organizations. The following points are important:

- Ensure sufficient resources for the most important infrastructures for research, incl. participation in HUNT 4.
- Ensure access to the necessary training in research methods, project design and statistics in all health organizations.
- Ensure that personnel in the clinics have the time and competence to participate in research activities, including improved arrangements for shared positions.
- Continuous assessment of the availability of sufficient ICT tools, as an important premise for supporting research.
- Better utilization of clinical data and registry data.
- The research communities must contribute actively to the acquisition of new EPR/PAS in the region

Research culture

In order for a hospital to deliver up-to-date, high-quality service, new knowledge must be continuously implemented in the clinical practice. This can only be achieved if clinical research is carried out in the clinic/wards, and the local culture is characterized by a scientific mindset. The health organizations in Central Norway are at different levels in terms of research activity, and St. Olavs Hospital, as an integrated university clinic, is, and will be, the leading organization in this respect. However, all hospitals have a responsibility to improve their own research activity. Management lines, responsibilities and roles related to research must be clarified in all the health organizations under Central Norway RHA, by promoting:

- Work to ensure that research is integrated into everyday life in all clinics.
- Inclusion by St. Olav of environments from the other health organizations in their research activity.

² With infrastructure for research, we mean equipment, resources and other services that research environments use to carry out research within their respective subject areas. This includes, among other things, scientific equipment, databases and collections, and structured scientific information that enables research. Research infrastructures can be gathered in one place, distributed in networks, or as separate units for research.

- Active contribution from St. Olav in the other health organizations' research projects.
- Recognition of the importance of research at all levels in the health organizations.
- Real user participation and recognition of users as a resource in research.
- Measures to communicate research activities and results both internally within the health organizations and to the public.
- Increased contact and collaboration with international research environments.

Collaboration

Collaboration is necessary to provide the healthcare service we need today and in the future. NTNU and other universities have formal responsibility for researcher training, and many of the PhD projects originating from health care thus depend on the interaction with and assistance from the Higher Education (HE) sector. The degree of joint publication in the region of Central Norway highlights that the research projects are largely carried out in collaboration between the hospital and the HE sector. Furthermore, there is a need for more collaboration between the regions, which may be a prerequisite to apply for national funds, as pointed out in the guidelines issued by MOHC. Regional and national research networks can form the basis of such collaboration. The following players are central to the collaboration:

- University, colleges and SINTEF
- The municipal healthcare service
- Other health organizations

External funding and internationalization

It is a goal to obtain more research funding at national and international level. Researchers in the region must to a greater extent apply to national sources such as the Research Council, the "Extrastiftelsen" and "Kreftforeningen", as well as to private actors such as foundations, industry, etc. The best environments should to a far greater extent seek international sources such as the EU, NIH and others.

- It is expected that established research environments in the organization group orientate themselves towards national and international sources and obtain funds from there.
- Necessary support functions must be established/further developed to strengthen the opportunities for national and international grants, and such services must be made available to the entire region.
- Arrangements must be made for exchange and guest stays at other institutions nationally and internationally, and to attract foreign researchers to the region.

Literature list

Task document from HOD – <https://www.regjeringen.no/no/tema/helse-og-omsorg/sykehus/styringsdokumenter1/oppdragsdokument/id535564/>

HO21- http://www.forskningsradet.no/prognett-helseomsorg21/Om_HelseOmsorg21/1253985487322

Specialist healthcare act – <https://lovdata.no/dokument/NL/lov/1999-07-02-61>

HODs research strategy – <https://www.regjeringen.no/no/dokumenter/helse-og-omsorgsdepartementets-forskning/id438517/>

Strategy for education and competence – <http://www.helse-midt.no/no/Fag/Utdanning/84416/>