

*Evaluation of clinical, epidemiological, public health,
health-related and psychological research in Norway*

Public health and health services research

*Public health, epidemiology,
relevant psychology, behavioural
research, health services research,
ethics and other health-related
research*

Panel 2

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TO THE RESEARCH COUNCIL OF NORWAY

The members of Panel 2 for the Evaluation of clinical, epidemiological, public health, health-related and psychological research in Norway hereby submit the following report. There is consensus among the members of the evaluation panel about the views presented in this report. The panel members are in collective agreement with the assessments, recommendations and conclusions presented.

None of the panel members had any conflict of interest that would warrant disqualification from general participation in the evaluation. However, one panel member (PKA) did not participate in the evaluation of the Centre of International Health, University of Bergen, as he had previously co-authored a paper (which was published during 2003) with a researcher being evaluated.



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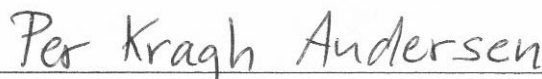
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EXECUTIVE SUMMARY

The objective of this evaluation was to review the overall state of public health and health services research in Norwegian universities, university hospitals and relevant research institutes. The evaluation was undertaken in 2003 at the request of the Research Council of Norway and is part of a larger evaluation covering clinical, epidemiological, public health, health-related and psychological research in Norway.

The current evaluation covered the fields of public health, epidemiology, psychology (as relevant), behavioural research, health services research, ethics and health-related social science. The evaluation panel rated the scientific activities undertaken by 20 research groups with respect to the quality, relevance, management and extent of international and national collaboration. An overall rating was assigned to each group, except in a few cases where the group was too small or too recently established to support a rating.

The 14 recommendations of the panel are summarised here in the form of a few key words (the reader is referred to the full text version on pages 7 - 13 in order to avoid misunderstandings). The recommendations are not listed in any particular order of priority.

- Ensure continued world leadership of epidemiological research
- Develop the Centre for International Health into a leading centre for global health research in Scandinavia and among the leading centres of Europe
- Significantly increase funding for research in health promotion and public health research (while ensuring that scientific quality is maintained)
- In future research give greater emphasis to
 - Studying the effect of ecological factors on population health
 - Salutogenic research (i.e. the study of factors that determine good health)
 - Person-oriented analysis of survey data linked to clinical data in hospitals and primary care
- Generate more research to support evidence-based decision-making in public health
- Establish a financial base for research-based evaluation of the Norwegian health care reforms
- Secure health services research as a multidisciplinary approach in a feasible organizational framework
- Maintain occupational health research in the public domain with balanced capabilities
- Strengthen health equity research
- Increase funding for nursing and health sciences research with a public health perspective
- Select leaders of research organizations more consciously and ensure better coordination of research efforts
- Reconsider the structure of very small research units
- Continue efforts to increase international cooperation at all levels
- Provide incentives to promote recruitment of researchers in general; review approaches for supplying public health research with necessary statistical manpower

1. PREFACE

This report summarises the findings from an evaluation of Norwegian public health and health services research. The evaluation was undertaken in 2003 at the request of the Division of Medicine and Health of the Research Council of Norway and is part of a larger evaluation covering clinical, epidemiological, public health, health-related and psychological research in Norway.

The current evaluation covered the fields of public health, epidemiology, psychology (as relevant), behavioural research, health services research, ethics and health-related social science. This involved twenty research groups working in either university faculties or the institute sector. The review was not intended as a review of individual researchers but was conducted at the level of the university department or research group.

The next two sections in this report describe the objective and methods of the evaluation. The general observations that arose from the evaluation are then presented, together with a series of recommendations for further action. Finally, more detailed evaluations are provided for each of the research groups that were reviewed.

The panel would like to note that, although they collectively have experience in a wide range of public health fields (CVs for the eight panel members are provided in Appendix 5), their expertise does not at a specialised level cover all the areas under review.

The panel would like to thank the research groups involved for their open and constructive discussions with the panel and for the comprehensive background information provided.

2. OBJECTIVE OF EVALUATION

The Research Council of Norway has as part of its mandate an obligation to evaluate research on a national level. The objective of the current evaluation phase was to review the overall state of clinical, epidemiological, public health, health-related and psychological research in Norwegian universities, university hospitals and relevant research institutes.

The Research Council of Norway determined the framework for the evaluation and the choice of research groups to be reviewed. The panel was requested to evaluate scientific activities with respect to their quality, relevance and international and national collaboration, bearing in mind the resources available. The evaluation would cover research units at the four Norwegian Universities (Oslo, Bergen, Trondheim and Tromsø), including university hospitals, as well as relevant research institutes, but would not include research undertaken at hospitals outside the university sector.

While HELTEF (Foundation for Health Services Research) and SINTEF Unimed would have been relevant in this context, they had already recently been evaluated and were therefore not included. Two ongoing programs in health economics at University of Oslo (HERO) and University of Bergen (HEB) are also being evaluated separately. The evaluation would cover staff in academic positions (professor I, professor II, associate professor) and post-doctoral fellows, as well as physicians at the university hospitals who spent more than 40% of their time on research.

The overall aims of the evaluation (as stated by the Research Council of Norway) were to

- Offer a critical review of the strengths and weaknesses of the research undertaken in these fields, in both international and national contexts, at the level of individual research groups and academic departments
- Identify areas of research that should be strengthened in order to ensure that Norway in the future possesses the necessary competence in areas of national importance
- Provide the institutions concerned with feedback regarding the scientific performance of individual departments, as well as suggestions for improvements and priorities
- Represent a basis for determining future priorities, including funding priorities, within and between areas of research.

The conclusions of the panel should lead to a set of recommendations concerning the future development of clinical, epidemiological, public health, health-related and psychological research in Norway.

3. THE EVALUATION PROCESS

The evaluation panel consisted of internationally recognized experts in the public health and health services research fields. The panel members are listed in Appendix 1 and their CVs are provided in Appendix 5.

The material provided to the panel came from several sources. Prior to the panel's visit to Norway, each research group delivered a report that described the work undertaken and evaluated the strengths and weaknesses of the group. Included were a curriculum vitae, publication list and two publications from each researcher involved. Information was also provided on the structure and priorities of the relevant university faculties. During the panel's visit in Oslo, representatives from each institution made a formal presentation, followed by a discussion led by the panel. Further background material was provided by the Research Council of Norway, including an overview of the organisation and administration in the universities and institutes, and a review of the extent of publication in the international scientific literature.

The panel was asked to evaluate scientific activities with respect to their quality, relevance and international and national collaboration and also to assess the way in which the research was organized and managed within the institutions. In order to make the assessments more comparable with those from previous and other ongoing evaluations, a similar five-point rating system was used, i.e. excellent, very good, good, fair and weak. The panel was concerned, however, that a heavy emphasis on international publications would not be appropriate in the evaluation of public health research and therefore included additional aspects of research, such as the success of academic training and the impact on society both nationally and internationally (see Appendix 2 for definitions of the criteria used). An evaluation form was designed (see Appendix 3) and was completed by each panel member for each research group evaluated, except in a few cases where the research group was too small or too recently established to support a rating.

The formal presentations took place in Oslo in the week 16-20 June 2003.

4. GENERAL OBSERVATIONS AND RECOMMENDATIONS

During the course of the evaluation the panel made a number of general observations about the state of public health research in Norway. These are presented below, together with the panel's recommendations.

Background material provided to the panel indicated that the Division of Medicine and Health of the Research Council of Norway spends about 30% of its funding on Public health and Health services research. Norway appears to make a good contribution to international knowledge in public health: between 1998 and 2002 it provided 1.2% of the world's publications in the field of Public, Environmental and Occupational Health, with an above average citation index (Medical Research in Norway – Bibliometric Indicators, Dag W. Aksnes, NIFU skriftserie nr. 9/2003).

World leadership in epidemiology

Norway is world famous for creating large and important population-based databases (epidemiology). International front research in this field has been and is still a reality, particularly in cardiovascular and perinatal research but also more generally using biobank materials in epidemiology. Recent legal changes have made it possible to use the many individual-based health-related registers for research purposes – including linkage to surveys based on the personal identification number of citizens. Norway, together with other Nordic countries, is therefore able to conduct advanced research and contribute to international cooperation utilizing these unique data.

There is good cooperation between research groups in longitudinal studies using a broad spectrum of data collection methods. However, the panel also learned that the infrastructure – such as data handling technicians, biobank maintainers – for this kind of research is insufficient. New positions for technical staff with long-term funding support are needed to maintain and manage the public health databases. The proper use of banking of biological material must be ensured to facilitate analysis of the relationship between exposures and health outcomes. It is also essential that the data are easily available to all relevant national - and international - research groups, regardless of which institution has direct responsibility for running the database.

Recommendation 1: The Norwegian government, research councils, universities and institutes should ensure that the Norwegian world leadership in epidemiology and register-based research is maintained by creating the necessary conditions for the establishment of sufficient infrastructure and funding. Open access to all databases is essential. It could be useful to organise a steering group, comprising both internal and external experts, for the larger research-oriented databases.

Strong research in international health

Special funds have been released to strengthen the Norwegian capacity for research and education in international health and there is a proposal for global health research to become a national priority. The Centre for International Health, University of Bergen, is a concerted action that has been very successful in promoting and coordinating multidisciplinary research in international health, integrating capacity building in priority areas and achieving an outstanding publication record. The Centre has successfully developed essential global health research, focusing on poverty-related health problems in low- and middle-income countries. The very successful training programs in international health offered by this centre and by the HEMIL Centre at the University of Bergen and the Department of General Practice and Community Medicine at the University of Oslo, have resulted in the development and strengthening of research capacities in a number of countries, with long-term multi-country research collaboration and a good international publication record.

Recommendation 2: The panel would like to see globalisation and its impact on population health as a future theme and strategy for research. The current research training programs in international health should be continued and could be augmented by funds for scholarships for international students. Further support should be provided to develop the Centre for International Health into a leading centre for global health in Scandinavia and among the leading centres in Europe. The development of a national network for international health could further strengthen the successful cooperation between different institutions.

Funding for public health research

The evaluation panel was very surprised to learn that such a rich country as Norway spends less money on research than a number of comparable countries – among these the other Nordic countries (1.7% of Norwegian GNP c.f. average of 2.2% for OECD countries; Nøkkeltall for medisinsk og helsefaglig forskning, Norges forskningsråd, 2003). There is increased pressure on Norwegian hospital expenditure due to an increasing number of elderly and the concomitant increase in disease burden - for example, from diabetes type II, dementia and tobacco-related diseases. Many other countries have developed a strategy that has increased emphasis on health promotion, disease prevention and public health. Research is necessary to support this strategy and to provide an evidence-based approach.

Recommendation 3: The Norwegian government should significantly increase the funding for public health research (while ensuring that scientific quality is maintained). The country would also benefit from more research on healthy ageing and on health promotion from a life-span perspective.

Change of focus within population health research

The broad range of data available offers huge opportunities for the country to invest in population health research that reflects the new thinking about the genesis and prognosis of health and disease. Except in the field of occupational health, most of the research examines the impact of individual exposures on the health of individuals rather than the impact of community (ecological) factors on health and responsiveness to medical interventions. The increasing recognition of the importance of comorbidity

and the greater coordination of care across multiple providers and levels of care require that research is person-oriented rather than disease-oriented. While several of the research groups under review (in particular the National Institute of Public Health) have recognised the value of moving in such directions, there are relatively few instances where survey databases are linked with clinical data. The balance between studying pathogenesis (the development of disease) and studying salutogenesis (the development of health) should be changed in order to strengthen salutogenic research (factors determining good health).

Recommendation 4: Greater attention should be given to examining the impact of community factors on population health - for example, to examine the ecological characteristics that explain the relationship between social class and health. Public health researchers could extend the focus of research from individual diseases to a person-oriented analysis and explore the benefits of multilevel analysis with regard to the determinants of health. There is huge potential for population health research through the linkage of survey databases with clinical data, and especially linking primary care with hospital care - this could be a research area in which Norway might lead the world.

Strengthen the links between public health research and public health policy

As opposed to the other Nordic countries and to England and Netherlands, Norway has no national program for public health policy and health promotion, but instead tends to decentralise such policy issues to the local political level. A consequence of this is a lower awareness and demand for public health research that can support evidence-based policy development. For example, there has been no discussion in Norway of which scientifically valid indicators should be used to monitor Norwegian population health and there is no linkage between health inequality research and governmental programs. With the exception of some of the departments of community medicine, there is little application of epidemiological methods to health service interventions.

Recommendation 5: The panel recommends the Research Council and the Ministry of Health and Social Affairs to establish a small study group to explore the experiences in other (particularly Nordic) countries of undertaking research to support the development of evidence-based national and local public health policies. Similar approaches should be implemented in Norway in order to promote the development of evidence-based practice.

Evaluation of health system reforms

The Norwegian health care system has recently been reformed, whereby the state has taken ownership of the hospitals and the specialist health care system. At the same time, the management of the system has been decentralised to five regional health boards and some market incentives have been introduced. This new health system is unique in the world and calls for research-based evaluation as part of an international learning process of how to deliver effective and efficient health care to a population. However, although Panel 2 evaluated public health and health services research (though with the omission of some relevant institutions), it was striking to the panel that it was not exposed to systematic research-based evaluation of the reforms.

Recommendation 6: The Norwegian government and the five health regions should establish a financial basis for research-based evaluation of the health care reforms in Norway.

Health services research

Health services research includes health economics research, health technology assessment and health policy research. It relates to multidisciplinary studies of the health care system, including its structure, organisation, function and outcome. The evaluation panel saw very little health services research of a multi-professional nature, however. It seems that the sub-disciplines of health services research, such as health economics and organizational research, are creating their own networks in this field instead of strengthening multidisciplinary research environments.

While the panel is fully aware of its limited set of information on this research field, it has been informed that health services research was recently removed from the National Institute of Public Health, that health services research should not be conducted through the Directorate of Health and that the health economic funding initiative is to be evaluated separately. Further institutes such as HELTEF and SINTEF were not included in the current panel evaluation. The panel nevertheless wants to express its concern for the future development of this important field of public health research.

