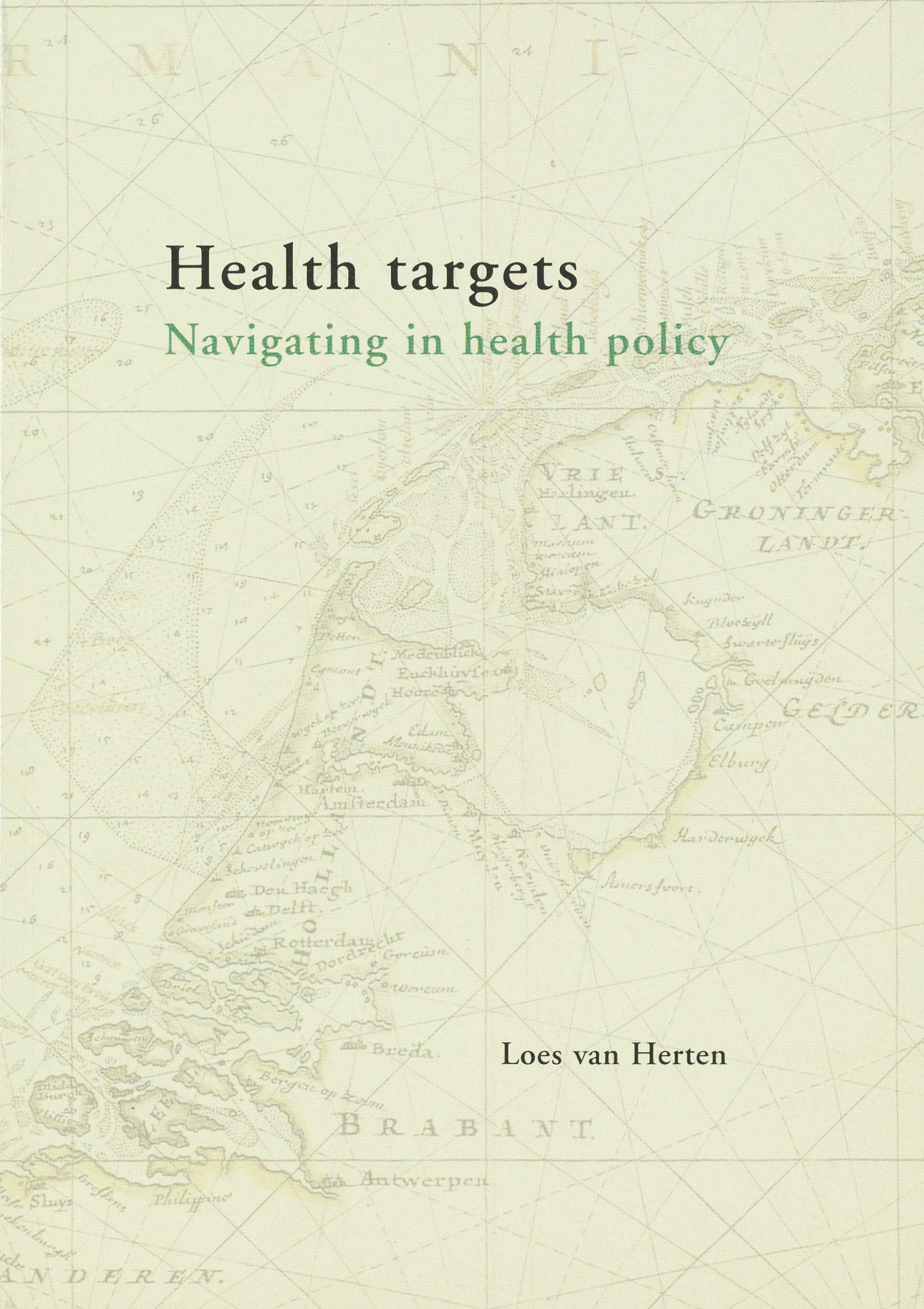
Health targets

Navigating in health policy



Loes van Herten

Health targets

Navigating in health policy

Loes van Herten

Stellingen

behorende bij het proefschrift

Health targets
Navigating in health policy

10 mei 2001

Loes van Herten

1 Het gebruik van gezondheidsdoelen in het begin van de jaren '80 werd mede mogelijk gemaakt door de ontwikkelingen in de epidemiologie.

2 Gezondheidsdoelen benadrukken dat investeringen in gezondheidsbeleid bijdragen aan het handhaven of verbeteren van de gezondheidstoestand van de bevolking.

3 De vertaling van gezondheidsdoelen naar de praktijk staat in Europa nog in de kinderschoenen.

4 Alleen wanneer veldorganisaties zich gezondheidsdoelen eigen maken en financiële en organisatorische middelen inzetten, zijn gezondheidsdoelen in de praktijk haalbaar.

5 Zonder politieke wil en durf zijn gezondheidsdoelen waardeloos.

6 Bij het stellen van gezondheidsdoelen is het proces minstens even belangrijk als de gezondheidsdoelen zelf.

7 Het Health for All beleid van de Wereldgezondheidsorganisatie heeft een te inspirationeel karakter, waardoor het in de lidstaten ongeloofwaardig overkomt.

8 Succes van intersectoraal beleid is onder andere afhankelijk van een goede voorbereiding door het Ministerie van Volksgezondheid.

9 Bij de probleemanalyse wordt in preventieve en geneeskundige zorg een gelijksoortig referentiekader gebruikt; bij de beleidsvorming en implementatie zijn de verschillen tussen beide sectoren groter.

10 De vraag naar preventieve zorg is latent aanwezig; hierdoor speelt zij geen rol van betekenis in de huidige discussie over vraaggericht zorg.

11 Succes dient niet alleen gemeten te worden aan de hoogten die zijn bereikt, maar ook aan de obstakels die zijn overwonnen.

12 Op een wedstrijdboot hoeft de schipper niet te navigeren, maar moet de navigator wel schipperen.

CIP GEGEVENS KONINKLIJKE BIBLIOTHEEK, DEN HAAG

Herten, Louise Maria van

Health targets: Navigating in health policy / Louise Maria van Herten
Leiden: TNO Prevention and Health
Thesis University of Amsterdam - With references - With summary in Dutch
ISBN 90-6743-786-7

Print Offsetdrukkerij Ridderprint BV, Ridderkerk, 2001
Cover Dienst der Hydrografie, Koninklijke Marine, Den Haag, 1999
Bron: Algemeen Rijks Archief, Den Haag; document nummer 4.VEL-H619.1

Health targets
Navigating in health policy

Gezondheidsdoelen
Navigeren in gezondheidsbeleid

ACADEMISCH PROEFSCHRIFT

ter verkrijging van de graad van doctor
aan de Universiteit van Amsterdam
op gezag van de Rector Magnificus
prof. dr. J.J.M. Franse
ten overstaan van een door het College voor Promoties ingestelde
commissie, in het openbaar te verdedigen in de Aula der Universiteit
op donderdag 10 mei 2001, te 14.00 uur
door

Louise Maria van Herten

geboren te Sittard

Promotiecommissie

Promotor
Prof. dr. L.J. Gunning-Schepers

Overige leden
Prof. dr. N.S. Klazinga
Prof. dr. E. Schadé
Prof. dr. A. J. Dunning
Prof. dr. D. Post
Dr. J.A.M. Hulshof

Universiteit van Amsterdam
Faculteit der Geneeskunde

Financial support by TNO Prevention and Health for the publication of this thesis is gratefully acknowledged.

Targets can be compared to the compass bearing by which a ship navigates.
(Peter Drucker, 1954)

Contents

Chapter 1	Introduction	9
Chapter 2	Health policies on target? Review on health target setting in eighteen European countries	19
Chapter 3	Targets as a tool in health policy Part I: Lessons learned	35
Chapter 4	Targets as a tool in health policy Part II: Guidelines for application	51
Chapter 5	New global Health for All targets	67
Chapter 6	Rationalising chances of success in intersectoral health policy making	79
Chapter 7	Health policy and practice	97
Chapter 8	Discussion	109
Summary		121
Samenvatting		127
Dankwoord		135
Curriculum Vitae		139
Cover		143

Contents

Chapter 1

Introduction

1.1 Background

Since the introduction of 'management by objectives' by Peter Drucker in 1954,[1] targets have been used to structure and rationalise policy issues by focusing on outcome, strategy, productivity, marketing and innovation.[1] Targets are also frequently used in the health policy sector. In the second half of the twentieth century, when universal access to health care became a policy goal in most Western European countries, targets in the health sector related to improvements in productivity and focused on the structure and organisation of the health system. It was an era of growth and there was a clear need for policy measures to ensure a good geographical spread of services and a system of quality assurance for this rapidly-expanding field. The expansion of the system reached its zenith in the late 1970s. The emphasis of policy shifted from the establishment of infrastructures to containing costs and improving the efficiency of health service delivery. There was subsequently a shift from productivity targets to strategy targets, with the latter aiming to improve the effectiveness and efficiency of health service delivery. These targets were increasingly phrased in terms of containing overall expenditure by controlling supply, for instance through capped budgets for hospitals or by fixing the number of hospital beds. These kinds of productivity and strategy targets still exist.[2]

Outcome-related targets are called health targets. This type of target does not focus on the structure and organisation of the health system or the effectiveness and efficiency of health service delivery, but on the health status of the population. There has been widespread awareness of health targets since the beginning of the 1980s. They draw attention to the fact that all the investments of time and money in health policy and in collateral areas are ultimately legitimised by the fact that they either contribute to maintaining or improving the health status of the population.[2] The use of health targets – as a tool in developing health policies – has been promoted through the Health for All by the Year 2000 campaign of the World Health Organisation (WHO).[3] The aim of this campaign was to ensure that all citizens of the world attain a level of health by the year 2000 that will permit them to live socially and economically productive lives. In 1984, all the countries of the European region adopted 38 health targets.[4,5]

The first two WHO health targets were intended to reduce the differences in health between groups and enhance the quality of life. The following ten health targets focused on the outcome in terms of mortality and morbidity (i.e. reduction in chronic diseases, infectious diseases, cardiovascular diseases, cancer, accidents, mental disorders and suicide) and on improving the health of specific groups (handicapped, elderly, children and women). In addition, there were health targets relating to health determinants. Some of them related to the public health sector, examples being the targets for the promotion of healthy lifestyles. Other risk-related health targets were intended to achieve a healthy environment and required action from sectors other than the health sector. A third sub-group of the determinant-related health targets were the targets that focused on appropriate care. The final group of WHO health targets were more conditional in nature and called attention to the need to develop country-specific Health for All policies.[4,5] With this set of health targets, WHO European Region linked up with health policy developments in Canada[6] and the US.[7]

To monitor progress, WHO European Region proposed a large number of indicators. Each European country was supposed to elaborate these targets in its own way. Following this WHO initiative, there were discussions in almost all European countries about how to improve health policy.[5] In 1996, the 38 health targets of WHO Europe were evaluated using Dutch data.[8] Although the Health for All by the Year 2000 strategy of WHO was an important initiative, the results of the analysis showed a sobering picture. It was expected that ten targets would be achieved partially in the year 2000. For almost half of the 38 targets - namely those for appropriate care and the development of national Health for All policies - no conclusion about achievement in the year 2000 could be drawn because these targets had hardly been made operational by WHO, if at all. Looking back, the 38 targets were too ambitious and too specific for general use, in particular the targets about reductions in mortality and morbidity. The targets were based too much on political desirability and not enough on scientific (especially epidemiological) considerations.[8]

Although the results of the study were not so positive for the health targets of WHO, the efforts to set health targets in the Netherlands looked promising.[8] As stated above, the setting of targets is a way to structure and rationalise policy issues. Health targets therefore express the planned changes in population health explicitly. At the same time, they provide a logical measure for the subsequent

evaluation of the chosen policy. However, the very limited attainment of the Health for All by the Year 2000 targets in the Netherlands begs the question of whether setting health targets is a useful tool in health policy.

The difficulty with health targets is that they cover a very complex field. As Lalonde[6] pointed out, this complexity results from the numerous determinants that affect the health status of the population. Our limited understanding of the causal web and the long lag times also make the health policy field a complicated one.[2] In addition, many actors are involved. Although it is usually central government that sets the health targets, other organisations or even ministries other than the Ministry of Health are often the ones who have to take the action necessary to achieve the change in the stated health determinants. In this way, health targets differ from the planning and financial targets, because there the Ministry of Health is often directly responsible for the allocation of resources necessary to achieve targets.[2]

1.2 Aim and research questions

The mechanisms described above mean that the setting of health targets is often approached with mixed feelings. An overview of the usefulness of health targets as a tool in health policy was missing. The aim of the studies described in this thesis is therefore to gain insight into the practice and potential of the health target approach.

First of all, it is necessary to look back at how health target setting as a tool in health policy developed. Here, the following questions were addressed:

1 To what extent are health targets accepted as a tool in health policy in European countries?
2 What benefits, drawbacks and necessary conditions were encountered with health target setting?

Secondly, it is necessary to look forward to how health target setting can help to face future challenges in health policy. In this area, the following questions can be asked:

3 How can the health target approach be used in health policy development?
4 How can supranational health policy contribute to the achievement of health targets?
5 How can intersectoral health policy contribute to the achievement of health targets?
6 How can health care policy contribute to the achievement of health targets?

1.3 Methods

This paragraph will give a rough outline of the methods used. A more detailed description will be given in the subsequent chapters. The first two questions addressed by this thesis have a retrospective character. The answers to those questions are based on two previous studies[8,9] and on an additional literature search on health policy, health targets and management by objectives. The aim of the first study[8] was to analyse progress made in the Netherlands towards the achievement of the Health for All targets of WHO Europe by the year 2000. All 38 targets were covered in this study, but the main focus was on the health outcome targets, which were mainly focused on morbidity and mortality. The other targets were analysed in less detail. The data used for the evaluation was obtained from secondary data sources. For supplementary data and validation of these results, additional sources were used. If sufficient quantitative information was available, the trend was extrapolated to determine whether developments with respect to the target were in the intended direction and/or whether it appeared likely that the target would be achieved by the year 2000.

The aim of the second study[9] was to review available knowledge of, and experience with, the practical use of health targets in Europe, in particular their use for priority setting in health policy development. An analysis was also conducted in order to determine whether health policy making in European countries was influenced by WHO's Health for All initiative. The study consisted of a literature review on health target and priority setting and an inventory of the actual situation in terms of setting health targets and priorities in eighteen European countries. The inventory included the collection of relevant material and consultation of local experts. For the Czech Republic, Finland, Hungary, Italy, Portugal, Poland, Spain and Romania the information was collected by collaborating institutes in the countries involved. Austria, Denmark, France,

Germany, Ireland, the Netherlands, Norway, Sweden, Switzerland and the United Kingdom were covered by the authors. All collaborating institutes received similar instructions on questions to be addressed and the format of the report. With very slight differences, they all followed the same approach to collecting materials. In addition to literature searches, the health policy section and the documentation centres of the Ministries of Health, embassies and a variety of scientists and other health policy experts were asked for relevant policy documents, reports and other publications. To gather expert opinion about developments in a country, questionnaires were sent to at least two experts per country. Finally, the country reviews were sent to the Ministries of Health in each country in order to give them the opportunity to check the review before publication.

These two studies and the additional literature search on health policy, health targets and management by objectives also provided the empirical basis for addressing the third question of this thesis.

The study of the new global Health for All strategy[10] provided the answer to the fourth question. The aim of this study was to round off the internal debate at WHO Headquarters about the new global Health for All strategy. During a visit to WHO in Geneva, face-to-face interviews were conducted with about thirty staff members using a semi-structured questionnaire on the proposed new global health targets. The respondents formed a reasonable cross-section of WHO staff. These interviews yielded a great deal of oral and written material. A literature search provided additional information. The criteria for judging the total framework were taken from a range of fields such as public health, organisational science, management, and communications. In order to assess the individual targets, criteria were used relating to the target type, the target group, the target conditions, the relevance of the proposed indicators, the demographic and epidemiological trends, and the relevance and attainability for WHO member states. The presentations of the preliminary results at a meeting with the programme managers and at a yechnical seminar at WHO headquarters, as well as at several meetings with the policy action coordination unit, produced feedback from WHO staff.

The aim of the fifth question was to analyse the possibilities of achieving health gain through intersectoral policy.[11] The analysis was based on a literature review. First of all, an inventory was made of policy fields that could possibly influence the health status of a population. In addition, attention was given to health determinants in relation to socio-economic health inequalities. Secondly, an inventory was made of factors that influence the feasibility of intersectoral policy. Thirdly, four policy fields were analysed in terms of the feasibility factors which had been identified. These policy fields are education, safety, agriculture and urban areas. A literature review was conducted for each policy field. Finally, overall conclusions were generated and the relationship with health target setting was discussed.

The answer to the last question about the contribution of health care to the achievement of health targets is based on the information gathered in all studies mentioned, especially in the review study in which we compared eighteen European countries.[9] This study analysed the differences and similarities between public health and health care at the national level. An additional literature search was conducted for an analysis of differences and similarities in actual practice. This literature search included an analysis of articles and grey literature relating to evidence-based medicine and clinical guidelines, and of articles and grey literature relating to screening, vaccination and health promotion programmes.

1.4 Outline of the thesis

Answering the research questions results in an overview of health target setting in health policy. Although it is hard to measure the direct contribution of setting health targets to the improvement of the health status of a population, this thesis provides justification for the usefulness of health targets as a tool for structuring health policy and making it more effective. Following the research questions, chapter 2 contains the results of the review carried out in eighteen European countries. It presents the use of health targets in eighteen European countries and stresses differences and similarities. The lessons learned from several health target approaches are described in chapter 3. This chapter summarises the benefits, drawbacks and conditions for application. Chapter 4 presents more practical guidelines for application.

Chapters 3 and 4 are of a general and theoretical nature and they fit in with the rational approach introduced by Simon in 1947.[12] In this approach, policy is structured in purely logical-strategic terms, i.e. as a series of sequential steps worked out to attain a given aim. However, the practice of policy development is obstinate. One can also argue that only small adjustments are possible, based on value judgements and strategic coalitions with a view to the empowerment of the specific positions of parties involved. This is called the incremental approach and was introduced by Lindblom in 1959.[13] De Leeuw stated that a combination of both approaches, known as the mixed-scanning approach - presented by Etzioni in 1967[14]- will be the best theoretical framework.[15] This approach makes use of fundamental decisions, based on the rational reflection of available knowledge, and of incremental changes based on value judgements and reflection on power structures.[15,16]

The final chapters of this thesis will therefore focus on actors involved in the policy making process. The supranational level is highlighted first by discussing the new global Health for All policy (Chapter 5). Since not all determinants that influence the health status of the population are under the direct responsibility of the Ministry of Health, intersectoral policy is necessary to achieve the health targets set. However, before developing intersectoral policy, it is wise to analyse the feasibility of potential intersectoral policy fields (chapter 6). Although other policy fields play an important role in achieving health targets, the health sector itself also plays an important role. Both public health professionals and health care professionals should be involved. Chapter 7 shows that it seems that both actors develop their policies independently. Combining the efforts of both sectors may lead to an integrated health policy. The final chapter (Chapter 8) discusses all the findings described in this thesis.

References

1 Drucker PF. The practice of management. New York/Evanston: Harper & Row, 1954.
2 Gunning-Schepers LJ, Herten LM van. Targets in health policy. European Journal of Public Health, 2000; 10: 2-6.
3 WHO, Global strategy for health for all by the year 2000. Geneva: World Health Organisation, Health for all series, no 3, 1981.

4 WHO-EURO, World Health Organisation Regional Office for Europe. Targets for health for all: targets in support of the European strategy for health for all. Copenhagen: WHO Regional Office for Europe, 1985.
5 WHO-EURO, World Health Organisation Regional Office for Europe. Implementation of the global strategy for health for all by the year 2000, second evaluation: eighth report on the world health situation. Volume 5, European Region. Copenhagen: WHO Regional Office for Europe, 1994.
6 Lalonde M. A new perspective on the health of the Canadians: a working document. Ottawa: Government of Canada, 1974.
7 Department of Health and Human Services. Protecting health/preventing disease: objectives for the nation. Washington DC: US Government Printing Office, 1980.
8 Water HPA van de, Herten LM van. Bull's eye or achilles' heel: WHO's European health for all targets evaluated in the Netherlands. Leiden: TNO Prevention and Health, 1996.
9 Water HPA van de, Herten LM van. Health policies on target? Review of health target and priority setting in 18 European countries. Leiden: TNO Prevention and Health, 1998.
10 Water HPA van de, Herten LM van. Never change a winning team? Review of WHO's new global policy: health for all in the 21st century. Leiden: TNO Prevention and Health 1999.
11 Herten LM van, Reijneveld SA, Kleijn-de Vrankrijker MW de. Health in all its aspects (Gezondheid in al haar facetten). Zoetermeer: Council for Public Health and Health Care, 2000.
12 Simon HA. Administrative behaviour. London: MacMillan, 1947.
13 Lindblom CE. The science of muddling through. Public Administration Review, 1959; 19: 79-88.
14 Etzioni A. Modern organisations. Englwood Cliffs: Prentice-Hall, 1967.
15 Leeuw E de. Health policy: an exploratory inquiry into the development of policy for the new public health in the Netherlands. Maastricht: Savannah/Datawyse, 1989.
16 Hogwood BW, Gunn LA. Policy analysis for the real world. Oxford: Oxford University Press, 1984.

Chapter 2

Health policies on target?
Review on health target setting in eighteen European countries

L.M. van Herten & H.P.A. van de Water
European Journal of Public Health 2000; 10 (4 Suppl): 11-16. Reprinted with permission.

Abstract

Introduction In 1984 the European region of the World Health Organisation (WHO) adopted 38 targets within the framework of the Health for All by the Year 2000 strategy. With the presentation of a renewed Health for All strategy in September 1998, it was considered an appropriate moment to review the use made of health targets in various European countries. This may be helpful in provoking new interest in the health target approach. *Methods* A snowball approach was used in each country to gather relevant policy documents, reports and other publications on health policy. In addition, experts' opinions were collected by mailed questionnaires. Draft reviews of target setting in health policy were formulated per country and were sent to the appropriate Ministry of Health for review before publication. *Results* The Health for All strategy has influenced the health policy of almost all countries included in this study. Most countries have formulated some health targets, whereas other countries have formulated some general priorities, goals or objectives as a related but less specific approach. Although many countries have formally adopted the health targets set by the WHO, the degree of elaboration, the focus of the health targets and the practical implementations vary considerably between the countries investigated. *Conclusion* Many countries have formally adopted health targets. Health targets, as a tool in health policy, are mostly used at a political level and their practical use seems to be in its infancy and can be considered as 'the promising beginning of a development'.

2.1 Introduction

Many countries are currently facing a challenge in terms of national health and health policy and, for this reason, the exchange of experience and insight gained in different countries would be useful. The 1984 Health for All strategy presented by the European office of the World Health Organisation (WHO) included 38 targets and was a stimulus to European member states to think about setting similar priorities and ways of achieving health targets.[1] The direct contribution of health targets to the improvement of the health status of a population is hard to measure and cannot be distinguished from the effects of other societal processes. However, despite the drawbacks on health target setting, there are clear arguments which indicate that target setting helps to develop a more rational and transparent health policy.[2]

Figure 1 Increasing specificity when developing health targets

Generally, target setting is a step-by-step process with increasing specificity (see figure 1). It starts with principles and values which may be markedly influenced by political opinion. Equity in health and equal access to health care facilities are two examples mentioned in the Health for All strategy. A goal is a very general description based on the principles and values of what should be achieved in the long term, for example a longer and healthier life for the inhabitants of a country. In the international literature and in many national policy documents it

is frequently used interchangeably with the term objective although, according to United Nations usage, an objective is rather more specific than a goal and is an aim which can be partly achieved during the planning period. Objectives therefore represent a more concrete elaboration of how the goal should be attained, such as a reduction in cancer morbidity and mortality. The subsequent qualitative targets are more specific than the objectives and have a concrete deadline, for example a reduction in smoking in the next decade. In the next step quantitative targets are set to monitor progress. When adequately defined, there is a built-in evaluation mechanism with measurable indicators. This process of formulating health targets usually stimulates the development of health policy at national, regional or local level.[3,4]

In September 1998 the European member states of the WHO adopted a renewed Health for All strategy, called 21 Targets for the 21st Century.[5] This is perhaps an appropriate time to review the literature on the use of health targets in eighteen European countries in order to determine whether target setting is used as a tool for establishing health policy and whether the 1984 Health for All strategy was implemented and indeed used to set health targets. This study may also be helpful in provoking new interest in the health target approach. Detailed results of this study are described in our report Health Policies on Target?.[4]

2.2 Methods

We investigated health target setting in Austria, the Czech Republic, Denmark, Finland, France, Germany, Hungary, Ireland, Italy, The Netherlands, Norway, Poland, Portugal, Romania, Spain, Sweden, Switzerland and the UK. Data were collected up until July 1998.

