



Research Assessment 2011

# Nijmegen Centre for Evidence Based Practice

Radboud University Nijmegen



**Research Assessment 2011**

**Nijmegen Centre for Evidence  
Based Practice (NCEBP)**

**Cover photo**

Image provided by Radboud University Medical Centre

**Graphic design**

Nies en Partners bno, Nijmegen

**Print**

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# 1 Introduction

## 1.1 The Netherlands System of Quality Assessment of Research

This quality assessment of research is part of the assessment system for all public Dutch university research, as organised by the universities in the Netherlands.

- The aims of the assessment system are to:
  - improve research quality based on an external peer review, including scientific and societal relevance of research, research policy and research management.
- ensure accountability to the board of the research organisation, and towards funding agencies, government and society at large

The assessment is of both research institutes and research programmes. The research institutes submit a description of the results that have been achieved by all contributing research programmes during the previous six years (including quantitative data about staff input, PhD's, publications, financial resources), a short outline of the mission of the institute, the objective of each individual programme, and developments anticipated in the context of the research profile of the faculty or institute. Two important elements of the assessments are the interviews, which the Evaluation Committee conducts with the management team and the programme directors, and the visit to the facilities.

This evaluation of the Nijmegen Centre for Evidence Based Practice was commissioned by the Executive Board of Radboud University Nijmegen.

## 1.2 The Evaluation Committee

The Evaluation Committee was appointed in November 2011 and consisted of:

- Professor Dr J.A. Knottnerus (chair), Maastricht University, School for Public Health and Primary Care, Maastricht, the Netherlands.
- Professor Dr Med. H.W. Hense, Universität Münster, Institut für Epidemiologie und Sozialmedizin, Münster, Germany.
- Professor Dr S.J. Morley, University of Leeds, Leeds Institute of Health Sciences, Leeds, United Kingdom.
- Professor Dr M.O. Roland, University of Cambridge, Cambridge Centre for Health Services Unit, Institute of Public Health, Cambridge, United Kingdom.
- Professor Dr D. T. Wade, Oxford Centre for Enablement, Oxford, United Kingdom.

Mr. M. Evenblij, independent scientific journalist, Amsterdam, the Netherlands, was appointed secretary to the Evaluation Committee.

A short curriculum vitae of each of the members is included in Appendix 1.

### **Independence**

All members of the Committee signed a statement of independence to ensure that they would judge without bias, personal preference or personal interest, and that their judgment was made without undue influence from the institute, the programme or other stakeholders.

### **1.3 Scope of the Assessment**

This assessment covers the research of the Nijmegen Centre for Evidence Based Practice. The period of assessment was 2005-2010, and recent developments were taken into account as much as possible. The Committee was asked to operate according to the *Standard Evaluation Protocol 2009-2015 for Public Research Universities*. This Protocol specifies the criteria for the assessment and the information that must be provided to the Committee.

### **1.4 Data provided to the Committee**

The Evaluation Committee received a detailed self-evaluation report provided by the Nijmegen Centre for Evidence Based Practice. For each programme, four or five key publications were specified in the report. A database of all publications of the institute from 2005-2010 was available for the Committee. In addition, the Committee was provided with a database of application forms for the Radboud University Medical Centre (RUMC) of all professors, principal investigators and theme coordinators, indicating their scientific track records. A set of information on the management activities of the institute was given to the Committee at the start of the assessments. On its request, the Committee was provided with a list of ten key-publications selected by each research programme.

### **1.5 Procedures followed by the Committee**

The Committee members all read the Self Evaluation Report. The interviews took place during the site visit from 23rd to 25th November 2011. The Committee had an opportunity to inspect some of the laboratory and clinical facilities and had discussions with the Rector Magnificus of the University, the faculty Dean Dean and the Executive Board of the Nijmegen Centre for Evidence Based Practice, senior researchers, PhD students, and post-doctoral researchers. The programme of the site visit is included in Appendix 2.

At the welcome meeting in Nijmegen, the Committee had the opportunity to meet with the Dean of the Faculty Board and representatives of the Nijmegen Centre for Evidence Based Practice Management.

During a closed meeting on the evening of 23rd November 2011, preceding the site visit for the institute as well as for each programme, the Committee identified areas that they would actively explore in the meetings with the institute and the programmes.

The Committee also agreed upon procedural matters and aspects of the assessment as described in the following paragraphs.

The interviews with the Management Team and Programme Leaders took place during the site visits on 24th and 25th November 2011. All interviews and discussions were conducted with the plenary Committee. A tour of the campus was conducted on the first day of the visit.

After the interviews, at the end of the first day on 24th November 2011, the Committee briefly discussed the comments for the institute and for each programme, to reach general conclusions. At this session, the Committee also discussed the scores for the various aspects of the performance of the institute and the programmes.

On the second day of the site visit the Committee discussed the results for each programme as well as for the institute to prepare this report. Afterwards a meeting with the, representatives of the University, the Faculty Board and the Management was arranged, in which the main findings of the Committee were presented. Professor Roland was absent on this last day, but he was later involved in the email feedback in preparing the final report.

