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JOHANNA LAMMINTAKANEN

Health Care Prioritisation

Evolution of the Concept, Research and Policy Process

Doctoral dissertation

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Series Editors: Jari Eskola, Ph.D.
Department of Social Psychology and Sociology

Jari Kylmä, Ph.D.
Department of Nursing Science

Veli-Matti Poutanen, Ph.D.
Department of Social Policy and Social Economics

Author's address: Department of Health Policy and Management
University of Kuopio
P.O. Box 1627
FIN-70211 KUOPIO
FINLAND

Supervisor: Professor Juha Kinnunen, Ph.D.
Department of Health Policy and Management
University of Kuopio

Reviewers: Professor Pertti Ahonen, Ph.D.
Department of Economics and Accounting
University of Tampere

Senior Lecturer David Chinitz, Ph.D.
Hadassah School of Public Health and
Mandel Leadership Institute
Hebrew University
Jerusalem

Opponent: Professor Juhani Lehto, Ph.D.
Tampere School of Public Health
University of Tampere

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ABSTRACT

Health care prioritisation has become a widely discussed and a much-studied phenomenon, both nationally and internationally. However, the political perspective of health care prioritisation has received less attention. The purposes of this study were to analyse Finnish prioritisation processes from the political perspective, by focusing on resource allocation issues at the macro and meso levels, and to understand the phenomenon of health care prioritisation by reviewing the existing body of research, and analysing the concept of health care prioritisation. The research tasks were: 1) to ascertain the different actors' attitudes towards health care prioritisation; 2) to compare the politicians' attitudes towards actual decision-making on resources at municipal level; 3) to conduct a systematic review of previous studies on health care prioritisation, focusing on the macro and meso levels; 4) to make a systematic analysis of the concept of health care prioritisation and rationing; and 5) to create an analytical tool for use in policy-level prioritisation on the basis of the systematic review and concept analysis.

The study consisted of three sub-studies, each of which used different kinds of data to address the research tasks. Survey data were collected in 1995 from four different groups (the general public, nurses, physicians and local politicians) using postal questionnaires. The response rate was 57% (n = 3830). Statistical data describing the allocation of resources to different social and health care services at municipal level (45 municipalities) were combined with the survey data to ascertain whether or not politicians' attitudes and actual allocations correlated. For the systematic review, data from research articles based on empirical data (n = 47) were gathered from different databases (Medline, Cinahl and Cambridge Scientific Abstracts). Finally, Rodgers' concept analysis was chosen as the model for analysing health care prioritisation as a concept. The data consisted of previous publications (n = 53) collected systematically from the above-mentioned databases, and covered the period 1970-2002 in order to investigate how the concept of health care prioritisation has changed temporally. Different analysis methods were used in the data analysis, varying from statistical analyses to both deductive and inductive content analysis.

The main findings of this study were as follows. Firstly, health care prioritisation is a context-dependent phenomenon. Similarly, the survey results showed that the attitudes of key stakeholders towards health care prioritisation also depend upon the context. The results of the concept analysis revealed that the concept itself has evolved over time, and reflects major societal changes. Secondly, while it is important to understand and analyse the process of prioritisation, it is equally as important to study the implementation process of the decisions made. The attitudes and actions within municipalities, compared to national health policy guidelines, displayed some differences, indicating that implementation is a crucial phase in the process. Thirdly, the evidence provided by previous empirical research is contradictory in order to be utilized in political decision-making. Fourthly, as a concept, health care prioritisation is still evolving, and this reflects contextual changes. In scientific literature, there is no shared understanding of what can be achieved by prioritising health care. As a concept, rationing has a more accurate meaning, and it has a stronger theoretical basis in (health) economics. Health care prioritisation is still immature from this perspective. Finally, different methodological approaches and methods are needed in order to study health care prioritisation.

In the future, both practical and scientific efforts will be required to manage health care prioritisation. More detailed information is needed on actual decision-making on health care priorities and implementation of these decisions at meso and macro levels. Further, outcomes and effects of health care prioritisation processes need to be analysed more carefully. From the scientific perspective, various approaches, data gathering and analysis methods are needed in order to gain a deeper insight into the phenomenon at the different levels of the health care system. This requires the adoption of a variety of research strategies as well as a multidisciplinary orientation.

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Medical Subject Headings: health policy; health priorities; health care rationing; resource allocation; decision-making; local government

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TIIVISTELMÄ

Terveydenhuollon priorisointi on ollut lisääntyvän kiinnostuksen kohteena viime vuosikymmeninä sekä kansainvälisesti että kansallisesti. Priorisointia on lähestytty sekä käytännön että tutkimuksen näkökulmista. Priorisoinnissa käytettyjä kriteereitä, toimijoita, priorisoinnin kohteita ja prosesseja on analysoitu yhteiskunnan eri tasoilla. Tässä tutkimuksessa tavoitteena oli sekä analysoida terveydenhuollon priorisointia poliittisen tason kysymyksenä että selvittää terveydenhuollon priorisointia käsitteenä ja tutkimuskohteena. Tutkimuksessa terveydenhuollon priorisointia tarkastellaan kansallisen ja alueellisen tason kysymyksenä politiikka- ja hallintotieteellisestä näkökulmasta. Tarkennetut tutkimustehtävät olivat: 1) selvittää eri toimijoiden asenteita terveydenhuollon priorisointiin; 2) verrata poliittisten päätöksentekijöiden asenteita kunnallisessa päätöksenteossa toteutuneeseen toimintaan; 3) laatia systemaattinen kirjallisuuskatsaus aikaisemmasta priorisointiin kohdistuneesta empiirisestä tutkimuksesta; 4) analysoida terveydenhuollon priorisointia käsitteenä ja 5) jäsentää terveydenhuollon priorisointipäätöksentekoa politiikan käytäntönä.

Tutkimustehtäviin haettiin vastausta kolmen osatutkimuksen avulla. Ensimmäisen osatutkimuksen aineiston muodosti vuonna 1995 toteutettu postikysely, johon osallistui väestö (n = 1178), hoitajat (n = 682), lääkärit (n = 837) ja kuntatason poliittiset päättäjät (n= 1133). Kyselyn kokonaisvastausprosentti oli 57. Jatkoanalyysissä poliitikkojen aineistoa verrattiin kuntatasoiseen SOTKA -tilastoaineistoon (45 kuntaa), analysoimalla, miten hyvin poliittisten päättäjien asenteet vastaavat kunnissa tapahtunutta toimintaa. Toisen osatutkimuksen aineiston muodosti 47 terveydenhuollon priorisointiin liittyvää kansallista ja kansainvälistä empiiristä tutkimusta, joita tarkasteltiin systemaattisen kirjallisuuskatsauksen periaattein. Kolmannessa osatutkimuksessa analysointiin terveydenhuollon priorisoinnin käsitettä ja sen kehittymistä Rodgersin evolutionaarisen käsiteanalyysimallin avulla. Aineiston muodosti yhteensä 53 vuosina 1970 - 2002 julkaistua kansainvälistä tieteellistä artikkelia. Osatutkimusten aineistot analysoitiin soveltuvin määrällisin ja laadullisin menetelmin.

Terveydenhuollon priorisointi osoittautui kontekstisidonnaiseksi ilmiöksi. Käsitteellisesti priorisoinnin kehittyminen on ollut yhteydessä yhteiskunnan muutoksiin. Monitieteisenä priorisoinnin käsitteen ala ei ole täysin selkeytynyt verrattuna esimerkiksi sääntely (rationing) -käsitteeseen. Kontekstisidonnaisuus heijastuu myös siihen, miten ja millaisin oletuksin vastaajilta kysytään esimerkiksi terveyspalvelujen tärkeysjärjestystä. Tässä tutkittujen neljän vastaajaryhmän tärkeysjärjestys muuttui sen mukaan oletettiin voimavarat väheneviksi vai lisääntyviksi. Vähenevien voimavarojen tilanteessa vastaajat pitivät erikoissairaanhoidon palveluja tärkeimpinä, kun taas lisääntyvien voimavarojen tilanteessa ennaltaehkäisevät palvelut korostuivat. Kotisairaanhoido oli tärkeää voimavaroista riippumatta. Poliittisten päätöksentekijöiden asenteet ja kunnallinen toiminta eivät aina vastaa toisiaan. Poliitikot priorisoivat ennaltaehkäiseviä palveluja lisääntyvien voimavarojen tilanteessa, mutta allokoiti tapahtuu kunnissa erikoissairaanhoidon suosien. Tutkimuksessa ei kuitenkaan haettu vastauksia siihen, millä mekanismeilla päätöksenteko tapahtuu. Tarkasteltaessa terveydenhuollon priorisointiin kohdistunutta aikaisempaa tutkimusta voi todeta, että tutkimusparadigma on monitieteinen ja määrällistä tutkimusta suosiva. Aikaisempien tutkimusten tulokset eivät kuitenkaan anna kestävä pohjaa politiikkaprosesseille ja niiden antamat suositukset ovat poliittisen päätöksenteon näkökulmasta ristiriitaisia. Esimerkiksi tulosten hyödyntäminen poliittisessa päätöksenteossa näyttöön perustuvan toiminnan ideologian mukaisesti on vaikeaa. Aikaisempi tutkimus ei myöskään anna selkeää tieteellistä pohjaa integroida potilastason kliinisiä lääketieteellisiä ja politiikkatason priorisointipäätöksiä.

Jatkossakin terveydenhuollon priorisoinnissa tarvitaan monitieteistä tutkimusotetta. Poliittisen päätöksenteon tutkimus on olennaista päätöksenteon luonteen, käytettävien argumenttien ja toimeenpanoprosessien ymmärtämiseksi. Terveydenhuollon priorisoinnin seurauksista ja vaikutuksista tarvitaan enemmän tietoa. Terveyspoliittisesti ensisijaisen tärkeää olisi tarkastella ns. hoitotakuujärjestelmän toimeenpanoa kansallisella tasolla. Käytännön päätöksenteon tutkimuksen lisäksi tarvitaan sekä teoreettista että menetelmällistä kehittämistyötä.