It is understood that the Norwegian government intends to establish a new national institute for health services research from 1st January 2004. The panel welcomes this decision and hopes that there will be a strong link between the national institute and the university sector that will ensure a sound academic cooperation. The experiences of the National Institute of Public Health have shown that such an approach is possible.

Recommendation 7: Health services research is an important field of public health research. It should be secured as a multidisciplinary approach in an organizational framework that provides incentives to perform quality research of high relevance to Norway and the international research community.

Maintain expertise in occupational health research

The range and quality of research in Norway on problems of occupational health compare well with those in other European countries and there is an appropriate emphasis on issues that relate to Norway's unique industrial mix and ecology. It is of concern, however, that research funding is largely through the Ministry of Labour and industry, rather than the Ministry of Health and the Research Council, and that there is little integration with other public health fields. Recent suggestions to privatise occupational health research that is currently undertaken in the public sector would appear to be a potential threat to its independence and long-term efficacy.

Recommendation 8: Occupational health research plays an important part in public health research and should remain in the public domain. A balanced capability should be maintained, including both traditional industrial risk factors (e.g. biologic monitoring for chemical and physical hazards) as well as research into workplace organisation and psychosocial stress.

Strengthen research on social inequalities in health

Increasing health disparities between population subgroups and the greater recognition of political, social and environmental factors that affect population health necessitate further research in this area. In Norway, equity-related research has been mainly undertaken with regard to regional, urban, socio-economic, ethnic and gender differences and linkages have been made between different types of statistical data sets. For example, the linkage of individual characteristics with those of the area in which the individuals live and work provides a useful basis for understanding why some population groups are more ill than others. Such an approach can assist in identifying more effective and efficient interventions to improve overall health and to reduce disparities in health.

Recommendation 9: Social inequalities in health are an important policy issue. The panel recommends that the Research Council of Norway and other national health agencies act to strengthen Norwegian health equity research, including impact assessments of national political decisions on social inequalities in health.

Development of Nursing science and other health sciences

Nursing science and other health sciences have been primarily established to provide master's level education in these fields and the units are often small with heavy teaching loads. However, despite the recent development of research programs and relatively fewer resources than, for example Sweden and Finland, Norwegian nursing and health sciences are strong in the areas of theoretical research, ethics and clinical research and have developed good international collaboration. Qualitative methods are well established, in contrast to other public health research where the emphasis is on epidemiological approaches and quantitative methods.

Recommendation 10: Norwegian society would benefit from greater funding of nursing and health sciences, with a stronger public health perspective, for example in the area of health promotion.

Research leadership and the coordination of research profiles

The panel considers that high quality research is generated from a research milieu that has a good professional and administrative infrastructure and where various disciplines within the frame of interest are organised into a feasible organisation with a dynamic leadership. Faculties and institutes have special responsibility in selecting professional research leaders, who can support the individual researcher as well as the wider multidisciplinary collaboration, and can recognise avenues of work that will best utilize the research potential.

The panel was surprised to learn that, within the institute sector, neither the institute leaders nor the relevant ministries appear to have coordinated their efforts to ensure complementary research profiles for the individual research institutes. For example, social inequality in health is a prioritised field at the National Institute of Public Health while also being integral to welfare research at Norwegian Social Research.

Recommendation 11: The panel recommends a more conscious selection of leaders of research organisations than is seen today in Norwegian public health research. The

research council should set up a coordination initiative involving the institute sector and the relevant ministries to develop agreed institute profiles and division of labour in order to avoid unnecessary duplication of research efforts.

Regionalisation and the problem of small units

Norway appears to have a strong regionalisation policy, whereby human and other resources are geographically distributed so as to encourage research and educational activities in all regions of the country. The presence of a university helps to provide a region with trained health personnel, while the tendency of universities to merge smaller institutes into larger departments can provide economies of scale and hopefully also higher professional competence. Not all universities are able to create strong research groups within all disciplines, however, especially if an institute or discipline has been established for educational purposes. Such units tend to be small and do not exceed the critical mass for research purposes, which require larger multidisciplinary research environments with supportive infrastructure.

Well-functioning national collaboration between research groups and an interdisciplinary approach are prerequisites for modern research. A strengthened collaboration between, for example, epidemiologists and health services researchers would combine epidemiological databases and methodological tools with the health services research approach that focuses on a different set of research issues. The panel also heard of what was described as inspiring collaboration between anthropology and epidemiology in the Department of General Practice and Community Medicine at the University of Oslo.

The community dentistry groups appear to be very small and vulnerable and would benefit from a national recruitment plan. It may be possible to fuse dentistry schools with the medical faculties and to integrate community dentistry into public health. The panel supports the tendency within the universities to merge smaller institutions into larger multidisciplinary institutions, but it has also observed that earlier professional subdisciplines tend to be maintained, without the creation of true multidisciplinary research.

Recommendation 12: The Research Council of Norway in their support policy is encouraged to distinguish between university units primarily established for educational purposes and university environments with a strong research component. Very small units could cooperate more with other departments at their universities, while a merger with other institutions could also be considered. The merging of research groups into one organisational structure should involve not only sharing of infrastructure, but also encouragement and support for true interdisciplinary research.

Maintain and strengthen international collaboration

Many of the research groups reviewed contribute actively to the international research community, especially through collaborative research with groups in other countries. Most groups have a good record of international publications and participation in international conferences. There would appear to be greater potential for undertaking EU-funded projects, especially in register-based epidemiology. The increasing proportion of elderly in the population offers opportunities for internationally relevant research, as does the Nordic welfare system, with its comprehensive health care system under transition.

The location of several universities in Northerly latitudes also offers special opportunities for research. The obvious case is Tromsø, but Trondheim has also a northern location, while Oslo and Bergen could play useful comparative roles. Examples of issues that could be addressed are the unusual fish-rich diet and the large variation in amount of daylight throughout the year. The Samic population provides another unique set of research issues.

There is large variation between institutions in the numbers of international research visitors and of Norwegians who travel overseas for research and training attachments. The system of part-time employment as adjunct professor tends to be used more for movement within Norway rather than for appointment of foreign researchers.

Recommendation 13: The panel recommends that Norwegian researchers maintain their participation in the international research community through international publications and collaboration. Further concerted actions should be funded to encourage researchers to take a leading role in research areas where the Norwegian context offers unique potential, for example international collaboration with other research groups located North of the Polar Circle. Research agencies and the universities should strengthen the international researcher exchange program.

Recruitment difficulties in public health research

As in other countries, Norwegian research institutions are faced with severe competition from other sectors where salaries in key disciplines may be higher. There are currently also relatively few graduates in the relevant professions. This has resulted in many unfilled posts and training positions in the universities, as well as an overbalance of older researchers in some units. Norway's special geography with long distances between cities has also contributed to recruitment difficulties. Some groups outside of Oslo are very small, with vacant positions and teaching loads that prevent the establishment of convincing research programs.

Many of the institutions under review expressed their concerns about the difficulty of recruiting statisticians, especially in the case of public health research groups who want to employ their own statisticians. There is an alarmingly low number of graduates in statistics at all Norwegian universities, and it is hoped that the recently established bachelor's program in Mathematics, science and technology at the University of Oslo, with a master's program in Modelling and data analysis that includes bioinformatics and biostatistics, will help to remedy this situation.

Recommendation 14: Research salaries should be reconsidered to improve the recruitment of high quality staff back to the public sector and to ensure the emergence of new researchers over the next decade. The Research Council should consider the establishment of focused incentive programs, as used in the US and elsewhere, in order to narrow the salary gap between the public and private sectors (e.g. salary bonuses for workers in underserved disciplines, one-off sign-on bonuses for academic posts). Consultative research and statistical support to other research groups could be given higher status, for example by awarding academic merit for this function.

5. EVALUATION OF RESEARCH GROUPS AND INSTITUTES

This section presents the evaluations for the individual research groups that were reviewed by the panel.

A considerable amount of material was provided to the panel as a basis for the evaluation. This material came from both the research groups under review and the Research Council of Norway (see box). The material provided by the research groups was standardised according to a request from the Research Council (see Appendix 6 & 7).

A. Material provided by research groups/institutes

Written material prior to panel's visit

- Description of group's structure and main research activities
- Own evaluation of the groups' activities as a SWOT analysis: strengths (S), weaknesses (W), opportunities (O) and threats (T)
- Curriculum vitae, publication list and two publications from each researcher under review
- Structure and priorities of the relevant university faculty

Oral material during panel's visit

- Introduction of group's representatives (see Appendix 7)
- Overview of the SWOT analysis
- Discussion with the panel

B. Material provided by the Research Council

- Factual information on organisation and administration of individual research groups/institutes
- Key statistics for medical and health research, 2003
- Bibliometric analysis of number of publications and citations in international scientific literature, 2003
- Oral introduction to the Norwegian research system

In the following reports on each research group/institute, a summary is first made of the research activities undertaken, followed by the panel's evaluation and recommendations. An overall rating is assigned to each group, except in a few cases where the panel considered the group to be too small or too recently established.

5.1 University of Oslo, Faculty of Medicine, Department of General Practice and Community Medicine

In 1993 several small institutes at the University of Oslo were merged to form the Department of General Practice and Community Medicine, located at the Ullevaal University Hospital. Since 2000, the Department has comprised 6 multidisciplinary research sections:

- General Practice and Family Medicine: 2 professors and 1.5 associate professors with teaching duties; research interests include drug utilisation, clinical communication
- Occupational Health, Social Insurance Medicine and Medical History: 4 (soon 5) professors, 1 associate professor and 1 professor II
- Preventive Medicine and Epidemiology: 2 professors and 1 associate professor, but will shortly have 2 new professor positions filled by staff currently working at the National Institute for Public Health (NIPH)
- Health Administration: 4 professors and 2 professor II positions, located 3 km away from the rest of the Department; includes research in health economics
- International Health: 1 professor and 1 associate professor; a master's program in International Community Health that supports a variety of research projects, mostly in developing countries
- Medical Anthropology and Social Medicine – 2 professors and 2 lecturers; a multidisciplinary group including medical anthropologists, sociologist and philosopher.

In 2002, six main research topics were identified:

- Urban health: a thematic research field that is largely based in this Department, but has strong links with researchers at NIPH
- Drug utilisation in primary care: a newer area
- Clinical communication: issues such as continuity of health care and social interactions in general practice
- Health economics: perceived as one of the big successes for the Department, successful in attracting research grants and developing a separate group infrastructure
- Cultural perspectives on (ill) health: a multidisciplinary area involving social sciences, anthropology and epidemiology in areas such as the perception of risk and trust, cultural dimensions of disabilities, ethnic diversity
- Musculoskeletal complaints: good success in attracting funding for PhD theses.

The department recognises the disadvantages of having many small research groups working independently of each other and aims for at least two permanent posts in each group, with strong inter-group collaboration. Despite the proximity of NIPH, they think Oslo University should have a strong epidemiological group and a majority consider that Health Administration (and health economics) should be retained as an important part of the department. Occupational Health will remain a small group mainly for teaching purposes, however, as the main research in this field is undertaken at Bergen and Trondheim universities, as well as NIPH and the National Institute of Occupational Health.

The location of Medical Anthropology within the department allows greater collaboration between this field and epidemiology. This has had a positive impact in the merging of qualitative and quantitative methods. Other cross-disciplinary

collaboration within the department is desired, but has been limited due to the need to first build up expertise within the individual research groups. Attempts are now being made to increase this collaboration through common seminars and joint projects.

There are links with the Department of Behavioural Medicine in the Faculty of Medicine and with the Pharmacy Department at the Rikshospitalet University Hospital. In addition, 125 general practitioners in the Southern and Eastern regions of Norway have undergone training in the Department and are now employed as part-time clinical teachers (equivalent of 12 full-time positions). There is good collaboration with NIPH, especially on the Oslo Health Survey, a major population-based study to explore the large health differences found between different parts of Oslo, as well as on key topics such as adolescent health and immigrant health.

International collaboration includes among others links with the Nordic network on social inequality and health, with institutions in the United States and longstanding collaborations with researchers in other countries such as Botswana and Palestine. The Urban health project offers an opportunity to link with research at the University of Singapore, as well as in Ethiopia and China (adolescent health).

The department expresses a need for greater technical support, especially in the handling of large population databases, and for greater access to biostatistical expertise. They would like the Research Council to provide special support to Community Medicine (which often falls between current programs due to its multidisciplinary nature) and to continue to support the international programs (although with a move of emphasis from 'assistance' programs to 'mutual learning') and the program on Cultural perspectives in health and illness.

Evaluation and recommendations

This is a well-organised group that is producing good quality work and has responded well to the need for integration across sectional borders; there is, for example, a good understanding of the potential for integrating the field of general practice into public health research. The International health group is producing some unique and impressive work, despite its small size.

The department has a good volume of publications. Few are in the most prestigious journals, except for the work on continuity of care and physician-patient communication, which is internationally known. There is potential for greater collaboration between the research groups in order to support more theoretical work; this might be attained through the establishment of common research themes, e.g. in clinical decision-making. The location of Medical Anthropology in this department provides a unique opportunity for collaboration between qualitative and quantitative approaches. The department would also benefit from greater technical support.

Overall rating: Very good

The panel notes that the Faculty Board made a decision on 3rd September 2003 to reorganise the Centre for Health Administration as a separate unit within the Faculty of Medicine.

5.2 University of Oslo, Faculty of Medicine, Department Group of Basic Medical Sciences: Section of Medical Statistics

This group comprises 2 (soon 3) professors, 2 associate professors, 2 adjunct (20%) professors, 2 postdoctoral fellows and a research adviser (20%). The research activities, which cover theoretical statistics, applied statistics and epidemiology, are grouped into two major areas: the Research group on survival and event history analysis, and the Research group on measurement error and epidemiology. The main collaboration is with the Institute of Mathematics (Division of Statistics), the Cancer Registry and NIPH, but the group also contributes to the supervision of PhD students from other medical fields.