Data and information were collected by means of computer searches of the literature and by sending a questionnaire to respondents in all countries. The main information sources used were policy documents. Because these documents often have a restricted distribution (the so-called grey literature), material had to be collected by communicating with experts in each country. A snowball approach was used. We contacted Ministries of Health (both the health policy section and the documentation centre), other national health institutes, embassies, scientists and other health policy experts to explain the purposes of

the project and to ask for relevant (government and non-government) policy documents, reports and other publications. We also sent experts a short questionnaire to determine their opinion about developments in their country. The questionnaire covered the following issues: (i) Is health target setting an issue of debate in your country? (ii) What has been the influence of WHO's Health for All initiative? (iii) What is the concrete use of health target setting, the status of development, and what are the main actors? (iv) Are there related developments in health monitoring or information systems?

On the basis of the information gathered, we prepared an overview for most of the countries. For some countries collaborating institutes were asked to prepare the overviews. In the Czech Republic, Hungary, Poland and Romania public health researchers provided the overviews of the situation in their own country. For Italy, Portugal and Spain a senior public health investigator in Spain prepared all three overviews. Two Finnish researchers prepared the overview for Finland. All collaborating institutes received similar instructions on required structure and format, questions to be addressed, etc.

We then used the eight country overviews together with the documents obtained and information from the questionnaires of the remaining ten countries to prepare a draft review for each country. These draft reviews were sent to the Ministry of Health in each country for correction. The feedback we received gave us the impression that our approach for collecting relevant literature and additional information from experts had succeeded.

2.3 Results

The main results of our study are summarised in table 1. Here we highlight three issues for each country: (i) the influence of the WHO's Health for All strategy on the acceptance of the health targets idea at a national level, (ii) the practical use of health targets at a national level (in terms of goals, objectives and qualitative or quantitative targets) and (iii) the support provided by existing health information systems for a health target approach.

Table 1 Summary of the country reviews on the use of health targets until July 1998

Country	Inspired by the WHO	Use of health targets	Information system
Austria	Yes	Yes	Existing system
Czech Republic	Initially yes	Not really	Expanded system
Denmark	Not really[a]	Not really	Expanded system
Finland	Initially yes[a]	Yes	Existing system
France	Yes	Yes	Expanded system
Germany	Yes	Yes	Expanded system
Hungary	Yes	Yes	Expansion planned[b]
Ireland	Yes	Yes	Expanded system
Italy	Yes, late	Yes	Existing system
The Netherlands	Yes	Not really	Expanded system
Norway	Initially yes	Yes	Existing system
Poland	Yes	Not really	Expansion planned[b]
Portugal	Yes, late	Not really	Expansion planned[b]
Romania	Yes	Yes	Expansion planned[b]
Spain	Yes	Yes	Expanded system
Sweden	Yes	Yes	Expanded system
Switzerland	Yes	Yes	Expanded system
United Kingdom	Yes	Yes	Expanded system

[a] The Health for All strategy confirmed existing principles.

[b] Expansion planned may vary from being aware of inadequacies in the system to concrete plans for improvement.

Austria

Developments had been strongly influenced by the WHO Health for All strategy. Current Austrian health policy[6] includes a number of targets for both health care and the health insurance system (concerning quality and accessibility), as well as several qualitative targets for health protection and promotion. Health data used to develop the policy were obtained from existing information systems.

Czech Republic

The need to restructure the health care system initially overshadowed involvement in the Health for All strategy. Health targets have not been formulated, but the country has a National Programme of Health[7] with priorities. This programme has made use of existing health data systems, but new forms of data collection (health interview survey) are currently being developed.

Denmark

The principles of the Health for All strategy were already important before the WHO presented its strategy. Formally speaking, there is no health target policy under this name, but priorities are formulated in the national Health Promotion Programme.[8] The country is developing a more comprehensive health information system to monitor developments in population health.

Finland

The principles and values of the WHO Health for All strategy were already accepted before the WHO presented its report in 1984. Although the country was initially quite active in developing a national health target policy,[9] an economic setback dampened enthusiasm for this approach and prompted discussion of the rationing of health services.[10] The country already has an extensive health information system.

France

The WHO Health for All strategy has had a clear influence in France. The 1994 document Health in France[11] laid the basis for recent health target-setting efforts, both at the national and regional levels and resulted in the organisation of a national health conference to establish priorities. There has been some expansion of the existing health information system, i.e. annual national health reports.

Germany

After initial interest in the Health for All strategy, discussion on the setting of health targets faded, followed by a later revival.[12] Now, some regions already have or are in the process of formulating health targets. The health insurance sector appears to be interested in applying health targets as tools for quality assurance. Some federal states and the national government are moving to develop better health monitoring systems.

Hungary

The debate on priorities in health policy began after the WHO Health for All initiative. A recent law, which adopted practically all of the main points of the strategy, lists priorities in health policy with the accent on health care. Qualitative and quantitative targets for population health have been set for the year 2010 and pilot projects for practical implementation have been started.[13] The health information system will be modified to meet the new requirements.

Ireland

Influenced by the WHO Health for All strategy, Ireland has revised its key values for health policy and has started to reorient its health services towards prevention and health promotion. The present health strategy[14] includes several health targets at the national level, which are to be worked out at the regional level by the recently installed regional health boards. Some initiatives have been taken to improve the existing health information structure.

Italy

Although the health target idea was not initially used, the recently published National Health Care Plan[15] includes five national targets which are similar to those of the Health for All strategy. The focus is on the health care system rather than on population health. Health data used to develop the policy were obtained from existing information systems.

The Netherlands

The Health for All strategy has been an important stimulus for the development of current national health policy. Although the setting of quantitative health targets was rejected in 1992 by the Secretary of State on Health, the most recent policy sets three general goals.[16] Monitoring of population health has been extended and improved through the introduction of 4-year health reports.

Norway

Although the Health for All strategy was well received, there is no clear relationship between the strategy and current policy documents. The report on population health[17] includes concrete health targets, but the practical relevance of these targets is unclear. The data used to develop the policy came from existing databases on health and health care.

Poland

Since 1990 there has been a National Health Programme, which is clearly based on the WHO Health for All strategy. The 1996 version of the programme[18] formulates eighteen strategic goals. Policy realisation, with emphasis on health promotion, is in an early phase. Improved regulations for health data systems have been issued and it is recognised that there is a need for a more extensive national health monitoring system.

Portugal

Given the similarities in the formulation of principles it is clear that the WHO Health for All strategy had some influence. The country's national policy[19] has objectives and the acceptance of health targets lies between contemplation and development. Policy documents are based on information obtained from existing data sources.

Romania

The Health for All strategy has not strongly influenced the country's health policy,[20] but important targets (such as equity, communicable diseases and women's health) have been adopted, leading to more emphasis on health promotion. The health target approach is just starting to be developed. The existing health monitoring and health data collection systems need to be improved.

Spain

The Health for All principles were accepted. Since 1989, nearly all regions have approved regional health plans with approximately the same set of health targets, although practical approaches may differ.[21] A special health data collection system was established to monitor progress in achieving the WHO health targets.

Sweden

Swedish policy documents frequently refer to the Health for All strategy.[22,23] Health promotion and disease prevention are priority areas associated with a number of national and regional targets. The country's extensive health information system has been improved to facilitate comparisons between regions.

Switzerland

The European Health for All strategy has had a fairly strong influence on health policy in this country.[24] There is no national health target strategy, because the federal government does not have the authority to adopt such a strategy. Switzerland has reorganised and improved its health information system to adapt to the Health for All programme.

UK

The initiative of the WHO influenced health policy in all parts of the United Kingdom. England has implemented the most concrete follow-up to the Health for All strategy. The 1998 strategy Our Healthier Nation[25] and its predecessor Health of the Nation[26] present a limited number of quantitative health targets for England which affect the practical organisation and financing of public health and health care. A special central unit at the Ministry of Health has been set up to monitor progress towards meeting health targets.

These summaries show that the health policy of almost all countries included in this study has been inspired by the Health for All by the Year 2000 strategy. Most countries have formulated some health targets and, although other countries may not have set health targets, they have all formulated some general priorities, goals or objectives as a related but less specific approach. In the countries which have formally adopted health targets, the degree of elaboration, the focus of the health targets, and the practical implementation of these targets vary considerably. The core health targets in most countries are similar (equity, health promotion, etc.), but there is great variation in the number of health targets and in their focus on public health or health care and in the actors involved. The practical use of health target setting as a tool in Europe seems to be in its infancy. It can be considered as 'the promising beginning of a development'.

Appropriate health information and health monitoring systems are a prerequisite for setting health targets. Almost all countries have improved their health information systems or are in the process of doing so and, consequently, will be able to respond to the health monitoring requirements of the health target approach.

2.4 Discussion

When using primary and secondary sources, as we did, one must be aware of potential confounders. For example, statements about the importance of starting points for a country's health policy often depend largely upon which policy documents are included in the study. Whereas one document focuses on public health, another from the same period may emphasise health care. Documents may also express the desirable rather than the actual situation. The different extent of regionalisation in the countries may also cause confusion. Most countries have national health targets, while some have both national and regional health targets and others have only regional targets. Such disparities reflect the different forms of government in European countries. In a federal state such as Switzerland, the national government is not empowered to define national health targets. Despite these limitations, the fact that grey literature policy documents made up the majority of the publications and the fact that reports on practical experience were scarce leads us to believe that, on the basis of our own findings, the information given by the experts and the feedback from the Ministries of Health, our conclusions reflect the current situation in practice.

Another point of discussion is the definition of goals, objectives and targets. The terms used in the policy documents varied between countries. The step-by-step approach for setting the health targets shown in figure 1 was seldom adopted in the countries studied. Sometimes the wording of what was called a target was so general that, according to the hierarchy of levels in the development of health targets, it should be classified as an objective or goal. As a rule, health targets were formulated in a qualitative sense and the practical elaboration at all levels – as, for example, in England – was the exception.

The relatively small number of quantitative targets probably reflects the fact that most countries consider health targets a source of inspiration rather than a management or technical tool. This inspirational aspect is also reflected by the observation that many targets focus on rather broad areas such as equity, quality of life and health promotion. In some countries health targets were seen as technical tools for making policy decisions in order to achieve an optimal balance between effect (health gain) and allocation of available resources, for example the health insurance targets in Germany. In others countries, for example Spain, health targets are promoted as a management tool.

These various ways of applying health targets are clearly complementary and compatible. We consider that the use of health targets as a source of inspiration corresponds to the development and application of such targets at a political level, including the articulation of intentions and desired directions. Inspiration implies a focus on steps 1–3 in the target development process shown in figure 2. In this process, the policy level (the use of health targets as a managerial tool) is defined as the production of a concrete plan for realisation of the intentions and desired directions. Thus, the policy level includes developmental steps 2 (goals) to 4 (qualitative health targets) but could also cover quantitative target formulation (step 5) and the selection of indicators for monitoring progress (step 6). Use of health targets as a technical tool is assumed to correspond to the practical level and suggests concrete implementation of plans formulated at the policy level. This use of health targets includes developmental steps 4–6, and possibly step 3.[4]

Figure 2 Three uses of health targets in different steps of development

Steps in development	Inspirational use (political level)	Managerial use (policy level)	Technical use (practice level)
Step 1. Principles and values	■ ■ ■ ■ ■		
Step 2. Goals	■ ■ ■ ■ ■	■ ■ ■ ■ ■	
Step 3. Objectives	■ ■ ■ ■ ■	■ ■ ■ ■ ■	□ □ □ □ □
Step 4. Qualitative targets	□ □ □ □ □	■ ■ ■ ■ ■	■ ■ ■ ■ ■
Step 5. Quantitative targets	□ □ □ □ □	□ □ □ □ □	■ ■ ■ ■ ■
Step 6. Indicators		□ □ □ □ □	■ ■ ■ ■ ■

■ ■ ■ Obligatory step □ □ □ Optional step

This is, of course, an oversimplification. In practice, the formulation of health targets follows a cyclical course with increasing concreteness and this made it difficult to rate the countries in the cells of figure 2. Even so, the diagram may help politicians, policymakers, professionals and others, whether they work from a macro, meso or micro orientation or at the European, national, regional or local level, to understand the intended use of health targets and to assess how far their development has proceeded.

2.5 Conclusion

We conclude that, in most of the countries studied, health policy has been inspired by the Health for All by the Year 2000 strategy, but this does not mean that these countries have fully developed health targets in their health policy. Most countries use health targets as a political tool and only a few countries, such as the UK and Spain, have elaborated the health target approach beyond the policy to the practical level. In most other European countries, the idea of health targets has gained political support, which is an important condition for further development. Despite this political support, health targets need to be developed at the policy and the practical levels. We also found renewed interest in this tool, which will certainly be reinforced by the new Health for All strategy of the WHO in Europe. It seems an appropriate moment to stimulate discussion and the exchange of practical experience. One should realise that the process - which started in the 1980s - takes time. An Italian proverb 'Chi va piano va sano, Chi va sano va lontano' ('Who goes slowly goes steadily, who goes steadily goes far') would seem to apply to the practical application of the health target approach, which appears to be on the right track and making steady progress.

Acknowledgement

This study was supported by an unrestricted educational grant from Merck & Co., Inc., New Jersey, USA. We are grateful to all the people who gave us the information which made it possible to carry out our study. We particularly want to thank our colleagues from the collaborating agencies for their help in preparing the overviews for their countries: Dr R. Gispert Margaroles (Italy, Portugal and Spain), Dr V. Kocandrle (Czech Republic), Ms T. Mikkola and Dr M. Sihto (Finland), Professor S. Nagyluskay (Hungary), Ms B. Niedzwiedzka (Poland), Dr D. Farcasanu and Dr L. Marinescu (Romania). We also thank the referees of this article for their helpful comments.

References

1 WHO-EURO, World Health Organisation Regional Office for Europe. Targets for health for all: targets in support of the European strategy for health for all. Copenhagen: WHO Regional Office for Europe, 1985.

2 Herten LM van, Gunning-Schepers LJ. Targets as a tool in health policy, part I: lessons learned. Health Policy, 2000; 53: 1-11.

3 Ritsatakis A. Setting targets for health: definitions and experiences in Europe. Handout for participants at the workshop Health Targets, Health Care and Health Policy in the European Union. Hannover, 28-29 april 1999.

4 Water HPA van de, Herten LM van. Health policies on target? Review of health target and priority setting in 18 European countries. Leiden: TNO Prevention and Health, 1998.

5 WHO-EURO, World Health Organisation Regional Office for Europe. Health 21: the health for all policy for the WHO European region: 21 targets for the 21st century. Copenhagen: WHO Regional Office for Europe, 1998.

6 Federal Ministry of Work, Health and Social Affairs. Health report for the National Council 1997: covering period 1993-1995 (Gesundheitsbericht an den Nationalrat 1997: Berichtszeitraum 1993-1995). Wien: Federal Ministry of Work, Health and Social Affairs, 1997.

7 Ministry of Health. National program of health (Národní program zdraví). Prague: Ministry of Health, 1995.

8 Ministry of Health. The health promotion programme of the government of Denmark. Copenhagen: Ministry of Health, 1992.

9 Ministry of Social Affairs and Health. Health for all by the year 2000: the Finnish national strategy (originally in Finnish, 1986: Terveyttä kaikille vuoteen 2000 Suomen terveyspolitiikan pitkän aikavälin tavoite ja toimintaohjelma). Helsinki: Valtion Painatuskeskus, 1987.

10 STAKES, National Research and Development Centre for Welfare and Health. From values to choices. Report of the working group on health care prioritisation. Saarijärvi, Finland: Gummerus Kirjapaino Oy, 1995.

11 High Committee on Public Health (Haut Comité de la Santé Publique). Health in France, general report (La santé en France, Rapport général). Montrouge: John Libbey Eurotext, 1996.

12 Ipse Communication. Health targets: on the status and the controversies of a health economical concept (Gesundheitsziele: Zum status und zur kontroverse eines gesundheitsökonomischen Konzepts). Bonn: Ipse Communication, January 1997.
13 Ministry of Welfare. Strategy of health promotion in Hungary up to the year of 2010 (Az egészségmegörzés stratégiája 2010ig). Budapest: Ministry of Welfare, 1998.
14 Department of Health. Shaping a healthier future: a strategy for effective health care in the 1990s. Dublin: Stationery Office, 1994.
15 ASI (Italian Health Care Agency). Draft of the national health care plan 1998-2000. Abstract from ASI.
16 Ministry of Health, Welfare and Sport. Healthy and well: framework for health policy 1995-1998 (Gezond en wel: het kader van het volksgezondheidsbeleid 1995-1998). Rijswijk: Ministry of Health, Welfare and Sport, 1995.
17 Ministry of Health and Social Affairs (Sosial-og Helsedepartementet). Report on population health (Folkehelse rapporten). Oslo: Statens Trykksakseksped isjon, 1996.
18 National Health Programme Intersectoral Co-ordinating Group. National health program 1996-2005 (Narodowy Program Zdrowia 1996-2005).Warsaw: Ministry of Health and Social Welfare, 1996.
19 Ministry of Health (Ministerio da Saúde). A strategy for the change of the century: 1997 orientations (Uma estrategia para o virar do século: orientaçôes para 1997). Lisboa: Ministry of Health, 1996.
20 National Centre for Health Promotion, Ministry of Health. Reproductive health promotion (Promovarea sănătă_ii reproductive). Bucharest: National Centre for Health Promotion, Ministry of Health, Operational Plan, 1998-2003.
21 Subdirectorate General of Health Planning, Directorate General of Insurance and Planning (Subdirección General de Planificación Sanitaria, Dirección General de Aseguramiento y Planificación). Health plan of the Ministry of Health (Plan de Salud del Ministerio de Sanidad y Consumo). Madrid: Ministerio de Sanidad y Consumo, Secretaría General Técnica, 1995.
22 National Board of Health and Welfare. Public health report 1997. Stockholm: National Board of Health and Welfare, 1997.

23 Public health group (Folkhälsogruppen). The health of the entire population: a national strategy for health. Stockholm: Folkhälsogruppen nr.8, 1991.
24 Federal Office of Public Health, Weiss W (ed). Health in Switzerland (Gesundheit in der Schweiz). Zurich: Seismo Verlag Sozialwissenschaften und Gesellschaftsfragen, 1993.
25 Department of Health. Our healthier nation: a contract for health. London: The Stationery Office, 1998.
26 Secretary of State for Health. The health of the nation: a strategy for health in England. London: The Stationery Office, 1992.

Chapter 3

Targets as a tool in health policy
Part I: Lessons learned

L.M. van Herten & L.J. Gunning-Schepers
Health Policy 2000; 53: 1-11. Reprinted with permission.

Abstract

This article reviews the start of the use of targets as a tool in health policy, summarises the fruitful uses and frequently-heard objections, and proposes some conditions for successful health target setting. Targets as tool in health policy are based on the management by objectives approach (1954). The use in health policy was possible due to advances in the use of epidemiology for public health purposes. It provisionally ends with the new health targets adopted by WHO in 1998. The setting and monitoring of health targets is one way in which a government can provide leadership, guidance and strategic direction for the health sector. These benefits, and others, will also be reviewed. Drawbacks - such as political accountability and the limited malleability of society - will also be discussed. To overcome most of the objections, the article ends with some SMART conditions for successful health target setting: Specific, Measurable, Achievable, Realistic and Time-bound. When SMART conditions are met, political will and daring are the recipe for a successful health target approach.

3.1 Introduction

In May 1998, the WHO in Geneva adopted ten new global health targets called Health for All in the 21st century.[1] The European region of WHO followed in September 1998 with its Health 21: 21 targets for the 21st century.[2] In the same year, the United States presented their national draft Healthy People 2010 objectives.[3] These new target documents are the successors to Health for All by the year 2000[4,5] and Healthy people 2000.[6,7] In Australia, New Zealand, the United Kingdom and other countries, targets have been adopted in health policy.[8-14] Why health targets? And - because all approaches differ in the way the targets were established - how should health targets be used? This paper reviews the groundwork for the successful application of targets as a tool in health policy.

Before looking forward, we do well to look backward for guidance. Part I of this article will therefore review the start of the use of targets as a tool in health policy, summarise the fruitful uses and frequently-heard objections, and will finally propose some conditions for successful health target setting. In part II of this paper,[15] we give more guidelines for the application of health targets as a tool in health policy by posing questions related to the policy cycle.

3.2 Historical overview

The use of targets in health policy is inspired by the management by objectives approach used in the business world. The term management by objectives was first introduced in 1954 by Drucker in his book The practice of management.[16] The term refers to a set of directed efforts to identify the individual steps and targets necessary to achieve common goals. The underlying assumption is that it is possible to specify common goals, which, when explicitly identified in targets, will yield more focused and efficient efforts. Management by objectives can be seen as a cyclic process, which starts with the definition of strategic goals, followed by background documentation and the identification of objectives. In the next phase the objectives should be implemented and monitored. The evaluation should give information for the redefinition of the objectives, which again should be implemented and so on.[16]

The pioneer of management by objectives for health was McGinnis. He established and guided the process of the Objectives for the Nation[6] in the United States. McGinnis distinguished several types of objectives applicable to the health policy field. His comparisons of the various types of objectives from the business and health fields are listed in table 1.[17] By bringing the management by objectives approach to the health sector, an important idea was born: health systems could be evaluated in terms of output: population health gains, or, put more simply, healthier people. After Objectives for the Nation[6] in 1980, Healthy People 2000[7] appeared in 1990 and a draft of Healthy People 2010[3] in 1998. National health objectives therefore appear to be able to survive changes in government, provided they are based on good technical support and that they build strong coalitions for action outside government.[18,19]

Table 1 Application of the Management by Objectives concept

Objective bases	Business applications	Health applications
Outcome	Profits	Morbidity and mortality reduction
Strategy	Product type and mix	Risk factors
Productivity	Labour/capital mix	Scope of services
Marketing	Client attitudes and awareness	Public/professional attitudes and awareness
Innovation	Product improvement	Surveillance, evaluation and research

The use of health targets at the beginning of the 1980s was also possible due to advances in the use of epidemiology for public health purposes. Since the identification of tobacco smoking as the principal cause of lung cancer in the early 1950s, other major risk factors for non-communicable diseases became known. The evidence epidemiologists generated relating to the contribution of risk factors to health problems and their magnitude was impressive. Later, epidemiologists began to explore the subtleties of confounding, misclassification, survivorship, and other such issues. The results of experimental and observational studies led to evidence-based preventive interventions and increased the direct impact of epidemiology on policy decisions. Nowadays, epidemiology remains the basic science of public health, because it continues to provide an improved understanding of the causes of disease, disability and death. This

makes it theoretically possible to identify populations at risk and to try to improve the health of these populations and prevent disease.[20-23]

The combination of these developments in epidemiology, the American approach to setting health objectives for the nation and the Lalonde health field concept[24] - which emphasised the interaction between life style, environment, human biology, and health services - contributed to the production by the European Region of the WHO of 38 targets as a specification of the global Health for All strategy.[18] These targets were endorsed in 1984[5] and motivated policymakers to think rationally about health policy, the use of targets as a tool to improve health policy, and the methods and structures required to bring about significant improvements in population health.[19] And with success, because since then a number of governments have adopted targets in their health policy - in and outside Europe.[8-14]

With the use of targets, the need to monitor and evaluate consistent activities also increased. More specific epidemiological data on various health problems and on various population groups was collected. This monitoring of health gains initiated country-specific and international comparative activities in epidemiological research and surveillance. The development of the European Health for All database is just one of the initiatives taken. The possibilities opened up by epidemiological research and surveillance made it possible to base health policy decisions on scientific facts rather than on untested expert opinions.[20-23]

As mentioned in the introduction, 1998 was the year which saw the presentation of new health target approaches for the first decades of the new millennium.[1-3] These new policies of WHO and some governments are a good stimulus for the further development of targets as a tool in health policy. The examples mentioned below will show that health targets may contribute to the development of a more rational health policy.