Yleinen suomalainen asiasanasto: terveydenhuolto; terveyspalvelut; priorisointi; päätöksenteko; terveyspolitiikka; asenteet; kunnat; käsiteanalyysi

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Kuopio, January 2005

Johanna Lammintakanen

* Screw, twist, adjust, polish your great dream.

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1 Introduction: why focus on health care prioritisation?

1.1 Health care prioritisation as a challenge for research and practice

Prioritisation has always been a part of health care (for example, Cooper 1975, Ham 1997, Ryyänen et al. 1999, Daniels & Sabin 2002, Rosén 2002), and in recent decades, health care prioritisation has also gained public and political attention, regardless of the prevailing health care system. It has been particularly topical in Western countries with advanced welfare services. In general, however, it is currently more widely accepted that prioritisation¹ is a means for health care reform whose objective is to minimise the gap between limited resources² and citizens' unlimited needs and expectations. Health care prioritisation has also been on the agenda in developing countries, although with a somewhat different focus. There discussion has been concerned with the basic premises of human life, as well as health promotion and primary health care issues (e.g. Bryant 2000, Khan 2000, Kipiriri et al. 2003). This study focuses on health care prioritisation in the context of welfare states.

Health care prioritisation is both a practical and an academic issue. From the practical point of view, it deals with very fundamental issues in human life: health; illness; pain and suffering; and death (e.g., the Hastings Center Report 1996, Hanson & Callahan 1999). The approaches adopted to solve the prioritisation issue have varied from prioritising the most seriously ill patients to maximising the total benefits in health care, regardless of who is getting them. However, the 'middle-road' approach has been more acceptable in many countries. (Daniels & Sabin 2002, 2-3.) To date, a great deal of knowledge has been gained from other countries' experiences of health care prioritisation (e.g. Ham & Coulter 2000, Daniels & Sabin 2002, Ham & Robert 2003). Based on these experiences, it becomes

¹ See Chapter 5 for discussion on the concepts.

² In this study, resources are understood as a broad concept including, e.g. human resources in addition to financial resources. In general, limited resources are given as the most common reason for prioritisation. However, health economists assume that resources are always limited in relation to unlimited needs and expectations (e.g. Fuchs 1974, Sintonen et al. 1997, 9). The resources used for health care have increased almost 10-fold in Finland since the 1960's. Even though resources decreased temporarily in the first half of the 1990's, the same level of spending was reached in 2000 as in the top year 1991 (KELA [*The Social Insurance Institute of Finland*] 2001). Other reasons for prioritisation have been the ageing population, technological advances in health care, citizens' and health professionals' increased expectations and medicalisation (e.g. Choices in Health Care 1992, Priorities in health care 1995, 43, Ryyänen et al. 1999, 9 - 24). In the near future, the lack of skilled personnel will have an effect on health care prioritisation. In addition, the European Union will play a greater role in health care prioritisation through its efforts, for example, to harmonise taxation, and introduce the open co-ordination mechanism, also in the field of welfare services. (Kantola & Kautto 2002, Rosén 2002, 27)

evident that health care decision-making is messy, and health care prioritisation is political in nature (Ham & Coulter 2003, 8). Furthermore, there is no universal model for health care prioritisation, and therefore, issues such as how to provide citizens with health care services when resources are limited, how to allocate resources fairly, and how to implement these decisions remain national concerns.

Such decisions are constantly being made, but their evidence base (scientific evidence being one such type) can be questioned. Researchers from different disciplines have been interested in this issue for many years, but still the evidence for health care decision-making and health care prioritisation remains modest (e.g. Innvaer et al. 2002, Kipiriri et al. 2003, Dobrow et al. 2004). In addition, there are weaknesses in the theoretical analysis of the phenomenon (e.g. Frankel et al. 2000, Martin & Singer 2000). Much research has been carried out, but there have been problems, such as a lack of cumulation of knowledge, and an inadequate understanding of phenomenon. This study aims to contribute to the cumulation of knowledge and theoretical analysis of health care prioritisation, and also to analyse the phenomenon from the policy-makers' perspective.

My interest in health care prioritisation arose during the graduate programme. Health care prioritisation was widely discussed in the Finnish media in the mid-1990's when I did my Master's degree. A large research project (Prioritisation in Health Care, PRIHC) was ongoing at the University of Kuopio at that time, and I wrote my Master's thesis as part of it (Lammintakanen 1997). More questions arose during this process than I could answer within one thesis, and the spark was ignited to study this complex and challenging phenomenon further.

1.2 The purposes of this study, study design, and methodological choices

This study focuses on health care prioritisation as a macro and meso level issue. The purposes of the study are 1) to analyse the Finnish prioritisation processes from the political perspective by focusing on resource allocation issues at the meso level, and 2) to understand the phenomenon of health care prioritisation by reviewing the existing body of research, and analysing the concept of health care prioritisation. The research tasks are:

1. to ascertain the main actors' attitudes towards health care prioritisation (the general public, nurses, physicians, politicians);

2. to compare the politicians' attitudes towards actual decision-making on resources at municipal level;
3. to conduct a systematic review of previous studies on health care prioritisation, focusing on the macro and meso levels;
4. to make a systematic analysis of the concepts of health care prioritisation and rationing; and
5. to create an analytical tool for use in policy level prioritisation on the basis of the systematic review and concept analysis.

The study consists of three sub-studies (see the more detailed description of the structure of the research report in section 1.4). The first sub-study provides a response to the first and second research tasks, while the second sub-study focuses on the third research task. The third sub-study covers the fourth research task, and the fifth research task is answered on the basis of the second and third sub-studies.

A policy-making perspective is adopted throughout the study, which means that health care prioritisation is interpreted as a macro (national) or meso (regional, local) level issue³. The perspective is quite obvious in the first sub-study, in which health care prioritisation is understood as resource allocation. Policy-makers act as a respondent group, and the questions are related to issues concerning attitudes to health services, and comparison between attitudes and actual occurrences in municipalities. Furthermore, other groups (the general public and professionals) were also asked to consider health care prioritisation as meso level issues.

With regard to the second and third sub-study, the policy-making perspective means that the studies and previous literature analysed were acquired by limiting the searches to macro and/or meso level health care prioritisation. The idea was to gain an understanding of both previous research and the concept of health care prioritisation from the political perspective, which excluded micro level issues (individuals and treatments) from the study, although these perspectives are important in terms of health care prioritisation both in practice and scientifically. In this case, however, micro level perspectives were considered to be beyond of the scope of the study. The main arguments behind choosing the political perspective are an obvious lack of empirical analyses using this point of view (see 1.3), and the importance

³ See e.g. Ham 1997, Ryyänen et al. 1999 on the discussion of different levels in health care prioritisation.

of policy process in health care prioritisation. Other choices and limitations made during the research process are discussed in relation to each sub-study.

Implementation research (see Main Chapter 3) was chosen as the interpretative framework for this study. The study is not representative of traditional implementation research, since no such explicit prioritisation policy exists for analysis in Finland. Therefore, a slightly modified approach was chosen. The first research task in the first sub-study represents the bottom-up approach. The main question is how different actors allocate resources to health services in different contexts (the “policy” is given to respondents, who must either cut or add seven per cent to the average municipality’s budget). This approach includes the responses of those who are supposed to be affected by the policy (Hill & Hupe 2002, 134). The second research task combines bottom-up and top-down approaches. The politicians’ attitudes are compared to actual occurrences at municipal level, and these are interpreted in relation to some national policies (see Hill & Hupe 2002, 131). The second sub-study represents some concerns and interesting implementation issues by analysing previous studies and the evidence they provide for the policy process. The third sub-study can be interpreted from the implementation perspective. It reveals that we identify well the precedents and processes of health care prioritisation, but we are less aware of the consequences⁴ of these processes.

I have used the concept health care prioritisation throughout the study. David Hunter (1997, 33-35) states that rationing is based on markets as a co-ordination mechanism, while priority setting has its origins in a planned, hierarchical command and control system. My understanding of health care prioritisation includes the connotation of the strong political orientation of this phenomenon (see e.g. Ham & Robert 2003). In addition, although the subject of this monograph is international, the study was conducted in the Finnish context, which, because of changes in the steering system during the last decade, still relies on a strong public sector, and less on a planned hierarchical command and control system (e.g. Oulasvirta et al. 2002).

From the methodological point of view, this study combines both quantitative and qualitative methodologies. However, according to Pertti Töttö (2004, 9-16), it is impossible to make a strict division between a qualitative and quantitative study, since to do so would suggest that a study could be either qualitative or quantitative from the very beginning to the end. Töttö (2004) states that quite simply, we conduct research that uses different kinds of data to answer different kinds of questions. This is illustrated in Figure 1. This study combines both

⁴ Implementation here is defined as an outcome (Lane 2000), see main chapter 3.

theoretical analysis and empirical analysis. In addition, empirical analysis combines results on measurement and textual data. In this report, however, I use the concepts qualitative and quantitative research, since they are commonly used concepts for certain types of research.

