
Executive summary

Health Council of the Netherlands. Research that makes you better.
A new orientation for umc research. The Hague: Health Council of the Netherlands, 2016; publication no. 2016/14.

Dutch university medical centres (umcs) are some of the best in the world in the field of academic science. Thanks to the close interconnectedness between patient care, science, education and training, the umcs are able to make a valuable contribution to healthcare innovation. The Minister of Health, Welfare and Sport (VWS) has asked the Health Council of the Netherlands to advise on how the research by the umcs can be linked up more effectively with current societal challenges and can make a greater contribution to the quality and affordability of prevention and healthcare (in other words become more responsive). The that drew up this advice carried out a literature study and talked to managers and researchers at umcs and numerous other interested parties such as patient organisations, healthcare insurers and health funds.

Shift in patient care detrimental for broad research function

More and more ‘ordinary’ patients are not treated at umcs but at non-university hospitals. As a consequence of healthcare insurers’ procurement policy, patient care at the umcs is focusing more on ‘complex’ or ‘specialised referral’ patients. As a result the research portfolio is also starting to concentrate more on specialised referral patients and no longer automatically aligns with the challenges in the healthcare sector, such as affordability and quality of ordinary (high-volume) patient care.

Government policy in recent years has focused on a shift from intramural care (healthcare in a hospital) to extramural care (for example nursing at home). In 2030 a quarter of the population will be older than 65 and the expectation is that approximately seven million people will be suffering from a chronic illness. Ageing and the increased focus on self-reliance and participation mean that more attention needs to be paid to care and prevention. For the time being these developments are only marginally reflected in the research performed at umcs. Their main focus is on fundamental medical-biological, translational and medical-specialist (curative-oriented) research and less on research into common diseases, keeping the population healthy for longer and coping with impairments.

Broad cooperation required

Research that links up with current issues requires structural cooperation with, among others, healthcare providers, research and knowledge institutes, local authorities and patient organisations. Cooperation is necessary in order to formulate research questions which are relevant to practice, to reach the necessary research populations in order to answer those research questions and to ensure that the acquired knowledge is implemented in practice. There are examples which show that such forms of cooperation produce results, such as the research agenda of the Ear-Nose-Throat Specialist Association [Keel-Neus-Oorheelkunde vereniging], the cooperation between umcs and other teaching hospitals (the Top Clinical Teaching Hospitals Partnership [Samenwerkende Topklinische opleidingsziekenhuizen], the Academic Public Health Workshops [Academische Werkplaatsen Publieke Gezondheid] and the general medical practice networks [netwerken huisartsengeneeskunde]. In practice, however, umcs often only participate insofar as additional financing and PhD premiums make such participation possible. In this way there is no structural influence on the research agenda.

Financing does not stimulate responsive research

The way in which the financing of umc research is structured is not conducive to a development towards more responsive research. The distribution of government funds for research within umcs is largely based on a system that came into being decades ago. Umcs are increasingly structuring their research on themes which they have traditionally scored well on and/or which have a focus on patient care. Research into care and prevention is receiving relatively low levels of structural financing compared to the medical disciplines and basic

scientific issues. There is an under-representation at the umcs of academic chairs oriented around care and prevention. What is more, these are often endowed chairs.

The funds for research that the umcs receive from the government largely comes from the Ministry of Education, Culture and Science (OCW). This ministry does not impose requirements on the use of these funds for particular research, based on the idea that it is best for umcs to make their choices themselves. A lot of government funding is used by umcs to match externally acquired research funding (subsidy providers often finance only part of the costs for research and the other costs have to be covered by government funds). The research funds that come (via ZonMw) from the Ministry of VWS are, however, distributed on the basis of goals formulated by the Minister of VWS. The problem is that this budget has been drastically reduced in recent years.

Research funding is increasingly distributed within umcs on the basis of performance-related financing. This involves assessments of the functioning of departments and individual researchers largely on the basis of bibliometric data such as citation scores, despite increased criticism of this in recent years. Such scores are also used to set up tenure tracks or to appoint principal investigators, senior university lecturers and professors. This can result in an underappreciation of specialist fields in which publications in journals with a high impact factor are less usual or realistic. It has turned out to be difficult to include the ‘relevance’ of research as a factor in performance-related financing because that aspect cannot easily be expressed numerically. In addition, the assessment of quality often focuses on individual researchers and this may be detrimental to collaboration and makes it more difficult to gain an overview of the strategy of a research group or institution.

