Identification and priority setting for health technology assessment in The Netherlands: actors and activities

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Abstract

This article describes the actual situation at the beginning of 1999 with regard to identification and priority setting for health technology assessment (HTA) on a national level in the Netherlands. For this purpose the literature on HTA published in 1980–1998, mainly national, was thoroughly reviewed. Many policy documents and other reports from the ‘grey literature’ of identification and priority setting for HTA in the Netherlands were also used. The results show that attempts to identify and set priorities for HTA is a new activity in the Netherlands. The three most important actors in the field are the Health Council, the Council for Health Research and the Health Insurance Council. Methodologies differ depending on the content and scope of each programme. In addition, the methods used are not always transparent and the activities are not co-ordinated. The lack of co-ordination is due to the fact that there is no single organisation that is authorised to identify and set priorities for HTA. Suggestions for improving co-ordination are proposed with the aim of
developing a truly national effort in this field, which will enable a more balanced and efficient set of HTA activities. © 1999 Elsevier Science Ireland Ltd. All rights reserved.

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1. Introduction

The field of health technology assessment (HTA) is now almost 20 years old. Technology assessment originally developed out of the need for information expressed by those making important ‘technological’ decisions. In health care, this concerns mainly the need for information on the efficacy (benefits), safety, and financial costs of proposed new technologies. Increasingly, HTA also considers available ‘old’ technologies and the appropriate indications for use of a technology for different groups of patients and in different clinical settings. HTA is additionally concerned with the social consequences and implications of adoption and use, including ethical and legal concerns. Technology assessment can be defined as a form of policy research [3,4], in the sense that information from assessments should make a more rational and effective decision-making process possible. The central goal is to improve the quality and cost-effectiveness of health care.

In the Netherlands, HTA was introduced around 1982 when the Health Insurance Council (Ziekenfondsraad) was confronted with patients demanding reimbursement of the costs of heart and liver transplantation that had been performed abroad. This debate stimulated a new policy, outlined in the paper ‘Limits to the expansion of the benefit package’ of the Health Insurance Council [5]. The paper stated that, as a prerequisite for coverage in the benefit package, both the efficacy and the cost effectiveness of all major new health technologies should be assessed. In addition, the Director General of Health asked the Steering Committee for Future Health Care Scenarios (Stuurgroep Toekomstscenario’s Gezondheidszorg, STG) for advice on a long-term policy on health technology [6]. This advice describes the existing health policies, including policies for HTA, and reached a number of conclusions pointing to the future. An important policy document, partly developed in response to the STG report, was ‘Limits to care’ [7]. The government subsequently requested advice on the question concerning establishing a border between effective and ineffective care from three important councils: the Health Insurance Council, the National Council for Public Health (Nationale Raad voor de Volksgezondheid), now Council for Care (Raad voor de Zorg) and the

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1 Health technology assessment is a comprehensive form of policy research that examines short- and long-term social consequences (for example, economic, ethical, legal) of the application of health technology [1,2]. Health technology is defined very broadly as the pharmaceuticals, devices, and procedures offered by the health care system, and the organisational and support systems within which health care is delivered.
Health Council (Gezondheidsraad). All three organisations advised that HTA should be seen as a help for decision-making [7]. One result was the establishment of the Fund for Investigative Medicine (Fonds Ontwikkelingsgeneeskunde) in 1988. This Fund is the main HTA programme in the Netherlands (approximately US $18 million/year), and is administered by the Health Insurance Council. At the end of 1988 The Council for Health Research (Raad voor Gezondheidsonderzoek) published a document on HTA, giving guidance for institutionalisation of HTA in the Netherlands [8]. By the 1990s HTA had become an important policy issue and all medical faculties and university hospitals currently are involved in HTA. The Ministry of Health, Welfare and Sports (VWS) and the Ministry of Education, Culture and Science (OCW) fund the Investigative Medicine Program, and sometimes fund other specific technology assessments as well. In the past the Dutch government has not taken a leadership role in steering HTA. However, a recent policy document ‘Medical technology assessment and efficiency in health care’ [9] proposed a more active role for the government, focusing on promoting greater efficiency in the health care sector by means of stimulating HTA. The Minister states that HTA has been growing during the last years in the Netherlands. She proposed a comprehensive health research policy based on transparent decision making and identification and prioritisation of health technologies [9]. Identification and prioritisation of health technologies are of main importance for a health system. Health technologies can have desirable and undesirable effects on health services and patients, and therefore they need to be assessed. Only a fraction of existing health technologies has been formally evaluated, and many more appear each year. However, resources for HTA are limited so that priorities have to be set. A more rational process of identifying and setting priorities can help to ensure that the maximum benefits in relation to their cost are realised for a health system [10].