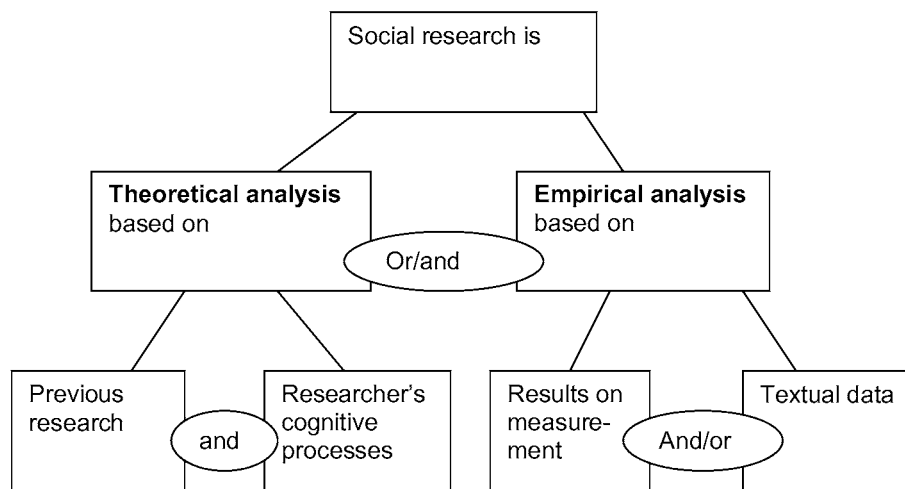


Figure 1. Elements of social research (Töttö 2004, 10)

The study design is summarised in Figure 2. In the first sub-study, the survey data and statistical data were gathered to address the first and second research tasks. In this part of the study, the orientation is that of applied research, and the technical interest of knowledge is dominant (Habermas 1976, Raunio 1999, 362-366, Järvinen & Järvinen 2000, 203). This section relies heavily on survey research tradition.

Research tasks three and four (sub-studies II and III) are addressed using textual data. Both deductive and inductive analyses were used in the systematic review, while the concept analysis relied on inductive analysis. However, there is doubt about whether or not analysis can ever be purely inductive (i.e. the researcher has at least an intuitive assumption on the phenomenon), and therefore, it can instead be called abductive analysis (Grönfors 1985, 33). The orientation in these sub-studies is that of basic research, and the adoption of the hermeneutic interest of knowledge. In other words, the aim is to understand the phenomenon (Habermas 1976, Raunio 1999, 362-366, Järvinen & Järvinen 2000, 203).

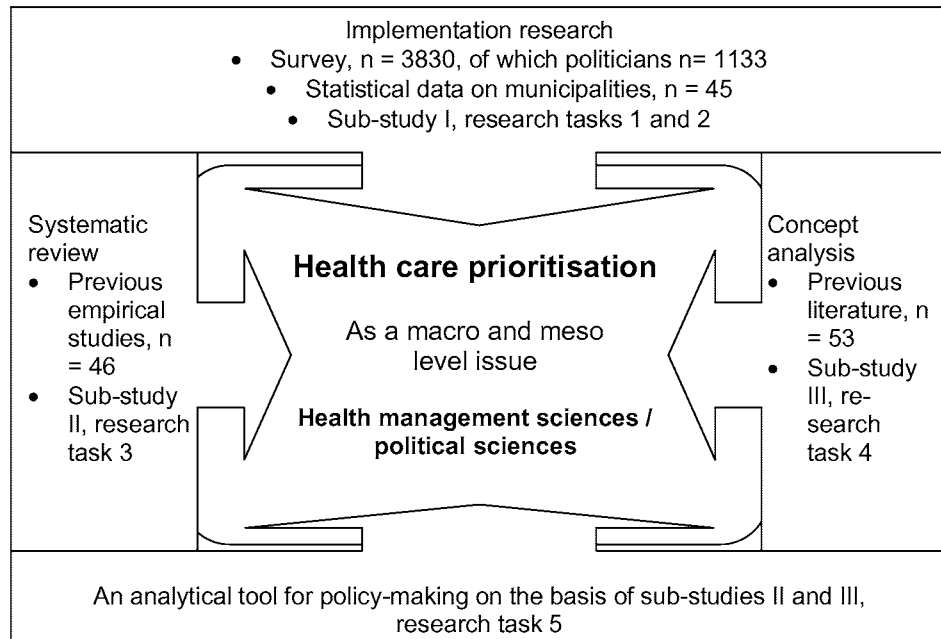


Figure 2. A summary of the study design

Johan Galtung (1977, see also Kuitunen 1988) offers another approach for analysing scientific activity. Bilateral scientific activity consists of three elements: data, theory and values. Empiricism combines data and theory, with the emphasis on data, and aims at addressing the issue of “how things are”. Criticism combines data and values, with the emphasis on values, and is predominantly concerned with “how things should be”. A third approach to scientific activity, constructivism⁵, combines theory and values as equal elements. The main issue here is “how to develop”. As Galtung (1977, 64) states, “Scientific activity is all this, but also the practice of changing reality, of creating new reality”. Scientific activity accepts values as a crucial part of the process, although they are usually stated implicitly. These three elements can be found in this study; the emphasis has changed from empiricism to the direction of constructivism and even criticism during the research process.

This study has both practical and scientific relevance. From the practical point of view, the analysis of policy-makers' attitudes, and the comparison of these to the actual situation in municipalities generates some interesting results, and poses questions on implementation

⁵ Pertti and Annikki Järvinen (2000, 102) note that a typical feature of constructive research is that it creates new reality on the basis of existing (research) data.

issues. The scientific relevance can be argued through the methodologically innovative approaches that have been adopted in this study.

1.3 The relation of this study to health management sciences

The study belongs to the field of health management sciences, which is a fairly recent field of science in Finland and the international academic world (Sinkkonen & Kinnunen 1999). This applied discipline focuses on the organisation, management and decision-making of health care organisations, as well as macro level issues. The discipline is closely related to administrative sciences, health sciences (especially nursing) and medicine (public health). Jari Vuori (2004) has analysed health sciences and administrative sciences in relation to health management sciences, and finds that both offer important perspectives, but are not sufficient as such. The paradigm of health management sciences has its origins of knowledge in organisational theory and administrative sciences, and the focus (health care) is guiding the study designs. However, if the paradigm is only defined with help of the focus, the accumulation of knowledge is fragmented. The basis of this study is in political sciences and administrative sciences, and its focus is health care prioritisation, therefore it can be stated that the study focuses on a central area of the health management science paradigm⁶.

In Finnish health management sciences, the themes of doctoral dissertations vary from micro organisational issues to macro level political decision-making (see Sinkkonen & Kinnunen 1999). From the point of view of this study, the most important works are dissertations by Tuomo Teittinen (1985), Reijo Salmela (1988), Kerttu Perttilä (1999) and Hannu Leskinen (2001), all of which focus on macro level issues, either from the implementation research or policy-makers' points of view.

In this thesis, health care prioritisation is studied from a perspective that is policy analytical, and the focus is on implementation issues in particular; a combination less used in the field of health management sciences. However, Tuomo Teittinen (1988) and Hannu Leskinen (2001) have used similar approach. In his doctoral dissertation, Tuomo Teittinen (1988) analyses the implementation of national plans in one case organisation, while Hannu Leskinen (2001) focuses on the implementation of service structure reform at meso level.

⁶ Pertti and Annikki Järvinen (2000, 17) refer to those disciplines in close relation to a researcher's own discipline as reference disciplines, from which theories can be borrowed and applied to an own discipline. In this case health management sciences is the own discipline, and implementation theory has been applied from the reference science in health management sciences.

Other doctoral dissertations using implementation research as an approach have also been published in Finland in the field of administrative sciences and social policy, for example, Pekka Kettunen (1994), who analyses the implementation of environmental health policy from the perspective of local networks. Other monographs include Niina Hietaniemi-Virtanen (2002), who focuses on educational policy and in particular, on the implementation of cutback policies, and Marita Sihto (1997) who analyses the national Health for All by the year 2000 policy programme and its implementation. These studies were useful in identifying many obstacles impeding a totally successful implementation of policies.

This study also belongs to the health care prioritisation research paradigm, which is profoundly multidisciplinary. This research paradigm has its roots in political sciences, economics, philosophy, sociology and public health (see Main Chapter 4). Although the topic has been studied fairly extensively⁷, the political scientific perspective received less attention in previous studies. Recently this gap was filled by Per Rosén, whose doctoral dissertation was published in 2002, adding to the dissertations from Johan Calltorp (1989) and Mikko Knuutinen (1998). In the Scandinavian countries and the United Kingdom (UK), where health services organisation and finance are mainly public, politicians have a remarkable role in the steering and managing processes of health care services. It is for this reason that much of the research on the political perspective has been conducted in these countries. Main Chapter 4 presents a more careful analysis of previous empirical studies.

1.4 The structure of the research report

The structure of this research report corresponds to my own learning process during the research process, through which my understanding of the ontological assumptions of this phenomenon changed. I adopted principles of methodological fundamentalism, which means that ontological assumptions precede the epistemological ones. In other words, one has first to know something about the phenomenon in which one is interested before one can decide how to acquire information about it. (Raunio 1999, 30 - 33.)

When I began my studies in the National Postgraduate School in Social and Health Policy, Management and Economics' doctoral programme, I had an idea that health care prioritisation was a very pragmatic phenomenon. I planned my study on the basis of the

⁷ In 1990's the studies focus mainly on the attitudes of different groups. Analyses of real situations are rare, although they might be more fruitful in terms of priority setting or rationing (see Main Chapter 4). Nowadays, the research paradigm is merely shifting toward analysis on actual prioritisation situations with various methodological approaches.

empirical research paradigm, and further analysed the large survey data collected during the PRIHC research project from Finnish health care politicians. I had two options after this, either to continue with empirical reality, and focus deeper on the political processes and political decision-makers' choices, or to try to "go beyond the phenomenon" by analysing the body of prioritisation research and the concept of prioritisation.

I considered several aspects at this stage. Firstly, the problems of attitude surveys, i.e. did they reflect the actual behaviour of the respondents, and what kind of information is gathered from them? As respondents, we are clever to give socially acceptable answers. In addition, the reality at the municipal level is different and more complex than mere attitudes can indicate. The first sub-study revealed the situation; the politicians preferred certain health services, but for many reasons, the actual budget analysis did not correspond with these preferences (see also van der Grinten 2000).