Desired future scenario: broadening of research and cooperation

The Committee has outlined a future scenario for the umcs and their research and innovation function. Its preferred scenario is one in which the umc partially continues to focus on the entire chain from basic to applied medical-specialist research, while also developing more strongly into an academic motor for research and innovation for care and prevention across the board, accompanied by a strong regional (and in the case of certain issues national) function. Research into quality and effectiveness of healthcare and prevention would also receive a great deal of attention. Among other things, burden of disease, costs of healthcare and prevalence all help to determine the choices made with regard to the research portfolio. With this in mind, umcs are going to invest manpower and

their (government) funds into their cooperation with all providers of intramural and extramural care and prevention in the region, with patients, local authorities, local health authorities (GGDs), universities of applied science and other public research and knowledge institutes such as the Netherlands Institute for Health Services Research (NIVEL), the Netherlands Organization for Applied Scientific Research (TNO), the Netherlands Institute of Mental Health and Addiction (Trimbos Institute) and the National Institute for Public Health and the Environment (RIVM). This allows relevant issues to be addressed and results to be properly applied in the practice of healthcare and prevention. This scenario implies a sharp change to the path currently being followed. Investments from the Minister of VWS are needed to raise the broader contribution to quality and affordability of care and prevention to a high level. Without that support, the umcs will keep the focus on their specialised referral function because of the influence of financial incentives from the healthcare system and the influence of the international scientific competition.

In order to turn this scenario into a reality, the Committee advises the Minister of VWS to hold discussions with healthcare insurers, health funds, the Association of Netherlands Municipalities (VNG) and the Ministry of SZW to draw up an agenda for research in sustainable partnerships/workshops by umcs together with professionals in the domains of healthcare, prevention and care. The Committee recommends that the Minister of VWS invests in a long-term R&D fund for the desired research and convinces all the parties involved to make a financial contribution. The fund in question can be managed by ZonMw. A contribution to the fund by healthcare insurers, the Association of Netherlands Municipalities [Vereniging van Nederlandse Gemeenten] (VNG) and the Ministry of SZW would appear to be obvious given their interest in high-quality research into improving quality and efficiency of care and support (in the neighbourhood), long-term employability and prevention.

Umcs will be able to use these resources, among other things, to invest more structurally and intensively in partnerships and workshops so that knowledge produced in practice is actually usable and is applied. Facilitating dual appointments – that is people who partially work at the umc and partially in practice – will help in this respect. It is also a good idea to involve interested parties such as patient associations, professional scientific organisations, health funds, regional providers of care and prevention, healthcare insurers and local authorities in the prioritisation, execution and assessment of research. The Committee also recommends using multidisciplinary assessment panels to assess

research(ers) as regards scientific quality and contribution to societal goals. The use of a portfolio will encourage a more qualitative assessment of research, with scientometrics playing no more than a supportive role. In addition, there should be more of a focus on research groups, alongside the assessment of individuals. The Committee also recommends that space be created for more diversity in dissertations, that investments are made in a thorough and broad training for PhD students and that steps are taken to ensure that they are spread properly across curative hospital healthcare, care and prevention. Currently a lot more students are obtaining PhDs in the field of curative hospital healthcare than in care, prevention and primary care.

Investing in improving research quality

The Committee endorses the recommendations expressed in a series of articles in the medical journal 'The Lancet' (Research: increasing value, reducing waste), which reveal problems in biomedical research worldwide as regards design, conduct, accessibility and reporting. A great many improvements can still be made in the research by the umcs, even though it is highly regarded at international level. This all begins with research questions which are relevant to knowledge users. The availability of methodological expertise for researchers is also important. To this end the Committee recommends that a methodological helpdesk be set up to encourage researchers to involve statisticians, epidemiologists, publication officers and other methodology experts at an early stage. Guidelines on the contribution of these experts to methodology on the design and conduct of research must be recorded in quality manuals or websites for research. In addition, improvements need to be made to the accessibility of research data. This is necessary to enable a critical assessment of research results. The Netherlands Federation of University Medical Centres (Nederlandse Federatie van Universitair Medische Centra) (NFU) should continue developing recent initiatives such as the Data4lifesciences programme and the Dutch Health Research Infrastructure to also allow access to research protocols, analysis plans and analyses that have actually been carried out. Research into practical issues, including the issues which the Minister of VWS wants to be addressed, warrants other research designs than the usual quantitative designs. The Committee recommends that more space be created for qualitative and mixed quantitative and qualitative methods which do justice to the complex outside world. This requires cooperation with other disciplines such as economics and behavioural sciences and an investment in creative research designs which link up with practical issues related to healthcare and prevention.