The report was subsequently submitted to the Executive Board of Radboud University.

## 1.6 Aspects and Assessment Scale

The Protocol requires the Evaluation Committee to assess the research on the four main criteria of the *Standard Evaluation Protocol*:

- Quality (the standard of the research conducted)
- Productivity (relationship between input and output)
- Societal relevance (social, economic and cultural impact of the research)
- Vitality and feasibility (flexibility, management and leadership)

The ratings used are: Excellent (5); Very good (4); Good (3); Satisfactory (2); Unsatisfactory (1). This five-point scale used in the assessment is described in the *Standard Evaluation Protocol* as follows:

Excellent (5)	Research is world leading. Researchers are working at the forefront of their field internationally and their research had an important and substantial impact in the field.
Very Good (4)	Research is internationally competitive and makes a significant contribution to the field. Research is considered nationally leading.



Good (3)	Work is competitive at the national level and will probably make a valuable contribution in the international field. Research is considered internationally visible.
Satisfactory (2)	Work adds to our understanding and is solid, but not exciting. Research is nationally visible.
Unsatisfactory (1)	Work that is neither solid nor exciting, flawed in the scientific and or technical approach, repetitions of other work, etc.

## 1.7 **Comments on the process and the provided information**

The Committee highly appreciated the open discussions during the sessions with the management team of the Nijmegen Centre for Evidence Based Practice, the programme and group leaders, the PhD Training and Supervision Committee and the PhD students and post-doctoral staff. The Committee was pleasantly surprised by the compactness and the readability of the self-evaluation report of the institute. In particular they appreciated the critically reflective SWOT-analyses that had been developed.

However, the committee would like to suggest some improvements that should make the next assessment even easier.

Sometimes the committee felt that the provided information was too compact, especially the list of scientific publications. The Committee noticed a discrepancy between the core goals of the institute and the presented key publications. The Committee suggests giving 10-15 top publications per programme or theme, and it also suggests distinguishing between publications that represent the core interests of a group and those that have the highest academic impact factors.

In some places, the information in the self-evaluation report presented too many single highlights and bits of information instead of the result of a process of reflection of how to present the results of six years research in a way that considers the various objectives of the institute and facilitates the comparison of the different programmes.

Finally the Committee noted that there also seemed to be an imbalance in the number of pages spent on the different programmes and noted that some SWOTs were more informative than others. Before final publication, the Committee would suggest an editorial and content review of the whole document to ensure consistency and balance.

## 2 Assessment of the Nijmegen Centre for Evidence Based Practice

### Nijmegen Centre for Evidence Based Practice

Director of the institute:	Professor Dr Paul Smits
Academic staff in 2010:	197.80 (298.12 incl. PhD)
Assessment of the institute:	Quality : 5
	Productivity : 5
	Societal Relevance : 5
	Vitality and feasibility : 4

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### 2.1 Mission, goals and research activities

'Science for care, care for science' summarises the ambitions of the Nijmegen Centre for Evidence Based Practice (NCEBP). The institute conducts population-based research into the prevention and treatment of human diseases, the results of which can be swiftly applied to practice. Within this field, NCEBP endeavours to achieve national and international excellence by developing advanced methods for population research and applying these in close collaboration with top clinical researchers.

The matrix organisation of research at the Radboud University Medical Centre (RUMC) offers NCEBP opportunities at the interface with clinical research institutes. NCEBP therefore focuses on RUMC's key clinical objectives, combining insights from mechanism-based and evidence-based medicine with the aim of achieving personalised medicine and patient-centred healthcare that is firmly founded in science. This 'translational' research is only possible through close contact and close harmony between research staff and medical doctors.

NCEBP's mission is to facilitate essential successive steps in translating early biomedical discoveries into applied clinical practice and public health. These steps are the translation of laboratory (including animal) research into the human in vivo situation (mechanism-based medicine), collecting clinical evidence on possible mechanisms and on the subsequent implementation of these interventions into clinical practice and public health. Developments in public health and clinical practice significantly add to NCEBP's research agenda and thereby to new knowledge and innovative insights.

NCEBP has four research programmes: 'Epidemiology and Evaluation', 'Clinical Research', 'Patient-Centred Interventions' and 'Quality of Clinical Practice'.

## 2.2 **Assessment of the institute**

The mission of the Nijmegen Centre for Evidence Based Practice combines the improvement of health care and prevention by development and application of the methodology of evidence-based approaches, with a focus on using research to personalise patient care. The scope extends from knowledge of the characteristics of population groups to improving individual patient outcome. Furthermore the institute attempts to optimise the working conditions for top researchers, who are active in methodological and applied health and clinical research.

A clear common ground is methodology development, to be applied to the spectrum of clinical, primary care, and public health research of the University Medical Centre. Combining a common methodological approach with ensuring the use of research to make care specific to an individual patient requires the involvement of clinical and public health fields. The diversity of clinical and public health topics is, however, a strength because it leads to developing and testing broadly applicable new and robust concepts and methods.