In this article the main actors involved in identification and priority setting for HTA on a national level in the Netherlands are described. The scope, strengths and weaknesses of the current activities are discussed, followed by recommendations for a more comprehensive approach for identification and priority setting for HTA in the Netherlands.

2. Methods

The literature on HTA published in 1980–1998, mainly national, was thoroughly reviewed. Many national policy documents and other reports from the ‘grey literature’ of identification and priority setting for HTA in the Netherlands were used.

One of the main sources used is a document on the organisation of HTA in the Netherlands, which was published in 1996 [11]. This document describes the situation of HTA in the Netherlands, focusing on the years 1985–1995. The aim of the document was to contribute to a discussion of the organisation of HTA in
the Netherlands. The National Library of Medicine’s bibliographic database (Medline) was searched for the years 1996–1998 as part of the literature review to identify articles, books and ‘grey’ literature related to identification and priority setting of health technologies in the Netherlands. In the search strategy we used the key words: identification and/or priority setting and health technologies. National policy reports, published in 1996–1998 were retrieved by hand searching national (policy) journals covering health policy issues (Nederlands Tijdschrift voor Geneeskunde, Medisch Contact, Tijdschrift voor Sociale Gezondheidszorg, Mediator and Graadmeter).

The actors and their activities involved in the identification phase will be described first, since a decision to conduct HTAs must be preceded by the identification of health technologies or health problems that are potentially in need of assessment. Secondly, actors and their activities involved in priority setting on a programme level will be described. Priority setting on a programme level means that the priorities are described in general terms, such as ‘HTA research into mental health care facilities’. These priorities do not always relate to a specific HTA programme. Thirdly, the actors involved in priority setting within HTA programmes, such as the Health Insurance Council and its Fund Investigative Medicine, will be described. Within HTA programmes, priorities are set between individual proposals for assessment (project level).

3. Results

3.1. Identification

The organisations involved in the identification of health technologies or health problems in need of assessment are the Health Council, the Health Insurance Council and the Council for Health Research. Since the latter two actors combine identification and priority setting, they will be described in the paragraphs on priority setting.

3.1.1. Health Council

The Health Council is the statutory body advising the government on the scientific state of the art with respect to health care, public health and environmental protection in the Netherlands. Its involvement in HTA is based on this responsibility. To carry out its task, the Council brings together groups of experts on specific topics at the request of the government, but it can also initiate studies on its own [11]. The Health Council identifies emerging technologies needing assessment through a type of Delphi process. The assessments of existing technologies are derived from the ‘126’-list of the Health Insurance Council, which will be described below. The top-five priorities of HTA described in the Annual report of 1997 and the Working programme of 1999 are listed in Table 1(A) [12]. The Health Council is strengthening its ‘early warning’ activities. At the end of 1994 a ‘core group’ for early identification of emerging technologies was established. At present,
it discusses important emerging health technologies in its Annual Advisory Reports, special case studies and in bulletins. Recently, an international working group has been formed, as a result of a European workshop on ‘Scanning the Horizon for Emerging Medical Technologies’ in 1997. A Health Council staff member chairs this group, which is called EUROSCAN. The aim of this working group is to support national agencies and HTA organisations in developing and running systems in early identification of health technologies to provide useful information to health planners and policy makers.

Table 1
Top 5 priorities indicated by different actors involved in identification and setting priorities for HTA

A. Priorities from the Health Council, derived from the ‘126’-list, as described in the Annual working programme for 1999 [12]
1. Incontinence
2. Chronic use of benzodiazepines
3. Decubitus
4. Use of devices in physiotherapy
5. Long-term psychotherapy

B. Priorities from the Council for Health Research and Committee on Explorations, as published in a report on exploring priorities in health research in 1996 [14]
1. Diagnosis and treatment of chronically ill: e.g. mental problems in children and adolescents; adults and depression
2. Adequate care of diseases which occur in the elderly, impairments: endocrine aspects of ageing, dementia and CVA
3. Stimulating autonomy and self-care: the patient as actor in health care and home care technology
4. Primary and secondary prevention: innovative prevention, effectiveness and efficiency of preventive technologies and implementation
5. Quality and efficiency of care: evaluation of medical practice, clinical decision making regarding diagnostics and quality of care