3.3 Fruitful use of health targets

Health targets are used by governments in several countries, including the USA, Australia, and the United Kingdom. The use of health targets by these

governments and by WHO will be taken as examples in this article, because a large body of English literature is available about these strategies. The strategies of the USA, Australia and the United Kingdom illustrate that health targets can help to rationalise health policy, although these countries have very different cultural-historical and political-administrative backgrounds. By comparison with the United Kingdom, the USA and Australia are relatively young nations. The USA and Australia differ in their political system. The USA has a two-party system, while in Australia several parties form the coalition government. The policies in Australia are therefore based more on consensus. Within WHO, all Member States have to agree with the policy, so here consensus plays an even more important role. Another factor that illustrates the differences between countries is the way in which the health targets are used. Many governments resemble WHO in giving their targets a more inspirational role, while the objectives of the USA have a more managerial and practical character.

Table 2 Benefits

Policy development phase	Benefit
Formulating targets	Gives insight in the health of the population
	Reveals gaps in knowledge
	Gives insight into consequences of alternative strategies
	Supports the priority setting process
	Increases the transparency of health policy
	Ensures consistency among several health programmes
	Shows up deficiencies in the health policy
	Stimulates debate
Implementing targets	Inspires and motivates partners to take action
	Improves commitment
	Fosters accountability
	Guides the allocation of resources
Monitoring and evaluation of targets	Supplies concrete milestones for evaluation and adjustments
	Provides opportunities to test the feasibility of the targets
	Provides opportunities to take actions to correct deviations
	Exposes data needs and discrepancies

The direct contribution of health policy to the improvement of the health status of a population is hard to measure and cannot be distinguished from the effects of other societal processes. The same applies to the setting and application of health targets. However, there are clear arguments that indicate that target setting helps to develop a more rational and transparent health policy (table 2). Firstly, during the process of health target setting, all aspects of population health are analysed and put into perspective. This facilitates the understanding of what is needed and what is possible and focuses the attention on groups that deserve higher priority.[25,26] This element can be illustrated by reference to the first USA health objectives. When they were set, a wide range of possible systems was drawn upon to provide data. They included: (a) data systems based on records, such as those in the US Vital Statistics System; (b) population-based surveys, such as those periodically undertaken by various health agencies to determine the prevalence of various health habits; (c) surveillance and monitoring systems, such as those established to monitor infectious disease prevalence; and (d) regulatory reporting systems established to monitor compliance with statutes or regulations.[25]

Health targets give the policy focus and increase recognisability. They also ensure consistency among disparate health programmes and show up underexposed areas in health policy.[26] The first health targets of the WHO regional office for Europe, for instance, were based on the health field concept of Lalonde and distinguished five groups of targets. Another example is the division into three major categories of the Australian targets of 1988. These three categories were: population groups, major causes of sickness and death, and risk factors.[8,9]

The target setting process stimulates debate. Target setting can also provide a common language for communications relating to programmes and priorities. It helps to build awareness of, and support for, health programmes among policymakers, field workers and the public. In turn, this can make existing implementation systems more efficient.[18,26] Such a commitment is also needed to survive changes in government. In the USA and Australia, the health targets are developed through a process of consultation. The targets therefore do not reflect the views of just one organisation, but are rather the product of a national process.[8,27]

Health targets improve management, because the targets can help clarify whether or not a policy is realistic in terms of strategies, timetables, and resource allocation (manpower, equipment, supplies, facilities, etc.).[17,26,28] Used in this way, targets can also improve short- and long-term planning, examples being the WHO targets regarding eradication of communicable diseases, like polio. Targets were set to improve polio vaccination. After development and introduction, the programme is now in full operation and will soon enter into the final phase of post-vaccination surveillance.[1]

Health targets provide benchmarks for the measurement of progress and the extension of accountability. Defining measurements makes it possible to organise feedback and establish systematic reviews and revisions of targets, priorities and the allocation of resources. It also facilitates the evaluation of the impact of health gain activities.[17-29] A number of examples can be listed here, such as the work of the Central Health Monitoring Unit at the department of Health and the National Audit Office in the UK. Such measurements increase our understanding of changes in population health and changes in environment, thereby providing support, in the past, for the revision of the Health for All targets,[1,2] of Healthy People in the USA,[3,7] of the Health of the Nation approach in the UK[13] and of the target approach in Australia.[9]

Finally, health targets expose data requirements and discrepancies. When the first objectives in the USA were published, the data sources then available were listed for each of the areas and for some of the objectives no baseline data could be found. Such a systematic approach to the health information system contributed greatly to the improvement of data systems and the dissemination of public health information.[23,30]

3.4 Objections

Notwithstanding the above arguments, the use of health targets has frequently been the subject of criticism. These criticisms are listed in table 3. Some of the constraints cannot be dealt with. Take for instance the limited malleability of society. One must accept that action taken by government has a limited impact on population health.[25] A government can discourage smoking, for example, by increasing the tax on tobacco, by warning in mass-media campaigns against the

health effects, by banning smoking advertising, by creating smoke-free public buildings, etc. However, all this may never result in the complete elimination of tobacco-smoking. Other unhealthy behaviour, like drinking, will also be hard to reduce by means of government action. Furthermore, our understanding of the causal web in non-communicable diseases is still limited, and this means that we may not be able to control all the variables that will determine the occurrence of disease in a population. Thirdly, many non-communicable diseases have long latency periods and risk factors with a very long lag time. The timeframe of interventions may therefore be much longer than those of policy periods.

Table 3 Drawbacks

Policy development phase	Drawback
Formulating targets	Makes it impossible to maintain that there is no rationing
	Increases political accountability
	Assumes a malleable society
	Oversimplifies the policy field
	Risk of setting easily measurable targets
	Neglects other important or new issues
Implementing targets	Frustrates when there are too many and too ambitious targets
	The technical and planning process could be seen as an end in itself
	Resource allocation could become inflexible
Monitoring and evaluation of targets	Attention could be given to measurable issues only
	Additional data and research could be needed

However, other objections are directed at the health system in a country. The effect of these objections on the potential for the successful use of health targets depends on how severe they are and what value is attached to them. They must therefore receive attention in an attempt to minimise their effect. Firstly, some political objections will be discussed, because explicit target setting makes it impossible to maintain the façade that there is no priority setting in health policy.[31] Furthermore, health targets could be seen as political promises and commitments. If targets cannot be achieved, some politicians may fear that their position will be undermined if they claim that their policy will result in the

achievement of the targets. Politicians become more vulnerable when they have to depend on other ministries and organisations to share the selected targets and divert energy and financial resources. This, for instance, happened in the Netherlands in the beginning of the nineties. The then Secretary of State for Health believed that it was not desirable to establish quantitative health targets because of the political accountability and the implied responsibility if the targets were not met. The Dutch Draft Target Document[32] was therefore never endorsed. In addition, politicians prefer targets that are attainable in the short term - say one or two years - which can compete with more effective long-term plans.[28] The most important drawback may therefore be the lack of political commitment.

Other drawbacks are of a methodological nature. A first methodological problem is that a health policy based on targets can lead to an oversimplification of the policy field. Many of the most important diseases have several risk factors and some risk factors affect several diseases. These interdependencies of both risk factors and diseases make it quite difficult to quantify health targets. This can lead to an inclination to set targets for the easily measurable and controllable diseases or health problems.[29,33] This in turn can lead to the danger of unwanted side effects for non-target diseases or health problems. An example might be less attention for complicated or new issues such as mental health problems and the occurrence of BSE and CJD. A health policy based on too many targets, or targets that are defined too generally and ambiguously, or targets that are too ambitious also frustrates the policy process and draws usefulness into question.[28,29] An example here are the 38 targets of the WHO's Regional Office for Europe and the inachievability of these targets simultaneously due to intervening developments like substitute mortality and morbidity.[34]

There is also the danger that some people will see the setting of targets as an end in itself, which can divert the attention from the activities required to achieve them.[18,29] This can also lead to an inflexible system for the allocation of resources. In the case of the development or improvement of the health information system, subgroup comparison - with subdivisions into, for instance, age, sex, or socio-economic status - should only be carried out when there is evidence that there are inequities between the subgroups. There should be a clear balancing between investments in monitoring and the relevant health gain. Otherwise work and money will fail to produce returns. With vaccination programmes, for

example, the monitoring system should be able to detect herd immunity. On the other hand, the extra amount of work for the fieldworkers should be limited, because this will weigh on the budget and may therefore compete with the total number of vaccinated people.[35]

The monitoring and evaluation of the targets can result in an excessive focus on items that are measurable but of lesser importance than other issues.[29] Additional data and research could also be needed to measure progress in more difficult policy areas such as the increased interest in the quality of care.

A final objection is that national health targets may result in an imbalance in local priorities. Local circumstances may suggest different priorities than those set as national targets and there is, therefore, a real danger that the pursuit of targets may neither maximise health gains nor use resources in the most cost-effective manner.[36]

3.5 Discussion

Balancing benefits and drawbacks, we conclude that target setting can be a worthwhile tool in health policy. In a structured process, health targets can make explicit the priorities that are inevitable in health policy. It also generates a system for monitoring the pursuit of the selected direction. Evidently, the use of health targets has a greater impact if one can successfully deal with the drawbacks which have been identified. Setting targets is therefore subject to a number of methodological and political conditions. These conditions are listed below.[18,26,29,33,34,37–39] A more practical elaboration will be given in the next article.

The methodological conditions can be summarised in the acronym SMART: Specific, Measurable, Achievable, Realistic and Time-bound. To improve the acceptance of health targets, they should in the first place be specific and measurable: clear, easily appraised and understood by a wide audience (public, politicians, policymakers, administrators and professionals). Due to the limited direct influence of the actions taken by the government on the health status of a population, targets should mainly focus on health determinants. Targets with the best prospects are probably those that are based on structural interventions and less on interventions directed at behavioural change.[18,26,29,33,34,37–39]

Since the targets concern desirable situations at some time in the future, another methodological requirement - alongside appropriate knowledge about the current situation - is that they should be based on a strategic vision for future health policy. They need to be focused on the achievement of tangible results combined with political desirability. The achievability of these results depends on the soundest evidence available: it therefore requires ample epidemiological understanding, knowledge about the effectiveness of candidate interventions, and an approach which allows for a lag time between intervention and effect. There should also be an understanding of existing policies relating to the relevant areas and also some awareness of the other targets and programmes with which a target can interlock. Targets that are set too high result in non-achievement, and cause frustration or foster complacency. Targets set too low provide no challenge and will lapse into formalities. So targets should be realistic: they should provide some challenge, but they should also be attainable. To increase credibility, it is better to be selective and to choose a limited number of targets rather than to be comprehensive. A set of targets which tries to tackle too much is almost bound to produce fragmented and loosely integrated strategies. A few key issues focus attention and discussion, direct participation and attenuate the forces of fragmentation. They also keep the system flexible when new issues come up.[18,26,29,33,34,37–39]

Adequate time and sufficient resources should be made available for the process of target setting, implementation, and evaluation and feedback. Commitment to supporting the process of setting health targets requires not only consensus, but also a considerable amount of will at a variety of levels. This requires communication and co-ordination and a balanced monitoring process through a mixture of process and outcome measures. These measures could describe the levels of health, the appropriate determinants of health and the levels of relevant service provision. The measures should be timely and quantifiable in one way or another, and they need to be sensitive enough to detect changes. Within the health information system, a good balance between what is needed and what can be achieved for a given amount of money should be found.[18,26,29,33,34,37–39]

In addition to these SMART conditions, there is one political prerequisite which should be satisfied before starting a target approach. This is political will and daring. Without political commitment and the will to execute a health target approach, a policy will be doomed to fail.

Acknowledgement

This study was supported by an unrestricted educational grant from Merck & Co., Inc., New Jersey, USA. We thank all our colleagues, but especially Dr J. Hulshof, for their helpful comments on earlier drafts of this paper.

References

1 WHO, World Health Organisation. Health for all in the 21st century. Geneva: World Health Organisation, 1998.

2 WHO-EURO, World Health Organisation Regional Office for Europe. Health 21: the health for all policy for the WHO European Region: 21 targets for the 21st century. Copenhagen: WHO Regional Office for Europe, 1998.

3 Davis RM. Healthy people 2010: national health objectives for the United States. British Medical Journal, 1998; 317: 1513 - 7.

4 WHO, World Health Organisation. Global strategy for health for all by the year 2000. Geneva: World Health Organisation, Health for all series, no 3, 1981.

5 WHO-EURO, World Health Organisation Regional Office for Europe. Targets for health for all: targets in support of the European strategy for health for all. Copenhagen: WHO Regional Office for Europe, 1985.

6 Department of Health and Human Services. Promoting health/preventing disease: objectives for the nation. Washington DC: US Government Printing Office, 1980.

7 Office of disease prevention and health promotion. Healthy people 2000. DHHS Publication No (PHS) 90-50212. Washington DC: US Government Printing Office, 1990.

8 Health targets and implementation committee. Health for all Australians. Canberra: Australian Government Publishing Service, 1988.

9 Nutbeam D, Wise M, Harris E, Bauman A, Leeder S (eds). Revised goals and targets for Australia's health in the year 2000 and beyond. Canberra: Commonwealth department of Health, Housing and Community Services, 1993.

10 Public Health Commission. A strategic direction to improve and protect the public health. Wellington: Ministry of Health, 1993-1994.

11 Ministry of Health. Strengthening public health action: the strategic direction to improve, promote and protect public health. Wellington: Ministry of Health, 1997.
12 Secretary of State for Health. The health of the nation: a strategy for health in England. London: The Stationery Office, 1992.
13 Department of Health. Our healthier nation: a contract for health. London: The Stationery Office, 1998.
14 Water HPA van de, Herten LM van. Health policies on target? Review of health target and priority setting in 18 European countries. Leiden: TNO Prevention and Health, 1998.
15 Herten LM van, Gunning-Schepers LJ. Targets as tool in health policy, part II: guidelines for applications. Health Policy, 2000; 53: 13-23.
16 Drucker PF. The practice of management. New York/Evanston: Harper & Row publishers, 1954.
17 Mc Ginnis JM. Targeting progress in health. Public Health Reports, 1985; 97 (4): 295-307.
18 Kickbush I. Targets for health: experiences and directions. International Workshop Target Setting in Brussels 8 and 9 March 1996. Bielefeld: Institute of Public Health, NRW.
19 Nutbeam D, Wise M. Planning for health for all: international experience in setting health goals and targets. Health Promotion International, 1996; 11 (3): 219-26.
20 Robbins A. Public health in the next decade. Journal of Public Health Policy, 1985: 440-6.
21 Kuller LH. Epidemiology and health policy. American Journal of Epidemiology, 1988; 127 (1): 2-16.
22 Susser M, Susser E. Choosing a future for epidemiology, I: eras and paradigms. American Journal of Public Health, 1996; 86 (5): 668-73.
23 Pearce N. Traditional epidemiology, modern epidemiology, and public health. American Journal of Public Health, 1996; 86 (5): 678-83.
24 Lalonde M. A new perspective on the health of the Canadians: a working document. Ottawa: Government of Canada, 1974.
25 Mc Ginnis JM. Setting objectives for public health in the 1990s: experience and prospects. Annual Review of Public Health, 1990; 11: 231-49.
26 Odiorne G, Weihrich H, Mendelson J (eds). Executive skills: a management by objectives approach. Dubuque: Wm. C. Brown Company Publishers, 1980.

27 Catford JC. Health targets: time to put the NHS back on course. British Medical Journal, 1991; 302: 980-1.
28 Koontz H, O'Donnell C, Weihrich H. Management, 8th ed. Singapore: McGraw-Hill, 1986.
29 Zwick DI. Establishing national health goals and standards. Public Health Reports, 1983; 98 (5): 416-25.
30 Sondik E. Commentary on year 2000 objectives: healthy people 2000: meshing national and local health objectives. Public Health Reports, 1996; 111: 518-20.
31 Coast J, Donovan J, Frankel S. Priority setting: the health care debate. Chichester: Wiley, 1996.
32 Ministry of Welfare, Health and Cultural Affairs. Health memorandum 2000 (Nota 2000). Leidschendam: Ministry of Welfare, Health and Cultural Affairs, 1986.
33 Abel-Smith B, Figueras J, Holland W, Mc Kee M, Mossialos SE. Choices in health policy: an agenda for the European Union. Luxembourg: Office for official publications of the European Communities. Aldershot: Dartmouth Publishing Company Limited. 1995.
34 Water HPA van de, Herten LM van. Bull's eye or achilles' heel: WHO's European health for all targets evaluated in the Netherlands. Leiden: TNO Prevention and Health, 1996.
35 Water HPA van de, Herten LM van. Never change a winning team? Review of WHO's new global policy: health for all in the 21st century. Leiden: TNO Prevention and Health, 1999.
36 Elkan R, Robinson J. The use of targets to improve the performance of health care providers: a discussion of government policy. British Journal of General Practice, 1998; 48 (433): 1515-8.
37 Hogwood BW, Gunn LA. Policy analysis for the real world. Oxford: Oxford University Press, 1984.
38 Denis JL, Langley A, Lozeau A. Setting priorities in public hospitals: the paradoxes of strategic planning. In: Malek M (ed). Setting priorities in health care. Chichester: John Wiley & Sons Ltd, 1994.
39 Mc Keon K, Whitelaw S, Hambleton D, Green F. Setting priorities: science, art or politics? In: Malek M (ed). Setting priorities in health care. Chichester: Wiley, 1994.

Chapter 4

Targets as a tool in health policy
Part II: Guidelines for application

L.M. van Herten & L.J. Gunning-Schepers
Health Policy 2000; 53: 13-23. Reprinted with permission.

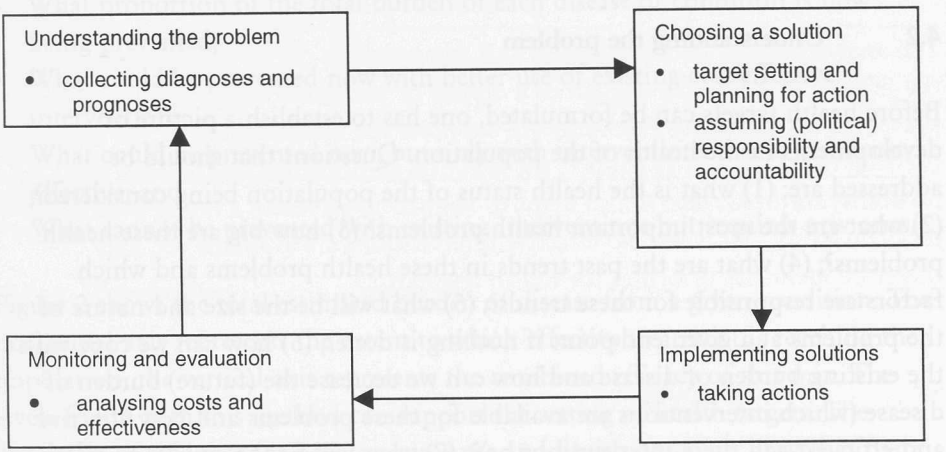
Abstract

The use of health targets as a tool in health policy is receiving more attention. Beyond political will and daring, there awaits the challenge of the fruitful use of health targets. This means an adequate response to the complexity of population health in a target structure that is transparent, controllable, and adaptable in changing circumstances. In this article, we will review the health policy development cycle in relation to health target setting. First, there should be understanding of the problem, and a clear picture of the health status of the population. Then a solution can be chosen. This part is not restricted to the technical side of the solution, i.e. the target setting and action planning. It also has a political side in which responsibility is taken for the choices made. In the next step, the chosen solutions are implemented by government and stakeholders. This will be followed by a monitoring and evaluation phase, which will in turn provide us with an insight into the health status of the population. At every step of the health policy cycle, questions which should be addressed when using health targets in health policy will be discussed.

4.1 Introduction

In the previous article,[1] we presented a historical overview of health targets as a tool in setting health policy. In that article, the fruitful uses, drawbacks and conditions were described. One of the conclusions was that the setting and monitoring of health targets is one way in which a government may provide leadership, guidance and strategic direction for the health sector. The use of health targets as a tool in health policy is receiving more attention. This is not surprising, since health targets help to rationalise health policy and make governments and organisations accountable for their activities. When setting health targets, the relationship between the content of the policy and the responsibility of government and stakeholders can be specified. This may however put them in a vulnerable position. So beyond political will and daring, there awaits the challenge of the fruitful use of health targets. This involves an adequate response to the complexity of population health in a target structure that is transparent, controllable, and adaptable in changing circumstances.

Figure 1 The health policy development cycle



Reduced to its basics, health policy development can be depicted as a four-step, problem-solving process (figure 1). Before a health policy can be developed, there should be understanding of the problem, and a clear picture of the health status of the population. Then a solution can be chosen. This part is not restricted to the technical side of the solution, i.e. the target setting and action planning. It

also has a political side in which responsibility is taken for the choices made. In the next step, the chosen solutions are implemented by government and stakeholders. This will be followed by a monitoring and evaluation phase, which will in turn provide us with an insight into the health status of the population. The cyclic process emphasises that there is no final end-point. One of the implications of the policy cycle is the assumption that, in principle, the elements of the cycle may change over time; new or different problems will require new or different solutions. This in turn may require organising or financing activities in public health differently.

In this article, we review the health policy development cycle in relation to health target setting. We will give a more practical elaboration and some guidelines for application of health targets as a tool in health policy. The aim of this article is to provide ideas that can serve as a handle when developing a health policy with health targets. At every step of the health policy cycle, questions will be discussed that should be addressed. The answers to these questions should be taken into account in the health targets and the health policy document.

4.2 Understanding the problem

Before health targets can be formulated, one has to establish a picture of developments in the health of the population. Questions that should be addressed are: (1) what is the health status of the population being considered?; (2) what are the most important health problems? (3) how big are these health problems?; (4) what are the past trends in these health problems and which factors are responsible for these trends?; (5) what will be the size and nature of the problems at a given end-point if nothing is done?; (6) how can we cope with the existing burden of disease and how can we decrease the (future) burden of disease (which interventions are available for these problems and how effective and efficient will these interventions be)?; (7) what will be the situation at a given end-point if interventions are implemented?

Epidemiological and demographic insights into the health of the population are the starting points for the setting of health targets. The areas chosen could be a major cause of premature death or avoidable ill health or disability, either in the population of the nation as a whole, or among specific groups of people or in

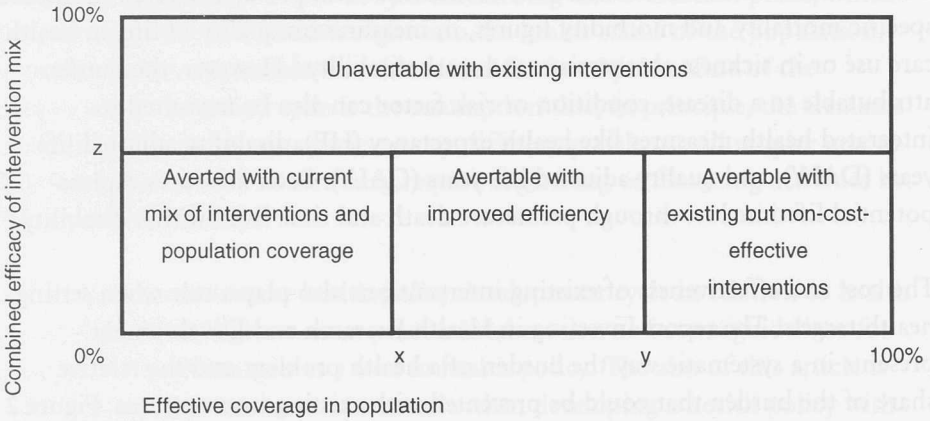
specific geographic areas. The epidemiological and demographic insights not only imply the present health status but also an understanding of trends in past decades. The trends can be measured in incidence and prevalence rates, in disease-specific mortality and morbidity figures, in measures on quality of life, in health care use or in sickness absenteeism and work disability.[2] However, the burden attributable to a disease, condition or risk factor can also be measured in integrated health measures like health expectancy (HE), disability adjusted life years (DALY), and quality adjusted life years (QALY). Such measures express potential lifetime lost through premature death and time lived with a disability.[3-5]

The cost and effectiveness of existing interventions also play a role when setting health targets. The report Investing in Health Research and Development[6] presents in a systematic way the burden of a health problem and the relative share of the burden that could be prevented with existing interventions. Figure 2 shows the analytical approach applied in this report. Using data on the available cost-effective interventions, and consulting the judgement of field experts on the proportion of the population receiving effective interventions, it is possible to estimate:

- What proportion of the total burden of each disease or condition is now being prevented;
- What could be prevented now with better use of existing cost-effective interventions;
- What could be prevented now, but only with interventions that are not cost-effective; and
- What cannot be prevented with existing interventions but requires new ones.