The quality and productivity of the research of the NCEBP show impressive achievements. Most programmes and themes are outstanding. The investigators develop innovative pathways even when this means a pioneering phase of some years when articles are published in lower impact journals. It is an investment in future growth and recognition.

The societal impact of the institution's research is substantial and the research covers a wide range of topics, many of which generate societal value. The executive board could evaluate the societal relevance of its research in more detail, and could consider advertising the achieved societal impact more. The vitality and feasibility of the NCEBP are very good, but it would be useful to more explicitly emphasise and explain the benefits of the diverse research themes, the coherence of the programmes, and the corporate identity of the institute. Also, strengthening the relation between research achievements and the allocation of finances should be considered. This last point relates specifically to the fact that most resources flow through departments rather than institutes and so does not incentivise institutes directly.

The matrix collaboration within the institute (embracing the NCEBP, the clinical departments and the University Medical Centre) is widely appreciated as fruitful and productive for innovative multidisciplinary research. There is a strong emphasis on creative, bottom-up initiatives and the promotion of talent development is impressive, as is the enthusiasm and openness of the investigators towards the institute. The matrix structure appears to be functional, provides for a healthy and challenging climate for investigators and PhD

students and offers contributions of the NCEBP to the quality of the clinical research of the Radboud University Medical Centre as a whole.

Nonetheless, the matrix structure could be improved. For example, core staff works in a number of different buildings which makes it difficult to establish a clear vision of a single institute, it reduces allegiance to the institute, and may impede further scientific synergy. Secondly, given the mission and profile of the NCEBP, a solid research infrastructure across all programmes of data and bio banks, ICT, academic practices networks, and well structured (regional, national and European) collaboration with health professionals, health institutions, and communities is of vital importance. A more comprehensive collaborative effort from the NCEBP and the boards of the University Medical Centre and Radboud University to safeguard and further develop this communal infrastructure is strongly encouraged.

The NCEBP has effectively anticipated the transition from the generation of the founding leaders to a new generation of leaders of the programmes and themes. This is associated with new leadership styles, for instance a shift from leader-centred type to a more networking approach. The SWOT analyses of the programmes are transparent and helpful to examiners. They should be made more consistent and used as a self-directive guide for further development and ongoing improvement.

The PhD training program is of high quality, and has shown an impressive positive development in the past few years. There was also a very positive appreciation from the perspective of the PhD students of the work of the PhD Training and Supervision Committee. The programme includes a Training and Education Plan, supervision and mentoring, and courses and meetings.

The Committee recommends giving extra attention to student guidance about future career prospects. The members recommend more tailor made solutions for part-time PhD students who are also involved in clinical and public health practice, and finally the Committee suggests more attention should be given to developing the value of the NCEBP as a trademark.

## **2.3 Recommendations for the institute**

The Committee's major recommendations are:

- (A) to further clarify the coherence of the institute. This could be achieved by more strongly emphasising the common methodological ground and the necessarily broad general scope of NCEBP's work, which is to be elaborated in various clinical and public health fields; and

- (B) to enforce the corporate identity of the institute, outward as well inward, for staff and students. Reflection is needed on how to manage diversity in research areas most effectively and how to safeguard access for all institute members to the institutional infrastructure (like places to meet, data bases and bio-banks) and networks of health professionals (inside Radboud University and the RUMC and beyond that on the local, national and European level).

The Evaluation Committee more specifically recommends the following:

1. The institutional board should develop the branding of the NCEBP as a national institution that is reputed for its excellent research and implementation tools for improved healthcare: an institute that knows how to translate group evidence to individual treatment and healthcare practice. External publicity about the qualities of the NCEBP should be improved.
2. While convincing overall coherence at the institute level is important, the board and group leaders are strongly advised to grasp the opportunities for capitalising on the diversity of clinical and public health fields involved, ensuring that diversity is both used and perceived as an advantage.
3. The Committee is rather neutral regarding a potential reduction in the 14 research themes, but stresses that, if undertaken, the broad scope of the institute and the collaboration between themes must be maintained.
4. The collaboration in the so called matrix of the NCEBP is productive and should be maintained. However, the institute needs to avoid over-complex relationships and lines of responsibility which may reduce efficiency.
5. The institutional board may take into consideration extending its multidisciplinary cooperation to other, non medical, faculties, such as the social science and humanities departments of the university. For this purpose, an especially favourable opportunity is the location of all faculties on one campus in Nijmegen. Examples of fields for innovative collaborations in this context could be health literacy, and the relation between health economics and general economics.
6. The Committee recommends increasing the budget at the institutional level as a tool for fostering talent and innovation, and career opportunities for those staff with high potential. This would be an investment to safeguard future development. Furthermore, allocation of budgets and grants may become more transparent. The Committee suggests involving the principal investigators more in budgetary management, in order to increase their knowledge and influence with respect to this process.
7. The institutional board should consider a more comprehensive evaluation and external communication of the societal impact of the institute's research.