The group has competence in many different statistical areas and works in a range of medical fields, such as HIV, childhood diarrhoeal diseases, cancer and nutrition. There are close connections with basic medical sciences and the National Hospital. The high volume of publications covers both methodological papers (mainly in statistical journals) and applied work (mainly in medical journals) and reflects the emphasis on joint work with clinical professionals. It has been difficult to recruit statisticians, however, as relatively few are reaching MSc level.

The group wishes to maintain its expertise in original methodological research, but also recognises the increasing demand for them to act as consultants for other units - although this role is not in their job description, which focuses on research, teaching and administration. At present, a staff member from Medical Statistics spends one day a week at the Community Medicine Department. There is a perception that work in the consultant role gets little credit within the university, thus reducing the incentive to take this role. The group would welcome changes to allow greater consultancy activity.

Evaluation and recommendations

This appears to be a very strong unit doing high quality work within methodological research. This approach should be maintained, but there is also a need for greater consultancy support to other departments. A range of solutions may be possible here, e.g. the replacement of some teaching duties by consultancy activities; enlargement of the group through the appointment of staff with a greater interest in public health; joint appointments between Community Medicine and Biostatistics. It is noted that the geographic distance between these two units is a barrier that probably reduces the incentive for collaboration.

Overall rating: Excellent

5.3 University of Oslo, Faculty of Medicine, Section for Care and Rehabilitation (Section for Health Science)

This section was founded in 1995 to develop and implement a 2-year master's program in health science for students with a health professional background. It has 1 professor, 3 full-time and 1 half-time associate professor and 2 professor II positions. Joint research positions have been established with two hospital-based units (the Department of Physiotherapy at the National Hospital and the Centre for Clinical Research at Ullevål University Hospital). The group has two main areas of research: Rehabilitation and physical functioning and Phenomenology of life-world. Their Master students are mainly nurses, occupational therapists and physiotherapists, many of whom continue on to a doctoral program. The group uses expertise from other units within the medical faculty and at other faculties and most of the students are co-supervised by other scientists.

There is a wide range of backgrounds and methodological expertise in the group. The group shares a common goal to contribute to knowledge about the relationship between personal experience and biological processes. They would like to have occupational therapists join the unit and to have greater collaboration with other researchers, including those working in clinical research groups. A need was expressed for more technical and administrative support and laboratory equipment. Both the large teaching load and the interdisciplinary nature of the research contribute to a low publication rate. The group's activities fall to some extent outside of the traditional research fields and they consider that it is difficult to obtain proper evaluation of some of their research initiatives.

Evaluation and recommendations

This was a difficult group for the panel to evaluate due to its relatively recent establishment. Their two main research areas appear to be rather distinct with little overlap. There does not seem to be strong interest in the more recent trends within the social sciences (for example, the greater focus on empowerment within the field of rehabilitation) nor for greater variation in qualitative approaches. There is not a large number of publications and few of them are in international journals.

It appears that this unit was created to provide a 2-year master's program in Health Science. It does not seem optimal to organise a separate unit for this purpose. The group is too small to be viable and might profit from merging with some other section, department or institute in the faculty.

Overall rating: Fair

5.4 University of Oslo, Faculty of Medicine, Department Group of Basic Medical Sciences: Department of Behavioural Sciences in Medicine

Subjective health and quality of life, Mental health research

Only some of the activities of this Department were evaluated here, the others being covered by the panel evaluating Psychiatry and Psychology.

This is a small department comprising 4 professors, 2 professor II positions and 4 postdoctoral fellows and 11 doctoral students. They function largely as a single research group, with a main focus on subjective health and clinical communication research in health care. Many of the activities involve empirical research with less focus on theoretical work.

The multidisciplinary nature of the group allows competence in a broad range of areas, including statistical methods, and there is wide collaboration with hospital-based clinical researchers as well as links with the Department of Medical Statistics. The group is involved in a small number of international projects. The group believes that the behavioural approach to medicine should be given more recognition and it was disappointed not to be successful in being represented in the thematic areas prioritised by the Faculty of Medicine. They are now investigating the possibility of collaboration with departments involved in the thematic areas.

A main problem is ensuring funding for research. The group is reliant on external funding, but often feel that they fall in the middle of somatic medicine, psychiatry and public health. There is a need for greater technical assistance for larger projects such as the questionnaire studies. It has been suggested that the group merges with the Department of General Practice and Community Medicine, but the department has stayed in the Department group of basic medical sciences due to the preferred leaning towards basic psychology and sociology (especially in teaching) and towards hospital clinical research.

Evaluation and recommendations

This is an important area of research, but the group is small and relatively isolated. They do good work in the areas of quality of life measurement and social indicators, but there appears to be a relatively narrow view of behavioural science in medicine, with few contacts to the more recent trends in psychology and sociology. Despite their reluctance to join with Community Medicine (partly due to their geographic separation), they could offer expertise that is currently lacking in the Department of General Practice and Community Medicine. Against this, are the close links that the Department of Behavioural Sciences already has with clinical research groups.

Overall rating: Good

5.5 University of Oslo, Faculty of Medicine, Centre for Medical Ethics

The Centre for Medical Ethics was initially established in 1989, but since 1995 has been in the Faculty of Medicine with its own Board. Its goal is to be a national, interdisciplinary centre for research, teaching and information in medical ethics. At present the Centre offers supervision and training only of PhD students, but there are plans to establish a master's program in health care ethics as well. The staff comprise 2 full-time professors (one position currently vacant), 3 adjunct professors (20%) and 3 doctoral fellows.

Four main areas of research have been prioritised: ethical issues in clinical medicine, issues relating to the normative basis of medicine, research ethics and resource allocation. The Centre attracts research fellows from different professional backgrounds and the projects are characterised by a variety of methodological approaches. A large number of publications have been produced, both articles in international journals as well as editorial and commentary articles in newspapers.

The Centre is an active partner in several research projects funded by the European Commission. A current multidisciplinary project investigates some of the ethical, legal and social challenges raised by research biobanking in its different forms, and the establishment of Clinical Ethics Committees at all regional hospitals in Norway provides further opportunities for research.

The area of Medical ethics is potentially very large and the Centre recognises the considerable drawbacks of having only two full-time positions, especially when the teaching responsibilities are also considerable. There have been discussions as to the benefits of merging with other units within the University (e.g. the Health Administration group from the Department of General Practice and Community Medicine, located in the same building), but the main perceived needs are for more full-time academic positions and greater access to students with a strong background in medical ethics.

Evaluation and recommendations

The work undertaken appears to be original and of good quality, with high relevance in particular for Norwegian society. It would seem impossible, however, for the Centre to continue in such a wide field with only two full-time positions. Even in the event of new staff being appointed, it is recommended that further prioritisation of work be made within the priority areas already identified, in order to maintain an adequate focus and quality of work, particularly with regard to population issues and health policy.

Too small for rating, see text

5.6 University of Oslo, Faculty of Mathematics and Natural Sciences, School of Pharmacy, Department of Social Pharmacy

While work in this field started 10 years ago, the present department was established in 1998. For the purposes of this evaluation, the department comprises 2 professors (one from 1st August 2003), 1 adjuvant professor, 1 lecturer, 1 postdoctoral fellow (20%) and 2 doctoral students. The main research areas are drug use (e.g. compliance studies, use among the elderly), communication and pharmacoeconomics.

Funding is received from the Pharmaceutical Society of Norway and the Society of Norwegian pharmacies; there is also a new project funded by the Drug Poison Information Centre. There are good connections with the Departments of Pharmacotherapeutics and of General Practice and Community Medicine, as well as the Institute of Nursing Science. Research is also undertaken in collaboration with the departments of Paediatrics and Obstetrics in Ullevaal University Hospital. Studies using the National Prescription Database will be undertaken through master degree projects.

It is a small field but with a good international network. A new project will involve collaboration with colleagues in the United Kingdom and New Zealand.

The group suggested that a change in location of the School (currently within a science faculty) would enhance local collaboration – preferably within a Faculty of Pharmacy, but a move to a Faculty of Medicine (e.g. the Department of General Practice and Community Medicine) could also be appropriate.

Evaluation and recommendations

This is an important area for research and there has been good scientific achievement to date, with a well-planned research agenda.

There is good collaboration with other institutes, but there are fewer links to public health research (e.g. in pharmacoeconomics). The department appears to be seriously under-funded and it is likely that this and structural barriers have made collaboration difficult. While there are obvious links to the Institute of Pharmacy, from a public health perspective it would be better for this unit to be closer to health and medical fields. It is noted that Social Pharmacy in Tromsø is located within the medical faculty.

No rating, see text

5.7 University of Oslo, Institute of Clinical Dentistry, Section for Community Dentistry

Research in this field has been undertaken since 1975, but was reorganised into the Institute of Clinical Dentistry in 1999. The Section for Community Dentistry, which has 2 professors, 1 postdoctoral fellow and 2 researchers, is located several kilometres away from the main part of the Institute of Clinical Dentistry.

The research activities undertaken include epidemiological surveys of oral health in Norway as well as in Botswana, Palestine and Lithuania; health services research; international comparative research; and health economics. Undergraduate teaching in the Medical Faculty of the University of Oslo is also provided.

This research group is the smallest within the Institute of Clinical Dentistry and reports longstanding frustrations over the lack of administrative support and limited funding. Despite this, the group has developed contacts with researchers in community medicine and the social sciences, as well as with other European researchers in community dentistry.

It appears that extra money will be devoted to research in the Institute of Clinical Dentistry this year. This should enable the establishment of further PhD positions. While the Institute will also be reassessing its whole research strategy, the community dentistry research group fear that their small section will not have sufficient funding to benefit from a reassignment with researchers in community medicine and the social sciences.

Evaluation and recommendations

There are good individual contributions within this department. The group has been active in Nordic health conferences and has produced a high volume of publications in good journals, mainly in the dental field but also some in medical journals.

The panel notes that oral health is fundamental to public health. Despite this, dental researchers are having difficulty maintaining their identity in the face of the much larger medical faculties, with whom they also compete for funding.

No rating, see text

5.8 University of Oslo, Institute of Nursing Science

The Institute of Nursing Science was established in 1985 to provide academic education for nurses and to contribute to the developing of nursing science in Norway. The institute has put extensive effort into the latest educational reform (the development of a Master's program), while also completing three major revisions of its program during the last ten years, as a result of mandatory changes in educational policy. The senior staff comprise 2 professors, 8 senior lecturers and 3 professor II positions.

The research undertaken is diverse, covering theoretical and methodological work as well as educational and clinical research. The current focus of research is on three main areas: nursing ethics, symptom management and nursing care of the frail elderly. The group has wide national and international collaboration, especially in clinical areas. There are fewer links within the Faculty of Medicine, but the staff has contributed to teaching, supervision and examinations in the Section for Health Science. There are also links with the Centre for Medical Ethics.

A major problem for the Institute is that 90% of the academic staff will retire within 10-15 years and the doctoral students are also relatively old. Other problems are the insufficient number of academic staff to cover research and educational needs explicitly expressed by the university hospitals and other institutions within the health care system. Lack of funds and insufficient infrastructure to support research activities and applications for external funding are also problems. The group would like the Norwegian Research Council to create a special program for Nursing and Health Science that would allow this field to be funded in its own right.

Evaluation and recommendations

Although this group is still in the process of establishing itself as a research group, it has a very good international reputation in ethics and nursing theory. They have built up the institute well by concentrating their focus of work, and have been successful in attracting competent researchers and in collaborating with the clinical field. There is a high volume of publications in international journals and a good number of doctoral students. There is also broad international collaboration and the Institute has benefited from long-term cooperation with nursing departments in the United States.

The Institute could develop more collaboration with other institutes in the Faculty of Medicine (e.g. Health Science, Behavioural Sciences, General Practice and Community Medicine). They could also strengthen their collaboration with European nursing institutes in order to be able to apply for money from the EU.

Overall ranking: Good

5.9 University of Bergen, Faculty of Medicine, Department of Public Health and Primary Health Care

This Department was established in 1990 through the fusion of several research groups and is divided into eight sections: Social medicine, Preventive medicine, General practice, Geriatric medicine, Nursing science, Occupational medicine, Physiotherapy science and Medical statistics. The sections are currently spread across three different locations, but it is planned to have all eight sections located in two adjacent buildings by July 2004 (including the Medical Birth Registry).

The department as a whole has 15 professors, 16 associate professors, 2 professor II positions and 1 postdoctoral fellow. A range of activities is undertaken, including:

- Register-based epidemiology (e.g. Medical Birth Registry, cardiovascular and arthroplasty registers)
- Large population-based data sets with associated biobanks (e.g. Hordaland Health studies, HUNT, Norwegian Mother and Child Cohort Study)
- Health economics
- Qualitative research (especially within General Practice research, Physiotherapy Sciences, Nursing Science)
- Long-term research on specific topics (e.g. quality of life, urological problems, clinical communication in general practice)
- Norwegian quality improvement of laboratory services in primary care (NOKLUS)

Despite the department's birth as an amalgamation in the 1990s of many different fields, there is collaboration on some projects, especially between Preventive medicine and Medical statistics (which are shortly going to merge into one unit); also between Occupational medicine and other sections (e.g. on quality of life research).

The department considers its strengths to lie in good statistical, epidemiological and qualitative methodology, registry-based research and physiotherapy assessment tools (including a movement laboratory to assess balance).

There is close collaboration with other national centres on the various databases (e.g. with NIPH for the Medical Birth register). Within the same university, there are also some ties with the Centre for International Health (mainly through master degree projects) and the HEMIL centre (through research projects and teaching). There is wide international collaboration within the EU and with researchers in developing countries (e.g. in East Africa, Nepal and Guatemala).

The department expressed difficulties due to lack of infrastructure and limited financial resources. Some of the research groups are vulnerable with only one or two professors (and in some cases affected by heavy teaching responsibilities) and there are no resources from the University for technical and administrative positions (e.g. for maintenance of the Medical Birth Register). A desire was expressed for the development of national endpoint registries (e.g. hospital discharge registry, cardiovascular disease registry) and a greater use of the electronic patient records generated by general practitioners.