Figure 2 shows the total estimated burden of disease from a given condition. The horizontal axis represents the extent to which effective treatment is reaching the population, the vertical axis represents the combined efficacy of this mix. The levels found with this method can support the setting of health targets. The categories of evidence for both resource use and health outcome, as well as the generalisability of those data, also determine recommendations for cost-effectiveness studies.[7]

Figure 2 Relative shares of the burden that can and cannot be prevented with existing interventions



x = population coverage with current mix of interventions
y = maximum achievable coverage with a mix of available cost-effective interventions
z = combined efficacy of a mix of all available interventions

The analysis of the epidemiological and demographic trends and the analysis of the relative shares of the burden of a disease or condition that could be prevented with existing interventions, supports the identification of the most pressing needs, as well as guiding the selection of priorities and thereby the feasibility of the targets. It also helps to identify areas where a major health problem exists, but where no effective interventions are available yet, and therefore identifies priorities for health research.

4.3 Choosing a solution

In the next step of the health policy cycle, solutions will be chosen and choices will be made, i.e. targets and action programmes will be formulated and political responsibility is taken. In this phase, the following questions should be considered: (1) how will the health policy priorities be selected?; (2) which stakeholders should be involved in the process?; (3) what kind of targets will be set and which steps should be taken? (4) which requirements should the targets meet?; (5) who will be responsible for the choices made?; (6) which actions are

necessary to achieve the targets?; (7) who will be responsible for those actions?; (8) how will progress towards the targets be measured?; (9) what will be regarded as a success?; (10) what is the consequence if a target is not achieved?

When setting health targets, one must also be aware of the type of use of targets and of the developmental steps taken (see figure 3). Three types of use can be distinguished: inspirational use on the political level, managerial use on the policy level and technical use on the practice level. The setting of targets is a step-by-step approach with increasing specificity. It starts with (1) principles and values and is followed by (2) goals, (3) objectives, (4) qualitative targets, (5) quantitative targets and ends with the development of (6) indicators and a monitoring system.

Figure 3 Three uses of health targets in different steps of development

Steps in development	Inspirational use (political level)	Managerial use (policy level)	Technical use (practice level)
Step 1. Principles and values	■ ■ ■ ■ ■		
Step 2. Goals	■ ■ ■ ■ ■	■ ■ ■ ■ ■	
Step 3. Objectives	■ ■ ■ ■ ■	■ ■ ■ ■ ■	□ □ □ □ □
Step 4. Qualitative targets	□ □ □ □ □	■ ■ ■ ■ ■	■ ■ ■ ■ ■
Step 5. Quantitative targets	□ □ □ □ □	□ □ □ □ □	■ ■ ■ ■ ■
Step 6. Indicators		□ □ □ □ □	■ ■ ■ ■ ■

■ ■ ■ Obligatory step □ □ □ Optional step

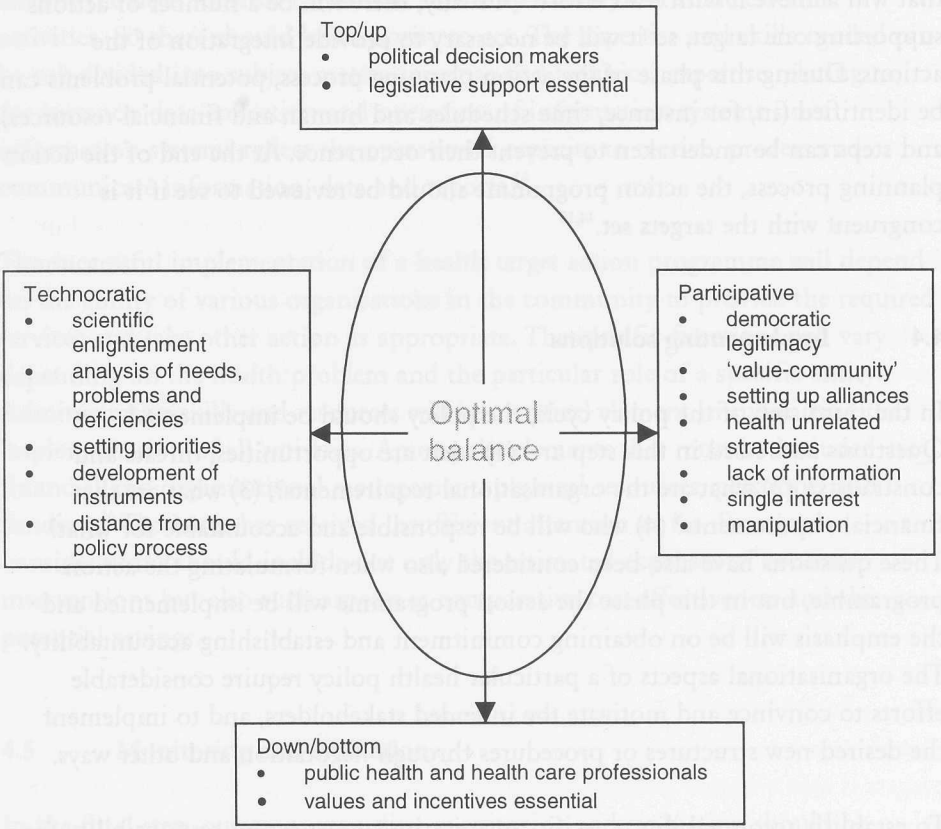
These steps should have a logical and meaningful relationship with each other and with the types of use of health targets. Targets with a more inspirational use are focused on steps 1 to 3 in the target development process. The responsibility and accountability for this kind of targets lies with the government. Managerial targets include the developmental steps 2 to 4 but could also cover step 5 and 6. At this level, policymakers - and in the end the Minister of Health - are responsible and accountable for the chosen targets. The use of health targets as a technical tool is assumed to correspond to the practice level and suggests the concrete deployment of programmes by stakeholders. This use of health targets

includes developmental steps 4 to 6, and possibly step 3. Responsibility and accountability are located with the stakeholders involved.[8]

The selection of health policy priorities and the setting of health targets rely on a social and political compromise. Figure 4 shows four poles between which such a compromise can be established.[9] The poles of the horizontal axis represent the process of defining health targets. These have been termed 'technocratic' and 'participative'. A 'technocratic' selection of health targets has the merits of scientific rigour and transparency. It not only makes the decisions explicit, but the objectives upon which these decisions are based are also made clear. On the other hand, it is distanced from the political process and lacks political legitimacy.[9,10] By contrast, the 'participative' selection of health targets has the advantage of democratic legitimacy, it can draw on common values and it is able to set up political alliances which will support the process of defining and implementing a programme.[9,10] However, the results of the 'participative' process depend on the selection of people involved. The more people are invited to participate in the selection of the health priorities, the more they will expect to see their proposals appear in the action programme, and the greater the danger of fragmentation, confusion, and, at a later stage, disappointment and disillusionment as expectations cannot be met.[11] The vertical axis signifies the relation between the policymakers and those who are responsible for implementing, executing and running the action programme. In a top-down strategy, policymakers select the health policy priorities and the action programme is carried out on their behalf. In a bottom-up strategy, those working in the health field or the community initiate the selection of health policy priorities. The interaction between the two poles on the vertical axis is crucial for success in the implementation of a health target action programme. An optimal balance in terms of managing the tension between the poles is to arrange a compromise and build a political alliance as indicated by the oval.[9]

The targets themselves should also meet certain requirements. These SMART conditions (Specific, Measurable, Achievable, Realistic and Time-bound) were already listed in the first part of this article.[1] Prior to widespread implementation, attention should also be paid to evaluation. So how progress will be measured and what will be considered to be a success should already be defined when targets are set. Finally, the consequences of not achieving a target should also be explored.

Figure 4 Political co-ordinates of defining and implementing health target policies



Activities should be directed toward the achievement of the targets. The action programme is concerned with what functions, tasks, and activities have to be carried out, and what is the best way to do this. In addition, it is necessary to determine when things have to be done, who is going to do them and who is accountable for them.[12] So in an action programme, priorities could be assigned to the targets, and financial and organisational resources should be put into a time frame. Roles, authority and the responsibility of organisations should also be taken into account. Theoretically, the action planning process will start by identifying all the possible ways or means by which the target might be reached. It will then proceed to the determination of the likely consequences of each

alternative. Finally, the selection takes place of the alternative (or alternatives) that is most likely to achieve the target, that will come closest to achieving it or that will achieve it with least effort.[13] Usually, there will be a number of actions supporting one target, so it will be necessary to provide integration of the actions. During this phase of the action planning process, potential problems can be identified (in, for instance, time schedules and human and financial resources) and steps can be undertaken to prevent their occurrence. At the end of the action planning process, the action programme should be reviewed to see if it is congruent with the targets set.[14,15]

4.4 Implementing solutions

In the third step of the policy cycle, the policy should be implemented. Questions addressed in this step are: (1) what are opportunities, threats and constraints?; (2) what are the organisational requirements?; (3) what are the financial requirements? (4) who will be responsible and accountable for what? These questions have also been considered also when formulating the action programme, but in this phase the action programme will be implemented and the emphasis will be on obtaining commitment and establishing accountability. The organisational aspects of a particular health policy require considerable efforts to convince and motivate the intended stakeholders, and to implement the desired new structures or procedures through negotiation and other ways.

To establish accountability, specific organisations must accept responsibility for undertaking activities that are expected to contribute to the achievement of targeted outcomes. When every participating organisation accepts accountability for their part of the process, the Minster of Health and the government can accept the overall accountability.

To implement such an action programme, arrangements are required for leadership, community empowerment, authority to act, expertise and skills, information systems, implementation resources, administrative skills and resources and funding.[16] Leadership is critical to initiate and sustain the process, particularly in reaching agreement among stakeholders regarding areas of accountable performance. Community empowerment complements leadership and encompasses the ability to establish and maintain a community perspective

on health targets and activities and to establish an environment in which many stakeholders can work together. Even though much depends on co-operative efforts, the need remains for formal authority to carry out some essential activities. So there should be authority to act. The expertise and skills needed can be sub-divided into subject matter expertise and technical expertise relating to, for instance, data collection and operation of information systems since information systems reflect the operational capacity to receive, process and communicate information, data and reports.[16]

The successful implementation of a health target action programme will depend on the ability of various organisations in the community to provide the required services and take other action as appropriate. The specific functions will vary depending on the health problem and the particular role of a specific entity. Administrative skills and resources will be a critical element in supporting the implementation of all activities. Among the elements that must be included are financial and organisational management, physical resources, personnel and funding.[16] The latter has received insufficient attention so far. Financial considerations should include not only the estimated expenses of concrete interventions but also such aspects as comparative cost-effectiveness and the potential savings.

4.5 Monitoring and evaluation

In the final step, questions regarding monitoring and evaluation should be answered: (1) how to measure progress in outcomes (see also the question addressed in policy formulation phase)?; (2) how to measure performance? (3) was the policy effective?; (4) was the policy efficient?; (5) which lessons can be learned (technical, organisational, financial, etc.)?; (6) is additional action needed to achieve the initial target? The aim here is to establish whether the targets have been met, whether the process of target setting has succeeded and whether additional action should be taken.

The indicators chosen depend on the aim of monitoring and evaluation. When monitoring progress in outcomes, the same indicators can be used as mentioned in the section 'understanding the problem', i.e. the incidence and prevalence of specific diseases and conditions, the subjective self-assessment of the state of

health, the use of health care facilities, the economic consequences of morbidity and mortality and the prevalence of health, morbidity and mortality, etc.[2] In addition to health outcome figures, performance figures are needed to monitor whether the action programme is being implemented as intended. Such process measures must apply to specific organisations that have accepted responsibility for some aspect(s) of the action programme. Since health priorities have many dimensions and can be addressed by various sectors, sets of indicators will be needed to assess performance.[16]

Although both types of indicators serve another aim, they are both important in this step of the health policy cycle. All indicators must be useful, clear, reliable, valid, objective, specific, sensitive to changes (in health status or performance) and available in good time at reasonable cost. The information provided by the selected outcome and process indicators should be reviewed regularly and used to inform further action.[17] As current targets are achieved and new ones adopted, the health policy cycle supports the initiation of new activities and selection of new indicators.

4.6 Discussion

Setting health targets is a cyclic process, so with monitoring the first step is already taken to understand the problem, which in turn, etc. Setting health targets is also a way of rationalising health policy. Although the choice of the selected health targets is a more political one, health targets can be used as a tool to make the health policy consistent and coherent. When the health targets are based on available knowledge, one can also speak of evidence-based policy.

This brings us to the resemblance between evidence-based policy and evidence-based medicine. In evidence-based medicine, the 'understanding of the problem' also takes place by systematic analysis of relevant literature. An overview of these systematic reviews is available at The Cochrane Library.[18] The 'choosing a solution' phase of evidence-based medicine can be found in the development of clinical guidelines such as the setting of health targets in evidence-based policy. In both evidence-based medicine and evidence-based policy, the commitment of stakeholders is very important when 'implementing solutions'. The same applies to monitoring and evaluation.

Evidence-based policy and the setting of health targets is, like evidence-based medicine, a complex task. Expertise of many kinds, and essentially from all of the public health disciplines, is often required. Moreover, acceptance of the targets as a basis for action by the various parties that may contribute to their attainment depends upon the extent to which these parties view them as sensible. Involvement of this entire framework in the formulation of targets enhances the likelihood that every necessary element will join in the mobilisation toward achieving them. It is important to stress that the intent of setting targets is not to predict what would happen if present trends continue, but to indicate what could be achieved with proper mobilisation of resources.[19]

As the pioneer of management by objectives, Peter Drucker, wrote in 1954:
targets are not a railroad timetable. They can be compared to the compass bearing by which a ship navigates. The compass bearing itself is firm, pointing in a straight line toward the desired port. But in actual navigation the ship will veer off its course for many miles to avoid a storm. She will slow down to a walk in a fog and heave to altogether in a hurricane. She may even change destination in mid-ocean and set a new compass bearing toward a new port - perhaps because war has broken out, perhaps only because her cargo has been sold in mid-passage. Still, four fifths of all voyages end in the intended port at the originally scheduled time. And without a compass bearing, the ship would neither be able to find the port nor be able to estimate the time it will take to get there.[20]

Acknowledgement

This study was supported by an unrestricted educational grant from Merck & Co., Inc., New Jersey, USA. We thank all colleagues, but especially Dr J. Hulshof, for their helpful comments on earlier drafts of this paper.

References

1 Herten LM van, Gunning-Schepers LJ. Targets as a tool in health policy, part II: lessons learned, Health Policy, 2000; 53: 1-11.
2 Schaapveld K, Bergsma EW, Ginneken JKS, Water HPA van de. Setting priorities in prevention. Leiden: NIPG-TNO, 1990.

3 Water HPA van de, Perenboom RJM, Boshuizen HC. Policy relevance of the health expectancy indicator: an inventory in European Union countries. Health Policy, 1996; 36: 117-29.
4 Torrance GW, Feeny D. Utilities and quality adjusted life years. International Journal of Technology Assessment in Health Care, 1989; 5: 559-75.
5 Murray CJL, Lopez AD (eds). Global burden of disease and injury series: volume I: the global burden of disease: a comprehensive assessment of mortality and disability from diseases, injuries and risk factors in 1990 and projected to 2020. Harvard: Harvard School of Public Health, World Health Organisation, World Bank, 1996.
6 Ad hoc committee on health research relating to future intervention options. Investing in health research and development. Geneva: World Health Organisation (Document TDR/Gen/96.1), 1996.
7 Mason J, Eccles M, Freemantle N, Drummond M. A framework for incorporating cost-effectiveness in evidence-based clinical practice guidelines. Health Policy, 1999; 47: 37-52.
8 Water HPA van de, Herten LM van. Health policies on target? Review of health target setting in 18 European countries. Leiden: TNO Prevention and Health, 1998.
9 Busse R, Wismar M. Outcome-related health targets for health services: a conceptual and comparative study. Hannover: Medical School Hannover, 1999.
10 Coast J, Donovan J, Frankel S. Priority setting: the health care debate. Chichester: Wiley, 1996.
11 Denis JL, Langley A, Lozeau A. Setting priorities in public hospitals: the paradoxes of strategic planning. In: Malek M (ed). Setting priorities in health care. Chichester: Wiley, 1994.
12 Odiorne GS. The politics of implementing MBO. In: Odiorne G, Weihrich H, Mendelson J (eds). Executive skills: a management by objectives approach. Dubuque: Wm. C. Brown Company Publishers, 1980, Section 4: Implementation of MBO and organisation development, 133-44.
13 Hood CC. The tools of government. London: The MacMillan press, 1983.
14 Weihrich H. Getting action into MBO. In: Odiorne G, Weihrich H, Mendelson J (eds). Executive skills: a management by objectives approach. Dubuque: Wm. C. Brown Company Publishers, 1980, Section 3: Setting objectives and planning for action, 94-103.

15 Werther WB, Weihrich H. Refining MBO through negotiations. In: Odiorne G, Weihrich H, Mendelson J (eds). Executive skills: a management by objectives approach. Dubuque: Wm. C. Brown Company Publishers, 1980, Section 3: Setting objectives and planning for action, 83-93.
16 Durch JS, Baily LA, Stoto MA. Improving health in the community: a role for performance monitoring. Washington DC: National Academy Press, 1997.
17 Bruce N, Price C, Whincup P. A slow death or eternal life? Future directions for annual public health reports. Public Health, 1994; 108: 439-46.
18 The Cochrane Libary (database on disk and CD-ROM). Cochrane Collaboration. Oxford: Update Software; 1996-. Updated quarterly.
19 Breslow L. Setting objectives for public health. Annual Review of Public Health, 1987; 8: 289-307.
20 Drucker PF. The practice of management. New York/Evanston: Harper & Row publishers, 1954.

Chapter 5

New global Health for All targets

L.M. van Herten & H.P.A. van de Water

British Medical Journal 1999; 319:700-703. Reprinted with permission.

Abstract

- The renewal of the Health for All strategy represents a further call for social justice.
- Ten new global health targets reflect most health problems in the world.
- Although the four targets for health outcome are the most concrete and measurable ones, they will be hard to achieve.
- The remaining six targets, dealing with the determinants of health and health policies, need further elaboration.
- Global targets are of questionable use to individual member states.

5.1 Introduction

In May 1998, the World Health Organisation adopted a resolution in support of the new global Health for All policy.[1] The new policy, Health for All in the 21st century,[2] succeeds the Health for All by the year 2000 strategy launched in 1977.[3] The renewal of Health for All, concurrent with the 50th anniversary of the WHO and the appointment of a new director general, offers a unique opportunity for the organisation to re-establish its purpose. In the new policy, the world-wide call for social justice is elaborated in key values, goals, objectives, and targets. The ten global health targets are the most concrete end points to be pursued. They can be divided into three subgroups (see box 1) four health outcome targets, two targets on determinants of health, and four targets on health policies and sustainable health systems. All member states are supposed to set their own targets within this framework, based on their specific needs and priorities.

Box 1 Global health targets

Health outcome

Target 1 Health equity: childhood stunting

By 2005, health equity indices will be used within and between countries as a basis for promoting and monitoring equity in health. Initially, equity will be assessed on the basis of a measure of child growth.

Target 2 Survival: maternal mortality rates, child mortality rates, life expectancy

By 2020, the targets agreed at world conferences for maternal mortality rates (MMR; < 100/100000 live births), under-five or child mortality rates (CMR; < 45/1000 live births), and life expectancy (LE; > 70 years) will be met.

Target 3 Reverse global trends of five major pandemics

By 2020, the world-wide burden of disease will be substantially decreased. This will be achieved by the implementation of sound disease-control programmes aimed at reversing the current trends of increasing incidence and disability caused by tuberculosis, HIV/AIDS, malaria, tobacco-related diseases and violence/trauma.

Target 4 Eradicate and eliminate certain diseases

Measles will be eradicated by 2020. Lymphatic filariasis will be eliminated by the year 2020. The transmission of Chagas disease will be interrupted by 2010. Leprosy will be eliminated by 2010 and trachoma will be eliminated by 2020. In addition, vitamin A and iodine deficiencies will be eliminated before 2020.

Box 1 Global health targets (continued)

Determinants of health

Target 5 Improve access to water, sanitation, food and shelter

By 2020, all countries, through intersectoral action, will have made major progress in making available safe drinking-water, adequate sanitation, food and shelter in sufficient quantity and quality and towards the management of risks to health from major environment determinants, including chemical, biological and physical agents.

Target 6 Measures to promote help

By 2020, all countries will have introduced, and be actively managing and monitoring, strategies that strengthen health-enhancing lifestyles and weaken health-damaging ones, through a combination of regulatory, economic, educational, organisational and community-based programmes.

Health policies and sustainable health systems

Target 7 Develop, implement and monitor national Health for All policies

By 2005, all Member States will have operational mechanisms for developing, implementing and monitoring policies that are consistent with this Health for All policy.

Target 8 Improve access to comprehensive essential health care

By 2010, all people will have access throughout their lives to comprehensive, essential quality health care, supported by essential public health functions.

Target 9 Implement global and national health information and surveillance systems

By 2010, appropriate global and national health information, surveillance and alert systems will be established.

Target 10 Support research for health

By 2010, research policies and institutional mechanisms will be operational at global, regional and country levels.

Presenting the new policy at the World Health Assembly was the first step in the renewal of the Health for All movement. The development of indicators for some of the targets and the promotion of the Health for All policy in all member states formed the next steps in the process.[4] There are two main aims behind the Health for All in the 21st century programme. Firstly, the WHO wants to develop a shared vision by listing the ten most important health issues. Secondly, the organisation wants to formulate ten targets to motivate all member states to take action and to set priorities for resource allocation. To fulfil these aims the WHO sought to include in the new targets components that were inspirational and achievable.

5.2 Methods

In our review of the new policy,[5] we considered how the ten new targets could be measured and attained, and their relevance. Measurability assumes unambiguous clarity, the use of quantitative elements, and the availability of indicators. We analysed the proposed indicators in relation to clarity and whether they could be measured, and assessed the indicators proposed for a given target, insofar as they had been developed. Attainability was analysed against a background of epidemiological and demographic trends. Relevance was considered in two parts – the global importance of the target and its usefulness for individual member states. The analysis was carried out by the authors separately, and, after consultation, the results were discussed with WHO staff.

5.3 Measurability

The table lists the results of our analyses for each target. It seems that most of the health outcome targets had been clearly (univocally) formulated. However, the other targets contain elements that are more difficult to interpret and measure – for example, they include terms such as 'substantially', 'major progress', and 'sufficient quantity and quality'. Quantitative outcomes have been given for three targets only; outcomes for other targets are qualitative. All targets have a clear deadline, except for part of target 1, which relates to the promotion of equity in health. We found that the clarity of the indicators was reasonable to good for part of target 1 (childhood stunting), target 2 (survival), target 4 (elimination of diseases), and target 5 (water, sanitation, food, and shelter) only. Of these four targets, only the indicators for target 5 did not include quantitative elements. For the remaining six targets, indicators were not given or were described poorly.