8. Research infrastructure is important for the institute as a whole and for all themes within it. There seem to be some concerns about the guaranteed access to this infrastructure, notably specific bio banks, and data bases and systems for data management, through ICT. The Committee advises investing time and resources to understand and manage these constraints proactively.
9. A more productive physical environment for the matrix collaboration should be considered, e.g., by bringing the core NCEBP staff together in one building. This would also add to increasing the internal corporate identity of the institute and the external visibility.

There have been very significant and impressive improvements in the NCEBP PhD-training programme in the last years and this is highly appreciated by the PhDs of the NCEBP. This is notably due to the instalment of a PhD Training and Supervision Committee and the Training and Education Plans. Nevertheless the Committee sees possibilities for further improvements and makes the following recommendations:

1. The tracking of the progress of PhDs could be improved. With an active management, no PhD student should be lost after enrolment in the program, and there should be a better long term tracking of finalising PhD-theses, with special attention to the relatively large number of part-time students also involved in practice, who seem to have higher rates of non-completion within a reasonable period.
2. The PhD supervision committee should give as much attention to the part-time students as it does to the full-timers. More tailor made solutions in supporting part-time PhD students may also contribute to efficient use of resources.
3. Expansion and standardisation in the way mentors do support their PhD students might be taken in consideration.
4. Most, but not all senior investigators and supervisors seem sufficiently committed to NCEBP's educational mission. All should be integrated and involved with the NCEBP, so that all PhD students can equally profit of the facilities and resources of the institute.
5. The Committee recommends extra provision of guidance on future career prospects of PhD students. The above mentioned external communication of the value of NCEBP as a research institute may contribute to their prospects.
6. Tracking and retaining contact with alumni PhD graduates would benefit the institute in various ways, including feedback to improve the match between the training programme and actual careers. Also, the alumni could be involved as external mentors or as field supervisors.

### **3 Assessments per programme**

The Committee has carried out an assessment at the level of the programmes, as defined by the Nijmegen Centre for Evidence Based Practice.

Comments that are applicable to all programmes have been made in Chapter 2 (Assessment of the Institute) and are not repeated below.

### 3.1 Programme: Epidemiology and Evaluation

Programme director:	Professor Dr Bart Kiemeneij
Academic staff in 2010:	34.18 fte (59.8 incl. PhD)
Assessment:	Quality : 5
	Productivity : 5
	Societal Relevance : 5
	Vitality and feasibility : 4

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#### 3.1.1 Objectives and research activities

Research methods in epidemiology, biostatistics and health technology assessment, are the main connecting factor in this programme. Research in the programme aims to develop new methods to tackle clinical and public health problems to make optimal use of pre-existing methods to acquire new knowledge about clinical and public health problems. The programme is mainly disease-oriented with a particular emphasis on cancer and infectious diseases. However, a large range of disciplines and departments (e.g. Ophthalmology, Internal Medicine, Surgery, Animal Facility, Human Genetics) is additionally involved in the themes sharing specific methods for studying aetiological, diagnostic, prognostic and intervention-related research questions. In virtually all its research, the programme attempts to bridge the space between fields of mechanism-based investigation and an evidence-based focus.

The three research themes of the programme are: *Molecular epidemiology* (identifying molecular, metabolic and genetic determinants for disease and disease outcome, mainly through association analyses in population studies); *Evaluation of complex medical interventions* (development and testing of methodologies for evaluating complex health care interventions); and *Infectious diseases and international health* (Improving health in low and high income countries by developing an evidence base for decision making).

#### 3.1.2 Assessment of the programme

The Committee was impressed by the quality of the research and the productivity of the researchers in the themes involved, who perform at an internationally outstanding level.

There is also no debate about the relevance of the diverse research topics for clinical practice and the society. However, the Committee noted some tension between coherence and diversity as reflected by a broad variety of research topics within the same programme: from molecular genetics and health care for infectious diseases in low income countries to evidence based methodological support for a range of clinical interventions. The synergy between the themes was not immediately obvious.



The programme and institute leaders may not consider this as a problem in itself because the themes share one major coherent element: a common methodological ground. The committee can accept this view, but then the key strength of the common methodological ground applied to a broad range of public health and healthcare issues should be better elaborated and communicated.

The Committee noted that the theme 'Evaluation of complex medical interventions' contributes important at the level of the University Medical Centre by promoting quality research in a broad range of clinical domains, offering a multiplicity of methods. However, the Committee was somewhat puzzled by the use of the term 'complex medical interventions' for this type of work because this term is commonly employed in different contexts than the ones investigated here (see e.g. UK MRC 2008). It suggested reconsidering the current title of the programme also with regard to external communication.

The challenges, opportunities and requirements in the field of the development of the bio-bank require special attention as they are of utmost relevance to the future prospects of this programme.

An interesting innovation was presented which enables better utilization of routine care data by making direct connections to electronic patient records (EPRs). This will also require new infrastructural solutions.