Future plans for this unit include strong development of perinatal epidemiology and possible location of the Norwegian Cardiovascular Disease Register at the university. Physiotherapy research will also be strengthened.

Evaluation and recommendations

This department is unusual in that they are very strong both in population surveys and register-based epidemiology and in the use of qualitative methods in clinical practice. They have publications in the most prestigious journals and much original work is being undertaken. There are some less developed areas, but the department appears to function well as a group.

Overall rating: The substantial part of the research is excellent, although there is work of relatively weak quality being undertaken in some areas.

5.10 University of Bergen, Faculty of Medicine, Centre of International Health

The Centre of International Health was established in 1988 as an inter-faculty centre with the aim of initiating, coordinating and conducting research and training programs for the benefit of poor countries. The Centre comprises i) scientific staff working at the Centre (8 full-time professors and associate professors, 5 part-time professors and associate professors, 2 postdoctoral fellows), ii) a network of researchers with their primary position at other departments in the University of Bergen, iii) PhD and Master students, and iv) a network of collaborating institutions and researchers mainly in countries in Africa and Asia.

A main research area ('essential global health research') covers country-specific activities in partnership with local institutions and global health research. It comprises activities within the areas of Mother and Child Health, malaria, HIV/AIDS, tuberculosis, health policy and systems research, health promotion and oral health. Collaborative projects have been undertaken with scientists in many departments, primarily at the Faculty of Medicine (e.g. departments of Public Health and Primary Health Care, Microbiology and Immunology), but also at other faculties, in particular the faculties of Odontology and Psychology (e.g. the HEMIL Centre).

While the Centre reports good institutional support and a flexible organisation of multidisciplinary research groups, they consider that the environment is too small, with few senior researchers working solely in International health. There is limited funding for Norwegian researchers and most of the senior positions involve the development of interdisciplinary projects as well as teaching, leaving less time for independent research. At present, funding from the University Council (NUFU) and other sources including the EU-INCO program has allowed the Centre to develop research programs based on long-term institutional collaboration. These programs provide funding mainly for partners' institutions and capacity building in the South. It is hoped that the recent increased national focus on international health will enhance the possibility of stronger funding of Norwegian research institutions and further strengthen collaborations that have been developed with European institutions.

Evaluation and recommendations

This is an excellent multidisciplinary group, who are among the world leaders in the integration of health promotion and social science methodology, especially in the areas of child health and nutrition, and HIV/AIDS. Moreover, the global health research undertaken by the Centre is achieved through the integration of basic science, clinical research and public health research in relevant areas and in collaboration with partners in a number of developing countries. There is a good volume of articles in prestigious scientific journals and also national reports and doctoral theses.

The panel would like to see this group develop into a leading centre for global health research in Scandinavia and among the leading centers in Europe.

Overall rating: Excellent

5.11 University of Bergen, Faculty of Psychology, Research Centre for Health Promotion (HEMIL Centre)

Established in 1988, the HEMIL centre is an interdisciplinary, inter-faculty organisation providing research and teaching activities. It has 7 permanent academic staff (5 professors, 2 associate professors), 2 externally funded senior researchers and about 20 research scholars and other staff. The Centre has a high production of doctoral theses, with 23 successful candidates since the Centre was established.

A primary area of research at the Centre is Adolescent health and lifestyles, which includes the following activities:

- Initiating and coordinating the WHO Health Behaviour in School-aged Children (HBSC) that presently comprises 36 countries; host institution of the project data bank
- Cooperation within the European Network of Health Promoting Schools that involves 40 European countries
- An EU-funded project on control of adolescent smoking
- The Norwegian Longitudinal Health Behaviour Study
- An intervention program aimed at improving social competence in primary school children
- Establishment of new international research networks (through the International Union for Health Promotion and Education) and coordination of EU-financed research projects.

Other areas of research include

- The Sub-Saharan Africa HIV/AIDS research group
- The Olweus anti-bullying program that is used both in Norway and in a number of other countries; it has also been approved by US educational authorities
- Research into the influence of social environment on health and well-being
- Projects related to health promotion interventions and policies (e.g. a national program on children and health, development of a European research database on health promotion infrastructure, the BE smokeFREE program that is currently used by about 60% of Norwegian secondary schools)
- Protection and promotion of mental health.

The Centre is a WHO collaborating centre for health promotion and education. The group has developed a broad international network and perceive themselves to be at the international forefront for research on health behaviour and psychosocial health (especially that of children). Self-reported health and mental health are also important areas for them. They have a high publication rate with about one-third of their publications appearing in international journals, although these are not always the most prestigious journals. They have contributed to the development of public policy through, for example, their work on bullying, Health Behaviour in School Children and behavioural epidemiology.

While the group has good statistical expertise, through researchers developing their own skills and knowledge in different statistical methods, they recognise a need to be more involved in developing theoretical models. Such models could be developed in different scientific fields, as the contexts in which they would be used vary greatly according to the interests of the researchers. Greater discussion within the Centre to develop a common understanding of some central themes would be fruitful, while the

multidisciplinary nature of their Centre could be better exploited with greater collaboration among the senior staff. The research staff contribute a significant amount of their time to teaching - there are two master's programs in health promotion (one international and one Nordic) program and the staff are also involved in other education programs at the faculty of psychology and other faculties.

Evaluation and recommendations

This is a very good group with some excellent features. There is high international competence in issues of health behaviour and the Centre makes a unique contribution in this area. The Centre is a large organisation by Norwegian standards and seems to be successful in attracting funding for its research, as well as in providing a good training program and identifying national and international markets for its work. The Centre has a strong international activity in the coordination of research networks and collaborates with more than 50 countries.

Much interesting research is being undertaken, but it is too fragmented. The Centre is recommended to further consolidate the on-going multidisciplinary and multi-professional research into a national and international Centre of excellence for Health promotion.

The HEMIL Centre has the potential of developing into one of the best health promotion research groups in Europe.

Overall rating: Very good

5.12 University of Bergen, Faculty of Dentistry, Department of Odontology, Community Dentistry

Following a reorganisation in 1997, the research activities of Community Dentistry in Bergen are conducted within the Department of Odontology. The section has 1 professor and 1 associate professor. The two associate professors at the Centre for International Health (1 full-time position and 1 temporary 50% position) cooperate with Community Dentistry.

The main research activities include epidemiological studies in Norway and Africa, and oral health services research (e.g. peoples' perceived ability to cope with dental life events; knowledge and behaviour in respect to oral health). Besides the affiliation with the Centre for International Health and other departments in the Faculty of Dentistry, Community Dentistry has research cooperation with the Centre for Odontophobia and the HEMIL centre at the University of Bergen, the Public Dental Services and the University of Connecticut Health Centre in USA. Community Dentistry intends to cooperate with the new Clinical Dental Research Centre, which is being established in 2003 with funding from the Research Council of Norway.

While the researchers contribute to undergraduate teaching and to supervision for MSc and PhD candidates, there is no PhD program due to insufficient human resources. The group would like greater funding for research projects, without having to compete with the Faculty of Medicine.

Evaluation and recommendations

This group appears to do good quality research, but is weaker in international collaboration and research education. The group is also too small to be viable, with only two permanent positions.

No rating due to small size of the unit.

5.13 Norwegian University of Science and Technology (NTNU), Faculty of Medicine, Department of Community Medicine and General Practice (ISM)

This is one of 5 departments within the Faculty of Medicine at NTNU in Trondheim. It has 11 full-time professor positions (of which 2 are vacant), 3 part-time professors, 8 associate professors, 30 research fellows and 4 postdoctoral fellows. The department has seen considerable growth over recent years (in 1998 the department had 7 research fellows and 1 postdoctoral fellow).

A central area of research within ISM is the HUNT project, a population-based study of health, disease and risk factors in the inhabitants of the Nord-Trøndelag County. While responsibility for the management of this project was moved from NIPH to NTNU in 2001, and formally to ISM in 2002, several of the researchers at ISM have been involved with the HUNT project since its inception and there is still close collaboration with the NIPH. The HUNT study has so far resulted in two large cross-sectional studies of the adult population, as well as a cross-sectional study of all high school students aged 13-19 years with a follow-up after four years. The questionnaire data, clinical measurements and blood samples collected as part of the HUNT studies have formed the basis for both national and international publications in several areas, e.g. cardiovascular illness, deep venous thrombosis, diabetes, bronchial obstruction, osteoporosis and social epidemiology. The HUNT database contributes to the national Cohort of Norway (CONOR) project and data from the Young-HUNT study have been linked to the Medical Birth Registry.

Other central activities within ISM include research on perinatal epidemiology (e.g. risk factors during pregnancy for small-for-gestational-age at birth, conducted in parallel with the University of Alabama, USA) and cancer epidemiology (e.g. the influence of the intrauterine environment on development of cancer in adulthood). Research is also undertaken in general practice (e.g. the communication of medical research information to general practitioners), health of the elderly, prevention of allergy among children, the consumption of alternative medicines, women's health (including the only Chair in Norway) and the development of electronic patient records. Two new research interests relate to bioethics and physiotherapy (mainly musculoskeletal problems).

Much of the work at the department has direct policy relevance. Previous HUNT projects have changed practice in national screening programs, while the results of Young-HUNT have been discussed with school teachers and administrators and presented at local and national policy level. The next HUNT study (HUNT-3) will be designed on the basis of issues prioritised by the Department of Health. Other areas of research, e.g. violence against women, are a result of current political processes, while a growing problem in Norway are the large numbers of hospital beds used by people aged over 70 years.

Although the HUNT databases have been linked with clinical databases, such as hospital registers for osteoporosis and stroke, the group recognizes that much of the potential of the HUNT data remains untapped. Recent additional funding should cover the appointment of several new temporary research positions, but the main perceived needs are the strengthening of the biobank maintenance and access, and greater statistical support. While some support in biostatistics is being achieved through

collaborative research with other institutes and through continuing education of present staff, a bachelor degree program in Biostatistics will start later this year.

The main research issues within the Women's health program, which was established in 1991, are violence against women (e.g. a regional study as part of the 2002 Oslo Health Screening survey as well as a national study), health problems such as osteoporosis (through HUNT) and urinary incontinence, gender differences in health, and reproductive events and psychosocial health (e.g. in co-operation with the University of Tromsø).

Evaluation and recommendations

Many of the activities undertaken are of high research quality, especially in the epidemiology of particular diseases. Despite recent attempts to fuse the research areas, however, there are still many small areas of research that appear to function separately from each other and there is no common research strategy that would link the different areas. The panel would like to see clearer leadership for these groups, helping to set the agenda for future research. A possibility would be to focus more on the enormous potential of linking clinical register data with the extensive epidemiological database. It would seem that the HUNT project will be an important profile for the future and could act as the core theme for the Department.

The various research groups do not attain critical mass, especially in consideration of the teaching activities also undertaken. Although some attempts at international collaboration have been made, this could be emphasized much more. Some of the groups have a high number of publications, but these have not always been in the best journals.

Overall rating: Good

5.14 University of Tromsø, Faculty of Medicine, Institute of Community Medicine (ISM)

This institute, established in 1973, currently has five departments: Epidemiology and medical statistics (4 professors, 3 associate professors, 2 professor II positions, 4 postdoctoral fellows), General practice (3 professors, 2 associate professors, 2 professor II positions), Health services research (4 professors, 1 professor II, 1 postdoctoral fellow), Preventive medicine (2 professors, 1 associate professor, 1 professor II, 1 postdoctoral fellow), and Social psychiatry and philosophy of medicine (2 professors, 1 associate professor).

Reflecting the Institute's strong emphasis on epidemiology, the main activities centre on several major population-based longitudinal studies: the Tromsø Study, the Finnmark study and the Norwegian Woman and Cancer Study (NOWAC). Through these studies, the Institute collaborates on a number of other national multi-centre projects, such as CONOR (Cohort of Norway), FUGE (functional genomics) and NOREPOS (osteoporosis).

The institute has also set up an additional cardiovascular RCT study (NORVIT; relation of homocysteine levels to AMI) and is involved in EPIC (a EU-funded study on nutrition and cancer) as well as other international collaborative studies in breast cancer, pregnancy outcomes, exposure to nickel and alcohol, allergy in children and lifestyles in schoolchildren.

Staff in the Department of General Practice have close connections with local general practitioners, both through teaching (there are 5 GPs with 20% academic positions, who teach and collaborate in research within the Institute) and tutoring (e.g. local GPs who train medical students in the field for 8 weeks). These connections are considered to enhance the impact of epidemiological results on clinical work and also allow clinical problems to be communicated back for possible further investigation. While GPs have used electronic patient records since 1980, there has so far been little use of these, the exception being the Finnmark study that included GP data on diabetes.

The Health services research department, including both health economics and health policy research, has 4 full-time professors who work largely on separate issues (e.g. use of helicopter ambulances, resource use after major surgery, economic and ethical issues in the distribution of health care). There are close connections (through a part-time position) with Health Economics Research at Oslo (HERO).

The institute also has collaboration with the Department of Pharmacoepidemiology and pharmacy practice (through the Tromsø, NOWAC and NORVIT studies as well as the PhD program) and with clinicians at the nearby University hospital. The international network is less extensive, being mainly dependent on personal contacts, and the Institute has been considering ways in which to attract more foreign visitors.

Because of relatively low teaching loads, the staff undertake mainly research activities. Although there is growing interest in qualitative research (e.g. patient-doctor communication, the interpretation of 'disease'), the main focus is on disease-oriented epidemiology. Past emphasis has been on cardiovascular diseases and cancer; but current interests include a wide range of conditions (mainly for adults, and especially the elderly).

It is recognised that the unique population-based epidemiological material (that also includes a large biobank) offers enormous potential for research. Several problems have arisen with respect to the use of this material, however. The Institute expresses a need for more technical support that would allow better database management and easier access to the data. There is a pressing need for more central cleaning of data, better documentation, easier extraction of data and greater maintenance of the biobank. It is hoped that a faculty-funded position can be filled as soon as possible. Extra resources would also allow the datasets to be translated into English, thus enhancing their international use.