Table 1 Overview of results of the analysis of target characteristics, appropriateness of indicators, and overall results on relevance and attainability of the ten global Health for All targets

nr	Target	Target characteristics			Indicator characteristics				Attainability	Relevance	
		Clear	Quantitative	Time-bound	Clear	Quantitative	Total set	Better needed		Global level	Member States
1	Equity in health	Yes	No	----	not given				Unclear	Yes	Yes
	Equity indices	Yes	No	05	not given				Yes	Yes	Yes
	Stunting	Yes	Yes	20	Yes	Yes	?	Yes	?	?	?
2	MMR, CMR, LE	Yes	Yes	20	Yes	Yes	Yes	No	?	Yes	?
3	Five major pandemics	?	No	20	not well described				Unclear	Yes	?
4	Elimination diseases	Yes	Yes	10; 20	Yes	Yes	?	yes	?	Yes	Yes
5	Water, sanitation, food and shelter	?	No	20	?	No	?	yes	Unclear	Yes	?
6	Health promotion	?	No	20	not well described				Unclear	Yes	?
7	HFA policies	?	No	05	not well described				Unclear	?	?
8	Essential health care	No	No	10	not given				Unclear	Yes	?
9	Alert systems	Yes	No	10	not given				Yes	Yes	Yes
	Surveillance systems	?	No	10	not given				?	yes	Yes
	Health information systems	?	No	10	not given				Unclear	Yes	Yes
10	Research	No	No	10	not given				Unclear	Yes	?

? questionable

5.4 Attainability

The table also shows the results of demographic and epidemiological analysis showing how attainable the targets are.[6-13] Information about available interventions, the use of equity indices, and alerting, surveillance, and health information systems was found in health policy documents.[13-18] Whether some targets are achievable is uncertain because there is no clear, quantitative statement of what will be considered as success in the given end year. These targets must be made more specific.

Judging the global attainability of the targets is difficult because of large differences in epidemiological and demographic trends between member states. This can be illustrated by the differences in maternal and child mortality and life expectancy. Another example is childhood stunting, a target more relevant for the developing world than for developed countries.[19,20] Cigarette smoking is yet another example – it is the major cause of preventable mortality in developed countries, but is also becoming important for developing countries, where tobacco consumption is increasing steadily.[21] With regard to communicable diseases, more people will be at risk because of 'globalisation' and increasing mobility.

Cost is another determinant of attainability. Take, for example, target 3. The cost of smoking prevention – financial measures to discourage tobacco consumption, the banning of tobacco advertising, health warnings on tobacco product packaging, and programmes of health promotion and education – could be relatively low.[21] But reversing the current trends in tuberculosis would cost much more. The use of directly observed treatment short course regimens to avert further contamination and prevent multidrug resistant tuberculosis is acknowledged in tuberculosis control programmes. In urban areas, directly observed treatment short course regimens can be provided on a daily or alternate day outpatient basis, but in rural areas patients would probably have to be admitted to hospital or clinic for treatment. Including all patients with tuberculosis in directly observed treatment short course regimens would more than double the number of patients being treated, which would lead to logistical and financial problems, especially in sub-Saharan Africa.[22]

For most targets, global epidemiological and financial constraints demand enormous additional amounts of political will, financial resources, and organisational effort. The creation of political will and impetus is a formidable challenge for the WHO and its new director general.

5.5 Relevance

At the global level, most targets are relevant in achieving Health for All (table 1). However, in target 1, for example, the relevance of childhood stunting is questionable for the developed world. Target 7 is only relevant globally when it is perceived as a stimulus for member states to develop health policies systematically. In our view, the new policy lacks targets related to the social environment and mental health issues. These major issues in global health have been omitted without argument.

The relevance of the targets for the member states varies in relation to epidemiological patterns and resources. For some member states, for instance, target 2 is set too high and is therefore potentially demotivating. For more developed countries, the relevance of this target is also questionable since it has already been wholly or partly met. The same applies to other epidemiological targets, and rates that are specific to region and to country are therefore needed. The elaboration of the targets also affects their relevance. For example, targets 5 and 6 are open to interpretation. Furthermore, the formulation of target 7 allows any country to state that it has a policy consistent with Health for All. The same applies to targets 8 and 10.

Thus, the ten targets are reasonably relevant globally, but represent an uneasy mixture of unequal entities. Some, for instance, are more specific than others. Some targets (such as target 10) focus on just one issue, while others (such as target 4) consider several different ones. Given these differences, it is impossible to compare the importance of the targets. It is therefore wise to measure progress in achieving the targets individually for the targets or their components.

5.6 Health for All in the 21st century?

The WHO has two aims with the new global Health for All policy. Firstly, the policy is a world-wide call for social justice. The WHO seems to succeed in the difficult task of drawing attention to the most important health issues. Just like the Health for All by the year 2000 strategy,[23,24] the new global health targets could give a new impetus to the development of health policies in member states in the decades to come. It will again put public health on the policy agenda. Secondly, the new policy aims to motivate member states to take action and to set priorities for resource allocation. Much work still needs to be done to achieve this. To be useful in health policy at this level, all the targets need to be elaborated further and clear, practical statements must be made on their operation – especially the four targets on health policy and sustainable health systems. The WHO should stimulate the discussion of these important targets, but it should also be careful about being too prescriptive about health systems since this could be counterproductive.

In addition, more attention should be given to the usefulness of the targets in member states. One way of doing this is to rank the countries by target and to divide them into three groups. A specific level could be set for each group. For example, for target 2, three such groups could be distinguished as follows:

- Countries that have already achieved this target
- Countries for which the global target is achievable and challenging
- Countries that find the global target hard to achieve and therefore 'demotivating'.

The first group needs stricter target levels, and the third group less stringent ones. If a breakdown of this kind is made for each target, some countries may be classified in different groups for different targets. In this way, the targets will provide an insight into the health status of the population and could be useful for policymakers in member states in encouraging action and allocating their resources.

Acknowledgement

This study was commissioned by Policy Action Co-ordination at the WHO and supported by an unrestricted educational grant from Merck & Co Inc, New Jersey, USA. We thank Dr J. Visschedijk and Professor L. J. Gunning-Schepers and other referees of this article for their helpful comments.

References

1 World Health Assembly. Resolution WHA51.7. In: Health for all policy for the twenty-first century. Geneva: World Health Organisation, 1998.
2 World Health Association. Health for all in the 21st century. Geneva: World Health Organisation, 1998.
3 World Health Association. Global strategy for health for all by the year 2000. In: Geneva: World Health Oraganisation, Health for all series, no 3, 1981.
4 Visschedijk J, Siméant S. Targets for health for all in the 21st century. World Health Statistics Quarterly, 1998; 51: 56-67.
5 Water HPA van de, Herten LM van. Never change a winning team? Review of WHO's new global policy: health for all in the 21st century. Leiden: TNO Prevention and Health, 1999.
6 WHO, World Health Organisation. World health report 1995: bridging the gaps. Geneva: World Health Organisation, 1995.
7 WHO, World Health Organisation. World health report 1996: fighting disease, fostering development. Geneva: World Health Organisation, 1996.
8 WHO, World Health Organisation. World health report 1997: conquering suffering, enriching humanity. Geneva: World Health Organisation, 1997.
9 Murray CJL, Lopez AD (eds). The global burden of disease. Boston: Harvard University Press, 1996.
10 United Nations. The world population prospects. New York: UN, 1998.
11 United Nations Development Programme. Human development report 1997. New York: Oxford University Press, 1997.
12 World Bank. Poverty reduction and the World Bank: progress and challenges in the 1990s. New York: World Bank, 1996.
13 WHO, World Health Organisation. Third evaluation of health for all by the year 2000. Geneva: World Health Organisation, 1999.

14 Ad Hoc Committee on Health Research Relating to Future Intervention Options. Investing in health research and development. Geneva: World Health Organisation, Document TDR/Gen/96.1, 1996.
15 Taylor CE. Surveillance for equity in primary health care: policy implications from international experience. International Journal of Epidemiology, 1992; 21: 1043-9.
16 Frerichs RR. Epidemiologic surveillance in developing countries. Annual Review of Public Health, 1991; 12: 257-80.
17 WHO, World Health Organisation. Health for all renewal building sustainable health systems: from policy to action. Report of meeting on 17-19 November 1997 in Helsinki, Finland. Geneva: World Health Organisation, 1998.
18 WHO, World Health Organisation. EMC annual report 1996. Geneva: World Health Organisation, 1996.
19 WHO, World Health Organisation. Physical status: the use and interpretation of anthropometry of a WHO expert committee. Geneva: World Health Organisation, technical report series No 834, 1995.
20 WHO, World Health Organisation. Global database on child growth and malnutrition. Geneva: World Health Organisation, 1997.
21 WHO, World Health Organisation. Tobacco or health: a global status report. Geneva: World Health Organisation, 1997.
22 Erkens C. Cost-effectiveness of 'short course chemotherapy' in smear-negative tuberculosis. Utrecht: Netherlands School of Public Health, 1996.
23 Water HPA van de, Herten LM van. Bull's eye or achilles' heel: WHO's European health for all targets evaluated in the Netherlands. Leiden: TNO Prevention and Health, 1996.
24 Water HPA van de, Herten LM van. Health policies on target? Review of health target and priority setting in 18 European countries. Leiden: TNO Prevention and Health, 1998.

Chapter 6

Rationalising chances of success in intersectoral health policy making

L.M. van Herten & L.J. Gunning-Schepers
Accepted for publication by the Journal of Epidemiology and Community Health. Reprinted with permission.

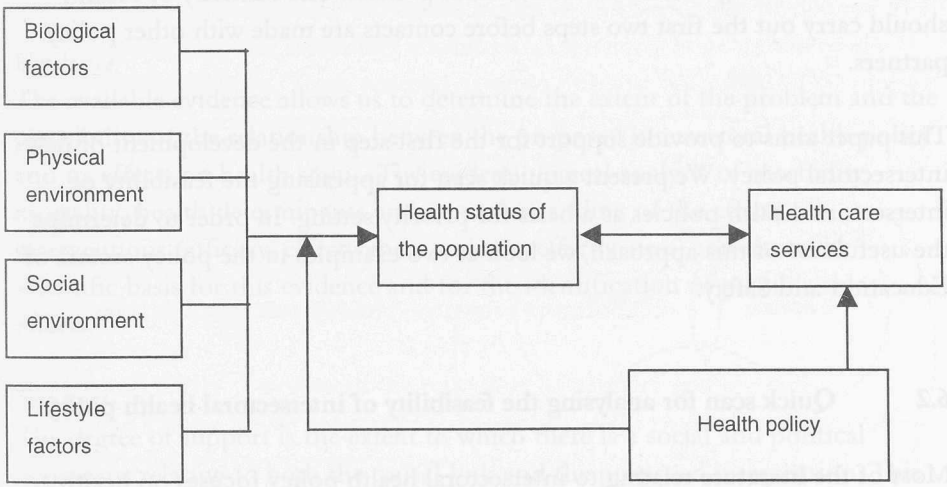
Abstract

Introduction It is generally accepted that a wide range of factors determine the health of a population, many of which are beyond the remit of the Ministry of Health. The aim of intersectoral health policy is to influence these factors. Success depends on a multi-stage process. This paper aims to provide support for the first step of this process in the form of a quick scan for appraising the feasibility of intersectoral health policy. *Methods* The content of the quick scan for intersectoral health policy was derived from a literature review. In order to determine the usefulness of this quick scan, we looked at two examples in the policy sectors of education and safety. *Results* The quick scan distinguishes between three factors: (1) the availability of evidence, (2) the degree of support, and (3) the availability of tools for implementation. The quick scan made it possible to review the two policy sectors systematically in a relatively short time and to obtain sufficient information for priority setting in intersectoral health policy. The examples in this paper suggest that intersectoral health policy for community safety is more feasible than intersectoral policy for psychosocial problems in secondary education. However, specific information is required for a more precise assessment of feasibility. *Conclusion* There are many ways of improving health through intersectoral health policy. The proposed quick scan may provide systematic support for setting priorities before developing policies of this kind.

6.1 Introduction

It is generally accepted that a wide range of factors determine the health of a population. Figure 1, which is based on Lalonde's health field concept,[1] shows that five groups of determinants can be distinguished.[2] This model is often the basis for the design and study of health policies. At the national level, the Ministry of Health is directly responsible for health care services (including prevention services) and health education in specific areas. However, many determinants of health are outside its control. This means that the Ministry of Health is often dependent on collaboration with other Ministries to achieve health policy targets. In turn, this can raise the question of how the Ministry of Health can realise its aims in other policy sectors.[3,4] The aim of intersectoral policy is to provide an answer. Intersectoral health policy can be defined as policy outside the scope of public health and health care with an explicit health component or dimension.[5] Intersectoral policy also plays a role at the local level and in public-private partnerships. The main focus of this paper is on the national level, but we also discuss other levels.

Figure 1 Health field concept



Intersectoral health policy can be a response to existing policy proposals from other sectors or it can consist of a new intersectoral policy. Existing policy proposals are increasingly subjected to health impact assessments (HIA). A health impact assessment is an instrument for determining the effects of a proposed policy on health. It can be relevant for policy proposals that are not directly concerned with health but which may nevertheless affect it. It allows the Ministry of Health to direct the political and social agenda and to sharpen the focus on health in interdepartmental policy making.[6-13]

Intersectoral health policy can also involve the development of new policy. Here, the health sector collaborates with other sectors in developing policies for improving health, an example being intersectoral health policy on traffic accidents. A structural scanning of all policy sectors can help to identify the sectors with the best opportunities for improving or protecting health. However, there often is no structured priority setting of this kind.[14] Ideally, the following steps should be distinguished when developing new intersectoral health policies: (1) analysis of the feasibility of intersectoral health policy; (2) ranking of relevant policy sectors; (3) sounding of the relevant policy sectors; (4) negotiation and developing of intersectoral health policies; and (5) implementation and evaluation of the agreed intersectoral health policies. The Ministry of Health should carry out the first two steps before contacts are made with other policy partners.

This paper aims to provide support for the first step in the development of new intersectoral policy. We present a quick scan for appraising the feasibility of intersectoral health policies as a basis for priority setting. In order to determine the usefulness of this approach, we look at two examples in the policy sectors of Education and Safety.

6.2 Quick scan for analysing the feasibility of intersectoral health policy

Most of the literature relating to intersectoral health policy focuses on health impact assessment. In this literature, two factors are usually identified as crucial for success. These are (1) the availability of evidence, and (2) the degree of support.[6-13] However, when developing new intersectoral policy, one has also to look at (3) the availability of tools for implementation.[15] We combined these

three factors and developed a quick scan consisting of nine questions (see table 1) which should be answered in a relatively short period (that is one week). The answers can mostly be found in literature reviews. They should at least give an indication of feasibility based on facts.

Table 1 Quick scan for feasibility of intersectoral health policy

Aspect	Questions
Evidence	What is the extent of the problem?
	Which health effects (positive and negative) can occur due to action in this policy sector?
	Are there causal relationships between health effect and policy sector or are relationships plausible?
Support	Is the subject on the political agenda?
	Which actors are involved?
	Will actors support or oppose?
Tools	Which instruments are already in use?
	Which instruments are proven useful?
	Which instruments are applicable on demand?

Evidence

The available evidence allows us to determine the extent of the problem and the plausibility of the relationship between the proposed intersectoral health policy and its effects on health status. The epidemiological analysis of morbidity, mortality, health determinants and an understanding of the effects of interventions (efficacy, effectiveness and cost-effectiveness) constitute the scientific basis for this evidence and for the identification of possible side-effects.[6,7,9]

Support

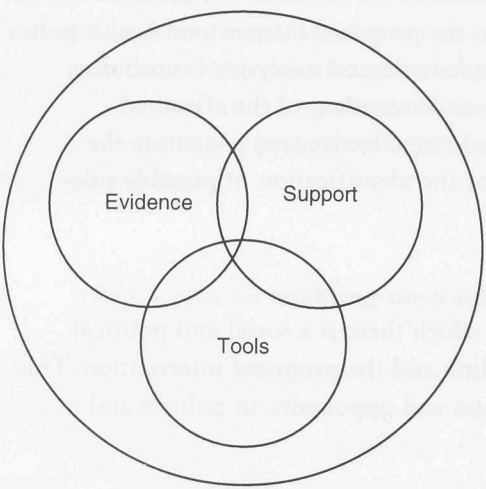
The degree of support is the extent to which there is a social and political consensus relating to both the causal link and the proposed intervention. This covers all those involved, both advocates and opponents, in politics and in society as a whole.[6,7]

Tools

The availability of tools for the implementation of intersectoral health policy means the extent to which a government has the instruments required to achieve proposed goals. It also means the extent to which these instruments have proven useful and applicable where required. The instruments can be classified into four categories: nodality, authority, treasury and organisation.[15] They correspond to government resources for achieving goals through communications, legislation and other means of exerting power, financing, and government activities, respectively. Some tools, like legislative power, are a unique feature of government only. Other tools are available to any organisation.[15]

Evidence, support and tools are not related hierarchically and interact with each other. When causal relationships are evident, bargaining power is greater and support is often broader. Wide support can stimulate intersectoral health policy, even if causal relationships with health status are difficult to determine. An example is intersectoral health policy relating to complex problems in urban areas. The complexity of interaction between problems in these areas can make it difficult to isolate individual causal relationships with health status. However, public interest in this policy sector opens up possibilities for intersectoral health policy.

Figure 3 Feasibility factors



6.3 Application of the quick scan to two policy fields

This part of the paper looks at the merits of the quick scan, examining possible Dutch intersectoral health policy in the sectors of education and of safety. We determine whether the quick scan provides enough information to prioritise policy sectors in the first step of new intersectoral health policy making. Both examples were elaborated in a short period of time on the basis of literature, with emphasis on the usefulness of the quick scan. The examples are therefore not comprehensive.

6.3.1 Education

The education policy sector ranges from primary schools to academic centres of excellence. Because of the many actors involved, we chose intersectoral health policy for psychosocial problems among students in secondary education to illustrate the method.

Evidence

The target group of intersectoral health policy in this sector can be defined as all individuals who attend secondary education. A relatively large number have psychosocial problems. These can be related to puberty, lack of parental support, or unemployment or substance abuse within the family.[16-20] The problems can be expressed in truant behaviour (absence from school, dropping out, addiction and criminality) or more passive reactions such as inactivity, anxiety, or other symptoms.[16-20] It is estimated that the overall prevalence of mental disorders in adolescence in the European Union is 15-20% and almost 10% seem to experience clinically recognisable depressive symptoms.[18]

Durlak and Wells[21-22] evaluated the outcomes of primary and secondary preventive mental health intervention programmes for children and adolescents, and concluded that such programmes significantly reduce problems and increase competencies. The interventions aimed at groups are effective if they focus on schools, but less if they focus on parents. Individual prevention programmes are as effective as group interventions at school. Furthermore, it is important for psychosocial problems to be recognised in time to prevent them from worsening.[21,22] Screening for psychosocial problems by doctors and nurses

working in community health services may be a way to reduce these problems.[19] These results indicate that intersectoral health policy involving collaboration with institutions of secondary education and child health care could have a beneficial effect on the range of psychological problems associated with adolescence.

Support

Education is a recurrent item on the Dutch political agenda. Many actors are involved, examples being teachers, parents, schools, youth care facilities, municipal health services, police, the justiciary, etc. Most of them agree that co-ordinated action in the field of psychosocial problems is necessary, but this is difficult to achieve in practice. Furthermore, most schools and teachers are already overloaded with work and have no time for additional duties. The opportunities for the development of new intersectoral health policy for psychosocial problems in secondary education would seem to be limited in the short term.

Tools

In many respects, there already is intersectoral health policy in secondary education. All four types of instruments are in use. With respect to nodality, a structure has been developed involving schools, youth care facilities and municipal health services. It has already been proposed that this structure should be expanded.[23] Legislation on substance abuse, truancy and youth criminality are examples of authority instruments that are already used. Treasury can be used to impose policies on governmental and non-governmental organisations. However, the more actors involved, the more funding possibilities are harder to integrate. Finally, organisations like the Dutch municipal health services can also enforce intersectoral health policy.[24] There are also some experiments which can be described as intersectoral health policy making within a school. These initiatives are supported by municipal health services and open up possibilities for preventing psychosocial problems.[25,26] However, it is unclear what additional measures are available for the specific psychosocial problems touched upon here.

Conclusion

On the basis of this quick scan, one can conclude that intersectoral health policy for secondary education and psychosocial problems could be successful, but that it will be difficult to get it started. There is some evidence indicating that

psychological programmes in a school setting and for individuals are effective. However, the tools for implementation do not cater for individuals. Feasibility will also be limited because support is not very strong.

6.3.2 Safety

The safety policy sector covers a wide variety of topics. Intersectoral health policies for traffic accidents and accidents in and around the home are relatively well developed in the Netherlands. We therefore chose intersectoral health policy for community safety as our second example. This item has already been on the agenda for several years, but the increase in attention for victims of street violence continues.

Evidence

Community safety can be measured by objective and subjective indicators. Objective indicators include numbers of victims, with a breakdown into, for example, burglary, car thefts, vandalism, violence and robbery. In most cities in the Netherlands, objective community safety seems to be decreasing, but this may also be the result of a higher reporting rate.[27] Subjective indicators reflect perceived community safety. They can be measured with questionnaires. Research has shown that about 30% of the Dutch population sometimes feel unsafe. This percentage is even higher in large cities, among the elderly and people with low socio-economic status.[27,28] Feeling unsafe is related to poor health. Inversely, the health of most perpetrators of violence is also poor.[29]

Improving objective community safety (in particular, reducing violence and robbery) can reduce the number of victims. Perceived community safety has a less direct effect on health status. The health effects of perceived insecurity are related to, for instance, social isolation, stress and excessive use of medication.[30] Although there are a lot of interventions to improve the perceived insecurity, like improving street lightning and trimming greenery, possibilities remain for intersectoral action in this sector.[27] Examples are intervention programmes for people who feel unsafe or intervention programmes directed at people who cause community unsafety. Substance abuse programmes can be used in attempts to reduce the number of drug addicts involved in criminal activities.[31]

Support

Some recent cases of street violence provoked widespread support for violence prevention and have placed community safety on the Dutch political agenda.[32] On the national level, the most important actors are politicians, followed by interest groups and the media. At the local level, police, community associations, housing associations, schools, shop owners, café and disco owners and senior citizens are important actors.[33] Most actors ask for action that will improve community safety in specific neighbourhoods. It is assumed that this will have an effect on objective and perceived community safety. An advantage of policy measures that focus on objective community safety is that the results can be made more visible. Policy which targets perceived community safety, for instance by means of media campaigns, will have less measurable effects. In addition, such campaigns can have negative side-effects, given the frequently-expressed suggestion that they only disguise the real problem of objective community safety.

Tools

In the community safety sector, policies are already in place relating to objective and perceived community safety.[34] All four types of instruments are in use. The Dutch government is already engaged in the establishment of a network regarding community safety, and legislation is providing for stricter regulation. Financial and organisational resources make it possible to improve environmental factors by, for example, improving street lighting and trimming greenery. In addition, government has increased the number of policemen on patrol. Public campaigns, burglary prevention facilities, and neighbourhood watch schemes, etc. also improve objective and perceived community safety. Cameras in public areas are ever more common. These measures have resulted in increased objective community safety, but the recent wave of gratuitous violence and intensive media coverage have increased feelings of insecurity.[27,32] Additional measures to improve perceived community safety are therefore necessary. Examples are courses in self-defence, training of those who cause community unsafety or asking the media to be more objective when reporting on incidents.

Conclusion

On the basis of this quick scan, one can conclude that intersectoral health policy for community safety is highly feasible. The causal relationship between objective community safety and health (especially in the case of violence and robbery) is

clear; the relationship between perceived community safety and health is less direct. As a result of cases of street violence, support is widespread and there are already implementation instruments in place.

6.4 Discussion

In the introduction, we stated that, before focusing on new intersectoral policies, the Ministry of Health should first analyse the feasibility of such a policy. Since this step is often skipped, we have presented a quick scan which allows for a systematic approach to listing the factors that determine the feasibility of intersectoral health policy. The proposed quick scan focuses on (1) the availability of evidence, (2) the degree of support and (3) the availability of tools for implementation. We tested the quick scan in two policy sectors. Since this was a quick scan carried out in a relatively short period, we only found indicators for those three factors. However, the quick scan made it possible to review the two policy sectors systematically in a relatively short time and to obtain sufficient information for priority setting in intersectoral health policy. Comparison of the two examples suggests that intersectoral health policy for community safety is more feasible than intersectoral policy for psychosocial problems in secondary education, because the support and policy tools relating to psychosocial problems in adolescents would seem to be limited at present in the Netherlands.