Secondly, what did we actually measure under the title of health care prioritisation? Were the hypothetical 'who to be treated'-like questions the best method to study prioritisation? This question led me to study further the previous body of research in order to find out how these problems had been addressed in previous studies. I chose the option to "go beyond the phenomenon", which in fact changed my point of view from empiricism to more constructivist and critical in Galtung's (1977) terms. In addition, I was interested in the analysis of the concept of health care prioritisation, since I noticed that the concept was used in many ways in different text. These considerations led me to conduct three sub-studies on this field that are presented in this thesis in original order. In other words, implementation study is presented first, because I began with it, then I continued with systematic review and, finally, ended up concept analytic research on health care prioritisation.

Due to above mentioned reasons the structure of the thesis (see Table 1) is not like as in traditional research report. The thesis consists of six main chapters. The first main chapter introduces the issue and represents the methodological approaches in general as well as discusses on the relation of this thesis to health management sciences. The second main chapter is noteworthy as it discusses the phenomenon of health care prioritisation more generally. It provides a general understanding of health care prioritisation, and as such, acts as a basis for later chapters. The three sub-studies are presented in main chapters 3 - 5, each of which represents the theoretical discussion, data gathering and analysis methods, results and conclusions relating to each sub-study. In other words, the main chapters 3 - 5 are written as article- style and they are quite independent entities. The third main chapter describes implementation research and analyses different groups' attitudes to health care

prioritisation as well as compares politicians' attitudes to actual decision-making on resources at municipal level in Finland. The fourth main chapter focuses on the systematic analysis of the body of research and discussion on paradigmatic issues in this discipline. Main chapter five concentrates on the conceptual issues, and provides a concept analysis on both health care prioritisation and rationing. In addition, the chapter five represents the tool, which is formulated on the basis of the second and third sub-study as well as previous literature. Main chapter six provides the conclusions and, in addition to a discussion on the relevance of this study from the practical, scientific and political points of view, offers some suggestions for further studies.

Table 1. A structure of the thesis

Chapter 1	Chapter 2	Chapter 3 (Sub-study I)	Chapter 4 (Sub-study II)	Chapter 5 (Sub-study III)	Chapter 6
Health care prioritisation as a macro and meso level issue					
Introduction to the issue Description of the methodological approaches in general Relation of this thesis to health management sciences Structure of the research report	Description on the international perspectives to health care prioritisation Description of prioritisation models in selected countries Finnish health care and prioritisation attempts in Finland Discussion on the basis of descriptions	Implementation research as a theoretical frame Description of the survey methodology and the statistical data (research tasks 1 and 2) Representation of the results based on survey in 1995 and the results on the basis of statistical data in comparison with politicians' attitudes Discussion and conclusions on the findings	Evidence based decision making as a part of health care prioritisation Systematic review as a methodological approach (research task 3) Results of the systematic review Discussion and conclusions on the findings	Concept definition of health care prioritisation Concept analysis as an methodological approach (research task 4) Results of the concept analysis Discussion and conclusions on the findings Presentation of the tool on the basis of sub-studies 2 and 3 (research task 5)	Discussion and conclusions on the validity and credibility of the whole research process Reflections of the main results Suggestions for the further studies

2 Health care prioritisation: an emerging issue in recent decades

As long as there has been any kind of health care, there have been issues of health care prioritisation and rationing, but the nature and the content of the discussion has changed over the last decades (e.g. Ham 1997, Ryyänen et al. 1999, Rosén 2002). Previously, a lack of human resources (e.g. a low number of physicians, as well as a lack of skills and ability to cure people) was the main reason for prioritisation, not insufficient economic resources as is the case today. Society accepted death as a natural part of life span, and medicine was not considered omnipotent, although it does have a long tradition of individualism and heroism, emphasising acute medicine and neglecting caring (Cooper 1975, 53, 91).

Before the systematic financing system, there was no public interest in health care, and single practitioners implicitly made prioritisation decisions. Medical services had little effect on most illnesses, and no one outside family members had an interest in the transaction between doctor and patient (Daniels & Sabin 2002, 1). The aim of this chapter is to provide an overview of health care prioritisation debate and internationally developed models. In addition, Finnish health care prioritisation discussion is described here in more detailed manner, since it is crucial in terms of this thesis and especially the first sub-study. Health care prioritisation has been defined in multiple ways by different authors. Here, health care prioritisation is understood as follows: *“Health care prioritisation is a process of fair and justified decisions between different interests, in order to steer health care provision in changing and complex settings”*. The basis and formulation of this definition is described in details in Main Chapter 5.

2.1 The development of health care prioritisation discussion

The need for limits in health care first emerged in the latter half of the 20th century, and this was for three reasons: 1) health service provision had become an institutionalised action; 2) the amount of stakeholders with a vested interest in health care increased; and 3) health care became more effective and costly (Daniels & Sabin 2002, 1). Concurrently, hospitals and their physicians emerged as powerful organisational and professional forces in health care (Harrison 2004, 18). It could be said that the discussion on modern health care prioritisation began in the 1970's (e.g. Fuchs 1974, Cooper 1975, Illich 1976, also Ham 1995, Calltorp 1999).

In the 1970's some hallmarks in this field were published. Victor Fuchs (1974) provides an economist point of view regarding health service problems in his book "Who shall live?", in which he emphasises the necessity of choice, both at the individual and societal levels. Michael Cooper (1975) analyses the problems of the NHS (British National Health Service) in his book "Rationing health care", focusing on the need and demand for care as well as rationing in theory and practice. Ivan Illich's (1976) book provides another perspective to this discussion, with an analysis on how medicine has become a victim of its own success. Illich also raises the issue of death and changing the understanding of death causing challenges to health care prioritisation in the discussion. The emergence of debate on this subject can also be seen through the increased activity in publication on the topic (see Main Chapter 4).

Over the years, the practice of prioritisation has changed. Michael Cooper (1975, 59) emphasises that previously, rationing was hidden behind clinical freedom. He also questions evidence-based practice by stating, "It's certain that much medical treatment is inappropriate, unproven, even unsound, but will authorities ever be united in deciding which?" (Cooper 1975, 58). Furthermore, Alan Williams (1988) continues the discussion by stating that it is not enough just to eliminate ineffective treatments, but that choices must be made between effective treatments, i.e. it is a question of allocative rather than technical efficiency.

In the 1980's, international interest in health care prioritisation increased because of advances in medical technology, population ageing, rising public expectations, and increasing costs. One of the hallmarks of this time was the publication of Henry Aaron and William Schwartz's comparative study on United States (US) and United Kingdom (UK) health care, and their different ways of rationing health care (Aaron & Schwartz 1984). Policy-makers in some countries (e.g. the Netherlands and Norway) took a more systematic approach to the issue than had previously been the case. These processes aimed at more explicit approaches at the macro level instead of muddling through.

There have also been efforts at strengthening decision-making at the meso and micro levels. (Ham & Coulter 2003, 4, Ham & Robert 2003, 141-142.) The widening gap between resources and demands required decisions to be made⁸ which were ethically more difficult. The decision-makers should also have strategies in place to cope with ethical decisions

⁸ Guido Calabresi and Philip Bobbitt (1978) have called these tragic choices. They divide them to first order determination (society must decide how much to produce with scarce resources) and second order determination (who will get services). These determinations are made separately, allowing a more complex mixture of allocation approaches. Calabresi and Bobbitt consider that scarcity of resources is not the result of a lack of resources, rather it is a societal decision that it is not prepared to forgo other goods to alleviate the scarcity.

(Mäntysaari 1994). During this first phase of health care prioritisation debate, the aim was to find a right way for health care prioritisation (Ham & Coulter 2003, 4, Ham & Robert 2003, 141-142.)

In the 1990's, discussion on health care prioritisation expanded, and became more systematic internationally⁹. At this second phase the focus of the prioritisation debate has shifted from technical aspects and consensus-seeking on a single priority-setting criterion at individual level to the prioritisation processes and decision-making structures at the meso and macro levels. The crucial questions in decision-making were accountability, transparency and the fairness of the process, and the role of values. (E.g. Klein 1993, Klein et al. 1996, Daniels 2000a, b, Holm 2000, Daniels & Sabin 2002, Ham & Robert 2003, 141-142.) In addition, the grounds on which priorities are set become a common interest. (Priorities in health care 1995, 41, Saltman & Figueras 1997, 101, Rosén 2002).

In the beginning of the 21st century science and politics joined together in the third phase of the health care prioritisation debate. This phase combines elements from the previous phases, emphasising that decisions should be based on sound techniques and on rigorous processes. Priority setting is inherently messy, and is often a political exercise. Both the evidence base of decisions and the decision-making processes need to be strengthened. (Ham & Coulter 2003, 10-11, Ham & Robert 2003, 141-142.)

The three phases of health care prioritisation described above reflect the crucial concern of whether there can be a political or technical /scientific solution to this issue. As Craig Mitton et al. (2003) note, there are multiple approaches (e.g. economic, ethical, professional) to priority setting, but no single golden rule or standard. The main elements of these multiple approaches are summarised below.

As an example of a technical method, cost-efficiency can serve as a basis for the prioritisation of methods. Similarly, evidence-based medicine (EBM) is attractive to policy-makers, since it is seen as a means of resolving this dilemma (Hunter 2003, 8). EBM and cost-effectiveness analysis (CEA) represent the values of effectiveness and efficiency, which are key values in resource allocation (Eddy 1996, cited in Martin & Singer 2003, 51). However, these are not the only relevant values in terms of health care prioritisation. Equity,

⁹ For example, the first international conference on priorities of health care was organised in Stockholm 1996. Since then international conferences have been organised every second year (London 1998, Amsterdam 2000, Oslo 2002, Wellington 2004)

public versus individual health,¹⁰ and the rule of rescue are also important values in the prioritisation processes. These are fundamental value issues that need to be considered if the policy is to have any chance of success (Tenbensen 2000, Martin & Singer 2003, 51).