### **3.1.3 Recommendations for the programme**

Against the background of outstanding research productivity of this programme, the Evaluation Committee offers to NCEBP and the leaders of the programme Epidemiology and Evaluation the following specific recommendations:

1. Avoid an appearance of incoherence and lack of synergy between the different research themes, the key strengths of 'diversity in topics but common grounds of applied methodology' should be better communicated.
2. The term 'complex intervention' in the title of the research theme 'Evaluation of complex medical interventions' should be reconsidered and replaced with a more appropriate label.
3. Special attention needs to be given to the development and availability of research infrastructures, in particular bio-banks and EPRs.

## 3.2 Programme: Clinical Research

Programme director:	Professor Dr Alexander Geurts		
Academic staff in 2010:	38.67 fte (67.84 incl. PhD)		
Assessment:	Quality	:	5
	Productivity	:	5
	Societal Relevance	:	5
	Vitality and feasibility	:	4

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### 3.2.1 Objectives and research activities

The Clinical Research programme has a broad scope varying from translational research and mechanism-based analysis of clinical problems to healthcare, rehabilitation and improving quality of life. A variety of research questions is addressed mainly in relation to four groups of chronic conditions: vascular, reproductive, neurological, and orthopaedic disorders. Research in chronic fatigue related to inflammatory and malignant disease is also encompassed in this programme.

Across the projects, the typical NCEBP approach is followed: are preclinical findings applicable to human beings? Do new diagnostic tools and therapeutic interventions improve healthcare? How should such new methods be introduced in clinical practice or in the patient's home situation to achieve optimal efficacy and cost-effectiveness? Research designs take into account that many chronic conditions affect the individual well-being of patients and also the mental and physical functioning of their family and caregivers.

The three research themes of the programme are: *Human reproduction* (aetiology and prevention of reproductive and developmental disorders, safety, effectiveness, and patient-centredness of care); *Human movement and fatigue* (understanding generic and disease-specific determinants of musculoskeletal problems, movement disability, reduced physical fitness and fatigue); and *Cardiovascular diseases* (achieving greater understanding of the pathogenesis of cardiovascular disease in order to improve evidence-based cardiovascular healthcare and to train young talented investigators in cardiovascular research).

### 3.2.2 Assessment of the programme

There is no doubt about the quality and productivity of this programme or about the high relevance for patient care of the different research themes in this programme. The programme shows international leadership in developing, implementing and evaluating cutting-edge opportunities supporting and innovating patient self management and treatment. The Committee applauds the enthusiasm of all three theme leaders for the introduction of innovative digital systems – the 'personal health community' – for the

improvement of care and the empowerment and autonomy of patients with chronic disabilities and with respect to the human reproduction – from pre-conception to post-delivery. This also leads to innovative approaches for shared care and collaboration between professionals and patients.

Given the enthusiasm conveyed by the key personnel, the Committee would welcome a closer cooperation of the three themes especially in further developing and implementing innovative digital systems and the 'personal health community' in health care. The cardiovascular theme appears to have a much more biomedical and technical orientation than the two other themes that focus more on the patient's health outcome, which seems closer to NCEBP's mission.

The Committee has noted some concern about increasing Good Clinical Practice bureaucracy and the desire for a collaborative RUMC policy to enhance overall efficiency. Furthermore, the research of the programme involves relatively many clinicians with little time for research per person, which may hamper the required coaching and support for PhD students.

### **3.2.3 Recommendations for the programme**

The Evaluation Committee makes the following recommendations:

1. The theme 'Cardiovascular diseases' should focus more on patient health outcome and personal health communities, in line with the other two themes.
2. Increasing bureaucracy for GCP needs attention and the Committee suggests a common approach is developed across the whole University Medical Centre.
3. With respect to the support of PhD students, the number of senior staff members with substantial time for research should be increased.

### 3.3 Programme: Patient-Centered Interventions

Programme director:	Professor Dr Andrea Evers		
Academic staff in 2010:	78.47 fte (115.57 incl. PhD)		
Assessment:	Quality	:	5
	Productivity	:	5
	Societal Relevance	:	5
	Vitality and feasibility	:	5

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#### 3.3.1 Objectives and research activities

The programme Patient-Centered Interventions focuses on the perspective of patients suffering from somatic and mental conditions, with specific attention on diagnostics and interventions in chronic conditions. The main goals are enhancing the self-management capacities of patients and increasing patient empowerment to improve health and disease-related outcomes. The research is conducted in a broad spectrum, including health promotion, disease prevention, diagnosing and treating diseases, rehabilitation, supporting patients and palliative care. The programme has strong research facilities for the development, validation, evaluation and implementation of new diagnostic tools, assessment instruments and intervention protocols for chronic somatic and mental conditions.

The four research themes of the programme are: *Effective primary care and public health* (supporting healthcare in the primary care population, regardless of health problems, gender, age or social class); *Psychological determinants of chronic illness* (improving diagnostics and treatment of patients with chronic somatic illnesses, in particular with regard to the psychological determinants and consequences of somatic conditions); *Mental health* (studying the determinants, prevalence, prognostic significance and treatment of mental health problems from a patient-centred perspective, including the implementation and cost-effectiveness of innovative therapeutic interventions); and the *Nijmegen Alzheimer Centre* (developing, evaluating and implementing support programmes to improve the quality of care and quality of life for people with dementia and their families, and contributing to fundamental knowledge on Alzheimer's disease).