C. Priorities from the Council for Health Research as described in the advice on HTA, 1998 [17]
1. HTA research into the economic aspects of existing technologies (especially topics on the ‘126’-list), new technologies including medical aids, and drugs
2. HTA research which covers not only the efficacy (and possible costs) but also other aspects, such as regional and individual differences in the care provided, highly complex care, the national policy on quality of health care and the macro-economic impact of (new) health technologies and/or care technologies
3. HTA research into prevention and diagnostic procedures
4. HTA research into nursing and paramedical care facilities
5. HTA research into mental health care facilities

D. Priorities from the ‘126’-list as published by the Health Insurance Council in 1993 [18]
1. Ultrasound treatment for problems of the locomotor system
2. Treatment and cure of non-hospitalised acute psychiatric patients
3. Specialists care for chronic patients
4. Diagnosis of suspected hernia nucleus pulposa
5. Diagnostic arthroscopy of the knee compared to diagnostic MRI
3.2. Priority setting on a programme level

3.2.1. Council for Health Research

The Council for Health Research (RGO) is involved in priority setting on a programme level. This Council advises the Dutch government on policy issues regarding health research, including HTA. The RGO monitors current research, pointing out gaps and overlaps and provides advice on co-ordination and programming of research [13]. Its main task is to indicate priorities for health research from a societal perspective. Priorities are not chosen only because they are of scientific interest, but because of their importance regarding public health in the future. In 1988, an advisory report on HTA was published, including a framework for setting priorities for HTA [8]. In 1996 the Council published a report on exploring priorities in health research, in collaboration with the Committee on Explorations (Overlegcommissie Verkenningen, OCV) [14]. The aim of the Committee on Explorations, established in 1992 by the Minister of Education and Science, is to explore the strategic importance of scientific and technical research in the long term. The RGO and the OCV established a working group, which consulted about 140 experts in health research and medical practice, to gain information concerning priorities for health research during the coming years. Both societal criteria and scientific criteria were used. The criteria for measuring the societal relevance included: contribution to diminish the prevalence and incidence of disease; contribution to diminish mortality; contribution to improving the quality of life; contribution to diminish the cost of health care; and developments in the future (demography, technological).

The scientific criteria include: availability of expertise in the Netherlands, availability of an excellent research environment and the extent to which research on the topic is already being performed in the Netherlands or abroad [14]. The subjects to be prioritised were derived from the report Exploring the Future of Public Health [15] and an RGO-advice on Prevention [16]. On the basis of a Delphi-like prioritisation process, fields of interest were selected. The five most important fields are listed in Table 1(B) [16]. In 1996, the Dutch Minister of Health has asked the RGO, by means of the policy document ‘Medical technology assessment and efficiency in health care’ to prepare a report on priority setting for HTA, on ways in which co-ordination should be improved, and on the feasibility and design of a national research programme aimed at improving the efficiency of health care [9]. For this purpose the RGO organised a workshop in 1997 to identify critical issues in setting priorities. The RGO has decided to publish its recommendations in two parts. Part I, published in 1998, deals with the gaps in HTA research experienced by both the supply and demand side of the market for HTA. On the basis of these findings the RGO listed a number of subjects in the field of HTA which are nominated for further priority ranking. Table 1(C) provides an overview of the 5 most important priorities. In the second part of the recommendations, the RGO plans to consider in more detail the subjects proposed in Part I and criteria for priority setting. Part II will also include an elaboration of the recommendation to establish a committee with the task of co-ordinating HTA research, and that of the recommendation for monitoring HTA research [17].
3.3. Priority setting on project level

In the Netherlands mainly three organisations are involved in priority setting on a project level. These organisations are: The Health Insurance Council, the Dutch Health Research and Development Council (ZorgOnderzoek Nederland) and the Netherlands Organisation for Scientific Research (Nederlandse Organisatie voor Wetenschappelijk Onderzoek).