Cost-effectiveness analysis (CEA) and cost-utility analysis (CUA) can be considered as methods for rationalist policy-making, and use of these might depoliticise the process of allocating health resources (Tenbensen 2000). Moreover, the decision of what is the reasonable resource input for the individual patient remains a question for the personnel responsible for treatment (Priorities in health care 1995, 13). In addition, the context of political procedures and institutions designed for coverage decisions should be taken into consideration when implementing technical solutions (Norheim 2003, 113).

My point is that health care prioritisation is also a profoundly political issue. In addition, I assume that health care prioritisation is a culturally and context dependent phenomenon (e.g. Klein 1993, Patrick & Erickson 1993, Garpenby 2003). Here, context dependent means that health care prioritisation is strongly related to the practical situations in which the decisions are made, whether at individual, micro, meso, or macro level. Situational factors (for example, political, economic, socio cultural environment, political administrative steering system, time, participants in decision making at macro level) have an effect on the decisions. (Sinkkonen & Kinnunen 1994, 21-23, see also Garpenby 2003) Internationally, health care prioritisation has common features, but ultimately, every country, region and organisation has its own specific features, and hence, it appears that no universal solution for priority setting can be reached. However, there are some lessons to be learned from international experiences that are discussed next.

2.2 International examples of health care prioritisation models

Different health care prioritisation models have been introduced in many texts (e.g. Honingsbaum et al. 1995, Coast et al. 1996, Saltman & Figueras 1997, Rynänen et al. 1999, Ham & Coulter 2000, Daniels & Sabin 2002, Ham & Robert 2003). The countries described are The Netherlands, New Zealand, Norway, Sweden, the US (the State of Oregon), and even the UK, although there is no prioritisation model as such.

¹⁰ This creates tension in health care: individual benefits are collectively financed. Furthermore, the sum of all individual wants is more than a society can afford. (van de Ven 1995.)

Ann Bowling (1996), for example, classifies the approaches used in different countries as follows: rationing by exclusion (e.g. the Oregon list), by guidelines (e.g. New Zealand) and by muddling through (e.g. the UK and Finland). Frank Honingsbaum et al. (1995) have classified the models into two categories: 1) the centralised model, in which the assumption is that it is possible to rank and exclude services from the service “package”, and 2) the decentralised model, which assumes that prioritisation occurs within each specialist field (see also Norheim et al. 2001).

Although the models have been described in detail in other contexts, only a brief summary is provided here since the international prioritisation models represent solutions in different contexts; cultures and health care systems with unique problems and challenges in implementation issues. The selected countries in this context are the Netherlands, New Zealand, Norway, Sweden and the US (the State of Oregon). Some crucial points are discussed, especially from the point of view of the implementation of prioritisation policies.

2.2.1 The Netherlands

The health care system in the Netherlands is built on corporatist institutions, and a combination of social and private insurance (Harrison 2004). Health policy is prepared and implemented by massive neo-corporative bureaucracy, bringing together actors from government, quasi-governmental agencies, private supplier and care provider organisations, and insurers. Therefore consensus, trust and co-operation are important policy instruments in the Netherlands. Prioritisation is a joint effort with different stakeholders, who have to act in a complex network of responsibilities and decisional power. (van der Grinten & Kasdorp 1999.)

In the Netherlands, priority-setting policy began in the early 1980's. In 1991, the Dutch committee on choices in health care produced its report (Choices in health care 1992, in other words the Dunning Report). This report introduced four selection criteria (necessity, effectiveness, efficiency, individual responsibility), and four main trends in prioritisation in Dutch health care. These trends are the introduction of Medical Technology Assessment, assessment of the basic package, the use of waiting lists, and stimulation of the appropriate use of services (Berg & van der Grinten 2003, 119). The report, however, received more attention abroad than at home (van der Grinten & Kasdorp 1999), although it has had an impact on decisions regarding entitlements to health care benefits in the Netherlands (Hermans & den Exter 1998).

Examples of in-vitro fertilization (IVF) and adult dental care services showed that it was difficult to exclude complete services or parts of the services from basic health insurance (Hermans & den Exter 1998), no matter how thorough and formal the evaluation of the technology. Through policy changes in 1994, health care choices became more the result of various sorts of implicit decisions in government bureaucracy and the health care system, than explicit political choices deferred as long as possible (van der Grinten & Kasdorp 1999). The setting of national priorities appears to be a difficult process in which political, economic and moral considerations become intertwined. The process has been described as a gradual, incremental approach, assembling a diversity of procedures, standards of proofs, and institutions with mixed strategies and shared responsibilities (Berg & van der Grinten 2003, 127, compare to Lindblom's (1973) principles of incremental decision making).

In the future, the emphasis will be on attempting to influence the individual treatment decisions of clinicians through evidence-based guidelines, rather than limiting the basic health care package through a process of priority setting (Berg & van der Grinten 2003, 127). The social and political plurality leaves little room for normative and ethical choices that are difficult to negotiate politically, and therefore, there is little incentive to formulate problems in these terms (van der Grinten & Kasdorp 1999). Herbert Hermans and André den Exter (1998) come to the conclusion that the application of the protocol guidelines and budget restrictions are difficult to realise. The prioritisation policy must satisfy legal standards, and if the law gives the right to treatment, court decisions will play an important role in determining whether a patient has an individual right to care.

2.2.2 New Zealand

The health care system in New Zealand is largely publicly funded through general taxation. District health boards own the public hospitals providing health services, and also act as purchasers in their regions, while the Ministry of Health has the national funding role. All levels of the New Zealand health system make prioritisation decisions, and the actors in service structure have changed over the last years (Cumming & Mays 2002, Bloomfield 2003, 16-41).

Fitzgerald (2004) describes health care in New Zealand as undergoing dramatic changes and continuing reorganisation. Ongoing changes have caused instability and uncertainty both for staff and service users (Howden-Chapman & Ashton 2000). The highly politicised hospital

sector reflects increased resistance to frequent internal restructuring, staff reductions and diminution of services (Fitzgerald 2004).

Prioritisation emerged in the health policy agenda in the early 1990's. A National Health Committee (NHC) was set up in 1992, and has worked in close relation to the public. The general public consultations produced six clear priorities for health services, and which were translated into policy and purchasing initiatives in 1998, with identified emphasis on certain service areas. (Edgar 2000.) The core questions in prioritisation were whether and when particular services should be offered, and what was the benefit, value for money, fair use of public funds, consistency with public values in terms of particular services. Milestones of the NHC's work are: 1) the rejection of an Oregon-style list, and agreement on prioritisation principles; 2) the development of booking systems to replace waiting lists; and 3) the promulgation of guidelines and clinical priority access criteria. (Howden-Chapman & Ashton 2000, Bloomfield 2003)

Toni Ashton et al. (2000) have, however, criticised the work of the NHC and other agencies, stating that although they established broad frameworks and clarified criteria, they failed to establish decision-making processes that offered practical guidance for purchasing decisions, and that ensured the transparency and consistency of these decisions. There is also ongoing tension between regional and local decision-making, as well as centralisation and devolution in health policy. (Cumming 1997, Cumming & Mays 2002.)

In addition, since 1998, many problems have emerged in New Zealand through hasty implementation and loose factors (no testing and further development of priority scores). The time and resources needed for implementing the prioritisation model were scarce, in addition to which, there was no guidance for hospitals or GPs on how to use the booking system. The latter lead to differences in implementation, and regional inequalities remained. (Howden-Chapman & Ashton 2000.)

2.2.3 Norway

Norway is representative of the Scandinavian welfare state model, with strong emphasis on public service provision and funding (e.g. Esping-Andersen 1993). Currently, Norwegian health policy is more centralised than that, for example, in Sweden. Norway was the first country to establish a national committee and develop national guidelines for prioritisation. The first Lønning committee identified five priority levels, of which the two lowest groups

would not be publicly funded. (Calltorp 1999, Norheim 2003, 95.) According to the Norwegian model, priority is given to those with the most serious condition, although it did not take into consideration either the effectiveness of the treatment or its cost (Daniels & Sabin 2002, 153). These general recommendations, however, had very little effect on practice (Calltorp 1999).

Another attempt at systematic prioritisation in Norway was the establishment of the second Lønning committee. This committee adopted a bottom-up approach by introducing specialty-specific working groups to make recommendations on health care prioritisation, to improve interaction between the political and clinical levels, and to develop more precise criteria for the selection and ranking of patients on waiting lists. It also emphasised managing and implementing mechanisms. (Calltorp 1999, Holm 2000, Norheim et al. 2001, Norheim 2003.) Søren Holm (2000, 35) makes the supposition that one of the effects of the implementation of such a system would be that different groups would be required to provide explicit reasons for their decisions (see also Norheim et al. 2001).

The general policy line has adopted the second committee's ideas that prioritisation is a function of many different "tools" (i.e. health technology assessment, quality assurance, etc.) in health policy. However, in their study, Ole-Frithjof Norheim and his colleagues (2001) discovered that several services were given high priority, although they did not fulfil the national guidelines on core services. In the period 1993-1997, less than half of the assessed technologies fitted the proposed criteria for priority setting. It may be that the criteria are too strict, or that the diffusion of new technology is not in accordance with what Norwegian health care would like to prioritise. The strategy is still to avoid discussions on which services should or should not be in the basic health care package (Calltorp 1999).

Ole-Frithjof Norheim (2003) summarises health care prioritisation in Norway as follows: it is a non-existent issue in Norwegian health policy, and faces political and administrative reluctance. The most visible consequence of the Norwegian model was the waiting list guarantee based on the second priority group. However, there have been violations against the guarantee, and also scattered attempts to prioritise at the micro and meso levels. The future direction in Norway is to emphasise vertical accountability; i.e., clinicians and health authorities are accountable for the population they serve.