In recent years there has been greater interest in developing regional research, e.g. in lifestyle differences between the Sami and other Norwegians and in 'rural health' (with financial support from the Ministry of health), which has a strong cultural element, e.g. an investigation into the Sami definitions of disease and health. It was also noted that the group is involved in the Adult Monitoring Assessment Project (AMAP) in the eight Arctic states.

Evaluation and recommendations

The panel recognised the excellent work being done here in epidemiology, for which the group is world-class in several areas. There is a high volume of publications in good international journals and wide national communication of results. Many of the PhD students have also been 'exported' to other national centres to further develop clinical epidemiology.

There was concern, however, over the relative weakness of the other departments and it was considered that the multidisciplinary approach should be strengthened within the Institute. Public health is a broad field and it is likely that a widening of approaches to include more qualitative work (e.g. from sociology and philosophy) would create opportunities for original work centred more on health than on disease. The appointment of more 'externally bred' senior researchers may also help to develop new approaches.

The Institute appears to underutilise Tromsø's natural geographic advantage. There are considerable opportunities here to further develop research in circumpolar health, together with researchers in other Arctic regions. The Institute could build up a unique research profile as a national centre for research in this area.

Overall rating: Excellent

5.15 University of Tromsø, Faculty of Medicine, Institute of Clinical Medicine, Department of Nursing and Health Sciences

This department was established in 1989 with the major challenge of developing an interdisciplinary curriculum at the postgraduate level to five health professions. The development of this new field of theoretical thinking and teaching has been time-consuming regarding planning and teaching. At the time of review, the group comprised 1 assistant professor and 3 associate professors, 1 associate professor II, 1 postdoctoral fellow and 3 research fellows. The professor position has been vacant for a year.

Most researchers have undergraduate education within nursing, physiotherapy and social work, with postgraduate and doctoral degrees in nursing science, philosophy and sociology. Research topics are within health care ethics, development of knowledge in health care, the interplay between the general public and health professional networks, effects of health policy reforms, communication with patients suffering from dementia, learning environments in nursing homes, the understanding of the concept of function and body movement in physiotherapy, the historical development of health care/social history of medicine in Northern Norway, physiotherapy to premature children, and within the understanding of experiences of patients in intensive care situations. The department is involved in the Tromsø branch of the Norwegian Teaching nursing home project through research projects regarding i) how nursing home residents spend their time, and ii) the relations between the nursing home residents and their relatives.

The department's location near the university hospital has helped the development of joint clinical research projects and there is also some collaboration with the Institute of Community Medicine.

A lack of resources and the emphasis on planning and teaching have to some extent limited research progress to date, and the absence of PhD training until this year (establishment of PhD in Health Science) has meant that research fellows have had to go elsewhere for their dissertations. There have also been recruitment problems for senior positions. The group acknowledges a rather low publication rate and a low international profile, and is making efforts to improve this situation. In the light of Tromsø's northern location, there is a possibility to further develop circumpolar research in this field and some links have already been made.

Evaluation and recommendations

Despite a relatively long institutional history, the research profile here is only just starting up, due to the absence of a permanent professor, a considerable teaching load and limited resources. While the experience in cross-disciplinary collaboration is very interesting and should be built on, there is missed potential here. There is a unique opportunity to develop a research profile related to circumpolar research, for example, together with the Institute of Community Medicine. It is also recognised that it is important for the nurses, occupational therapists, physiotherapists etc. in this area of Norway to have a local research milieu.

Overall rating: Fair

5.16 University of Tromsø, Faculty of Medicine, Institute of Pharmacy, Department of Pharmacoepidemiology and pharmacy practice

This is a small unit within the Institute of Pharmacy. The group under evaluation comprises 2 associate professors (1 full-time and one 50%) and 1 adjunct (20%) professor.

The research activities relate predominantly to patterns of drug use and adverse/long-term effects of drugs in the general population, as well as the use of alternative medicine. The staff have heavy teaching loads, with both undergraduate courses and a master's program. The group has benefited from its location within the Faculty of Medicine and has built up its research activity in collaboration with the Institute of Community Medicine. They are currently involved in three main projects (the Tromsø Study, the Norwegian Women and Cancer Study and the NORVIT study) and will also work on the new National Prescription Database and the HUNT-3 study. There are good connections to pharmaceutical organisations in Norway and with other Nordic researchers working in similar topics.

The group recognises that their small size limits their ability to build up a productive research group. There are recruiting problems due to few postdoctoral fellows and there is no full professor in the field. While there are joint projects with other groups, some structural problems remain, for example, in relation to access to data held in other institutes. The group considers that they would benefit from a reorganisation, with staff grouped around common research interests and/or methodology rather than according to teaching programs as it is now. A closer collaboration and new co-localisation within the Institute of Community Medicine should be considered.

Evaluation and recommendations

The work being undertaken here is very important and the data potential is unique, with access to information on drug use that is linked to data on lifestyle, health status and sociodemographics.

Good work is being done but there are too few positions filled as yet for productive work. Research progress has been limited due to heavy teaching responsibilities and recruitment problems. In view of these difficulties and the potential for collaboration, the department may well benefit from amalgamation with the Institute of Community Medicine.

No rating, see text

5.17 Norwegian Institute of Public Health (NIPH) – Division of Epidemiology

The Norwegian Institute of Public Health was established in 2002, as a merger of the former National Institute of Public Health, the National Health Screening Service, the Medical Birth Registry in Bergen, the Department of Health Statistics and Methodology from a large Norwegian pharmaceutical wholesaler, and staff from the Norwegian Board of Health. More recently, the National Institute of Toxicology has also been merged into the institute.

The Division of Epidemiology, which is one of five divisions at NIPH, includes staff from all the institutions that were merged to form NIPH and thus covers a broad range of professional backgrounds. The main goal of the Division of Epidemiology is to improve public health through scientifically based knowledge. The primary research fields, chosen on the basis of public health significance, relevance for global health, availability of population-based data and/or biobanks and special significance, are perinatal health, osteoporosis, cardiovascular diseases, mental health, asthma and allergy, diabetes and infections.

The Division has six main research groups: Chronic diseases and health surveys (4 professors, 6 associate professors, 2 professor II positions, 1 research physician and 2 postdoctoral fellows), Genes and environment (4 professors, 2 associate professors, 3 research physicians and 1 postdoctoral fellow), Health statistics (2 associate professors), Medical Birth Registry (1 professor, 2 associate professors, 4 professor II positions), Mental health (3 professors, 3 associate professors, 1 research physician and 1 postdoctoral fellow) and Pharmacoepidemiology (1 associate professor). There is emphasis on collaboration across groups with special focus on social inequalities in health, pharmacoepidemiology, genetic epidemiology, environmental epidemiology and biostatistics.

The work in the Division of Epidemiology centres on the databases maintained by the institute. Major population-based databases and biobanks run by the institute include the Cohort of Norway project (CONOR; involving collaboration with the Norwegian universities and the Ministry of Health), the Mother and Child Cohort Study (a longitudinal study exploring the effects of environmental and genetic factors on maternal and child health) and the Norwegian twin panel to study psychiatric disorders. Much of the information can be linked to registers internal and external to the institute, e.g. the Medical Birth Registry, Cause of Death Register, the new National Prescription Database (see also Oslo Social Pharmacy & Tromsø Pharmacy), clinical registers and data from Statistics Norway.

The Institute collaborates with several other Norwegian groups, such as the National Institute of Occupational Health, the Norwegian Institute of Science and Technology (through the HUNT study) and the four Norwegian universities (e.g. through the CONOR and Osteoporosis studies). There is also wide international collaboration through these projects. There is an emphasis on free and ready access to both the data and the methodology produced at the institute.

The scientific staff have dual roles of research and consultancy, but see this in a positive context where the two roles can enhance each other, for example when novel methodological work is inspired by an empirical clinical problem. The institute offers statistical support to the universities for users of the databases. While researchers are

encouraged to follow up on original research, there are various mechanisms in place to avoid duplication of work, especially in regard to the use of registry data.

The institute expresses a desire for greater provision of resources for database management and for molecular biology, as well as more involvement of the regional health enterprises in the funding and use of the databases. The opportunity to work with unique datasets can be a major draw card for statisticians to work in the health field; this could be further aided by the setting up of positions for PhD scholarships and postdoctoral positions.

Evaluation and recommendations

This is an excellent scientific group producing very high quality work, reflected in a high volume of national and international publications, often in prestigious journals. The group has had a significant impact on knowledge and health policy in Norway.

It would appear, however, that the datasets available here are not being used to their full potential. It may be possible, for example, to expand collaboration to general practice (e.g. through the Norwegian Association of General Practitioners), as well as to population aspects of health services research. While the institute is strong in traditional disease epidemiology, there is less emphasis on other aspects such as, for example, health promotion.

There is a great need for intervention research in public health and Norway has a good infrastructure for public health actions. However, there appears to be a general lack of interventional public health research at NIPH. Previous research activities in health promotion and prevention have been moved to another governmental department, which unfortunately has no mandate for conducting research. The NIPH is therefore recommended to amend its working program to include health promotion and prevention research in collaboration with other national, regional and local bodies.

Overall rating: Excellent

5.18 Norwegian Social Research (NOVA)

NOVA was formed in 1996 by a fusion of four research groups: Institute of Applied Social Research, Norwegian Institute of Child Welfare Research, Norwegian Youth Research Centre and Norwegian Institute of Gerontology. NOVA is owned by the Ministry of Education and Research but is run as an autonomous research institute, with two-thirds of the funding coming from external research bodies.

The purpose of NOVA is to conduct research and development projects in order to increase knowledge about social conditions and social change. It aims to both undertake research of a high scientific level and to provide information of more immediate relevance for social policy and welfare institutions. At the end of 2002, the institute had approximately 80 researchers with backgrounds that include sociology (32), psychology (17), political science, social anthropology, social work and economics. The staff under review comprise 12 senior researcher I posts (equivalent to professor), 11 senior researcher II posts (postdoctoral fellows) and 2 university professors with part-time (20%) positions at NOVA.

Within its broad research areas, NOVA has a number of research projects on health inequalities, disability studies, health and care services, and health-related behaviours. Research is organised in seven research groups, each with 8-15 members: Child and youth welfare; Youth; Public policy, living conditions and family finances; Quality of life, welfare services and health; Social security and social assistance; Ageing; Migrant studies.

The institute comprises experienced researchers with a range of backgrounds. Both qualitative and quantitative approaches are used. Although some basic research is undertaken, much of the work is applied research. Projects differ in size - about half of the projects going on in 2001 lasted for three years or more, while a quarter lasted less than one year. The institute experiences an increased demand for short-term evaluations and 'quick solutions' from public agencies. While such short-term projects are an important aspect of the work, the institute aims at having larger and more long-term projects.

The institute has a large number of projects (about 120-140 going on each year) and has many contacts with social policy makers and service providers, as well as with Norwegian universities and university colleges (e.g. by means of shared posts). NOVA attempts to have some influence on national research strategy. The institute has recently undertaken several large-scale data collections, sometimes in cooperation with other research institutes. The institute has emphasised PhD training of the researchers on the staff, with 20 successful PhDs since 1996.

Evaluation and recommendations

This institute is conducting good work of high relevance to Norwegian society and has a good volume of publications, with many in reputed social science journals. The success of their PhD program is also impressive. There does appear, however, to be a lack of overall coordination and strategic planning. While this institute currently does some work on preventive aspects and health promotion, there is considerable potential here that is not being exploited. A different structure may be needed to improve

collaboration with the public health field, for example, through more direct involvement in public health training.

Overall rating: Good

5.19 Cancer Registry of Norway: Institute of Population-based Cancer Research

The Cancer Registry was established in 1951 and is organised with the Norwegian Radium Hospital in the Southern Norway Regional Health Authority as an independent institution with its own Board and its own Chapter in the national budget. It covers the whole population of Norway and its main goals are registration, research and communication. The institute comprises four research departments: Registration, Screening for cervical and breast cancer, Basic epidemiological research (endogenous factors) plus Screening for colorectal cancer, and Occupational and environmental research (exogenous factors). There are currently 106 employees, including 30 doctors and 5 statisticians, with 9 permanent positions for senior staff above PhD level. The external funding situation is relatively favourable and includes funding from the European Union, the International Agency for Research in Cancer and the National Cancer Institute as well as industrial companies and the National and Nordic Cancer Society. The number of doctorate theses has been steadily increasing, with 25 to be finalised by the summer of 2005.

The databases cover all types of cancer and certain precancerous conditions and are close to 100% complete due to a reliable and mandatory reporting system involving several data sources. The ability to link the cancer registry data with other Norwegian databases offers huge potential for research in many fields, thus the institute has collaborative links with many national and international milieus. Over the last 15 years the institute has taken an increasingly leading role in large studies, e.g. prediction of cancer incidence and mortality, Nordic solid childhood tumour registry, vaccination study against cervical cancer, nickel and carcinogenesis, population-based clinical research and a longstanding activity in occupational research.

The recruitment situation is favourable due to a strong local tradition of regarding research as a core activity. There is concern within the Institute, however, that they will be used as a data-deliverer only, especially in national clinical cancer research related to the organ-specific internal registries and also for the research/funding in competition with experimental and other clinical research. In spite of four professor II positions, the Registry would prefer more formal links to the university system.

Evaluation and recommendations

The work here is of a high standard, with a good publication record, and is highly relevant at both national and international levels. The average age of the researchers is quite high, however, and younger researchers need to be recruited. It may be an option for this group to build on their work in health economics and to move beyond evaluation of screening programs towards other aspects of health services research. Moreover, it would be possible for this institute for population-based cancer research to undertake additional research on cancer prevention.

The work on occupational cancer, while of high quality, would benefit from greater resources for exposure assessment and occupational hygiene, either by recruiting appropriate personnel or in collaboration with the National Institute of Occupational Health.