3.3.1. Health Insurance Council

The Health Insurance Council administers the Exceptional Medical Expenses Act (Algemene Wet Bijzondere Ziektekosten) and the Health Insurance Act (Ziektenfondswet). The Health Insurance Council informs and reports to the Crown and the minister responsible, at their request or on its own initiative regarding issues concerning both Acts. In addition, the Health Insurance Council funds health research, including HTA, within the Fund Investigative Medicine. The Health Insurance Council set priorities for HTA regarding existing provisions by a Delphi-type process in 1993. Medical advisors of insurance companies and other experts were asked to identify priorities among existing technologies and to subsequently rate them on selected criteria, such as cost. One hundred and twenty-six priorities (‘126’-list) were identified, and were presented in rank order [18]. The following criteria were used: the degree of uncertainty concerning efficacy, effectiveness or efficiency; frequency of use; costs; the extent to which the concerned technology could potentially decrease morbidity or mortality and increase quality of life; and the extent to which technology assessment results could change the rate of use of the technology [18]. The top-five priorities, based on these criteria, are listed in Table 1(D). This was the first attempt to rationalise priority setting for HTA in the Netherlands. This approach was intensely debated [19–23]. Although imperfect, this ‘126’-list was judged to be useful for follow-up activities by both the Health Insurance Council and the Health Council. Recently, the Health Insurance Council initiated an actualisation of the 126-list. In the beginning of 1998 the Health Insurance Council sent a questionnaire to experts and organisations involved in health care asking for identification of health technologies (in the broad sense) which could be applied more efficient. This inventory led to a list of 194 topics. The Health Insurance Council will prioritise the topics on the basis of the following criteria: potential change in cost on an aggregate level; potential health gain; and number of people affected [24]. This list will be used as an input for a top-down approach within the Fund Investigative Medicine. In the top-down approach, which started in 1993, selected groups of researchers are invited to submit a full research proposal focusing on a specific topic. Only those proposals are eligible for assessment addressing the selected topic [25].

In addition, the Health Insurance Council developed a more explicit model for priority setting within the Fund Investigative Medicine in 1998. Research proposals focusing on new or existing health technologies can be submitted to this Fund. In different reports the Health Insurance Council described criteria for identifying the relevance of HTAs for policy making. These criteria are: potential health benefits;
potential financial benefits or costs; expectation of feasible and valid results and possibilities for implementing them; costs of the proposed project and special circumstances, such as anticipated rapid diffusion of health technology [26,27]. To judge research proposals, submitted to the Fund Investigative Medicine in 1998, on their relevance for policy making in the perspective of the goals of the Health Insurance Council, specific information about these criteria was asked for in the application form. Based on this information a judgement form was made for reviewing the relevance for policy. Several methods for ranking priority setting were studied, including ranking on the basis of absolute numbers, equal scales, logarithmic scales, exponential scales and a subjective estimation of the reviewer. The results of this exercise will become available in 1999.

3.3.2. Dutch Health Research and Development Council

The Dutch Health Research and Development Council (ZON) was initiated in 1996 to promote the efficient allocation of government funds for applied health research. ZON is an intermediary organisation between the Ministry of Health and the research community. ZON is responsible for programming, priority setting and the actual allocation of research funds regarding health, prevention and care, including the organisation of care. ZON organised different types of research programmes, such as Quality of Health Care, Prevention, Home Care Technology and Efficiency in Health Care. Each programme is formulated by a working group of experts. The working group judges all research proposals on their relevance for the programme. The relevance is assessed by means of two variables: the extent to which the project contributes to the aim of the programme and the probability of implementing the results. The working group of the programme decides whether a research proposal will be approved or not [28]. However, the methods used for setting priorities between proposals are not explicitly described.

3.3.3. Netherlands Organisation for Scientific Research

The Netherlands Organisation for Scientific Research (NWO) is a statutory organisation with the main purpose of improving the quality of scientific research in the Netherlands [29]. In 1989, health-related research was formally recognised as one part of NWO and a separate board was installed, the Board for Medical Science (Gebiedsbestuur Medische Wetenschappen, GB-MW). The GB-MW has not only emphasised scientific quality, but has attempted to improve societal-relevant research within different programmes. However, criteria and methods used for priority setting are not explicit nor are they transparent. NWO also plays an important role in the Fund Investigative Medicine. A special NWO committee evaluates the research proposals to that program for scientific quality and feasibility. Without a positive opinion from NWO, proposals within the Fund Investigative Medicine are unlikely to be funded [30].