2.2.4 Sweden

In Sweden, health care represents an important symbol and cornerstone of the welfare society. For this reason, it is difficult to admit and formulate the concept of limits regarding this part of society. In addition, solidarity and equity are the basic values of the health care system. Swedish society mainly funds health care through taxation, and relies on public health provision. Local authorities have a crucial role in service provision, and they have the right to levy taxes. Structural reforms (e.g. the adoption of market principles and county council mergers) have created a new situation regarding the centre-periphery power relations. The move has been towards greater local power, which will have an effect on implementing national criteria and guidelines on health care prioritisation. (Calltorp 1995, 1999, Harrison 2004.)

Swedish discussion on health care prioritisation began in 1988, but the committee on prioritisation was not established until 1992. The committee was active in stimulating public discussion on the issue, aimed at increased public awareness (Calltorp 1999). The Swedish Commission on health priorities (Priorities in health care 1995, 11-12, 41-42) notes that there are two different types of prioritisation in health care: 1) a professional choice between medical treatment, guided by the consideration of the patient's needs as opposed to financial considerations; and 2) prioritisation necessitated by resource limitations.

A distinction is made between clinical and political-administrative prioritisation. The former is individualised, and must be done quickly, continuously and with allowance for a constantly changing reality. Political-administrative prioritisation is population-oriented. It refers to anonymous groups, and is usually provided after thorough drafting, and on a single occasion. (Priorities in health care 1995, 26.) In addition, Sweden followed the Norwegian example, and introduced four basic values that should be taken into consideration when making difficult decisions. The parliamentary committee in Sweden adopted a principle that priority should be given to the most vulnerable and seriously ill. This meant that, concomitantly, they sacrificed the greater health benefit medicine might deliver to less seriously ill patients (Daniels & Sabin 2002, 3, see also Calltorp 1999).

The Swedish committee lacked concrete advice on how to prioritise health care. In his study on the implementation of market reforms, Harrison (2004, 91) notes that the Swedish coalition government had neither the will nor the power to restructure the health care system on many powerful stakeholders. The four basic values were adopted as a basis of health care

prioritisation by providing a framework for local level decisions. Implementation and the development of more practical tools are left to the county councils, some of which have developed their own prioritisation models and processes (e.g. Bäckman et al. 2004). However, there are signs of emerging differences between county councils. In the future, it is expected that the new structure of health services research, and the development of research-based tools will be important in terms of implementing prioritisation decisions (Calltorp 1999).

In 2001, Sweden took a step ahead in terms of health care prioritisation by establishing The National Centre for Priority Setting in Health Care. Its basic task was to gather, analyse, and disseminate information on health care priorities in Sweden. The reports produced by the Centre are distributed to policy makers and providers in both health and social sectors at regional and local levels. (Garpenby 2003, see also Internet pages of The National Centre for Priority Setting in Health Care.)

2.2.5 The State of Oregon, US

The financing of health care in the United States takes a totally different form to that of other developed nations. It is a combination of private and public sources, which leaves one sixth of the population without insurance coverage. People are denied services on the basis of ability to pay, age, residence, etc. (Patrick & Erickson 1993, 11, Clancy & Danis 2000). Considering the US spending rate for health care, this is a rather provocative situation.

Health care delivery, however, is undergoing a change towards managed care organisations with responsibility for more people. Prioritisation in the US has been generally described as a complex series of interactions between federal and state government policies, employers' decisions whether or not to insure their personnel, and clinicians' decisions influenced by the media and the public. (Clancy & Danis 2000.) The US has adopted a view that society should maximise the total benefit its health care expenditures provide, regardless of who gets the benefits (Daniels & Sabin 2002, 3).

The State of Oregon established a prioritisation committee in the late 1980's. The Oregon Health Plan (OHP) is an attempt to solve the prioritisation problem on a technical basis. Oregon used an explicit process to integrate public and professional judgements in health care prioritisation, the outcome of which was a ranked list of pairs of medical conditions and treatments in order of appropriateness and importance. This has remained unique in the United States. Oregon has expanded benefits more than it has reduced them, and although

universal coverage has not been achieved, coverage of uninsured people has increased. The policy of Medicaid shifted from which population to cover to which benefits to offer. (Baur & Wang 1996, Coast 1996, Leichter 1999, Clancy & Danis 2000, Oberlander et al. 2001)

The OHP has been considered as both a success (e.g. Leichter 1999) and a failure (e.g. Oberlander et al. 2001). Howard Leichter (1999) credits Oregon's success to the policy being implemented incrementally. Despite the idea of rationing as radical in the field of health care, the reform policy has gained widespread acceptance, which has led to additional incremental steps to reforms. Conversely, the OHP has made many of the limitations of technical methods for explicit prioritisation quite obvious (e.g., the problem of heterogeneity of patients, quality of data, equity versus efficiency).

The plan, however, retained its most obvious flaw; because it was poor people who were covered by Medicaid, and the budget was very limited, it was they who were supposed to make sacrifices for the sake of other poor people. The process forced officials and citizens to face the serious problem, and when the legislators finally saw the list and the eliminations due to the budget, they managed to find more resources (Gutmann & Thompson 2002, 92-93). Jonathan Oberlander et al. (2001) state that the OHP has not extensively rationed services, nor has its policy of cutting public coverage for services resulted in savings. The establishment of explicit limits has been very difficult in practice.

In addition, the methodology used has been considered as inappropriate, and it has been felt that the current OHP has little in common with the original proposal (e.g. Blumstein 1997, Jacobs et al. 1999). Lawrence Jacobs et al. (1999, 178) state that the real innovation in Oregon was the development of a coherent political strategy to accomplish reform in a national environment hostile to social reform. Furthermore, Tim Tenbensen (2000) considers that, although the OHP is considered successful politically, this success did not build on 'evidence-based' approaches to rationing.

2.3 Recent health care reforms and health care prioritisation in Finland

The challenges met by Finnish health care are similar to those of Western health care (e.g. Saltman & Figueras 1997, Collins et al. 1999, Ham & Coulter 2003). The deep economic recession at the beginning of the 1990's had a major influence on health care, and especially on priority setting, through two separate mechanisms. The recession speeded up the reform, and enhanced fundamental structural changes in the welfare system, without powerful

opposition from the citizens. It was necessary to develop new tools according to New Public Management principles (see e.g. Lane 2000) for managing health care provision. At the same time, cutbacks in social and health care become the main concern of policy-makers. Municipalities were forced to decrease their service provision, although the demand for those services increased (Mäntysaari 1994, Martikainen & Uusikylä 1997, Rissanen & Häkkinen 1999, Anttonen & Sipilä 2000, Julkunen 2001).

The authority structure, the exercise of control, and discretion between central and local institutions were all reorganised during the 1990's. The aim of decentralisation in 1993 was to increase accountability by giving more freedom and responsibility to municipalities. Competition, introduction of market control, cost-containment, self-regulation and innovations in organisation at local level were enhanced. The central government steers municipalities using three main means: 1) by providing information for local policy-making decisions; 2) through legislation, although the laws do not include detailed instructions of the scope, content or organisation of health care services; and 3) through state subsidies, but the resources are no longer allocated for a specific purpose (with some exceptions, e.g., child and juvenile psychiatric services in 2000). These changes in the steering system enabled the differences that occur in health service provision between the municipalities. (Martikainen & Uusikylä 1997, Oulasvirta et al. 2002.)

One consequence of the 1993 reform has been the rise of municipalities as powerful actors in the Finnish welfare model. Similarly, the reform of basic rights (1995) emphasised municipal responsibility in welfare services (Myllymäki 2002). According to the Constitution, municipalities hold full political sovereignty, and their basic tasks can be divided as follows: 1) to provide citizens with high quality services¹¹ at moderate costs; 2) to monitor and control service provisions, collect taxes and promote citizens' equity and rights, including mandatory rights to some social security; and 3) to guarantee and promote democratic decision-making and citizen empowerment (Oulasvirta 1996, Heuru 2002). The most important economic decisions concerning service provision are made at the municipal level. However, the structure of authority, and discretion between national and local actors causes several problems, especially in terms of health care services¹²:

- 1) Municipalities are too small to take advantage of local needs and economies of scale;

¹¹ Service provision includes education, libraries, culture and leisure-time services, primary and secondary health care, social care (including child day care, care of the elderly and mentally handicapped, care of alcohol and drug abusers, and refugees), technical and community services, environmental control services, housing, business services and some other functions.

¹² However, it has to be remembered that the municipalities are different and they do not all have these kinds of problems

- 2) Their knowledge is scarce, especially that concerning secondary care;
- 3) Their power over how the hospitals function is low;
- 4) Local politicians have a dual role; they represent the needs of the local population, but at same time, the municipalities have members on hospital boards who participate in the hospital decision-making; and
- 5) Decisions are more affected by regional policy and/or local interests than economic facts. (Rissanen & Häkkinen 1999, also Sinkkonen & Nikkilä 1988, Knuutinen 1998.) In addition, Palo (1994) also points out that decisions on health care are often made impulsively, and at random.

In summary, in Finland, the change from a centralised system to a decentralised one has been rapid. Because of economic pressures and cutback policies, the power structure has shifted from policy formulation to administration processes. Concurrently, these changes have forced local policy-makers to set priorities and evaluate their actions. (Martikainen & Uusikylä 1997.) According to Pekka Rissanen and Unto Häkkinen (1999), the following features are specific for health care prioritisation in Finland – strong local administration, an unclear split between purchaser and provider, duality in health care funding, and the potential dual role of physicians in both the public and private sectors.

2.3.1 Health care prioritisation in Finland

Several activities have been introduced to address the problem of prioritisation in Finland. Nevertheless, the whole concept¹³ is regarded as unethical and refutable among those politicians unwilling to make difficult choices, but who are willing to convert political problems into medical ones (Lenaghan 1997a, b, Palo 2000, 42). In Finland, both the national and local level politicians have avoided public discussion on priorities, and they have been unwilling to formulate any kind of explicit prioritisation policy (Myllymäki 2002, see also international experiences Malone & Rycroft-Malone 1998, Ham & Coulter 2003, 8, Bäckman et al. 2004). Moreover, politicians have excluded the public from the debate, overburdened doctors, and prevented public accountability.