Overall rating: Very good

5.20 National Institute of Occupational Health (NIOH)

This is a sector-related research institute, which had its beginnings in 1964. Currently, 90% of the budget originates directly from the Ministry of Labour and Government Administration. At the time of this review, there was a proposal from central government to turn the institute into a limited company, a move strongly opposed by the institute itself on the basis of loss of academic freedom and independence.

The primary objective of the institute is to promote healthy conditions at the workplace and to create an understanding of the importance of a good working environment. The institute has a number of functions

- The generation of knowledge and development of methodological approaches
- Providing the authorities with a base for deciding priorities and standards
- A professional link between industry and occupational health research
- Keeping the Norwegian community informed on developments within the occupational health field.

The research activities within the *Departments of Occupational Medicine and Occupational Hygiene* can be divided into 5 main programs: cancer and reproductive effects, respiratory diseases, effects on the nervous system, toxic effects of metals and musculoskeletal disorders/work-related disorders. The permanent staff are multidisciplinary, including 6 physicians, 2 psychologists and 1 occupational hygienist, and is funded internally (50% research, 50% advisory). They publish in all of their five interest areas, and especially in respiratory and neurotoxic fields. The research is based on epidemiological methods, with particular focus on quantitative exposure assessment.

The *Department of Physiology* is involved more in basic research than epidemiology, and is a multidisciplinary group that addresses issues related to the workplace. The group expresses frustration over a general lack of understanding within Norwegian policy-making for their potential contribution in the area of work and health, and would like to see more integration between sources of funding at Ministry level. The research staff comprise 1 professor and a postdoctoral fellow.

Despite the Institute's primary relationship to the Ministry of Labour rather than the Ministry of Health, there is extensive collaboration with other national health research institutions, as well as with national registries, hospitals and industry. The group recognises the need to recruit younger researchers and expresses the lack of local statistical expertise, although they do get support from the Section of Medical Statistics at the University of Oslo. Despite their financial support from industry, there is a strong tradition for independence of the research undertaken.

Evaluation and recommendations

This institute is producing good quality work and has made original contributions in some aspects of their field. They appear to be up-to-date with recent trends in occupational health research, in both wider and narrower aspects.

There are no great incentives at present for the group to publish internationally - greater resources for research would probably alter this situation. Institutes in other Scandinavian countries, the United Kingdom and the United States are placing

increasing value on organisational research; NIOH may wish to expand their own activities relating to the organisation of workplaces and work climate. It is a strength, however, that the institute has maintained its traditional occupational health work, and this should be retained in the event of expansion to other areas.

Occupational health research is an area of high relevance to Norwegian society and the panel recommends that the institute remain government-funded in order to ensure the survival of research in this field.

Overall rating: Very good

Appendix 1. Members of Panel 2: Public health and health services research

Director Finn Kamper-Jørgensen (*Chair*)
National Institute of Public Health
Svanemøllevej 25, 2100 Copenhagen Ø
Denmark

Professor Charli Eriksson
Public Health Science, Department of Caring Sciences
Örebro University
70182 Örebro
Sweden

Professor Barbara Starfield
Johns Hopkins University School of Hygiene and Public Health
Department of Health Policy and Management and Pediatrics
624 N Broadway, 452 Hampton House
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USA

Professor Anders Ahlbom
Karolinska Institute
Institute of Environmental Medicine, IMM
Box 210, 171 77 Stockholm
Sweden

Professor Per Kragh Andersen
Institute of Public Health
Department of Biostatistics
University of Copenhagen, Panum Institute
Blegdamsvej 3, DK-2200 Copenhagen N
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Professor Uffe Juul Jensen
Institute of Philosophy
University of Aarhus
Ndr. Ringgade, 8000 Århus C
Denmark

Professor Mark Richard Cullen
Yale Occupational and Environmental Medicine Program
135 College St. 3rd floor rm# 366
New Haven, CT 0 6510
USA

Professor Anneli Sarvimäki
Age Institute
Kalevankatu 12a, FIN-00100 Helsinki
Finland

Dr Claire Gudex (*Scientific secretary for the panel*)
Hverringevej 9, 5230 Odense M
Denmark

Appendix 2. The criteria used by Panel 2 to assess public health research

Criteria for final ranking:

- International publication in best journals
- International front position
- Originality of research
- Conceptualisation of own research within framework of public health research
- Total publication activity
- Success with academic training
- Relevance and influence of research – internationally, nationally
- Overall impression of research group/institute

Excellent

International front position, undertaking original research and publishing in the best international journals. High productivity. Very positive overall impression of research group/institute and leadership

Very good

High degree of originality, a publication profile with a high degree of international publications in good journals. High productivity and very relevant to international research or to Norwegian society. Very positive overall impression of research group/institute

Good

Contribute to international and national research with good quality research of relevance both to international research development and to Norwegian problem solving. Good balance between international and national publications. Acceptable productivity. Positive overall impression of research group/institute

Fair

The quality of research is acceptable, but international publication profile is modest. Much routine work in design and publication. Relevance and productivity of research is not exciting. No original contributions to research knowledge. Overall impression is positive but with a distinct degree of scepticism from the evaluators

Weak

Research quality is below good standards and the publication profile is meagre. Only occasional international publication. No original research and little relevance to problem solving. No overall positive impression by evaluators

Appendix 3. Evaluation form used by Panel 2 to rate Norwegian public health research institutions

Name of institution _____

CRITERIA	Bottom (Ranking)Top
1. Quality of research	
2. International front position of research	
3. Relevance of research	
a) To Norwegian society	
b) To international research	
4. Exceeds critical mass	
5. Collaboration and contacts	
a) Internationally	
b) Nationally	
Recruitment of researchers	
6. Research education (e.g. PhDs)	
7. Research communication	
a) Publications in international peer-reviewed journals	
b) In Norway	
8. Leadership and management	
Overall evaluation	

Evaluator's name

Appendix 4. Terms of reference

The Research Council of Norway: Evaluation of clinical, epidemiological, public health, health-related and psychological research in Norway

Terms of reference

I. Introduction

The Division of Medicine and Health at the Research Council of Norway has decided to evaluate research activities in clinical, epidemiological, public health, health-related and psychological research in Norwegian universities, university hospitals and relevant research institutes. The reports of the evaluation panels, including an overall summary, will form the basis for the future strategy of the Research Council in this area.

The objective of the evaluation

The objective of this evaluation is to review the overall state of clinical, epidemiological, public health, health-related and psychological research in Norwegian universities, university hospitals and relevant research institutes.

Specifically, the evaluation process will:

- Offer a critical review of the strengths and weaknesses of the above fields, both nationally and at the level of individual research groups and academic departments. The scientific quality of the research will be reviewed in an international context.
- Identify departments which have achieved a high international level in their research, or which have the potential to reach such a level.
- Identify areas of research that need to be strengthened in order to ensure that Norway in the future possesses necessary competence in areas of national importance. A key aspect is to enable the Research Council of Norway to assess the situation regarding recruitment in the above scientific fields.

Further, the evaluation aims to:

- Provide the institutions concerned with the knowledge required to raise their own research standards
- Provide the institutions concerned with feedback regarding the scientific performance of individual departments, as well as suggestions for improvements and priorities
- Improve the knowledge base for strategic decision-making by the Research Council
- Function as a platform for future work on developing clinical, epidemiological, public health, health-related and psychological research
- Represent a basis for determining future priorities, including funding priorities, within and between areas of research.

More generally, the evaluation is designed to reinforce the role of the Research Council as advisor to the Norwegian Government and relevant ministries.

Organisation

Evaluation panels will be established for each of the following subfields:

- Clinical research (clinical medicine, clinical odontology, clinical pharmacology)
- Public health and health services research (public health, epidemiology, psychology, behavioural research, health services research, ethics, health related social science etc.)
- Psychiatry and psychology (clinical psychology, basic psychology)

II. Mandate for the evaluation panels

The panels are requested to make use of the self-assessments provided by the institutions in the evaluation of the overall state of clinical, epidemiological, public health, health-related and psychological research. The panels are requested to write a report with a set of specific recommendations for the future development of the field, including means of improvement when required. The panels are requested to evaluate scientific activities with respect to their quality, relevance and international and national collaboration, bearing in mind the resources available. The panels are further requested to evaluate the way in which clinical research, epidemiology, public health research and health services research and psychology are organised and managed.

The conclusions of the panels should lead to a set of recommendations concerning the future development of clinical, epidemiological, public health, health-related and psychological research in Norway.

1. Scientific quality and relevance

Specific aspects to be considered:

- International position of Norwegian clinical, epidemiological, public health, health-related and psychological research.
- Quality of the departments and appropriateness of their funding.
- Strong and weak areas.
- Relevance of the research.
 - Which fields of research have a strong scientific position in Norway and which have a weak position?
 - Is Norwegian clinical, epidemiological, public health, health-related and psychological research ahead of scientific developments internationally within specific areas?
 - Are the results currently being produced, e.g. number of fellowships awarded and articles published, reasonable in terms of the resources available?
 - Is there a reasonable balance between the various fields of Norwegian clinical, epidemiological, public health, health-related and psychological research?
 - Are research areas absent, over- or underrepresented in any particular field?
 - Is Norwegian clinical, epidemiological, public health, health-related and psychological research being carried out in fields that are regarded as
 - particularly relevant by the international research community?
 - relevant to the needs of the Norwegian society?
 - relevant to the needs of the (Norwegian) health sector?
 - relevant to the needs of Norwegian industry?

2. The institutional situation with regard to:

- **Organisation, academic career structure, scientific leadership, gender and age**
 - Are the academic departments adequately organised and is the size and organisation of the research groups reasonable?
 - Is scientific leadership being exercised in an appropriate way?
 - Do the departments have strategies with specific plans for their research, and are such plans being followed up?
 - How is the career path for young researchers?
 - Does the department face a depletion problem?
 - How is the balance between men and women in academic positions?

- **Graduate and postdoctoral contacts, training and mobility**
 - How are graduates employed after completion of higher degrees?
 - Is recruitment to doctoral training programmes satisfactory, or should greater emphasis be put on recruitment in the future?
 - Is there a satisfactory degree of national and international mobility?
 - How ambitious/demanding is the research culture among young researchers?
- **National and international contacts and collaboration**
 - Is there a reasonable degree of co-operation and division of research activities at national level, or could these aspects be improved?
 - Is there sufficient contact and co-operation among research groups at national and international level?
 - Does the department maintain sufficient contact with the public sector and industry?
 - Is there sufficient co-operation in the use of laboratories, expensive equipment and larger data collections?
 - Do research groups take part in international programmes or use facilities abroad, or could utilisation be improved by introducing special measures?
 - What roles do Norwegian departments/research groups play in international co-operation in individual subfields of clinical, epidemiological, public health, health-related and psychological research?
 - Is there an adequate degree of national and international mobility?
 - How is the collaboration with relevant industry?

3. Financial support

Specific aspects to be considered:

- The general financial situation for clinical, epidemiological, public health, health-related and psychological research
- The balance between positions, projects and equipment
- The review process

4. Interchange of knowledge and technology between clinical practice and industry

5. Specific panel-related issues and questions

Clinical research (clinical medicine, clinical odontology, clinical pharmacology)

- To what extent are conditions provided for combining clinical practice and clinical research?
- How close is the contact and interaction between basic disciplinary research, epidemiology and clinical research?
- How close is the contact and interaction between public health and clinical research?

Public health and health services research (public health, epidemiology, psychology, behavioural research, health services research, ethics, health related social science)

- How close is the contact and interaction between basic disciplinary research, epidemiology and clinical research?
- How close is the contact and interaction between public health and clinical research?
- How close is the contact and interaction between research in this area and the social science research?
- How close is the contact and interaction between research in this area and the health services and other user groups?

Psychology and psychiatry (clinical psychology, clinical psychiatry, basic psychology)

- To what extent are conditions provided for combining clinical practice and clinical research?
- How close is the contact and interaction between basic disciplinary research, epidemiology and clinical research?
- How close is the contact and interaction between psychology and psychiatry research?
- How close is the contact and interaction between psychology and social science research?
- How close is the contact and interaction between psychiatry and somatic medicine?

6. Future developments and needs

7. Miscellaneous

Are there any other important aspects of Norwegian clinical, epidemiological, public health, health-related and psychological research that ought to be given consideration?

Appendix 5. Curriculum vitae for the members of Panel 2

Name: **Anders Ahlbom**

Date of birth: March 11, 1947

Present position: Professor and head, Division of Epidemiology, Institute of Environmental Medicine, Karolinska Institute, Stockholm; Director, Division of Epidemiology, Stockholm County Council

Education

BA from University of Stockholm in 1970 and PhD in Statistics in 1974.

PhD in Social Medicine from Karolinska Institute, 1978.

Associate Professor in Epidemiology (docent), Karolinska Institute, 1980.

Research fields

Epidemiological theory and methods. Environment and life style factors in relation to chronic disease, in particular cancer and cardiovascular disease.

Awards

International Prize for Tumor Prevention, 2002. Italian Association Against Cancer

Membership in academic and professional committees

International expert appointments

1987-1988 Scientific expert, New York State Power Line Projects

1996- Member, International Commission for Non-Ionizing Radiation Protection (ICNIRP)

1996- Chairman, ICNIRPs Epidemiology Standing Committee

2000- Member, Det Læge- og Naturvidenskabelige Udvalg, Danish Cancer Society

2001- Member of the Council of Fellows of the Collegium Ramazzini

Member of committees for appointment of professors in Denmark, Norway, and Finland

Member of European Commission expert groups

Swedish expert appointments

1987-1989 Member of the Toxicology Board

1988-current Scientific advisor, National Board of Health and Welfare

1991-1992 Expert advisor to the Swedish Government Work Environment Commission

1993-current Scientific advisor to National Board of Food Administration

1994- 2003 Member of the Board, National Institute of Psychosocial Medicine

1997-1998 Chairman, Swedish Epidemiological Society

1996-97 Vice chairman, Swedish Society for Work & Environmental Safety (Läkarsällskapet)

2001-current Member, Public Health Priority Committee, FAS

Member of the founding board, Swedish Epidemiological Society

Chairman, Program for Environment and Health, Environmental Protection Board

Member of committees for appointment of professors

Editorial Appointments

1985- 1997 American Journal of Epidemiology, Associate Editor,

1987-1994 Ambio (Journal of the Royal Swedish Academy of Sciences), Consultant

1989-2001 Epidemiology, Editorial board

1995-2000 Journal of Long-Term Effects of Medical Implants, Editorial Advisory Board

Currently:

Scandinavian Journal of Work, Environment & Health, Editorial board (since 1988)

American Journal of Industrial Medicine, International contributing editor (since 1991)

Acta Tropica, Associate editor (since 1996)

European Journal of Epidemiology, Associate editor (since 2000)

Name: **Per Kragh Andersen**

Date of birth: April 26, 1952

Present position: Professor of biostatistics at Department of Biostatistics, Institute of Public Health, University of Copenhagen.