However, specific information is required for a more precise assessment of feasibility. More time and information are also needed to investigate the possibilities for achieving further health benefits. The results of such a detailed analysis (see table 2) can also provide the health sector with the tools required to make them more credible when – at a later stage – negotiations start with other policy sectors. With regard to evidence, an understanding of the underlying processes in demographic and epidemiological trends is needed to arrive at an assessment of the nature and the extent of the health effects, the lag time and the reversibility of effects. A more detailed picture will also yield information about the target groups and appropriate intervention settings (house, school, work). Public health scientists, like epidemiologists, can review the existing evidence to support this part of the analysis. For a detailed picture of levels of support for a potential intersectoral health policy, more information is required about the actors involved and their influence. To identify the actors who have the power to

take decisions and those with the ability to provide opposition – as well as their relative influence – all actors have to be assessed. They will be active not only in the political arena but also in society as a whole (lobby groups, media, etc). For a detailed review of the tools required for implementation, one needs information about both public health and management. A more detailed review of this kind must provide an insight into the current use of instruments, the plausibility of effects and the cost-effectiveness of the instruments. It will also show whether, and if so which, additional instruments can best be brought into action and how. The areas of support and tools mainly involve work for policy analists.

Table 2 Detailed analysis of the feasibility of intersectoral health policy

Aspect	Questions
Evidence	What kind of effects and side-effects will occur (somatic, psychological, social)?
	In what time span can effects and side-effects occur?
	How long will effects and side-effects be present?
	Are effects and side-effects reversible?
	Are effects and side-effects direct or indirect?
	In which population groups will effects and side-effects be the most radical?
	What is the size of these target groups?
	In which settings will effects and side-effects occur (home, school, work)?
Support	Which actors will give support?
	What influences do these supporters have on the content of political discussion?
	Which actors will put up opposition?
	What influences do these opponents have on the content of political discussion?
	Which actors are neutral towards the proposed policy?
	Can supporters and opponents influence these actors?
Tools	Which combination of instruments is most suitable?
	Are the effects of the instruments plausible?
	Are instruments cost-effective?
	Are radical changes necessary?
	How soon should the instruments be deployed?

After prioritisation and a more detailed analysis of the feasibility of relevant policy sectors, the sectors responsible for these policies should be drawn into the process. Here, government as a whole, and the health sector in particular, must recognise the legitimacy of action involving several policy sectors with the aim of promoting better health. The specification of consensus goals with measurable targets can provide the necessary benchmarks for such an intersectoral health policy.[35] With a health target approach of this kind, policymakers from other sectors can be asked to assess and elaborate how their proposed initiatives will achieve further progress toward the achievement of the health targets chosen, and to indicate how their initiatives will not hamper progress.[8]

However, it must be recognised that different sectors have different – and sometimes conflicting – priorities. In recognising this phenomenon, it is important for the health sector to provide leadership where appropriate, to negotiate and to adapt to existing agendas and priorities.[3,36] The health sector will be stronger when it does its homework and has an understanding of the evidence, support and tools for implementation. However, this will not be enough. One must also be aware of some disadvantages associated with the health sector that can hamper negotiations with other policy sectors. Firstly, the proposed intersectoral health policy is usually preventive in nature and, even putting aside the difficulty of proving causal relationships, the outcomes are mostly in terms of risks of undesirable effects in the distant future.[37] An actual lobby group – such as patient representatives – is often absent. Furthermore, negative side-effects such as a possible increase in injuries as a result of the encouragement of physical exercise[38] can also raise barriers in the negotiation phase. With respect to tools for implementation, the speed at which instruments can be brought into action is also important. Additional legislation, for instance, generally requires much more time than budget allocation. Frequently, however, there are no economic incentives to support intersectoral health policy and integrated initiatives.[39] In addition, integrated programmes are often seen as threats to sector-specific budgets, whereas support from others is necessary for intersectoral health policy. So during negotiations about potential intersectoral health policies, the health sector has to present arguments to create win-win situations. With respect to the examples mentioned in this article, the prevention of psychosocial problems can reduce drop-out in schools in the education sector, and the reduction of drug-related crime can result in improvements in the safety sector.

Finally, the proposed quick scan was developed for the national level. Its methodology may also be applicable to the local level and to public-private partnerships. The evidence does not differ from the evidence on the national level. However, there may be substantial differences between the various levels in terms of support and available tools.[39,40]

In summary, there are many possible ways of improving health through intersectoral health policy. Choices must therefore be made about where to start. In the Netherlands, our quick scan proved to be useful at the national level. Future research should examine its usefulness at the local level and in other countries. It is probable that it will function best in the framework of health target setting, where it will have the potential to generate additional health benefits.

Acknowledgement

The Council for Public Health and Health Care, Zoetermeer, the Netherlands supported this study. We thank all our colleagues for their helpful comments on earlier drafts of this paper.

References

1 Lalonde M. A new perspective on the health of the Canadians: a working document. Ottawa: Government of Canada, 1974.
2 Schaapveld K, Bergsma EW, Ginneken JKS, Water HPA van de. Setting priorities in prevention. Leiden: NIPG-TNO, 1990.
3 Milio N. Priorities and strategies for promoting community-based prevention policies. Journal of Public Health Management and Practice, 1998; 4: 14-28.
4 Putters K, Grinten TED van der. Health impact screening: the administrative function of a health policy instrument. Eurohealth, 1998; 4: 29-31.
5 Griffiths S, Hunter DJ (eds). Perspectives in public health. Oxon: Radcliffe Medical Press Ltd, 1999.

6 Ministry of Health, Welfare and Sport. Health impact assessment: exploration and report of a workshop (Gezondheidseffectscreening: verkennend rapport en verslag van een workshop). Rijswijk: Ministry of Health, Welfare and Sport, 1995.
7 Putters K. Health impact assessment: rational models in their administrative context (Gezondheidseffectscreening: modellen in hun bestuurlijke context). Rijswijk: Ministry of Health, Welfare and Sport, 1996.
8 Ratner PA, Green LW, Frankish CJ, Chomik T, Larsen C. Setting the stage for health impact assessment. Journal of Public Health Policy, 1997; 18: 67-79.
9 Scott-Samuel A. Health impact assessment – theory into practice. Journal of Epidemiology and Community Health, 1998; 52: 704-5.
10 Lerer LB. Health impact assessment. Health Policy and Planning, 1999; 14: 198-203.
11 Lock K. Health impact assessment. British Medical Journal, 2000; 320: 1395-8.
12 World Health Organisation European Centre for Health Policy. Health impact assessment: main concepts and suggested approach. Gothenburg consensus paper. Brussels: World Health Organisation European Centre for Health Policy, 1999.
13 WHO-EURO, World Health Organisation Regional Office for Europe. Assessing the health impact of integrating in the European Union. Budapest: 16-18 December 1999. Copenhagen: World Health Organisation, Regional Office for Europe, 2000.
14 Herten LM van, Reijneveld SA, Kleijn-de Vrankrijker MW de. Health in all its aspects (Gezondheid in al haar facetten). Zoetermeer: Council for Public Health and Health Care, 2000.
15 Hood CC. The tools of government. London: The MacMillan Press, 1983.
16 Schuyt CJM. Vulnerable adolescents and their future: a policy recommendation based on literature (Kwetsbare jongeren en hun toekomst: een beleidsadvies gebaseerd op een literatuurverkenning). Rijswijk: Ministry of Health, Welfare and Sport, 1995.
17 Rutter M, Smith DJ (eds). Psychosocial disorders in young people: time trends and their causes. Chichester: John Wiley & Sons, 1995.

18 European Commission. Report on the state of young people's health in the European Union: a commission services working paper. Luxembourg: European Commission Directorate-General Health and Consumer protection, Unit F3 – Health promotion, health monitoring and injury prevention, 2000.
19 Brugman EB, Reijneveld SA, Verhulst FC, Verloove-Vanhorick SP. Identifying psychosocial problems in children. Archives of Pediatrics and Adolescent Medicine, 2001; 155: in press.
20 Spencer N. Poverty in child health. Abingdon: Radcliffe Medical Press, 2000.
21 Durlak JA, Wells AM. Primary prevention mental health problems for children and adolescents: a meta-analytic review. American Journal of Community Psychology, 1997; 25: 115-52.
22 Durlak JA, Wells AM. Evaluation of indicated preventive interventions (secondary prevention) mental health programs for children and adolescents. American Journal of Community Psychology, 1998; 26: 775-802.
23 Ministry of Justice, Ministry of Internal Affairs, Ministry of Education, Culture and Science, Ministry of Health, Welfare and Sport. Four years of Van Montfrans: execution of plan for tackling juvenile crime (Vier jaar Van Montfrans: uitvoering plan van aanpak Jeugdcriminaliteit). The Hague: Ministry of Justice, 1998.
24 Lemstra W. Advisory report of the strengthening public health committee, local health policy: a better position (Advies van de commissie versterking collectieve preventie, gemeentelijk gezondheidsbeleid: beter op zijn plaats). Zoetermeer: Hageman, 1996.
25 Reijneveld SA, Stiggelbout M, Swagerman-van Hees M, Brugman E. Improving the implementation of prevention programmes by municipal health services: recommendations on observing and preventing psychosocial problems in children and adolescents (Verbetering van de uitvoering van preventieprogramma's door GGD'en: aanbevelingen over signalering en preventie van psychosociale problemen bij kinderen en jeugdigen). Leiden: TNO Prevention and Health, 2000.
26 Verloove-Vanhorick SP. Public health primary tasks project: outlines of recommendations from public health primary tasks committee (Project basistaken collectieve preventie: hoofdlijnen adviezen basistaken collectieve preventie). The Hague: Ministry of Health, Welfare and Sport, 1998.

27 Verweij AO, Latuheru EJ, Rodenburg AM, Weijers YMR. Urban areas 1997, part I: situation and developments in cities (Jaarboek 1997 grote stedenbeleid, deel 1: situatie en ontwikkeling in de steden). Rotterdam: Institute on Socio-economic Research, 1998.
28 Ministry of Internal Affairs. Integrated safety report 1998 (Integrale veiligheidsrapportage 1998). The Hague: Ministry of Internal Affairs, 1998.
29 Junger M, Laan AM van der, Stroebe W. Delinquency and health: the relationships between delinquent behaviour, health related behaviour and health outcomes in adolescence. British Journal of Health Psychology (in press).
30 Koornstra A (ed). Space for health: healthy building and living in new neighbourhoods: an exploratory study (Ruimte voor gezondheid: gezond bouwen en wonen in nieuwe wijken: een terreinverkenning). The Hague: VNG Uitgeverij, 1997.
31 Otero Lopez JM, Luengo Martin A, Miron Redondo L, Arrillo de la Pena MT, Omero Trinanes E. An empirical study of the relations between drug abuse and delinquency among adolescents. British Journal of Criminology, 1994; 34: 459-78.
32 Dijkstra A. Street violence as a perceived health risk before and after a wave of media interest (Straatgeweld als gepercipieerd gezondheidsrisico voor en na een mediagolf). TSG, 1999; 77: 316-23.
33 Socio-economic council. Together to the city: advice concerning urban areas (Samen voor de stad: advies inzake het grote stedenbeleid). The Hague: Socio-economic council, 1998.
34 Ministry of Internal Affairs. Integrated safety programme (Integraal veiligheidsprogramma). The Hague: Ministry of Internal Affairs, 1999.
35 Herten LM van, Gunning-Schepers LJ. Review: Targets as a tool in health policy, part II: guidelines for application. Health Policy, 2000; 53: 13-23.
36 Gray B. Conditions facilitating interorganisational collaboration. Human Relations, 1985; 38 (10): 911-36.
37 Gunning-Schepers LJ, Barendregt JJ. Timeless epidemiology or history cannot be ignored. Journal of Clinical Epidemiology, 1992; 45: 365-72.
38 US Department of Health and Human Services. Physical activity and health: a report of the Surgeon General. Atlanta, GA: US Department of health and human services, Centres for disease control and prevention, National centre for chronic disease prevention and health promotion, 1996.

39 WHO, World Health Organisation. Intersectoral action for health: a cornerstone for health for all in the twenty-first century. Report of the international conference, 20-23 April 1997, Halifax, Nova Scotia, Canada, 1997.

40 Plamping D, Gordon P, Pratt J. Practical partnerships for health and local authorities. British Medical Journal, 2000; 320: 1723-5.

Chapter 7

Health policy and practice

L.M. van Herten & L.J. Gunning-Schepers
Submitted to European Journal of Public Health

Abstract

The drive to achieve health gain and the increasing use of scientific evidence are important developments in the health sector. On the national level, data on efficacy, effectiveness and cost-effectiveness are used to set priorities. At this level the public health and the health care sector both address the population as a whole. However, in actual practice, the approaches in the public health and health care sectors have traditionally differed. This paper explores the different traditions in using evidence on efficacy, effectiveness and cost-effectiveness. The public health and health care sectors could profit from each other's experience. In the public health sector, efficacy should not be replaced by effectiveness. In the health care sector, more attention could be paid to heterogeneity within populations and to organisational circumstances affecting effectiveness. Finally, both sectors will need to combine outcome measures with cost measures.

7.1 Introduction

In June 2000, the World Health Organisation (WHO) presented its World Health Report 2000. In that report, it calls for attention to be paid to the performance of health systems in terms of health status, responsiveness of the system and fairness of finance.[1] With this report, WHO shifted its attention from public health targets towards health services. Outcome studies have been used traditionally to analyse the extent to which health services contribute to the health status of the population. Quantitative data is needed on (1) the nature and extent of the health problem and the inequalities between sub-populations and (2) on the efficacy and effectiveness of interventions.[2] The scarcity of resources in the health sector mean that the cost-effectiveness of interventions increasingly play a role in policy.

Box 1 Some examples of health target setting

- The UK's 1998 strategy 'Our Healthier Nation' and its predecessor 'Health of the Nation' are one of the most developed health target approaches in Europe. These strategies aim to improve health by using a limited number of quantitative health targets. The new policy is based on increasing effectiveness. In this strategy, targets for the year 2010 have been set for four areas: heart disease and stroke, accidents, cancer and mental health.
- Since 1989, nearly all regions of Spain have approved regional health plans. These plans have similar sets of health targets, although practical approaches may differ. In 1995, the Ministry of Health issued a Health Plan, which represents a step forward in the harmonisation of the regional policies.
- In Sweden, health promotion and disease prevention are priority areas associated with a number of national and regional targets. Most of the health plans and programmes drawn up by the County Councils referred to WHO's Health for All and were based on the target model. In line with the WHO monitoring scheme, the National Board of Health and Welfare issues a Public Health Report every three years.
- In the Netherlands, the setting of quantitative health targets was rejected in 1992 by the Secretary of State on Health. As a less specific approach, the Dutch government stated three general goals in their most recent policy paper. These goals are the extension of healthy life expectancy, prevention of premature mortality and the improvement of the quality of life.

There are however differences in how this data is used on the national level and in practice. On the national level, the data is used to set priorities. In public health, these priorities are often made explicit by health targets (see box 1).[3] In the health care sector, governments are increasingly turning to priority-setting methods in order to justify allocation decisions (see box 2).[3,4] Although there are many differences, the discussions in the public health and health care sectors on the national level are similar in that they address the population as a whole. They often focus on average health outcomes.

Box 2 Some examples of priority-setting methods

- In Finland, the 1995 report 'From values to choices' presents ethical, economic and administrative issues related to making choices, but it does not offer prioritisation lists for individuals or groups.
- In the Netherlands, the 1991 Dunning report recommend four criteria (sieves) for including health care interventions in basis insurance package: Is the intervention necessary from the community point of view? Has proof been given that it is effective? Is it efficient? and Can it be left to individual responsibility? This advice was discussed thoroughly in the health care sector, but never put into use in the practical sense.
- In Norway, the 1987 Lønning report identified five levels of urgency. The second report in 1997 took into account the severity of diseases as well as the effectiveness (including the cost-effectiveness) of interventions. Four groups of services were defined: basic health services, supplementary health services, health services of low priority and services that do not belong within the health services financed by the government.
- The Swedish Parliamentary Priorities Commission issued its final report in 1995. This report presented a way of thinking about priority setting to assist those responsible for taking decisions, both on the policy and on the clinical level. As a basis for priority setting the commission laid down three principles: human dignity, solidarity and efficiency.

However, in actual practice, the differences between the public health and health care sectors will be greater than at the national level. In the health care sector, clinical guidelines provide patient averages which have to be translated to the individual (see box 3).[5-7] And although the tradition of using population averages is accepted for many prevention programmes (see box 4), such as vaccination and screening, health promotion programmes are increasingly being adapted to specific population subgroups and different settings.[8-10]

Box 3 Some examples of clinical guidelines

- In the UK, professional bodies, encouraged by the National Health Service, are producing guidelines to be used by providers in order to improve care and by purchasers to guide contracting and commissioning decisions. The NHS is now using an appraisal instrument to determine which guidelines to recommend to health authorities.
- In the Netherlands, the Dutch College of General Practitioners has produced guidelines since 1987, issuing more than 70 guidelines at a rate of 8-10 topics per year. A rigorous procedure involves an analysis of the scientific literature, combined with consensus discussions among general practitioners and content experts.
- In Finland, national and local bodies have issued more than 700 guidelines since 1989. A programme for evidence-based guideline development has been launched recently.
- In Spain, the Catalan Agency for Health Technology Assessment has started preparing guidelines and teaching methods for guideline development.

Box 4 Some examples of prevention programmes

- In 1953, the Netherlands started a National Immunisation Programme. All children may be vaccinated free of charge at the age of 3,4,5 and 11 months (DTP-Polio and Hib), 14 months (MMR), 4 years (DT-Polio) and 9 years (DT-Polio and MMR). Although there is no legal obligation or requirement to be immunised, the coverage has been over 90%.
- In 1995, the European Parliament recommended population-based mammography screening for all women aged 50-69 years. However, each Member State sets its own target age group for screening as it sees appropriate.
- In 1985, the Heartbeat Wales programme on behavioural risks for cardiovascular disease was started. The programme used a range of established health promotion methods directed towards both changing health behaviour in individuals and achieving environmental, organisational and policy changes that support healthy choices.

The public health and health care sector, both at the national level and in practice, use health outcome results from research (see figure 1). It is, however, often unclear how evidence on efficacy, effectiveness and cost-effectiveness of interventions is used. This paper explores the different traditions in using this evidence at the national level and in practice, both in health care and public

health, and looks where the two sectors could profit from each other's experience.

Figure 1 Four fields of health policy

	Population	Individual/Community
Health care	Priority-setting methods	Clinical guidelines
Public health	Health targets	Protocols for preventive activities

7.2 Efficacy

The overall aims of public health are health protection, disease prevention and health promotion. To ensure that there will be no harm to individuals, this sector has a strong tradition of using scientific research. The criteria of Wilson and Jungner[11] stress that there should always be clear evidence on several aspects before introducing prevention programmes such as screening. In general, population data is used as a basis for interventions for the population. Traditionally, the public health sector has used this data to develop protocols for preventive intervention, underpinned by the results of scientific research on efficacy.

The health care sector, by contrast, traditionally focuses on the health status of the individual patient.[12] Scientific research at the (patient) population level has to be translated into treatment decisions at the individual level which are increasingly based on scientific fact rather than on expert opinion. The aim of the clinical guidelines and evidence-based medicine is to improve the quality of medical care, to reduce interdoctor variability and to close the gap between what physicians do and what scientific evidence supports.[6,13-16] Most clinical guidelines are based on reviews of the efficacy of interventions in a homogeneous study population which may not have the same characteristics as an individual patient. The attempt to standardise care potentially ignores the heterogeneity of patients and the complexity of medical decisions.[12,17] This is the inherent tension in the acceptance of evidence-based medicine by individual physicians. It is therefore increasingly stressed that guidelines are primarily intended as recommendations and that it is the art of medicine to interpret these recommendations in the light of the specific characteristics of each individual patient.[6,15,18]

7.3 Effectiveness

Since many vaccination and screening programmes have a long tradition of working in accordance with strict protocols, the difference between efficacy and effectiveness is often minimal in these public health programmes. However, a major difference is found in health promotion where increasingly community-based and tailor-made interventions try to adapt to the specifics of the subpopulation and of the setting.[12,19-21] Supporters have even argued that efficacy trials are a waste of time since every community is different.[22] An argument reminiscent of medicine before the era of clinical guidelines. However, although it is hard to develop efficacy trials in public health settings, they are needed to prove that interventions will, in principle, have a positive effect on the health status of individuals or subpopulations. Effectiveness trials, on the other hand, will help clarify what specific circumstances determine success in a particular setting. Although process evaluation has to be part of such trials, outcome still ultimately determines success.

In the health care sector, effectiveness studies which include variation of individual characteristics in patient populations or the organisational settings are rare.[16,23] It is often assumed that the same expertise is present in everyday practice as in the trial. Most of us know this is not the case, but research funding for studying the two variables is scarce. Although some organisational circumstances are difficult to change (like budget constraints, waiting lists and limited personnel), the importance of such circumstantial conditions is often ignored when efficacy trials are used to set priorities at a national level. To a certain extent, this also applies to public health targets. To reap the full benefits of evidence-based medicine and evidence-based public health, more attention needs to be paid to this area in order to ensure that the critical success factors are also in place.[24,25]

7.4 Cost-effectiveness

On the national level, the main issue in discussions of health policy is the allocation of available resources against the background of increasing demand and expanding technical possibilities. Analysing the cost-effectiveness of interventions is mostly seen as a first step in discussions of the value of

interventions. This discipline needs further elaboration in both sectors. Difficulties relate to cost measures and effect measures.[26-29] Alongside discussions about incorporating direct and indirect costs or the measures used for health benefits, there is continuing debate about discounting. The latter is especially important for the public health sector, where short-term costs are often related to long-term benefits.[30,31] In the health care sector, the tension between practice and the national level is more apparent. Incorporating cost-effectiveness in the evidence-based guidelines is often equated with cost-cutting policies.[32] The use of cost-effectiveness rather than quality arguments has made priority-setting by governments somewhat suspect with the medical profession.[33]

7.5 Conclusions: items for the research agenda

The drive to achieve health gain and the increasing use of scientific evidence are important developments in the health sector. We have seen here that the public health and health care sectors have similar experiences even though the approaches have traditionally differed. Health care started at the individual level and went on to use research to set priorities at a population level. Public health, on the other hand, started with average population measures and only recently refined them for specific subpopulations. Where health care has traditionally concentrated on efficacy and has little experience with effectiveness, health promotion seems almost to have thrown efficacy overboard and sometimes seems to equate effectiveness with process evaluation. In addition, both sectors have difficulty in using cost-effectiveness data.

Both sectors could learn from each other's experience, possibly in joint research. It is important to make distinctions between efficacy and effectiveness. The efficacy of interventions should always be clear. Outcome research on efficacy in public health should be strengthened, since the interest in effectiveness studies sometimes appears to have replaced efficacy trials.

On the other hand, the effectiveness of interventions depends on individual characteristics and on organisational circumstances. The public health sector shows that there is much to gain for the health care sector in translating efficacy results into effectiveness outcomes. Research on the consequences of patient

heterogeneity and organisational circumstances could optimise the health outcome of medical interventions.

Finally, both sectors will need to combine outcome measures with cost measures if evidence is to be used to allocate resources at a population level. This means that societies must optimise cost-effectiveness by choosing the 'right' mix of medical and non-medical services and by producing them at minimum cost. Much could be gained at a national level if composite health measures such as DALYs and QALYs could be developed along similar lines in public health and health care policy.

Acknowledgement

We thank all the referees of this article for their helpful comments.

References

1 WHO, World Health Organisation. World health report 2000, health systems: improving performance. Geneva: World Health Oraganisation, 2000.

2 Ann Aday L, Begley CE, Lairson DR, Slater CH. Evaluating the healthcare system: effectiveness, efficiency and equity. Chicago: Health Administration Press, 1998.

3 Water HPA van de, Herten LM van. Health policies on target? Review of health target setting in 18 European countries. Leiden: TNO Prevention and Health, 1998.

4 Ham C. Priority setting in health care: learning from international experience. Health Policy, 1997; 42: 49-66.

5 Fahey T, Griffiths S, Peters TJ. Evidence based purchasing: understanding results of clinical trials and systematic reviews. British Medical Journal, 1995; 311: 1056-9.

6 Woolf SH, Grol R, Hutchinson A, Eccles M, Grimshaw J. Potential benefits, limitations and harms of clinical guidelines. British Medical Journal, 1999a; 318: 527-30.