¹³ In Finland, prioritisation is usually understood as a synonym for cutback management (see Hietaniemi-Virtanen 2002, 64). The reason for this is that in Finland, the debate began at the same time as the economic recession, while in other countries, the beginning of the prioritisation debate occurred during economic boom. However, there is a clear distinction between cutback management and health care prioritisation. Cutback management aims at decreasing the size of the public sector for both principal and practical reasons (Hietaniemi-Virtanen 2002, 14).

The challenge also in Finland is to develop a policy which defines the limits and extent of local flexibility, rather than allows it to continue to be used as an excuse for all manner of inappropriate variations (Coast & Donovan 1996, Lenaghan 1997b). There are, however, some municipalities who have been active in health care prioritisation (e.g. Knuutinen 1998). In addition, other actors, such as the medical profession and researchers, have been active regarding health care prioritisation (e.g. Rissanen & Häkkinen 1999, Palo 2000). Next, the efforts made both at national and local levels are described.

2.3.2 National efforts to prioritise health care

At governmental (or macro) level there has been no systematic agenda to formulate at least an explicitly named priority-setting policy. However, the governmental level has been active in reforming the health care system as such, and for example, national programmes like Health Care into the 21st Century and the National Health Project have been formulated for this purpose. These cannot be interpreted as explicit prioritisation policies since they merely confirm the status quo, and there is an obvious lack of public participation in the processes.

Two national consensus conferences on health care prioritisation have been held in Finland. In 1993, the National Research and Development Centre for Welfare and Health (STAKES) established a working group on priorities in health care. Its aims were to identify problems in resource allocation, develop principles for decision-making, make proposals for maintaining and evaluating decision-making processes, promote public debate, participate in national and international discussions, and learn from other countries experiences (Arvoista valintoihin 1994). A consensus conference related to the working group's activities was held in 1993. The conference focused mainly on micro level issues for example by discussing how to avoid choices at patient level and if the choices have to be done on what basis. At the first meeting, it was widely accepted that priority setting as such is not a solution, but that removing the inefficiencies from the system would help to solve the problems. A list of recommendations based on the principles of dignity, autonomy, equality and equity of the patients was published in 1994, but the impact of these remains unknown. (Mikkola & Bergström 1994, Palo 1994, Rissanen & Häkkinen 1999, Palo 2000, 39.)

A couple of years later, the process was re-established by STAKES and the Finnish Medical Society, Duodecim. A proposal for prioritisation was formulated, which included the following aspects:

- 1) Ethical principles in the form of a proposal to establish a permanent committee for priority setting. However, the national expert panel rejected this at the second consensus meeting in 1999.
- 2) Principles of examination and treatment: national inspection of current clinical practices.
- 3) Evidence-based medicine: support for the FinOHTA¹⁴.
- 4) Continuous education – both professionals and political decision-makers should be involved.
- 5) Cost containment and funding. DRG-based services financed through fiscal revenue and insurance.
- 6) Participation of the public and media in the form of open discussion in suitable forums. (Palo 2000, 41.)

Priority setting was accepted as a solution in principle, and some basic guidelines were agreed. However, the implementation of these principles (at least 1, 4 and 6) has been inefficient.

The conclusion is that, in terms of health care prioritisation, top-down policy formulation has been ineffective through a lack of political commitment. There has been discussion on prioritisation, but there is a lack of real action and continuity of the prioritisation process. The actions taken are merely cosmetic, and do not bring about any real changes (see also Rissanen & Häkkinen 1999). As the Hastings Center expert group (1996) states, there are three possible solutions to this situation – incremental, radical and paradigmatic change. However, only the last one is a true solution in health care; changes in the ideology behind the structures of health care are needed (compare with the need to redefine the goals of health care e.g. Liss 2003).

The issue of health care prioritisation is still topical in Finland, for example, the National Health Project carried out by the Ministry of Social Affairs and Health (STM 2002) again deals with this issue. In their report, Marjukka Mäkelä and Leena Niinistö (2001) argue for prioritisation, and considered it the fourth most important issue in terms of evidence-based practice, and reforming Finnish health care. However, public debate has again emphasised

¹⁴ Finnish Office for Health Technology Assessment

the unacceptability of health care prioritisation¹⁵. The attempts made in Finland reflect those of other Scandinavian countries. General ethical principles have been discussed but patient-centred prioritisation has remained low-profiled (Rissanen & Häkkinen 1999). It seems that Finland is following the Norwegian example, with the focus on evidence-based medicine, clinical guidelines, and concerns with waiting lists, while explicit political commitment is missing. The very latest trends in Finland are introduction of treatment criteria for certain procedures and time limits within patient's need for care should be assessed by the professional (so called care guarantee) (STM 2004).

2.3.3 Municipal efforts to prioritise health care

In municipalities, health care prioritisation can be seen as a political process, in which the citizen's needs are valued against public administration. The list of the municipality's priorities is formulated based on this evaluation. (Heikkilä 1993, 76.) Municipal priority-setting processes have been described as a heterogeneous phenomenon with different goals, varying from preventing a democracy deficit to listing targets for cutbacks (Knuutinen 1998, Möttönen 1999). These processes have been classified as follows: 1) some municipalities have discussed values for the sole purpose of clarifying the basic values steering municipal service provision; 2) some municipalities have classified the services provided into core, quality of life and support services; 3) Municipalities have also ranked the services according to their importance. (Möttönen 1999.)

In municipalities, priority-setting processes have been used for five purposes (Möttönen 1999). Typically, priority setting has been used as a means for managing cutbacks, and there are two different methods: either equal cuts in all services, or selective cuts, which means service ranking. The first method was preferred among local politicians for two reasons. Budget frames made it easier to consider cuts in resources than cuts in services. It was also easier to argue for equal responsibility in reductions rather than to discuss service rankings and their value base. (Möttönen 1999, also Thorslund et al. 1997.)

¹⁵ For example, in television debate concerning the announcement of the National Health Project's recommendations, a representative of the Finnish Patient Association denied the possibilities of prioritisation in Finnish health care. Then, in her next sentence, she called for prioritisation in Finnish health care. This example describes the attitudes of general public to the issue. Prioritisation is considered as a wicked and ethically unacceptable action. The debate was held on April 11th 2002 9-10 p.m. on the channel TV 2.

Priority setting can be used as a means for the exercising of political power at the municipal level. Some political groups can use priority setting for their own purposes. Elected officials, however, usually know the result of the priority-setting process beforehand. Social and health care services and education are given top priority, while leisure time and technical services are at the bottom at municipal level. Resources for services are also usually fixed because of a certain level of production costs, and there is no room for real priority setting in municipalities. In addition, service providers, especially strong professions, are powerful, and actively resist all efforts to cut down their service production or resources. (Möttönen 1999, see also Oulasvirta 1995, Knuutinen 1998.)

As a means for service planning and steering, prioritisation is expected to have an effect on municipal service provision. In many municipalities, priority setting is part of the municipal planning process. The problems of planning, however, are clear; on the one hand, decisions are self-evident, on the other, they are so general and open to interpretation that it can be argued that every action fits the frame. Moreover, strategic decision-making takes place at the political level, while decisions are implemented, and impacts experienced at the operational and citizens' level. This implementation gap between policy aspiration and the reality all too often experienced by the public have become one of the dilemmas of modern government. In addition, the main problem in municipal decision-making is that the service providers do not act according to the goals that were set during the policy process (Knuutinen 1998, Möttönen 1999, Hunter 2003).

As a topic of public discussion, priority setting provides information on the preferences of citizens, but there are some problems in the Finnish context. Citizens ignore the resources used in services, they lack information concerning the need for certain services, and municipalities have to provide core services which are invisible to citizens. Furthermore, civil servants and elected officials usually prefer services for marginal groups. (Möttönen 1999). Public involvement is needed to legitimise the process, and the choices must be informed by an understanding of community preferences if they are to gain acceptance among those affected (Saltman & Figueras 1997, 112, Ham & Coulter 2003, 6). However, open dialogue on prioritisation is too often considered as unethical, and as criticism against the Scandinavian welfare state (Thorslund et al. 1997).

Priority setting can also be a symbolic process, because it strengthens an organisation's self-interest and legitimates its activities. The process of prioritisation can even be seen as a good way of improving a municipality's image. (Möttönen 1999.)

2.4 Summary of the discussion of prioritisation at international and national level

Internationally health care prioritisation has been actively discussed over three decades. Many countries have tried to solve the issue by either ignoring it, muddling through, or by establishing a national committee to make recommendations. There remains, however, reasonable disagreement on what guidance general principles give to real decision-making (Holm 2000, Daniels & Sabin 2002, 3-4).

The above-described prioritisation models reflected the basic values guiding the health care system in these countries. From the Nordic point of view, concerns over the equity principle, and a desire to safeguard it have been a driving force for prioritisation debate and the activities that have been done (Calltorp 1999). Strong public support, and commitment to universal health care forced the Swedish government to more systematic prioritisation (Harrison 2004, 189). In the Netherlands, the criticism of Dunning's approach relates to two politically sensitive criteria: the necessity for, and the individual affordability of health care (van der Grinten & Kasdorp 1999). In addition, the implementation and outcomes of human service programmes depend upon local contexts, processes and human resource conditions (Harrison 2004, 9).

The content of the policy has been significant to its implementation, as the example from the State of Oregon shows. Moreover, there has often been a gap between national guidelines and implementation, the most obvious examples being the Netherlands and Sweden. Efforts to exclude some services from the "basic package" have largely failed (e.g. contraceptives in the Netherlands), although there have also been some successes despite the long process leading to the implementation of the committee's recommendation (e.g. homeopathic remedies and dentistry for adults in the Netherlands, and IVF in Norway) (van der Grinten & Kasdorp 1999, Lönning 2002). Nevertheless, the international models have shown that inclusions and exclusions do not need to be similar from country to country (Hoedemaekers & Dekker 2003a, b).