Education

1978 MSc in Statistics

1982 PhD in Mathematical statistics with the thesis "Statistical models for covariates' influence on the intensity of a point process" (in Danish)

1997 Dr. Med. Sci. with the thesis "Multi-state models for event history analysis in clinical medicine and epidemiology" (All degrees from the University of Copenhagen)

Research fields

Quantitative methodology, in particular biostatistics and its application in epidemiological research.

Awards

Elected as member of International Statistical Institute in 1990

Membership in academic and professional committees

Some organizational experience

1985-1989 Member of board, Danish Society for Theoretical Statistics (President 1986-88)

1992-1993 Member of board, Institute for Biostatistics and Theory of Medicine

1996-1997 Member of board, Scandinavian Journal of Statistics

1994-1999 Member of steering group, Danish Epidemiology Science Centre

1981-current Organizer or contributor to several international conferences

1997-current Board member for Diet, Cancer and Health project, Danish Cancer Association

Some evaluative and academic experience

2001-current Member of Biomedical Research Committee, Danish Heart Association

Panel member (2003): Evaluation of Norwegian Public Health Research

Evaluation (1987-current) of 14 doctoral theses in Denmark, Norway, Sweden, Finland and the Netherlands

Evaluation (1992-current) of 10 senior academic positions in Denmark, Norway and Sweden

Editorial Appointments

Referee of papers for statistical and medical journals, and associate editor of several journals:

1990-1997 Scandinavian Journal of Statistics

1990-current Statistical Methods in Medical Research

1992-1996 European Journal of Medicine

1995-current Statistics in Medicine

1999-current Biometrics

2001-current Journal of the National Cancer Institute

Name: **Mark Richard Cullen**

Present position: Head, Section of Occupational and Environmental Medicine, University of Yale, USA.

Education

1971 Undergraduate degree, Harvard

1976 Medical degree, Yale

1980 Specialist in internal medicine and clinical epidemiology, Yale

1993 Professor of Medicine and Public Health

Research fields

During the early years, Dr. Cullen's research focused on current problems in clinical occupational medicine and contributed to the literature on lead poisoning, chronic beryllium disease, asbestosis, glycol ether intoxication, occupational asthma and the emerging problem of multiple chemical sensitivities. Over the past decade, he has extended his work to include larger epidemiological studies, most notably of miners, painters and other groups. A new focus has been on psychosocial aspects of the workplace as causal factors in the pathogenesis of chronic disease.

Membership in academic and professional committees

Dr. Cullen acts as consultant to numerous organizations, including many large corporations and trade unions, and US governmental organizations, including the National Institute for Occupational Safety and Health.

During successive sabbatical leaves beginning in 1988, Dr Cullen has lived and worked in Zimbabwe, Ecuador and South Africa.

In 1997 he was elected to the US Institute of Medicine of the National Academy of Sciences for his contributions in medicine and public health in the US and abroad.

Name: **Charli Eriksson**

Date of birth: September 9, 1948

Present position: Director of Research, Community Medicine, University Hospital, Örebro;
Professor, Public Health, Department of Caring Sciences, University of Örebro (part-time)

Education

1970 BM and 1971 BA from University of Gothenburg

1973 MSc in Psychology and 1977 PhD from University of Gothenburg

1986 Associate Professor in Community Medicine, University of Uppsala

Research fields

My research activity over the years has included a broad range of issues and different aspects of public health such as epidemiology, suicide, self-care, development of primary health care, health problems in a county, evaluation of decentralization of management of health care, primary health care in Kenya, tobacco, nutrition, cancer prevention, alternative medicine, health policy in Costa Rica, HIV/aids prevention, health communication, research policy, evidence-based public health actions, social capital, health impact assessment, healthy cities and competence development for public health.

Membership in academic and professional committees

Some organizational experience

1988-1995 Member, Caring and Prevention Priority group, Swedish Cancer Society

1991-2000 Member of Committees: Individual, health and society / social network, Swedish Council for Planning and Coordination of Research

1993-1999 Board Member, Center for Epidemiology, National Board of Health and Welfare

1995-1997 Member of project group, Community Intervention Programs to Prevent

Cardiovascular Disease, The Swedish Council on Technology Assessment in Health Care

1996-98 Chairman of project group, Smoking Cessation Methods, The Swedish Council on Technology Assessment in Health Care

1996-2000 Swedish member, Management Committee, Europe against cancer

1997-2000 Member of reference group, Swedish Council of Working Life Research

2002-current Member of working group on prevention, Swedish Cancer Society

2002-current Committee Member, Public Health and Caring Science, Swedish Research Council

Some evaluative and academic experience

1991 External evaluator of the Norwegian comprehensive research programme: HEMIL

1994 External evaluator of projects included in funding 1986-1990 by Ministry of Health, Denmark

1997-98 Member of working group developing national research plan for equity in health

1997 Member of review committee for communication research, Linköping University

1998 Member of steering group evaluating three EU public health programmes

2000-current Expert advisor, Community Medicine, County Council Örebro

2001-current Member of Faculty Board, University of Örebro

2001-current Member, Research Ethics Committee, University of Örebro

Evaluation of 6 professorships, 10 PhD dissertations as opponent and 13 as member of committees, and 22 senior research positions in Sweden, Norway and Denmark

Editorial appointments

2001- current Editorial Committee, Scandinavian Journal of Public Health

Participated in 14 planning or scientific committees for conferences and edited or co-edited five international books and six Swedish books from these conferences.

Name: **Uffe Juul Jensen**

Present position: Professor of philosophy in the Department of Philosophy, Aarhus University, Denmark; Director, Research Centre for Health, Humanity and Culture, Aarhus University.

Education

Master's degree in philosophy

Research fields

Professor Juul Jensen's main concerns are related to the analysis and clarification of concepts of health and illness that transcend traditional biomedical concepts, the development of the modern welfare state and public health in an age of globalization, facilitation of change in social practices including health practices, and promotion of social justice.

Uffe Juul Jensen's main fields of research are the philosophy of science and methodology of the health sciences (epistemological problems of epidemiology especially causal analysis); research standards (and standards of quality) in various kinds of health care practice, e.g. disease-oriented practices, situation-oriented practices (e.g. primary care and community-oriented practices); and problems in developing an integrated health-care practice.

His specific research interests are in interdisciplinary health research (especially in the field of prevention, health promotion, rehabilitation and psychiatry) and qualitative research in general; action health research (research concerning the involvement of users e.g. patients, clients and citizens, in health care practice); research concerning the rationing of health care (questions of equity and distributional justice); and methodological problems concerning the relationship between clinical practice and basic medical research e.g. methodological and philosophical problems concerning evidence-based medicine (how to build the bridge between general – experimentally corroborated – hypotheses and decisions concerning the individual patient or particular groups).

Awards

Gold medal for a dissertation (prize paper) on the relationship between psychology and neurophysiology.

Membership in academic and professional committees

For many years he was Head of the Department of Philosophy, Aarhus University, and later became the Director of the Research Centre for Health, Humanity and Culture. He was the initiator of a course on philosophy of medicine for medical students in Denmark and has been a member of various national and international research associations, committees, think tanks, editorial boards etc. especially concerning philosophy and the theory of science in general, and philosophy and the theory of medicine and health practice in particular. He has undertaken research and teaching visits at a number of universities and research institutions in Europe, Australia and the United States.

Name: **Finn Kamper-Jørgensen**

Date of birth: March 25, 1944

Present position: Director, National Institute of Public Health (Statens Institut for Folkesundhed)

Education

1970 MD from University of Copenhagen

1975 PhD in Health economics/social medicine, University of Copenhagen

Research fields

Rather broad over the years. Began with health economics, road traffic accidents and social medicine. Moved towards epidemiology and health services research and health promotion. Lately rather broad public health issues.

Awards

Nordic Public Health Prize 1991

Membership in academic and professional committees

Some organizational experience

1973-1979 Member of the Danish Medical Research Council; chairman of a number of important subgroups developing research, e.g. Primary health care research, Nursing research

1978-1988 Member (vice-chairman) of EU Health Services Research Committee

1978-, Member of Nordic Cooperation Group on Health Services Research, now chairman

Several times organizer and planner of Nordic Health Policy Forum

1988-1991 WHO Regional Office for Europe: European Advisory Committee on Health Research

1984-1996, Chairman (certain periods), National Health Technology Assessment Committee, National Board of Health

1997-2001 Chairman, Council of the Institute for Health Technology Assessment

Member of the 'Koncern-leadership-group', Ministry of Health, Denmark

Some evaluative and academic experience

External evaluator of The Swedish Council for Health Technology Assessment

External evaluator of the Norwegian comprehensive research program: HEMIL

Chairman of external evaluation group of Swedish Institute SPRI (twice)

Chairman of steering group evaluating Swedish medical education

Member of steering group evaluating Danish Medical Education

Chairman of external evaluation group of Swedish National Institute of Public Health

Evaluation of at least 3 professorships, 15 PhD dissertations and 10 senior research positions in Denmark, Norway and Sweden

Chairman (2003): Evaluation of Norwegian public health research

Chairman (2003): Evaluation of Swedish working life research and public health research

Editorial appointments

1971-1978 Scientific co-editor, Ugeskrift for Læger (Danish Medical Journal)

1996-current Editorial Board, Danish Medical Bulletin

2000-current Co-editor, Scandinavian Journal of Public Health

Occasional peer reviewer for at least 10 international scientific journals within epidemiology, health services research and health promotion; peer reviewer for Nordic research councils and institutes.

Name: **Anneli Sarvimäki**

Date of birth: 19.12.1947

Present position: Research Director, Age Institute, Helsinki, Finland; Adjunct professor, Nordic School of Public Health, Gothenburg, Sweden.

Education

1974 Master of Arts (education), University of Helsinki

1979 Nurse, Helsinki Swedish College of Health Care

1980 Nurse specialist (psychiatric nursing), Helsinki Swedish College of Health Care

1986 Licentiate of philosophy (philosophy), University of Helsinki

1988 Doctoral Dissertation (PhD, education), University of Helsinki

Research fields

Anneli Sarvimäki has been doing research on ethical, epistemological and conceptual issues in nursing and other health sciences for 20 years. She is the co-writer of the first book on nursing ethics in Finland, published 1985. The 7th edition was published in 2002. Her empirical research, using both qualitative and quantitative methods, encompasses projects on the development of the nursing discipline, quality of life related to chronic pain and ageing, quality and care culture in the care of the elderly, and ageing in ethnic minority groups. Professor Sarvimäki is currently directing a research project entitled “Ageing between two cultures”, funded by the Academy of Finland. She collaborates with researchers in Sweden and is involved in networks with researchers in Canada, the United States and the United Kingdom, where she has also been invited as guest lecturer.

Awards

Venny Snellman Scholarship 1993.

Membership in academic and professional committees

Anneli Sarvimäki has written about 160 publications and delivered keynote and paper presentations at numerous national, Nordic and international conferences. She reviews manuscripts for several international nursing journals and is a member of the international board of Nursing Inquiry and Journal of Nursing Philosophy, as well as board member for the Finnish journal Gerontologia. Professor Sarvimäki was a member of the Finnish National Committee for Health Care Ethics during its first period 1998-2002.

Name: **Barbara Starfield**

Present position: University Distinguished Service Professor with appointments in the Departments of Health Policy and Management and Pediatrics at the Johns Hopkins University Schools of Public Health and Medicine; Director of the Johns Hopkins University Primary Care Policy Center.

Education

BA degree, Swarthmore College

MD degree from the State University of New York (Health Sciences Center in Brooklyn)

MPH degree from the Johns Hopkins University.

Fellow of the American Academy of Pediatrics and a member of the Institute of Medicine.

Research fields

Dr. Starfield's overriding concerns are understanding the impact of health services on health, especially with regard to the relative contributions of primary care and specialty care on reducing inequities in health. Her focus is both on clinical care and on services to populations as well as the inter-relationships between the two.

Dr. Starfield's specific research interests are in primary care measurement, the relationship between the processes and outcomes of health care, quality of care, health status measurement (particularly for adolescents and children), and child health policy. In her book, 'Effectiveness of Medical Care: Validating Clinical Wisdom' she discusses the impact of access to care on children's health, with a main focus on the problems of access for low-income children and the effect of the Medicaid program on access and health. A second book, 'Primary Care: Concept, Evaluation, and Policy' (1992) relates to the impact of primary care within a health services system and describes an approach for examining the extent of primary care in populations and in clinical facilities. A third book, 'Primary Care: Balancing Health Needs, Services, and Technology' (1988) describes innovative methods to evaluate the attainment and contributions of primary systems and practitioners. It complements the earlier book by highlighting two additional areas: equity in health services and health, and overlap between clinical medicine and public health.

Awards

She is the recipient of numerous national awards, most recently including the first Pew Primary Care Research Award (1994), the Distinguished Investigator Award of the Association for Health Services Research (1995) and the American Public Health Association's Martha May Eliot Award (1995). Dr. Starfield was named an Honorary Fellow of the Royal College of General Practitioners (UK) in 2000 and received the Ambulatory Pediatric Association's Lifetime Achievement Award in 2002.