7 Woolf SH, Grol R, Hutchinson A, Eccles M, Grimshaw J. International overview. eBMJ (www.bmj.com), 1999b.
8 Tudor-Smith C, Nutbeam D, Moore L, Catford J. Effects of the Heartbeat Wales programme over five years on behavioural risks for cardiovascular disease: quasi-experimental comparison of results from Wales and a matched references area. British Medical Journal, 1998; 316: 818-22.
9 Hirasing RA, Zaal MAE van, Meulmeester JF, Verbrugge HP. Child health in the Netherlands: facts and figures 1997. Leiden: TNO Prevention and Health, 1997.
10 Tse W. Breastcancer screening programmes in the European Union. Luxembourg: European Parliament, Directorate General for Research. Environment, Public Health and Consumer Protection, 1995.
11 Wilson JMG, Jungner G. Principles and practice of screening for disease. Geneva: World Health Organisation, 1968.
12 Soller M, Lee PR. A new look at preventive care guidelines. American Journal of Preventive Medicine, 1999; 17: 315-6.
13 Jenicek M. Epidemiology, Evidence based medicine and evidence based public health. Journal of Epidemiology, 1997; 7: 187-97.
14 Browman GP, Levine MN, Mohide EA, Hayward RSA, Pritchard KI, Gafni A, Laupacis A. The practice guidelines development cycle: a conceptual tool for practice guidelines development and implementation. Journal of Clinical Oncology, 1995; 13(2): 502-12.
15 Sackett DL, Rosenberg WM, Gray JA, Haynes RB, Richardson WS. Evidence-based medicine: what it is and what it isn't. British Medical Journal, 1996; 312: 71-2.
16 Aveyard P. Evidence based medicine and public health. Journal of Evaluation in Clinical Practice, 1997; 3: 139-44.
17 Berg M. Problems and promises of the protocol. Social Science and Medicine, 1997; 44: 1081-8.
18 European Commission. Employment and social affairs. 'Best practice': state of the art and perspectives in the EU for improving the effectiveness and efficiency of European health systems. Luxembourg: Office for Official Publications of the European Communities, 1999.
19 Campbell M, Fitzpatrick R, Haines A, Kinmonth AL, Sandercock P, Spiegelhalter D, Tyer P. Framework for design and evaluation of complex interventions to improve health. British Medical Journal, 2000; 321: 694-6.

20 Farquhar JW. The community-based model of life style intervention trials. American Journal of Epidemiology, 1978: 108 (2): 103-111.
21 Koepsell TD, Diehr PH, Cheadle A, Kristal A. Invited commentary: symposium on community intervention trials. American Journal of Epidemiology, 1995: 142 (6): 594-8.
22 Diehr P, Koepsell T, Cheadle A, Psaty BM, Wagner E, Curry S. Do communities differ in health behaviours? Journal of Clinical Epidemiology, 1993; 46 (10): 1141-9.
23 Birch S. As a matter of fact: evidence based decision making unplugged. Health Economics, 1997; 6: 547-59.
24 Bero La, Grilli L, Grimshaw JM, Harvey E, Oxman AD, Thomson MA. Closing the gap between research and practice: an overview of systematic reviews of interventions to promote the implementation of research findings. British Medical Journal, 1998; 317: 465-8.
25 Haynes B, Haines A. Barriers and bridges to evidence based clinical practice. British Medical Journal, 1998; 317: 273-6.
26 Olsen JA, Richardson J. Production gains from health care: what should be included in cost-effectiveness analyses? Social Science and Medicine 1999; 49: 17-26.
27 Anell A, Norinder A. Health outcome measures used in cost-effectiveness studies: a review of original articles between 1986 and 1996. Health Policy, 2000; 51: 87-99.
28 Phillips KA, Holtgrave DR. Using cost-effectiveness/cost-benefit analysis to allocate health resources: a level playing field for prevention? American Journal of Preventive Medicine, 1997; 13: 18-25.
29 Mason J, Eccles M, Freemantle N, Drummond M. A framework for incorporating cost-effectiveness in evidence based clinical practice guidelines. Health Policy, 1999; 47: 37-52.
30 Messonnier ML, Corso PS, Teutsch SM, Haddix AC, Harris JR. An ounce of prevention... what are the returns? 2nd ed. 1999. American Journal of Preventive Medicine, 1999; 16 (3): 248-63.
31 Cohen D. Health promotion and cost-effectiveness. Health Promotion International, 1994; 9 (4): 281-7.
32 Haycox A, Bagust A, Walley T. Clinical guidelines – the hidden costs. British Medical Journal, 1999; 318: 391-3.
33 Robinson R. Limits to rationality: economics, economists and priority setting. Health Policy, 199; 49: 13-26.

Chapter 8

Discussion

Chapter 8

Discussion

8.1 Introduction

The aim of this thesis was to gain an insight into the practice and the potential of the health target approach. To study the usefulness of the health target approach, six research questions were formulated. Section 8.2 states the answers to these questions. Section 8.3 includes remarks and an overall conclusion about the usefulness of health targets as a health policy tool. In the final section (8.4), the main results and conclusion of this thesis will be put into perspective against the background of Dutch health policy development. This section ends with recommendations for the Netherlands.

8.2 Main results

To what extent are health targets accepted as a tool in health policy in European countries?

Although it is hard to measure the direct effects of health targets on the improvement of the health status of a population, the results presented in chapter 2 show that most of the eighteen European countries studied have formulated some health targets to structure their health policy. However, the degree of elaboration, the focus of the health targets and practical implementation vary considerably. It is therefore concluded that health targets, as a tool in health policy, are mostly used at a political level and that their practical use seems to be in its infancy.

What benefits, drawbacks and necessary conditions were encountered with health target setting?

The benefits, drawbacks and conditions are discussed in the third chapter of this thesis. It is made clear that the setting and monitoring of health targets is one way in which a government can provide leadership, guidance and strategic direction for the health sector. However, drawbacks – such as political accountability and the limited malleability of society – are often reasons why governments prefer not to establish health targets. Political will and daring alone are not enough; targets must also be SMART (Specific, Measurable, Achievable, Realistic and Time-bound) to overcome most of the objections.

How can the health target approach be used in health policy development?
The fourth chapter reviews the health policy development cycle in relation to health target setting. Although the process of health policy development is often not very structured, this model can provide support for policy drafting. In the first step, there should be an understanding of the problem, and a clear picture of the health status of the population. On the basis of this information, a solution can be chosen in the second step of the process. This phase is not restricted to the technical side of the solution, i.e. target setting and action planning. It also has a political component in which responsibility is taken for the choices made. The greatest challenge here is to strike a balance between sufficiently acknowledging the complexity of population health and selecting an easily-comprehensible target structure which remains controllable and which can adapt to changing circumstances. However, the process of introducing targets can be as important as the targets themselves. Target setting gets people thinking and encourages compromises between rival interest groups. The target setting and action planning phase is therefore a difficult one. During the third step, government and stakeholders can implement the chosen solutions. The implementation phase will be followed by a monitoring and evaluation phase, which will in turn provide an insight into the health status of the population.

How can supranational health policy contribute to the achievement of health targets?
In answer to this question, the fifth chapter looked at the new global targets of WHO, since WHO was one of the leading actors promoting health target setting. The new WHO global health targets seem to have been successful in the difficult task of drawing attention to the most important health issues. However, the targets need more elaboration if they are to motivate member states to take action and to set priorities for resource allocation. WHO should encourage discussion of the targets, but it should also be careful about being too prescriptive about health systems since this could be counterproductive. The new global Health for All targets are not useful for the developed member states, because most of the issues covered relate to developing countries. The new Health for All targets of the WHO European Region[1] focus more on the problems of developed countries. However, the measurability, attainability and relevance of these targets are also questionable.

How can intersectoral health policy contribute to the achievement of health targets?

The aim of intersectoral policy is to influence the wide range of factors that determine the health of a population, many of which are beyond the remit of the Ministry of Health. The contribution of other sectors to the achievement of the health targets depends on the feasibility of the intended intersectoral health policy. Chapter six presented a quick scan for analysing the feasibility of such a policy. This quick scan distinguishes between three factors (1) the availability of evidence, (2) the degree of support, and (3) the availability of tools for implementation. In order to determine the usefulness of the proposed quick scan, two Dutch examples were studied. The quick scan made it possible to review the two policy sectors systematically in a relatively short time and to obtain sufficient information for priority setting in intersectoral health policy. The proposed quick scan can provide systematic support for setting priorities before developing intersectoral policy. We also concluded that it will probably function best in the framework of health targets where it will have the potential to generate additional health benefits.

How can health care policy contribute to the achievement of health targets?

To analyse how much health services contribute to the health status of the population, attention has to be paid to health outcomes, i.e. efficacy, effectiveness and cost-effectiveness of interventions. In spite of the different ways this data is used in the public health and the health care sectors, there are developments that bring both sectors closer together. Public health started with average population measures and only recently refined them for specific subpopulations. Health care on the other hand started at the individual level and went on to use research to set clinical guidelines for 'average patients'. Both sectors could learn from each other's experience, possibly in joint research. In the public health sector, there should be a greater emphasis on outcome studies of efficacy, since the interest in effectiveness studies sometimes appears to have replaced efficacy trials. In the health care sector, studies of the consequences of patient heterogeneity and the organisational circumstances could optimise health outcomes. In addition, both sectors will need to combine outcome measures with cost measures if evidence is to be used to allocate resources at a population level. Much could be gained if such measures could be developed along similar lines in public health and health care policy.

8.3 In summary

One may argue that the above results lean too heavily on the rational approach to policy models.[2] In most chapters, it is assumed that policy is structured in a series of stages which need to be gone through prior to attaining the overall objective: the improvement of the health status of the population. Practice shows that health policy development is not so rational, and constrained by many factors. Health policy development is more of an incremental approach[3] in which marginal adjustments are sometimes the highest attainable goals. A combination of those two approaches, the mixed-scanning approach,[4] seems promising because of an increasing tendency towards transparency and rationalisation in the decision-making process in health policy.[5,6]

However, the question will be whether health targets are useful and feasible in health policy based on a mixed-scanning approach of this kind. To answer this question, all three aspects covered in chapter 6 – (1) availability of evidence, (2) degree of support, and (3) availability of tools for implementation – should be applied to the health target approach. Firstly, with respect to the availability of evidence, it can be concluded that there are limitations here because of the difficulty of measuring the direct contribution of health targets to the improvement of the health status of the population. However, this thesis demonstrates that health targets can be a worthwhile tool for structuring and rationalising health policy. In addition, there are several databases that can provide evidence for determining priorities and for setting SMART targets. Secondly, the degree of support is improving in many countries and, furthermore, the call for accountability in general is increasing. Thirdly, many countries have enough tools for implementation. Alongside legislative power, a Ministry of Health can use nodality, treasury and organisation as instruments in trying to achieve the proposed policy.[7] In summary, it can be concluded that the health target approach is useful and feasible and that its success depends mostly on political will.

8.4 Case study: the Netherlands

An additional question that can be raised is whether these conclusions are also applicable to the Netherlands and its health policy. This thesis will end with country-specific recommendations.

In the 1980s, the Health for All strategy of WHO Europe provided an important stimulus for the Dutch government, resulting in the discussion document 'Nota 2000' (Health 2000 memorandum).[8] Parliamentary debate of this paper resulted in a request for a more concrete health policy document. In 1989, the 'Ontwerp kerndocument' (Draft target document)[9] – with several quantitative health targets – was presented, but this was never endorsed by Parliament. In subsequent years, health policy in the Netherlands focused increasingly on restructuring the health care and health insurance system. In 1987, the Dekker committee presented its report 'Bereidheid tot verandering' (Willingness to change),[10] which was followed in 1991 by the report of the Dunning committee called 'Keuzen in de zorg' (Choices in health care).[11] In 1992, the new Secretary of State for Health rejected the idea of setting quantitative health targets because of the assumed inherent political vulnerability, given the ambitious nature of the WHO Health for All targets. In the same year, the Ministry published 'Gezondheid met beleid' (Strategy for health),[12] a document with no quantified health targets. A separate memorandum entitled 'Preventiebeleid voor de volksgezondheid' (Prevention policy for public health)[13] was published on preventive policies. In 1995, 'Gezond en wel' (Healthy and sound)[14] presented three goals for health policy. They are: extension of healthy life expectancy; prevention of premature mortality; and improvement of the quality of life. Within the framework of these main goals, various concrete activities for tackling major health problems and measures for improvement were formulated. However, these goals were not translated into health targets in practice. An interesting point is that the paper also defined budgets for the planned activities.[15] Since 1999, annual budget measures also include descriptions of policy content.[16,17] The latest document – 'Zorgnota 2001' (Care memorandum 2001)[17] – includes a policy agenda and concrete health targets for exercise, tobacco, alcohol and fat consumption, safe sex and accident prevention. These targets appeared without much discussion and it is questionable whether these new health targets will be implemented in practice.

Despite the fact that the Health for All targets were not accepted as such, the Health for All strategy has produced very interesting spin-offs in the Netherlands. The research programmes for equity in health and for chronic disease, the establishment of the Netherlands School of Public Health, and the Healthy cities network at the local level are just some examples. Another spin-off is the 'Volksgezondheid toekomst verkenning' (Public health status and forecast), which appeared first in 1993[18] and a second time in 1997.[19] These documents give a clear overview of the health status of the population and provide a basis for health target setting and action planning. It should be added, however, that some of those activities were initiated before the start of the Health for All strategy, but that this strategy contributed to the implementation of these activities.[15]

At the local level, the 'Wet collectieve preventie volksgezondheid' (Public health (preventive measures) act) of 1989 plays an important role. After discussion in Parliament in 1994 and an evaluation study in 1995,[20] a Committee was established in order to evaluate and strengthen the enforcement of the Public health (preventive measures) act at the local level. As a result of the report of the Lemstra committee[21] several steps were taken. The basic tasks in public health services were discussed and described as concrete responsibilities.[22] The 'Raad voor volksgezondheid en zorg' (Council of public health and health care) was asked to advise on the relationship between public health services and health care services[23] and on the use of intersectoral health policy.[24] In addition, a 'Platform openbare gezondheidszorg' (Public health services platform) has been set up. This platform suggests a bottom-up approach to policy making in networks, with clear and attainable targets on the local level. It is suggested that these local targets and action plans should be the input for a national health policy.[25] The Ministry of Health has responded positively to these suggestions, promising that it will draw up a national health policy to set priorities for the national level and to provide a framework for priorities at the local level. Such a document will appear every four years, starting in 2002.[17]

A national framework will give the Dutch government the opportunity to develop a health policy that will include health targets.[26] The next Health status and forecast document, which is also planned for 2002, will indicate which topics are most important at the national level. In the meantime, a process should be initiated to generate commitment among relevant stakeholders, such as local policymakers and actors in the field.[27] The results of the data analysis and the

consultations with relevant stakeholders on the national and local levels and in practice will provide the content for the national framework. SMART health targets can then be formulated to stress the choices made. In addition, action plans have to be made to translate the national targets into health targets at the practice level. It is important to preserve the commitment and accountability of the relevant stakeholders. So the dialogue with them should be open at all times. Although there is a possibility that the health targets formulated in such a negotiation process will not focus on the best possible result, it will structure and strengthen the overall effort to improve the health status of the population. The process itself may be even more important than the outcome. The health target approach should not be a goal in itself. I therefore advise the Dutch government to pick up the gauntlet and to show that they are willing to use health targets to set a course in health policy.

References

1 WHO-EURO, World Health Organisation Regional Office for Europe. Health 21: the health for all policy for the WHO European region: 21 targets for the 21st century. Copenhagen: WHO Regional Office for Europe, 1998.
2 Simon HA. Administrative behaviour. London: Macmillan, 1947.
3 Lindblom CE. The science of muddling through. Public Administration Review, 1959; 19: 79-88.
4 Etzioni A. Modern organisations. Englewood Cliffs: Prentice-Hall, 1967.
5 Niessen LW, Gryseels EWM, Rutten FFH. The evidence based approach in health policy and health care delivery. Social Science and Medicine, 2000; 51: 859-69.
6 Bots PWG, Hulshof JAM. Designing multi-criteria decision analysis processes for priority setting in health policy. Journal of Multi-Criteria Decision Analysis, 2000; 9: 56-75.
7 Hood CC. The tools of government. London: The MacMillan press, 1983.
8 Ministry of Welfare, Health and Cultural Affairs. Health 2000 memorandum (Nota 2000). Leidschendam: Ministry of Welfare, Health and Cultural Affairs, 1987.

9 Ministry of Welfare, Health and Cultural Affairs. Draft target document: health policy for the years 1990-1995 (Ontwerp Kerndocument: Gezondheidsbeleid voor de jaren 1990-1995). Rijswijk: Ministry of Welfare, Health and Cultural Affairs, 1989.
10 Government Committee on Structure and Financing of the Health Care system (also called Dekker Committee). Willingness to change (Bereidheid tot verandering). The Hague: Distribution centrum of governmental publications, 1987.
11 Government Committee on Choices in Health Care (also called Dunning Committee). Choices in health care (Keuzen in de zorg). Government Committee on Choices in Health Care, Zoetermeer, 1992.
12 Ministry of Welfare, Health and Cultural Affairs. A strategy for health: health policy document 1992 (Gezondheid met beleid: volksgezondheidsbeleid 1992). Rijswijk: Ministry of Welfare, Health and Cultural Affairs, 1992.
13 Ministry of Welfare, Health and Culture. Prevention policy for public health: practical choices for the nineties (Preventiebeleid voor de volksgezondheid: praktische keuzen voor de jaren negentig). Rijswijk: Ministry of Welfare, Health and Culture, 1992.
14 Ministry of Health, Welfare and Sport. Healthy and well: framework for health policy 1995-1998 (Gezond en Wel: Het kader van het volksgezondheidsbeleid 1995-1998). Rijswijk: Ministry of Health, Welfare and Sport, 1995.
15 Water HPA van de, Herten LM van. Health policies on target? Review of health target and priority setting in 18 European countries. Leiden: TNO Prevention and Health, 1998.
16 Ministry of Health, Welfare and Sport. Care memorandum 2000 (Zorgnota 2000). The Hague: Ministry of Health, Welfare and Sport, 1999.
17 Ministry of Health, Welfare and Sport. Care memorandum 2001 (Zorgnota 2001). The Hague: Ministry of Health, Welfare and Sport, 2000.
18 Ruwaard D, Kramers PGN (eds). Public health status and forecast: the health status of the Dutch population over the period 1950-2010 (Volksgezondheid toekomst verkenning: de gezondheidstoestand van de Nederlandse bevolking in de periode 1950-2010). Bilthoven: RIVM, 1993.
19 Ruwaard D, Kramers PGN (eds). Public health status and forecast: the sum of the parts (Volksgezondheid toekomst verkenning 1997: de som der delen). Bilthoven: RIVM, 1997.

20 Health Care Inspection. Municipal involvement in public health (Gemeentelijke betrokkenheid bij collectieve preventie). Rijswijk: Health Care Inspection, 1995.
21 Government Committee on Strengthening Public Health (also called Lemstra Committee). Municipal health policy: in better position (Gemeentelijk volksgezondheidsbeleid: Beter op zijn plaats). Rijswijk: Ministry of Health, Welfare and Sport, 1995.
22 Steering Committee Basic Tasks Public Health. Basic tasks public health. The Hague: Ministry of Health, Welfare and Sport, 1998.
23 Council of Public Health and Health Care. Working together on a public health services (Samenwerken aan openbare gezondheidszorg). Zoetermeer: Council of Public Health and Health Care, 1999.
24 Council of Public Health and Health Care. Health without care (Gezondheid zonder zorg). Zoetermeer: Council of Public Health and Health Care, 2000.
25 Platform Public Health Services. Play for the profit: a vision on the public health services (Spelen op de winst: een visie op de openbare gezondheidszorg). The Hague: Ministry of Health, Welfare and Sport, 2000.
26 Saan H. An exciting period for new public health in the Netherlands (een spannende tijd voor nieuwe public health Nederland). TSG, 1998; 76: 419.
27 Stokx L. Target setting in public health: to target or not to target. January, 1999.

Summary

'Management by objectives' is a way of making planned changes explicit. At the same time, the concrete targets it generates provide a useful frame of reference for the subsequent implementation and evaluation of the chosen policy. This management principle, which was introduced in 1954 in the business world, was adopted by the health sector at the beginning of the eighties. Advances in epidemiology also made it possible to set health targets in health policy. Health targets can help to guide and structure this complex policy field. They also draw attention to the fact that all investments of time and money are ultimately legitimised by the fact that they contribute to either maintaining or improving the health status of the population.

At first sight, health targets in health policy would appear to make sense. The question is, however, whether they are a useful tool in practice. To answer this question, six research questions were formulated:

1 To what extent are health targets accepted as a tool in health policy in European countries?
2 What benefits, drawbacks and necessary conditions were encountered with health target setting?
3 How can the health target approach be used in health policy development?
4 How can supranational health policy contribute to the achievement of health targets?
5 How can intersectoral health policy contribute to the achievement of health targets?
6 How can health care policy contribute to the achievement of health targets?

The first two questions are retrospective in nature and provide justification for the use of health targets to structure health policy. Chapter 2 reviews the use of health targets in various European countries. The use of health targets in Europe was promoted through the WHO Health for All by the year 2000 campaign in 1984. Each country was expected to elaborate these targets in their own way. In 1998, a survey was conducted to determine whether this had indeed happened. Relevant publications were gathered and an overview of the actual situation was established by collecting expert opinions through mailed questionnaires. Summaries per country show that the Health for All strategy has influenced the health policy of almost all countries included in the study. Most countries have formulated health targets and others have adopted a less specific approach by formulating general priorities, goals or objectives. The degree of elaboration, the

focus of the health targets and practical implementation also vary considerably between the countries investigated. It can therefore be concluded that health targets, as a tool in health policy, are mostly used at a political level and their practical use seems to be in its infancy.

General benefits, drawbacks and conditions can be identified on the basis of practical experience with health targets (chapter 3). The setting and monitoring of health targets is one way in which government can provide leadership, guidance and strategic direction for the health sector. These benefits, and others, are illustrated using examples from the USA, Australia, the UK and the WHO health targets. Drawbacks – such as political accountability and the limited malleability of society – are also discussed. The methodological conditions can be summarised in the acronym SMART: Specific, Measurable, Achievable, Realistic and Time-bound. When SMART conditions are met, political will and daring are the recipe for a successful health target approach.

Bearing the practical experience and theoretical knowledge in mind, the question is how to use health targets in the development, implementation and evaluation of health policy. Chapter 4 gives a more practical elaboration and some guidelines for the application of health targets as a health policy tool. Questions that should be addressed at each step are discussed. First of all, there should be an understanding of the problem. Epidemiological and demographic insights into the health of the population and information about the cost and effectiveness of existing interventions are the starting points. Secondly, a solution has to be chosen. This part is not restricted to the technical side of the solution, i.e. the target setting and action planning. It also has a political component in which responsibility is taken for the choices made. In the third step, government and stakeholders implement the chosen solutions. The successful implementation of a health target action programme will depend on the ability of various organisations in the community to provide the required services and take other action where appropriate. The final step is the monitoring and evaluation phase. The aim here is to establish whether the targets have been met, whether the process of target setting has succeeded and whether additional action is required.

The final chapters of this thesis focus on the relationships with other actors involved. Firstly, chapter 5 highlights the supranational level by discussing the new global Health for All policy. This policy was launched in 1998 and was the

first step in the renewal of the Health for All movement. The ten new health targets reflect most health problems of the world and they are therefore relevant for the global level. The four targets for health outcome are the most concrete and measurable ones, but they will be hard to achieve. The remaining six health targets, dealing with determinants of health and health policies, need further elaboration in order to motivate individual member states to take action and set priorities for resource allocation. A proposal is put forward to set three levels in order to make health targets more practicable for member states.