#### 3.3.2 Assessment of the programme

Both the scientific quality and the societal relevance of the research in this programme are of a very high level. The primary care research embedded in this programme has a longstanding history of world leadership. The transition of care from disease- and doctor-centred care to a patient-centred orientation is evident in this programme. The themes in this programme share an innovative approach to empowering patients, focusing on their

competences instead of their disabilities, and organising tailor made care around them. So the programme shows convincing coherence in research topics. The programme addresses a major issue in healthcare: maximising a valued life despite the presence of illness, and promoting the quality of life in chronic disease.

The general productivity and quality of this programme are recognised by the Committee as meeting the best international standards. The Committee noted that publishing research in the developmental phase is usually in journals with a lower Impact Factor, and felt that this reflects the weakness of the rating system rather than the research.

There is also a strong and motivating program-wide commitment to elaborating the concept of patient-centeredness over the whole range of patient self management, individual care, health care organisation and management, and health care infrastructure. Parts of this programme have a strong potential to improve the effectiveness and efficiency of primary care.

The inclusion of social dentistry in the programme is important and promising, as an additional perspective in an integrated patient-centred approach. There is also a strong collaboration of the programme members with other programmes of the NCEBP and in the field of health care workers outside the hospital. There is much attention for implementation of the results of this programme in clinical practice.

### **3.3.3 Recommendations for the programme**

The Evaluation Committee has no substantial recommendations to the leadership of the NCEBP on the programme Patient-Centred, but emphasizes the importance of appointing a high level successor of Professor Chris van Weel (who retires in 2012) in order to continue Nijmegen's longstanding world leadership in primary care research.

### 3.4 Programme: Quality of Clinical Practice

Programme director:	Professor Dr Michel Wensing		
Academic staff in 2010:	46.48 fte (54.91 incl. PhD)		
Assessment:	Quality	:	5
	Productivity	:	5
	Societal Relevance	:	5
	Vitality and feasibility	:	4

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#### 3.4.1 Objectives and research activities

The research in the programme Quality of Clinical Practice addresses three basic questions: To what extent do patients receive high-quality healthcare (and does this change over time)? What is the impact of implementation strategies to improve quality of clinical practice (and how can this be enhanced)? And how can healthcare services be organised and financed to provide sustainable high-quality clinical practice? The programme focuses on primary healthcare, hospital care, nurses and allied health professions. The projects integrate concepts and methods from the clinical disciplines, behavioural and social sciences, clinical epidemiology and medical ethics.

The four research themes are: *Implementation science* (improving healthcare practice, in primary and ambulatory care); *Quality of hospital and integrated care* (development, evaluation and implementation of optimal care in the hospital, nursing home and home care in collaboration between care providers and patients); *Healthcare ethics* (studying the ethical aspects of cure, care and processes of change based on or caused by scientific progress and evaluating existing care in the light of changing norms and values); and *Quality of nursing and allied healthcare* (developing intervention strategies and searching for scientific evidence to support clinical practice and professional development).

#### 3.4.2 Assessment of the programme

The coherence of the themes in this programme is high, partly due to its mono-departmental structure. The societal impact of the research in the different themes is considerable and still should continue to grow, due in part to an aging society and ever-advancing medical possibilities. The quality and productivity of research in this programme are excellent. There is strong, longstanding and internationally recognised world leadership in the field of quality of care and implementation research.

The transition to new leadership of the program and IQ Healthcare is quite recent. The Committee has confidence in the choices made to sustain and further develop the programme, but continuing efforts will have to be made to continue its leading international position.

The Committee was concerned that especially in this programme the balance of funding is currently too heavily on external sources, and agrees that the proportion of primary university funding streams needs to be increased.

Good examples of innovative research in the programme include the cultural determinants of health care provision and quality, the studies on international moral differences, and the concept of 'moral geography'.

### **3.4.3 Recommendations for the programme**

The Evaluation Committee gives the leadership of the NCEBP and of the programme Quality of Clinical Practice the following recommendations in consideration:

1. Attention should be paid to a better balance between university funding and external funding, to increase the proportion of the former.
2. The developments after the change of leadership in this programme might require extra attention from the institutional board.

## 4 Response of the institute

On behalf of all research program leaders of the Nijmegen Centre for Evidence Based Practice (NCEBP), and on behalf of the former scientific directors of the institute in the period 2005-2011, we would like to express our sincerest appreciation and gratitude to the members of the External Evaluation Committee for their thorough and well-balanced assessment of our research institute and its four research programmes. The Evaluation Committee consisted of international top researchers in the fields of the four research programmes and was chaired by Prof. André Knottnerus, one of the most experienced and knowledgeable scientists in the evidence-based practice field. It is therefore that it fills the NCEBP with enormous pride that it was evaluated with the marks Excellent for the three criteria Quality, Productivity and Societal relevance and with the mark Very good for the criterion Vitality and feasibility. The Institute is equally grateful for the very specific recommendations of the Committee to further improve the quality of the research and training in the Institute and the visibility and sustainability of the institute as a whole. The comments and recommendations will be input for a retreat where the program leaders, (junior-) principal investigators, PhD council members and other key-personnel in the Institute will discuss the ingredients for a medium-term policy plan 2012-2017.