Membership in academic and professional committees

Co-founder and first President of the International Society for Equity in Health, a scientific society devoted to contributing knowledge to assist in the furtherance of equity in the distribution of health.

Appendix 6. Initial letter sent from Research Council to each institution under evaluation

Til adressaten
se vedlagte adresseliste

Vår saksbehandler/telefon

Vår ref.

Oslo,
01.11.02

Deres ref.

Fagevaluering av forskning innenfor de kliniske fagene, de samfunnsmedisinske fagene, helsefagene og psykologi – informasjonsmøte

Områdestyret for Medisin og helse (MH) har besluttet å følge opp evalueringen av grunnleggende biofaglig forskning (2000) med evaluering av forskningen innenfor de øvrige fagområdene som MH har ansvar for, dvs. kliniske fag, samfunnsmedisinske fag, helsefag og psykologi. Det vil bli lagt stor vekt på å få til en god prosess hvor dialog med forskningsmiljøene skal stå sentralt. Vi vil derfor avholde et **informasjonsmøte torsdag 12.desember 2002** og vi ber dere om å holde av denne dagen

Bakgrunn og hensikt

Evalueringen vil omfatte forskning ved universitetene, universitetssykehusene og –klinikkene samt sentrale forskningsinstitutter utenfor universitetssektoren. Enheter og forskergrupper som ble evaluert i biofagevalueringen skal naturligvis ikke evalueres på nytt.

Hensikten med evalueringen er å:

- Styrke grunnlaget for forskningspolitiske råd til regjeringen og berørte departementer.
- Bedre plattformen for forskningsstrategiske beslutninger både i Forskningsrådet og i forskningsmiljøene selv.
- Få råd om tiltak som kan gi økt kvalitet og effektivitet innen klinisk-, samfunnsmedisinsk-, helsefaglig- og psykologisk forskning.

Se vedlagte utkast til mandat for evalueringen.

Forslag til panelmedlemmer

Evalueringen vil bli gjennomført ved hjelp av tre evalueringspanel:

Panel 1: Klinisk forskning (klinisk medisin, klinisk odontologi, klinisk farmasi/farmakologi)

Panel 2: Samfunnsmedisinsk- og helsefaglig forskning (samfunnsmedisin, epidemiologi, atferdsforskning, helsetjenesteforskning, etikk, helserelatert samfunnsforskning)

Panel 3: Psykologi og psykiatri (klinisk psykologi, klinisk psykiatri og basal psykologi)

Panelene vil bli satt sammen av internasjonalt anerkjente fageksperter som til sammen har kompetanse innen de ulike delene av de tre fagområdene.

Dere inviteres med dette til å foreslå fageksperter til panelene. **Forslagene sendes rådgiver Berit Nygaard raskest mulig og senest innen 29. november 2002.** Ekspertene må være internasjonalt anerkjente forskere, både kvinner og menn, som er habile i forhold til de norske fagmiljøene. Forslaget til eksperter må inneholde navn, adresse og en kort beskrivelse av aktuelt forskningsområde/er. Det er en fordel med kandidater som dekker flere kompetanseområder. Presiser gjerne om noen av de foreslåtte også er egnet til å lede det aktuelle panelet.

Plan for evalueringen - Egenvurderinger fra instituttene

Panelene vil basere sine vurderinger og anbefalinger på egenvurderinger fra instituttene, på CVer og publikasjonslister for de vitenskapelig ansatte og på møter (intervjuer) med representanter fra fagmiljøene.

Egenvurderingene utgjør viktig grunnleggende informasjon for fagekspertene. Høy kvalitet på dette materialet, inklusive CVer og publikasjonslister fra det vitenskapelige personalet, vil derfor ha stor betydning for evalueringens samlede kvalitet. Evalueringen er avgrenset til å omfatte følgende vitenskapelige stillinger: professor I, 1.amanuensis, postdok. og professor II. Brev med nærmere orientering om egenvurderingen og beskrivelse av hva den skal inneholde av informasjon, vil bli sendt miljøene i slutten av november. Frist for innsendelse av egenvurderingene vil etter planen bli siste halvdel av februar 2003.

Ekspertenes møter med fagmiljøene (høringer) vil finne sted våren/forsommeren 2003. Evalueringen avsluttes med rapporter fra panelene som forventes å foreligge innen utgangen av 2003. I tillegg har vi diskutert om det også vil være nyttig å få utarbeidet en overordnet rapport hvor det settes fokus på felles vurderinger og anbefalinger for hele området klinisk-, samfunnsmedisinsk-, helsefaglig- og psykologisk forskning.

Informasjonsmøte

Forskningsrådet inviterer til felles møte for instituttleder og andre aktuelle aktører **torsdag 12.desember kl. 1030 – 1400 på Radisson SAS Plaza Hotel i Oslo**. Hensikten med møtet er å informere om evalueringen og å drøfte aktuelle spørsmål med instituttene. Invitasjon til møtet med angivelse av maksimalt antall deltakere, vil bli sendt i løpet av uke 48.

Kontaktpersoner

Spørsmål i tilknytning til evalueringen kan rettes til:

- Rådgiver Berit Nygaard (kliniske fag), Området for medisin og helse, telf. 22037174, e-post: bn@forskningsradet.no
- Rådgiver Arthur Aamodt (samfunnsmedisin/helsetjeneste), Området for medisin og helse, telf. 22037084, e-post: aam@forskningsradet.no
- Prosjektleder Malena Bakkevold, telf. 64972872/95750533, e-post: post@ malena.no

Med vennlig hilsen

Norges forskningsråd

Hans M Borchgrevink
Direktør
Medisin og helse

Gro E M Helgesen
Avdelingssjef
Medisin og helse

Vedlegg:

- Utkast til mandat for evalueringen
- Adresseliste

Appendix 7. Follow-up letter sent from Research Council to each institution under evaluation

Fagevaluering av klinisk, epidemiologisk, samfunnsmedisinsk, helsefaglig og psykologisk forskning – Timeplan og retningslinjer for høringsmøtene

Vi viser til kontakt per brev og e-post om evalueringen og tidspunkt for høringsmøtene.

Vedlagt følger timeplan for instituttene/enhetenes møter med panel 2 . Det enkelte institutt/enhet må selv gå inn i timeplanen og sjekke aktuelt tidspunkt for oppmøte. Høringene finner som kjent sted i uke 25, dvs. fra mandag 16 juni til og med fredag 20 juni.

For å oppnå likebehandling forutsettes det at timeplanen holdes av alle parter.

Informasjon og inntrykk fra høringsmøtene må betraktes som tilleggsinformasjon til det materialet som allerede er innsendt fra instituttene/enhetene og som utgjør hovedmaterialet for evalueringen.

Forberedelser

Hvert høringsmøte vil ha en todelt oppbygging med innledning/presentasjon fra det aktuelle instituttet/enheten og påfølgende spørsmål fra panelet.

Panelet er godt kjent med det innsendte materialet. Punkt 6 i egenvurderingen er omtale av instituttets/enhetens sterke og svake sider. Leder av panelet ønsker at presentasjonen især konsentreres om dette punktet, samt at sterke/svake sider i tillegg ses i et framtidsperspektiv. En slik analyse går under betegnelsen SWOT-analyse hvor akronymet står for "Strengths" (styrke), "Weaknesses" (svakhet) - i dag - og "Opportunities" (muligheter) og "Threats" (trusler) - i framtiden. Vi er oppmerksomme på at framtidsperspektivet har en naturlig kobling til både nåtid og fortid. Hvilke forskningsincitamenter er viktige? Gjør framstillingen så konkret og oversiktlig som mulig – **og husk at den skal være på engelsk.**

Forholdet mellom innledning og høring skal være i størrelsesorden 20 – 80. Konkret betyr dette at dersom et institutt/enhet står oppført med 1,5 time i timeplanen så skal innledningen (SWOT-analysen) utgjøre maksimalt 18 minutter av møtet. For å sikre tilstrekkelig tid til spørsmålsstilling forbeholder panelet seg retten til å avbryte innleiderne dersom de går ut over den skisserte tidsrammen.

Vi anbefaler at innleiderne benytter lysark slik at informasjonen kommer tydelig fram. Ta med 10 kopier av presentasjonen (**på engelsk**) slik at denne er tilgjengelig for panelet i det videre arbeidet.

Deltakelse

Det er nødvendig å begrense antallet deltakere under høringsmøtene. Maksimalt antall deltakere fra deres institutt/enhet er satt til 'x' personer. Forskningsrådet dekker reiseutgifter (ikke kost og overnatting) for inntil 'x' deltakere. Høringsmøtene for de største instituttene/enhetene vil gå over flere timer. Instituttet/enheten bestemmer selv om deres representanter skal delta under hele høringsmøtet eller om de skal komme til ulike tidspunkt.

Vi ber om at liste over instituttets/enhetens representanter med navn og tittel sendes Arthur Aamodt per e-post senest innen tirsdag 10 juni, se adresse nedenfor.

Alle intervjuer finner sted på Radisson SAS Scandinavia Hotel (Holbergsgate 30, 0166 Oslo, tlf 23 29 35 53) som ligger nær Nationalteateret stasjon (fly-tog og T-bane).

Generelle spørsmål i tilknytning til høringsmøtene rettes til:

Rådgiver Arthur Aamodt, tlf 22 03 70 84, e-post: aam@forskningsradet.no

Prosjektleder Malena Bakkevold, tlf 64 97 28 72, mobil 95 75 05 33, e-post: post@malena.no

Praktiske spørsmål rettes til:

Prosjektsekretær Vibeke Natalie Torp, tlf 22 03 74 98, e-post: vnt@forskningsradet.no

Panel 2 ser sammen med Forskningsrådet fram til en viktig og hektisk uke og takker for arbeidet som blir lagt ned i denne forbindelse fra instituttenes/enhetenes side.

Med vennlig hilsen
Norges forskningsråd

Gro E M Helgesen
Avdelingssjef
Medisin og helse

Arthur Aamodt
Rådgiver
Medisin og helse

Vedlegg

Timeplan for panel 2

Kopi: Fakultetsledelsen

Appendix 8. Time schedule for Panel 2

Date	Time	Institution/department
Mon		
16 June	0900 – 0930	Panel's half hour
2003		Norwegian Institute of Science and Technology (NTNU), Faculty of Medicine
	0930 - 0945	Presentation of the faculty
	0945 - 1045	<i>Institute of Community Medicine and General Practice (ISM)</i>
	1045 - 1100	Break
	1100 - 1200	<i>Continuing – Institute of Community Medicine and General Practice</i>
	1200 - 1300	Lunch
		University of Oslo, Faculty of Dentistry, Institute of Clinical Dentistry
	1300 - 1315	Presentation of the faculty / institute
	1315 - 1345	<i>Sector for Community Dentistry</i>
	1345 - 1400	Break
		University of Bergen, Faculty of Dentistry
	1400 - 1415	Presentation of the faculty
	1415 - 1445	<i>Department of Odontology, Community Dentistry</i>
	1445 - 1500	Break
		University of Bergen, Faculty of Psychology
	1500 - 1515	Presentation of the faculty
	1515 - 1600	<i>Research Centre for Health Promotion (HEMIL)</i>

Date	Time	Institution/department
Tue		
17 June		University of Oslo, Faculty of Medicine
	0900 - 0915	Presentation of the faculty
	0915 - 1045	<i>Department of General Practice and Community Medicine</i>
	1045 - 1100	Break
	1100 - 1215	<i>Continuing - Department of General Practice and Community Medicine</i>
	1215 - 1315	Lunch
	1315 - 1415	<i>Department group of Basic medical Science/Section of Medical Statistics</i>
	1415 - 1430	Break
	1430 - 1515	<i>Department group of Basic medical Science/Department of Behavioural Sciences in Medicine (also assessed by panel 3). Only section 2.2.1 and 2.2.3</i>
	1515 - 1530	Break
	1530 - 1615	<i>Section for Health Science</i>
	1615 - 1630	Break
	1630 - 1715	<i>Institute of Nursing Science</i>
	1715 - 1730	Break
	1730 - 1800	<i>Center for Medical Ethics</i>

Date	Time	Institution/department
Wed		
18 June	0900 - 1015	Norwegian Institute of Public Health (NIPH)
	1015 - 1030	Break
	1030 - 1230	<i>Continuing - Norwegian Institute of Public Health</i>
	1230 - 1330	Lunch
	1330 - 1430	The Cancer Registry in Norway <i>Institute of Population-based Cancer research</i>
	1430 - 1445	Break
	1445 - 1545	National Institute of Occupational Health (NIOH) <i>Department of Occupational Medicine/Department of Occupational Hygiene/ Department of Physiology</i>
	1545 - 1600	Break
	1600 - 1700	Norwegian Social Research (NOVA)
	1700 - 1730	<i>Panel's half hour</i>
	1900	Dinner

Date	Time	Institution/department
Thu		
19 June		University of Oslo, Faculty of Mathematics and Natural Sciences, Institute of Pharmacy
	0900 - 0915	Presentation of the faculty /institute
	0915 - 0945	<i>School of Pharmacy</i>
	0945 - 1000	Break
		University of Tromsø, Faculty of medicine
	1000 - 1015	Presentation of the faculty
	1015 - 1130	<i>Department of Social Pharmacy</i>
	1130 - 1145	Break
	1145 - 1230	<i>Department of Nursing and Health Sciences</i>
	1230 - 1330	Lunch
	1330 - 1500	<i>Institute of Community medicine</i>
	1500 - 1515	Break
	1515 - 1645	<i>Continuing - Institute of Community medicine</i>

Date	Time	Institution/department
Fri		
20 June		
		University of Bergen, Faculty of Medicine
	0900 - 0915	Presentation of the faculty
	0915 - 1030	<i>Department of Public Health and Primary Health Care</i>
	1030 - 1045	Break
	1045 - 1200	<i>Continuing – Department of Public Health and Primary Health Care</i>
	1200 - 1300	Lunch
	1300 - 1345	<i>Centre for International Health (CIH)</i>
	1345 - 1400	Break
	1400 - 1500	Summing up before departure