The actors involved in identification and priority setting for HTA in the Netherlands are not closely linked (Fig. 1) and they indicate different priorities
for HTA for different purposes (Table 1). The organisations do collaborate within some HTA-programmes, such as the Health Insurance Council and the Netherlands Organisation for Scientific Research within the Fund Investigative Medicine, and the Health Council and the Health Insurance Council with regard to the ‘126’-list. However, all actors mentioned do not work together towards a common goal. Without such collaboration, the desire of the Ministry of Health to have a successful national program for efficiency in health care, will not be realised [9].
4. Discussion

The three most important players in the field of identifying and priority setting for HTA in the Netherlands, in our opinion, are the Health Council, the Council for Health Research and the Health Insurance Council. Unfortunately, these organisations take different approaches. This is not remarkable, since the overall approach relates to the nature of the programme for which priorities are being identified, and the division of responsibilities [10]. However, the three organisations have not yet described explicitly the ways in which priorities for HTA are to be identified, who is responsible for particular elements in the priority setting process, and who will be involved in the process. For example, priority-setting exercises have been performed separately by the Health Insurance Council and the Health Council regarding the ‘126’-list with different methods and different results. It can be concluded that the methods used are typically not very transparent, and thus explicit criteria are seldomly used. The probable reason for this is that methods for setting priorities on the basis of societal criteria are not well developed. Another reason is that crucial elements in priority setting for HTA can not be based on sound (scientific) evidence. The initiative of the Health Insurance Council in 1998 to develop a more explicit model for priority setting for the Fund Investigative Medicine is a step forward in making the process more evidence based and more transparent.

Input for the identification and priority setting process can be obtained from organisations who provide the actors on the national level with useful information for policy making, such as the National Institute for Health and Environmental Hygiene (Rijksinstituut voor de Volksgezondheid en Milieuhygiëne, RIVM). The RIVM is involved in basic data collection relating to the health of the Dutch population and the functioning of the health care system. In 1993, RIVM published a major report, ‘Exploring the future of public health’ (Volksgezondheid Toekomst Verkenningen, VTV) that presented a great deal of information on the health of the Dutch population [15]. This information was helpful for identifying areas for priority setting for HTA [14]. In 1997 an extended update of the report was published. The reports are used for evaluation of recent health policy, as well as for formulating future health policy [31]. Not only national organisations can be of relevance for an input in the identification and priority setting process. Lessons can also be learned from international collaboration, such as the EUR-ASSESS project. The aim of EUR-ASSESS was to stimulate and co-ordinate developments in HTA in Europe and to improve decision-making concerning adoption and use of health technology. One of the formal objectives of the project was to improving approaches to identifying priorities for assessments and to review and advise on methods for priority setting for HTA, which was studied by the Priority Setting Subgroup [10].

To improve the identification and priority setting process for HTA in the Netherlands, it seems to be essential to develop a more co-ordinated effort. The
different actors need to become a team, sharing experiences with their priority setting models and deciding about responsibilities. Lessons can be learned from countries performing practical priority setting processes, such as the United Kingdom and the Basque country of Spain [10]. It should be clear that the general approach for priority setting should reflect the goals of the programme, the resources available and the working methods of those involved. This means that the perspectives of both decision-makers and researchers need to be considered [10]. In the end of 1997 the first steps towards a more co-ordinating effort regarding the ‘126’-list have been mounted by Health Insurance Council and the Health Council, as was recommended by the policy document of the Minister of Health [9]. In a policy letter of the Minister of Health, also representing the Minister of Education, Culture and Science, to the Permanent Commission for Health, Welfare and Sports, the RGO was asked for advice on efficiency in health care. The Minister specifically asked the RGO for advice on a permanent co-ordinating body for HTA [32]. In its advice letter, the RGO recommends a national ‘platform’ for HTA [32]. Members of the platform should include: members of the Health Council, the Health Insurance Council, the Board for Medical Science of the Netherlands Organisation for Scientific Research, the Health Research and Development Council, the Association of University Hospitals (Vereniging van Academische Ziekenhuizen, VAZ) and the Council for Health Research, as well as representatives of patient/consumer groups, professional groups, medical insurance organisations and the industry (pharmaceutical companies and medical device organisations). The main task of the platform, according to the RGO, is to develop information about existing studies in the Netherlands, and the need for more HTAs in other subjects. It is the responsibility of the platform, according to the RGO, to provide the RGO every 2 years with a report on HTA activities on a national and international level, and on the needs for new HTA activities. This report should serve as an input for the advice of the RGO to the Minister on the long-term programme of HTA in the Netherlands [33]. It is our belief that if those responsible for different HTA programs share information in and about the priority setting process, possibilities can be identified and discussed for joint and sometimes expensive assessments. This will imply that value for money from investment in HTA could be increased at both the programme level and overall.

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