Based on the Self-Evaluation of the Institute and the comments and recommendations of the Committee, NCEBP anticipates the following goals to be reached during the next evaluation period.

1. A stronger branding and (inter)national visibility of the Institute as an expert centre with high societal relevance that shares population sciences' based methodology to solve clinical and public health problems.
2. Creation of visiting associate professor fund in order to boost international research networks.
3. A stronger coherence within the Institute based on the common goal to develop and/or apply population-sciences methodology but also on a recognizable physical environment and trademark/branding.
4. Stronger collaborations with both health care providers and basic scientists in order to combine population science and mechanistic research opportunities for the same clinical and public health problems.
5. A more intensive collaboration with researchers within other RU Faculties, in particular the Faculty of Science, the Faculty of Social Sciences and the Nijmegen School of Management, to evolve into an interfaculty Research Institute.
6. Safeguarding and valorization of the Institute's special infrastructure in the sense of data management facilities, large databases, networks of health care providers, biobanks and consultancies for ethical and legal issues, systematic reviews, meta-analyses, statistical analyses and simulations.



7. Development of a NCEBP graduate school consisting of a Master and PhD program that is attractive for both national and international students.
8. A better formalized PhD training, career development, and alumni program with both standardized and tailor-made requirements for students, supervisors and mentors, that accommodates both full-time and part-time external PhD students.
9. Accreditation by the Research School Accreditation Committee (ECOS) of the Royal Academy of Sciences.
10. Instalment of an advisory board of external stakeholders.

In conclusion, NCEBP was evaluated very favourably but still, there are considerable challenges for the Institute for the next couple of years. We are excited to take these next steps that will take us to the level of an international top research institute that takes 'care for science in care'.

On behalf of the NCEBP Management, staff and researchers,  
Prof. Bart Kiemeney

## **Appendix 1    Curricula vitae of the Evaluation Committee members**

### **Professor Dr André Knottnerus (chair)**

The Dutch Cabinet has appointed Professor J.A. (André) Knottnerus as chairman of the Netherlands Scientific Council for Government Policy (WRR). André Knottnerus is also Professor of General Practice at the University of Maastricht since 1988. He was chairman of the Health Council of the Netherlands from 2001 to 2010. He is also chairman of the Medical Section of the Royal Netherlands Academy of Arts and Sciences (KNAW). André Knottnerus (b. 1951) studied medicine at VU University Amsterdam. He obtained his doctorate at the University of Maastricht in 1986 with a thesis on the development and application of clinical and epidemiological research methods in primary care settings. In 1990/91 he was Dean of the University's medical faculty. He was supervisor of 63 PhD students in the medical sciences and is author or co-author of more than 350 scientific articles and author and editor of a number of books on primary care and diagnostic research. He is editor-in-chief of the Journal of Clinical Epidemiology.

### **Professor Dr Hans-Werner Hense, Dept of Epidemiology and Social Medicine, University of Münster**

Prof. Dr. Hans-Werner Hense is professor of Clinical Epidemiology. His scientific interests comprise of the epidemiology of cardiovascular diseases, cancer Registry, and prognostic studies (age-related macular degeneration (AMD)). Prof. Hense started his professional career within the WHO MONICA network and gained extensive experience with design of questionnaires, protocols for clinical measurements and examinations. At the University Münster he was involved in chronic disease research. His research focus now on genetic susceptibility (AMD and vascular diseases), on using health related data bases for research, and the evaluation of early detection programs in oncology. Prof. Hense is Principal Investigator of the prospective Münster Aging and Retina Study, co-PI for the prospective BiDirect study, and National Coordinator of the epidemiological projects in two National Competence Networks. He is Associate Editor of the International Journal of Epidemiology and on the Editorial Boards of several national and international epidemiologic journals.

### **Professor Stephen Morley, University of Leeds**

Prof. Stephen Morley is Professor of Clinical Psychology at the Leeds Institute of Health Sciences, University of Leeds and director of the doctoral training programme in clinical psychology. He has worked in Leeds since 1984, and has held his current post since 1996. He is Chartered Clinical Psychologist and Fellow of the British Psychological Society. He is currently a Section Editor for the European Journal of Pain, Editor Cochrane PaPaS (pain and palliative care) review group, and formerly Chair of the British Psychological

Society's Journals Committee. The current research activities of Prof. Morley are primarily focused around pain. This includes the effectiveness and development of psychological methods for treating chronic pain and also the cognitive, interpersonal processes and identity in adjusting to chronic pain. Prof. Morley teaches a course on methods and evaluation, and contributes to teaching on therapy and clinical health psychology. He is also active as a clinician, treating patients with chronic pain.