Alongside actors at the supranational level, several actors play a role at the national level. This is clearest in intersectoral health policy (chapter 6). The aim of intersectoral health policy is to influence the wide range of factors that determine the health of a population, many of which are beyond the remit of the Ministry of Health. The success of intersectoral policy depends on the preparatory work done by the Ministry of Health. Chapter 6 provides support for the first step of this preparation in the form of a quick scan for appraising the feasibility of intersectoral health policy. The quick scan distinguishes between three factors: (1) the availability of evidence, (2) the degree of support, and (3) the availability of tools for implementation. In order to determine the usefulness of this quick scan, we looked at the Education and Safety policy sectors. The quick scan made it possible to review the two policy sectors systematically in a relatively short time and to obtain sufficient information for priority setting in intersectoral health policy. However, specific information is required for a more precise assessment of feasibility. The results of such a detailed analysis can also provide the health sector with the tools required to make them more credible when – at a later stage – negotiations start with other policy sectors. Health targets can support these negotiations through the commitment which is established by setting these targets.

Alongside actors outside the Ministry of Health, professionals inside the ministerial apparatus also play a role. Chapter 7 distinguishes between the public health sector, which focuses primarily on the protection and promotion of the health status of the population as a whole, and the health care sector, which is based on the individual patient. In spite of differences between the traditions of these sectors, there are developments which are bringing the two sectors closer to each other. The public health sector is trying to cater to specific subpopulations and settings and the health care sector is trying to base treatment on results from

studies of subpopulations. Both sectors differ in their use of efficacy, effectiveness and cost-effectiveness measures. In the public health sector, there should be an increase in the emphasis on outcome studies of efficacy, since the interest in effectiveness studies sometimes appears to have replaced efficacy trials. In the health care sector, studies of the consequences of patient heterogeneity and field conditions could optimise health outcomes. Both sectors will need to combine outcome measures with cost measures of interventions in order to achieve the right mix of preventive and curative interventions on the national level.

The final chapter returns to the aim and the research questions of this thesis. The individual research questions are answered by summarising the conclusions of the foregoing chapters. It should be pointed out here that this thesis leans heavily on the rational approach, which is characterised by a staged tactic based on an analysis of available knowledge. Since practice is often based on value judgements and coalitions – the 'incrementalist' approach – this final chapter looks at how the two approaches can be combined in the Dutch situation and to what extent target setting has a chance of success.

It is concluded that the setting of health targets has a good chance of success, since health targets have proven to be a worthwhile tool in structuring and rationalising health policy. In addition, stakeholders in the Netherlands are willing to implement health targets. The intention to develop a national health policy in 2002 – which will be elaborated at the local level – presents a good opportunity to translate health targets into practice. It is now the turn of the Dutch government to pick up the gauntlet and to show that they are willing to use health targets to set a course in health policy.

Samenvatting

'Management by objectives' is een manier om geplande veranderingen expliciet te maken. Daarnaast bieden concrete doelen houvast bij de implementatie en evaluatie van het gekozen beleid. Dit managementprincipe, dat in 1954 zijn intrede in het bedrijfsleven deed, is begin jaren tachtig overgewaaid naar de gezondheidssector. De intrede van gezondheidsdoelen in het beleid werd mede mogelijk door de ontwikkelingen in de epidemiologie. Gezondheidsdoelen kunnen helpen bij het sturen en structureren van dit complexe beleidsveld. Daarnaast benadrukken zij dat alle investeringen in tijd en geld op dit terrein gelegitimeerd worden door het feit dat zij bijdragen aan het handhaven of verbeteren van de volksgezondheid.

Op het eerste gezicht lijken gezondheidsdoelen als instrument in gezondheidsbeleid zinvol. Het is echter de vraag of ze in praktijk bruikbaar zijn. Om hierop een antwoord te kunnen geven zijn zes onderzoeksvragen geformuleerd:

1 In welke mate worden gezondheidsdoelen geaccepteerd als instrument in gezondheidsbeleid in Europese landen?
2 Welke voordelen, nadelen en voorwaarden zijn verbonden aan het stellen van gezondheidsdoelen?
3 Hoe kunnen gezondheidsdoelen gebruikt worden bij de ontwikkeling van gezondheidsbeleid?
4 Hoe kan supranationaal gezondheidsbeleid bijdragen aan het bereiken van gezondheidsdoelen?
5 Hoe kan intersectoraal gezondheidsbeleid bijdragen aan het bereiken van gezondheidsdoelen?
6 Hoe kan gezondheidszorgbeleid bijdragen aan het bereiken van gezondheidsdoelen?

De eerste twee vragen zijn retrospectief van aard, en onderbouwen dat gezondheidsdoelen bruikbaar zijn bij het structureren van gezondheidsbeleid. Hoofdstuk 2 geeft een overzicht van het gebruik van gezondheidsdoelen in verschillende Europese landen. De toepassing van gezondheidsdoelen in Europa is aangemoedigd door de Health for All by the year 2000 strategie van de WHO in 1984. Van elk land werd verwacht dat het een eigen uitwerking aan deze doelen zou geven. In 1998 is in achttien Europese landen bekeken in hoeverre dat is gebeurd. Daarvoor zijn relevante publicaties bijeengebracht en is de status-quo bepaald door deskundigen een schriftelijke vragenlijst voor te leggen. De

samenvattingen per land laten zien dat de Health for All-strategie van invloed is geweest op het gezondheidsbeleid van bijna alle onderzochte landen. De meeste landen hebben gezondheidsdoelen geformuleerd, terwijl andere zijn uitgegaan van een minder specifieke benadering door meer algemene prioriteiten en doelen te stellen. Ook verschillen de detaillering, de focus en de praktische implementatie van de gezondheidsdoelen behoorlijk tussen de onderzochte landen. Geconcludeerd kan worden dat gezondheidsdoelen als instrument in gezondheidsbeleid meestal gebruikt worden op politiek niveau maar dat hun praktische toepassing nog in de kinderschoenen staat.

Uit de praktijkervaringen met het gebruik van gezondheidsdoelen, kunnen algemene voor- en nadelen en voorwaarden voor gebruik worden afgeleid (hoofdstuk 3). Het toepassen van gezondheidsdoelen is een manier waarop de overheid richting kan geven aan de gezondheidssector en een coördinerende en begeleidende rol op zich kan nemen. Deze en andere voordelen worden geïllustreerd met voorbeelden uit de Verenigde Staten, Australië en Groot-Brittannië en de gezondheidsdoelen van de WHO. Bezwaren – zoals politieke aansprakelijkheid en de beperkte maakbaarheid van de maatschappij – worden ook bediscussieerd. De methodologische voorwaarden kunnen worden samengevat in het acroniem SMART: Specifiek, Meetbaar, Acceptabel, Realistisch en Tijdgebonden. Wanneer aan de SMART-voorwaarden wordt voldaan, valt of staat het succesvol gebruik van gezondheidsdoelen met politieke wil en durf.

Met de praktische ervaringen en de theoretische kennis in het achterhoofd, is het de vraag hoe gezondheidsdoelen een rol kunnen spelen bij het ontwikkelen, implementeren en evalueren van gezondheidsbeleid. Hoofdstuk 4 geeft handvatten voor de toepassing van gezondheidsdoelen als instrument in het gezondheidsbeleid. Hierbij zijn per fase diverse vragen opgenomen die men zou moeten overwegen. Ten eerste dient er inzicht te zijn in het probleem. Epidemiologische en demografische gegevens over de volksgezondheid en informatie over de kosten en effectiviteit van interventies zijn daarbij de startpunten. Vervolgens kan in de tweede fase een oplossing worden gevonden. Deze fase beperkt zich niet tot de technische kant van de oplossing, die bestaat uit het opstellen van gezondheidsdoelen en het bijbehorende actieplan. Er komt ook een politieke kant bij kijken waarbij verantwoordelijkheid wordt genomen voor de gemaakte keuzen. In de derde fase moeten de overheid en andere betrokkenen de gekozen oplossingen implementeren. Het succes daarvan zal

afhangen van de mogelijkheden die diverse organisaties in de gemeenschap hebben om de benodigde diensten te leveren en de gewenste acties uit te voeren. Als laatste vindt de controlerende en evaluerende fase plaats. Daarbij moet worden bepaald in hoeverre de gezondheidsdoelen zijn gehaald en het proces van doelen stellen is geslaagd. Ook dient bepaald te worden in hoeverre aanvullende acties nodig zijn.

De laatste hoofdstukken van dit proefschrift richten zich op de relaties met andere betrokken actoren. Eerst wordt in hoofdstuk 5 het supranationale niveau belicht door het nieuwe wereldwijde Health for All-beleid te bediscussiëren. Dit beleid is in 1998 aangenomen en was de eerste stap in de herziening van de Health for All-beweging. Aangezien de tien nieuwe doelen de meeste gezondheidsproblemen op aarde bestrijken, zijn ze relevant op wereldniveau. Vier ervan zijn gericht op de gezondheidstoestand van de bevolking en zijn daarmee het meest concreet en meetbaar. Zij zullen echter moeilijk te bereiken zijn. De overige gezondheidsdoelen, die betrekking hebben op determinanten van gezondheid en gezondheidsbeleid, zouden verder uitgewerkt moeten worden om individuele lidstaten te motiveren tot het ondernemen van actie en het stellen van financiële prioriteiten. Voorgesteld wordt om de gezondheidsdoelen bruikbaarder te maken voor lidstaten door drie niveaus per gezondheidsdoel te onderscheiden.

Naast actoren op supranationaal niveau zijn er ook op nationaal niveau diverse actoren betrokken bij het gezondheidsbeleid. Het duidelijkst komt dit naar voren in het intersectorale gezondheidsbeleid (hoofdstuk 6). Het doel van intersectoraal gezondheidsbeleid is het beïnvloeden van het grote scala aan factoren die van invloed zijn op de volksgezondheid, en waarvan diverse factoren buiten de beïnvloedingssfeer van het Ministerie van Volksgezondheid vallen. Succes van intersectoraal gezondheidsbeleid is onder andere afhankelijk van een goede voorbereiding door het Ministerie van Volksgezondheid. Hoofdstuk 6 ondersteunt de eerste stap van deze voorbereiding in de vorm van een korte vragenlijst ter bepaling van de haalbaarheid van intersectoraal gezondheidsbeleid. Daarin komen drie essentiële factoren aan bod: (1) de beschikbaarheid van bewijs, (2) de mate van steun, en (3) de beschikbare instrumenten voor implementatie. Om te bezien of deze korte vragenlijst ook bruikbaar is, is hij toegepast op de beleidssectoren Onderwijs en Veiligheid. Het bleek mogelijk om in een relatief korte periode een systematisch overzicht van de beleidssectoren te verkrijgen, en

om voldoende informatie te verzamelen voor het stellen van prioriteiten tussen sectoren. Meer gedetailleerde informatie over de drie factoren is echter noodzakelijk voor een preciezere beoordeling van de haalbaarheid. Met de resultaten van een dergelijke diepgaande analyse krijgt de gezondheidssector de benodigde informatie in handen om sterker over te komen wanneer – in een later stadium – onderhandelingen met de andere sectoren starten. Gezondheidsdoelen kunnen dergelijke onderhandelingen steunen, omdat er dan commitment is om deze doelen te bereiken.

Behalve actoren buiten het Ministerie van Volksgezondheid spelen uiteraard ook actoren daarbinnen een rol. In hoofdstuk 7 wordt daarbij onderscheid gemaakt tussen de volksgezondheidssector, die zijn aandacht met name richt op het beschermen en bevorderen van de gezondheidstoestand van de hele bevolking, en de zorgsector, die uitgaat van de individuele patiënt. Ondanks deze verschillen in traditie zijn in beide sectoren ontwikkelingen gaande die de sectoren dichter bij elkaar brengen. Zo probeert de volksgezondheidssector zich steeds meer te richten op specifieke groepen en omstandigheden, en probeert de zorgsector behandeling te baseren op resultaten van studies bij specifieke groepen. Beide sectoren verschillen echter in het gebruik van informatie over de werkzaamheid, effectiviteit en kosteneffectiviteit van interventies. De volksgezondheidssector dient onderzoek naar de werkzaamheid van interventies te versterken, aangezien het soms lijkt of effectiviteitsstudies de studies naar de werkzaamheid hebben vervangen. In de zorgsector zal onderzoek naar de consequenties van de verschillen tussen patiënten en de organisatorische randvoorwaarden de resultaten van interventies moeten optimaliseren. Beide sectoren zullen daarnaast aandacht moeten besteden aan de kosteneffectiviteit van interventies om zodoende een juiste mix van preventieve en curatieve interventies op nationaal niveau te bewerkstellingen.

Het laatste hoofdstuk komt terug op het doel en de vraagstellingen van dit proefschrift. De afzonderlijke vraagstellingen worden op basis van de conclusies uit de voorgaande hoofdstukken beantwoord. Opgemerkt wordt dat dit proefschrift sterk leunt op een rationele benadering van beleid, die zich kenmerkt door opeenvolgende stappen gebaseerd op een analyse van beschikbare kennis. Aangezien in de praktijk nog vaak gestuurd wordt op waardeoordelen en coalities, de zogenoemde incrementele benadering, is in dit laatste hoofdstuk

voor de Nederlandse situatie bekeken hoe beide benaderingen gecombineerd kunnen worden en hoe kansrijk het stellen van gezondheidsdoelen daarbij is.

Geconcludeerd wordt dat het stellen van gezondheidsdoelen kansrijk is, aangezien het een waardevol instrument is bij het structureren en rationaliseren van gezondheidsbeleid. Daarnaast blijken veldpartijen in Nederland bereid te zijn om gezondheidsdoelen te implementeren. Het voornemen om in 2002 met een nationaal gezondheidsbeleid te komen – dat zijn uitwerking moet krijgen op gemeentelijk niveau – biedt daarom een goede mogelijkheid om gezondheidsdoelen te vertalen naar de praktijk. Het is nu aan de Nederlandse overheid om de handschoen op te pakken en een koers uit te zetten in het volksgezondheidsbeleid.

Dankwoord

Het stellen van doelen is niet eenvoudig, het bereiken van die doelen is evenwel moeilijker. Steun en hulp van anderen is onontbeerlijk in het tussenliggende traject. Mijn doel was dit proefschrift af te ronden voor 13 mei 2001 en dankzij velen is dit een realistisch doel gebleken. Op deze plaats wil ik dan ook degenen die mij daarin hebben bijgestaan graag bedanken. Een aantal van hen wil ik graag persoonlijk noemen.

Op iemands kompas varen
Uiteraard begin ik met het bedanken van mijn promotor Louise Gunning-Schepers. Wat heb ik me vaak gelukkig geprezen dat ik jou als promotor had. Je reageerde altijd uiterst snel en adequaat op vragen, ideeën en conceptteksten. Ik heb onze gesprekken altijd als zeer stimulerend en leerzaam ervaren. Bedankt voor je vertrouwen en voor de energie die je in mij gestoken hebt.

Een oogje in het zeil houden
Josée Hulshof, Hans Van Oers en Wendy Reijmerink, ook jullie wil ik hartelijk bedanken voor het opbouwende commentaar dat ik steeds van jullie mocht ontvangen. Wanneer ik dacht dat de tekst van een conceptartikel wel duidelijk was, wisten jullie mij ervan te overtuigen dat enig schaafwerk nog wel nodig was.

De wind doet de zeilen bollen
Ik wil graag de opdrachtgevers van de onderliggende projecten hartelijk bedanken voor hun financiële ondersteuning. Marijke de Kleijn-de Vrankrijker wil ik bedanken voor de mogelijkheden die TNO Preventie en Gezondheid mij geboden heeft om structureel aan mijn proefschrift te kunnen werken. Daarnaast gaat mijn dank uit naar al het ondersteund personeel. Hans Spreuwenberg wil ik apart bedanken voor het altijd weer snel aanleveren van de gevraagde literatuur. Lidy-Marie Ouwehand, bedankt voor het controleren van de literatuurlijsten. Ook Jaap van der Plas wil ik met name noemen en hartelijk bedanken voor het drukklaar maken van dit boekwerk. Maar natuurlijk gaat ook dank uit naar mijn directe collega's en oud-collega's voor hun blijken van belangstelling voor mijn proefschrift, mijn projecten en gelukkig ook voor de wat minder inhoudelijke zaken. Ik waardeer de plezierige samenwerking en alle gezelligheid zeer.

Alle zeilen bijzetten
Hoewel de wind uit de goede hoek waaide, heb ik gedurende mijn promotie veel op me af zien komen. Met name mijn beide medeleden van het

Parel*genootschap, Astrid Chorus en Rom Perenboom, wil ik bedanken voor de discussies die we gevoerd hebben over onze artikelen (en vele andere onderwerpen). Ook wil ik jullie bedanken voor de zaken die jullie als paranimf voor mij regelen. Harry van de Water en Menno Reijneveld wil ik danken voor hun mede-auteurschap. Pete Thomas dank ik hartelijk voor de correcties van mijn Engelse teksten. De Dienst der Hydrografie van de Koninklijke Marine wil ik bedanken voor het ter beschikking stellen van de zeekaart die ik voor de omslag heb gebruikt. Daarnaast heeft Elise van Rooij mij aan het einde van het traject veel werk uit handen genomen. Elise, dank voor de vele puntjes op de i. Maar zeker ook bedankt voor de vele uurtjes dat we bij elkaar konden binnenlopen.

In de peiling houden

Velen hebben de vorderingen van mijn proefschrift de afgelopen jaren belangstellend gevolgd. In Maastricht hield het kompas de dames van Po'di Ragazze al in de peiling en gelukkig is dat zo gebleven. Ook de Maastrichtse 'epi-ladies', mijn Utrechtse studievrienden, mijn Leidse tennismaatjes, Hanny en Floor Fritz en alle andere vrienden en familieleden dank ik voor de vriendschap en belangstelling. Mijn grootste dank gaat echter naar mijn ouders en Jochem voor de onvoorwaardelijke liefde en steun die ik van hen krijg.

* Promotie Astrid, Rom En Loes

Curriculum Vitae

Loes van Herten is geboren op 13 mei 1971 in Sittard. Ze is opgegroeid in Venlo, waar ze in 1989 haar eindexamen Atheneum B aan het Collegium Marianum haalde. In hetzelfde jaar begon zij met de studie Gezondheidswetenschappen aan de Rijksuniversiteit Limburg in Maastricht. In het kader hiervan liep ze stage bij de Gezondheidsraad in Den Haag en bij de Wereldgezondheidsorganisatie in Genève, Zwitserland. In 1994 sloot zij deze studie af met het behalen van het doctoraal examen in de Biologische Gezondheidskunde. Sinds 1995 staat ze als epidemioloog geregistreerd bij de Vereniging voor Epidemiologie. In 1996 heeft zij de kopstudie Milieukunde aan de Universiteit van Utrecht afgerond.

Sinds 1995 werkt Loes van Herten als epidemioloog bij TNO Preventie en Gezondheid in Leiden. Zij is daar betrokken geweest bij een groot aantal verschillende onderzoeksprojecten waaronder gezondheidsdoelen, gezonde levensverwachting, intersectoraal gezondheidsbeleid, monitoring van de gezondheidstoestand en determinanten van gezondheid, toegankelijkheid van zorg voor illegalen en de kwaliteit van de gezondheidszorg. Ze is een actief lid van het internationale netwerk over gezonde levensverwachting, REVES.

Loes van Herten was born on 13 May 1971 in Sittard. She spent her childhood in Venlo where she obtained her secondary school diploma at the Collegium Marianum in 1989. In the same year, she went to the University of Limburg in Maastricht to study Health Sciences. As part of her training, she worked at the Health Council in The Hague and at the World Health Organisation in Geneva, Switzerland. In 1994, she was granted her Masters Degree in Biological Health Sciences. Since 1995, she has been registered as an epidemiologist with the Netherlands Epidemiology Society. In 1996 she completed a second Masters degree in Environmental Studies at Utrecht University.

Since 1995, Loes van Herten has been working as an epidemiologist at TNO Prevention and Health in Leiden. She has worked on several research projects, including health targets, health expectancy indicators, intersectoral health policy, monitoring of health status and health determinants, accessibility of health care for illegal immigrants and monitoring of the quality of care. She is an active member of the international network on health expectancy, REVES.

Cover

Lies van Herten was born on 13 May 1971 in Sittard. She spent her childhood in Venlo where she obtained her secondary school diploma at the College Sint Maartenslyceum in 1989. In the same year, she went to the University of Limburg in Maastricht to study Health Sciences. As part of her training, she worked at the Health Council in The Hague and at the World Health Organisation in Geneva, Switzerland. In 1994, she was granted her Masters Degree in Biological Health Sciences. Since 1995, she has been registered as an epidemiologist with the Netherlands Epidemiology Society. In 1996 she completed a second Masters degree in Environmental Studies at Utrecht University.

Since 1995, Lies van Herten has been working as an epidemiologist at TNO Prevention and Health in Leiden. She has worked on several research projects including health targets, health expectancy indicators, intersectoral health policy, monitoring of health status and health determinants, accessibility of health care for elders, management and monitoring of the quality of care. She is an active member of the international network on health expectancy, REVES.

Paskaart van de kust van Jutland tot Calais en Dover, met een gedeelte van de oostkust van Engeland

Johannes Vingboons, ongedateerd (ca. 1660).
Manuscript, acquarel, oorspronkelijk 70 x 50 cm.

De oorspronkelijke aquarel behoort tot een verzameling van 116 kaarten en aanzichten die in 1869 door het Algemeen rijksarchief werd aangekocht en de 'Atlas Vingboons' wordt genoemd. De kaarten en aanzichten zijn getekend en geschilderd omstreeks 1660 door verschillende tekenaars en graveurs, waaronder Johannes Vingboons. Deze grotendeels manuscriptexemplaren zijn gemaakt aan de hand van journalen en kaarten vervaardigd door zeevaarders tijdens hun reizen naar de oost en de west en gedurende hun ontdekkingsreizen. De journalen en kaarten bevonden zich onder andere in het 'geheime archief' van de VOC in het Oost-Indisch huis te Amsterdam, dat door drukker uitgever Joan Blaeu werd beheerd. Reden waarom de 'Atlas Vingboons' later ook wel de 'Geheime Atlas' van de VOC werd genoemd.

Verkleinde facsmile uitgegeven ter gelegenheid van het 125-jarig bestaan van de Dienst der Hydrografie van de Koninklijke Marine, Den Haag, juli 1999.
Bron: Algemeen Rijks Archief Den Haag; document nummer 4.VEL-H619.1

Sea chart of the coast from Jutland to Calais and Dover, with a part of the east coast of England

Johannes Vingboons, undated (ca. 1660).
Manuscript, acquarel, originally 70 x 50 cm.

The original aquarel is part of a collection of 116 charts and views, called 'Atlas Vingboons', which were acquired by the State Archives' Service. The sea charts and views were drawn and painted around 1660 by several draughtsmen and engravers, including Johannes Vingboons. Most of these manuscripts are based on journals and maps made by navigating officers during their trading voyages to the east and west and during their discovery voyages. The journals and maps were part of the 'secret archive' of the VOC (Dutch United East India Company) in the East India house in Amsterdam, which was managed by the publisher Joan Blaeu. This was the reason why at a later date the 'Atlas Vingboons' was also known as the 'Secret Atlas' of the VOC.

Minimised facsimile published on the occasion of the 125th anniversary of the Hydrographic Service of the Royal Netherlands Navy, The Hague, July 1999.
Source: State Archives' Services, The Hague; document number 4.VEL-H619.1

Sea chart of the coast from Jutland to Calais and Dover, with a part of the east coast of England

Johannes Vingboons, undated (ca. 1660).
Manuscript, acquired, originally 70 x 50 cm.

The original sheet is part of a collection of 116 charts and views, called 'Atlas Vingboons', which were acquired by the State Archives' Service. The sea charts and views were drawn and painted around 1660 by several draughtsmen and engravers, including Johannes Vingboons. Most of these manuscripts are based on journals and maps made by navigating officers during their trading voyages to the east and west and during their discovery voyages. The journals and maps were part of the 'secret archive' of the VOC (Dutch United East India Company) in the East India House in Amsterdam, which was managed by the publisher Joan Blaeu. This was the reason why at a later date the 'Atlas Vingboons' was also known as the 'Secret Atlas' of the VOC.

Miniatured facsimile published on the occasion of the 125th anniversary of the Hydrographic Service of the Royal Netherlands Navy, The Hague, July 1990. Source: State Archives' Services, The Hague, document number 4.VEL-H619.1


De Welle
De Hummer
Capelle
Borxum
Welles
Blakney
Snittesham
NORFOLK.
Admiraels Huys
Leemuyen
GELANDT.
Oxfordnesse
SVFFOLK
Kent.
Eye
Doveren
Dyngnes
Nieuport