**Prof. Martin Roland, University of Cambridge**

Prof. Martin Roland became Professor of Health Services Research in the University of Cambridge in 2009. He trained at the University of Oxford, where he obtained his doctorate. Following vocational training in Cambridge, he worked in London and in Cambridge before moving to the Chair in General Practice in the University of Manchester in 1992. In 1994, he became Director of the National Primary Research and Development Centre. Between 2006 and 2009, he also was Director of the NIHR School for Primary Care Research. In September 2008 he took a part-time appointment as Special Advisor to RAND Europe, a not-for-profit policy research organisation based in Cambridge. Prof. Roland has been a practising GP for 30 years. His main areas of research interests are developing methods of measuring quality of care, and evaluating interventions to improve care in the NHS. Previous research includes back pain, hospital referrals, out of hours care, and nurse practitioners in general practice.

**Professor Derick Wade, Oxford University Hospitals, Oxford**

In addition to general medical training, Prof. Derick Wade is trained in several specialties including neurology, neurosurgery, psychiatry and neurophysiology. He also spent six years undertaking research into stroke and rehabilitation. Prof. Wade has extensive expertise in several other clinical areas including head injury rehabilitation, management of multiple sclerosis and motor neurone disease and the management of patients who have disability without any underlying disease. His research activities cover a wide area – he has published over 170 papers in peer reviewed journals on many different studies. Since 1994 Prof. Wade has edited the specialist journal, *Clinical Rehabilitation*. He is closely involved in Health Service Management and development both locally, and nationally and internationally. He is a member of committees such as the DVLA neurology committee. He has been involved in WHO groups and advised national groups in the USA, and New Zealand. In June 2002 he was made an honorary fellow of the College of Occupational Therapists.

## **Appendix 2 Programme of the site visit**

### **Wednesday November 23**

- 18.30 Installation External Review Committee  
Prof. Frans Corstens, Dean Radboud University Medical Centre (RUMC)
- 19.00 Introduction and information on the site visit  
Prof. Paul Smits (Scientific director NCEBP), dr Gerdi Egberink,  
(Assistant scientific director NCEBP), Hannelies Linders (MSO)
- 19.30 Dinner and preparatory Meeting External Review Committee  
Closed session on working procedure and writing report

### **Thursday November 24**

- 09.00 Welcome  
Prof. Bas Kortmann, Rector Magnificus Radboud University
- 09.15 Information on the organisation of RUMC  
Prof. Paul Smits, Scientific director NCEBP
- 09.30 Session with the Board/management of NCEBP  
Prof. Paul Smits, prof. Bart Kiemeney, prof. Alexander Geurts,  
prof. Andrea Evers, prof. Michel Wensing, dr Gerdi Egberink
- 10.30 Coffee break
- 10.45 Session with programme Epidemiology and Evaluation  
Prof. Bart Kiemeney, prof. Gert Jan van der Wilt, dr Rob Baltussen
- 11.45 Session with programme Clinical Research  
Prof. Alexander Geurts, prof. Jan Kremer, prof. Gerard Rongen
- 13.45 Session with programme Patient-Centred Interventions  
Prof. Andrea Evers, Prof. Chris van Weel, prof. Marie-Charlotte Huysmans,  
prof. Anne Speckens, prof. Myrra Vernooij-Dassen
- 12.45 Lunch
- 14.45 Session with programme Quality of Clinical Practice  
Prof. Michel Wensing, dr Hub Wollersheim, prof. Evert van Leeuwen,  
prof. Theo van Achterberg
- 15.45 Coffee break
- 16.15 Session with members PhD Training and Supervision Committee (TSC)  
Prof. Gert Jan van der Wilt (Chair), prof. Marie-Charlotte Huysmans,  
dr Tjard Schermer, prof. Myrra Vernooij-Dassen, dr Gerdi Egberink
- 17.00 Session with PhD students and postdocs  
Ruben Cremers MSc, Antoinette van Laarhoven MSc, Karin Lammers MSc,  
Marcia Tummers MSc, Dr Laura van Hulst, Dr Sita Vermeulen
- 17.45 Closed session External Review Committee: Preliminary considerations

- 19.00 Dinner with dean RUMC: Prof. Frans Corstens, board NCEBP: Prof. Paul Smits (Scientific director NCEBP), prof. Bart Kiemeneij, prof. Alexander Geurts, prof. Andrea Evers, prof. Michel Wensing, dr Gerdi Egberink (Assistant scientific director NCEBP); former Scientific director NCEBP, Prof. Richard Grol and Prof. Gerhard Zielhuis.

**Friday November 25**

- 9.00 Closed session External Review Committee: discussion results and preparation of Assessment Report
- 11.00 Coffee break
- 11.30 Closed session External Review Committee: discussion on overall programme
- 14.00 Presentation preliminary findings External Review Committee  
Prof. André Knottnerus (Chair)
- 15.00 Closure

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