The actors involved in the committee work also varied from country to country. For instance, politicians were involved in Sweden, whereas in Norway they were not, and in New Zealand they had a powerful role in the whole process. (Calltorp 1999.) The Nordic prioritisation systems were criticised as misguided, since they were based almost only on severity of disease, and not on any kind of effectiveness measure. In addition, the Danish report raised two essential issues that affected all previous prioritisation systems: 1) they were based on a

simplistic view about the purpose of the health care system; and/or 2) they did not give any specific guidance on how to prioritise (Holm 2000, 31).

One process-oriented approach adopted in the Nordic countries makes the assumption that there is no principled way of setting priorities; only decisions made through the correct priority-setting process are legitimate, and these are characterised by transparency and accountability (Holm 2000, see also Daniels & Sabin 2002). Nevertheless, there is still a need for greater transparency in decision-making, as well as a stronger commitment to justifying decisions, the development of formal appeal mechanisms, and the regulation of the decision-making processes, at least in publicly funded health care (Daniels & Sabin 2002, Ham & Robert 2003, 154). The problem in many countries seems not to be a lack of insight into "how it should be done", but merely uncertainty regarding "how it could be done". Answering this question requires case studies on practical policy-making in order to place the implementation issue in a more realistic perspective. (van der Grinten & Kasdorp 1999).

There are some important lessons to learn from the Finnish point of view. The experiences of other countries (Norway, the Netherlands, Sweden), which also have decentralised health care systems, are rather contradictory in terms of the outcomes of the prioritisation processes. The main problem is the lack of power centre to implement prioritisation policies. Decentralisation helps politicians to avoid responsibility for tough choices, at least at national level. It may also leave complex priority-setting decisions in the hands of institutions and people poorly equipped for the task. Lipsky (1980) makes heroes of street level bureaucrats, because they try to make the best of the tragic situations they face (see also Hill & Hupe 2002, 53).

The centralised and decentralised features of the system make it difficult to identify the institutions where the decisions are made. The most important institutions are probably those at the meso level: administrative and political decision-makers at the county and regional levels. Funding and coverage decisions at the meso level are not made according to outcome-centred criteria, but are in line with historical budgets, broad investment considerations, and uninformed expectations from the public. There is also often a gap between the proposals put forward by government committees and expert groups in relation to rationing and what happens at the micro and meso levels, and this has taken place in Norway and Sweden in particular. Decentralisation allows leaders and stakeholders at the front line to make priority-setting decisions that best align with the goals of their institution, and best meet the needs of their patients. It also permits greater involvement by patients and the public. (Ham & Coulter 2003, 7, Martin & Singer 2003, 48, Norheim 2003, 108 -113.)

Health care prioritisation is not only discussion on the current practice but it also includes discussion on the objectives of health care systems, and how to achieve these goals in a specific health care system. Rosén (2002, 9) states that acceptance of the minimal agreement of vital goals and the means of achieving these goals is needed to accomplish explicit rationing in the public health system (see also Mäntysaari 1994, *Priorities in health care* 1995, 30, 69).

Agreement on health care goals, however, is not easy to find for two reasons, 1) the goals of health care are complex in nature, and 2) the goals of health care and medicine need to be redefined (Daniels 2000a, b, Callahan 2002, Berg & van der Grinten 2003). Per-Erik Liss (2003) proposes clarified goal setting in health care prioritisation using three arguments. Firstly, if the prioritisation processes are considered to be needs lead, it should be noted that a need itself contains a goal component. Secondly, the goals act as a basis of assessment whether the resources have been used efficiently or not. Thirdly, in health care, different groups of actors work as a team, and teamwork requires an understanding of common goals. However, it is very difficult to evaluate how the prioritisation models have taken the goals of health care into consideration, and whether they have been reformulated during the prioritisation processes.

In summary, the international models are constantly evolving, and seeking balance between decentralised and centralised features. Furthermore, almost all of them have problems in gaining political acceptance for health care prioritisation (except the State of Oregon). In the future, these countries will use multiple approaches to the issue, rather than merely relying on a single tool. The health care prioritisation models have not altered the health care systems in any radical way. The exclusions have been somewhat modest, as have the resource savings. The processes as such, however, have promoted both professionals' and the public's awareness of the issue, and allowed them to realise the limits of health care more clearly. Similarly, the health care prioritisation processes have revealed problems in the current health care system, either in policy-making or decision-making at other levels.

3 Health care prioritisation as an issue of policy implementation

The main aim of this chapter is to analyse health care prioritisation as a problem of policy implementation. Instead of analysing an explicit prioritisation policy, the issue of implementation is studied with the help of a hypothetical “policy” given to the respondents. The choices made emphasise the macro and meso level perspective of health care prioritisation. The chapter is organised as follows. First, the field of implementation research is discussed. Secondly, this chapter presents the first sub-study. The aims of this sub-study are to ascertain different groups’ attitudes to health care prioritisation and to compare the attitudes of politicians to statistical data from Finnish municipalities to ascertain whether the attitudes presented in the survey also existed in real budgetary decisions. The chapter ends with some concluding remarks.

3.1 Health care prioritisation from the policy implementation point of view

Health care prioritisation raises fundamental ethical, economic, societal, political, and organisational concerns. It involves the exercise of both political and value judgements. Therefore, it will never be possible to provide a completely objective and mechanistic approach to solve the issue (e.g. Lind & Wiseman 1978, Klein 1993, Harrison 1995). Ultimately, health care prioritisation is more political than technical for two reasons, 1) the demand for health care exceeds the supply, and 2) the misunderstanding that medical care equals health (Heginbotham 1992, Hunter 1997, 18). Moreover, health services are the least important part in improving health if the determinants of health are taken into consideration. Resource allocation is political, and requires accountability for public funds, and public involvement in the allocation of resources, especially in publicly funded health care systems (Calman 1994, Priorities in health care 1995, 30, Harrison 1997).

Allocation of health resources raises issues on how society makes social choices, and social arrangements. However, maximising social or community good may conflict with individual wishes or demands, and vice versa. (Patrick & Erickson 1993, 12, van de Ven 1995) Tobin (1990, cited in Rosén 2002, 14) describes the difficulty with prioritisation by saying that it is hard enough to find an intellectually defensible compromise between equity, utility and autonomy, but even harder to find a solution that can survive politically. Additionally, Jonathan Oberlander et al. (2001) describe the political paradox of rationing, meaning that

the more public the decisions about priority setting and rationing, the harder it is to ration services to control costs. In other words, more discussion on setting limits could actually increase costs, as politicians are under public pressure not to cut services, and this places them in a difficult position.

3.1.1 Policy analysis and implementation research

Macro and meso level health care prioritisation has emphasised the problems between politics and administration, which is a classic issue in administrative sciences¹⁶. Health care prioritisation includes the allocation of resources, and crucial concerns include how to make decisions on resources, and how to implement these decisions. Implementation of public policy is the process from formulated policy intention to observed impact and consequences. It is a phase of political process, in which administration and politics combine. (Gustavsson, cited in Kiviniemi 1986). Decisions are seldom self-executing, and therefore, an implementation stage can be separated from policy formulation (Hill & Hupe 2002, 7).

Implementation research has its origins in USA policy analysis of the 1960's. The beginning of policy analysis was related to the post-behavioural revolution of political science, and it aimed to solve the crisis between politics and administration. Policy analysis is seen as a field of research, not as a new theory or method itself. It is an approach to public policy that aims at integrating and contextualising models and research from different disciplines. (Berndtson 1995, 66-72, 240-242, Parsons 1995, xv.) Policy analysis can be approached from two different perspectives: 1) policy analysis produces knowledge in and for the policy processes; and 2) analysis of the policy processes is concerned with knowledge about the formulation and implementation of public policy. (Ham & Hill 1984, also Parsons 1995, 20).

The main interest in policy analysis has been to analyse the initiation and formulation of political decisions and their effects (outcomes) in society. It has emphasised research on the public sector's actions and the reasons for this, its institutions, and the functions of the state. Budget analysis has been a key method for policy analysis, because it helps to ascertain the

¹⁶ The discussion of the distinction between administration and politics has its origins in Woodrow Wilson's text (1887) in which he made a clear distinction between politics and administration which lacked relation to the reality of political and administrative behaviour (Vartola 1979, Hill & Hupe 2002, 31). However, by the late 1970's the lines of demarcation between public and private as well as policy and administration appeared less well-defined (Parsons 1995, 7). As Lane (2000, 11) points out, the political administration dichotomy tried to produce one sphere for politicians where they would deal with goals and values, and another sphere for administrators where facts and means were crucial (see also Simon 1966).

resource allocation, and the focus of the policies (Berndtson 1995, 71-72, 240-242). In other words, a budget is a most political thing: it illustrates the winners and losers in the decision-making process, and it clearly demonstrates how the values have been allocated (Berndtson 1995, 261 – 262, Parsons 1995, 40).

In the 1970's, implementation research was separated from policy analysis¹⁷ (e.g. Parsons 1995, 75 – 75, 457, Hill & Hupe 2002, 18). There are, however, different perspectives concerned with whether implementation research is a discipline as such or not. For example, Piirainen and Suikkanen (1992) do not see implementation research as a separate discipline because it lacks a solid philosophical background. Instead, they see implementation research as a tool for policy evaluation, which aims at finding the problems in the implementation of different policies. (Piirainen & Suikkanen 1992, 1993.) Hill and Hupe (2002, 2) consider implementation research as a sub-study of political science and public administration. In addition, there is a question on the relation between evaluation research and implementation research, which has been widely discussed else where (e.g. Laukkanen 1995, Sihto 1997, Ahonen 1998, Clarke 1999, Hill & Hupe 2002, 11-12).

3.1.2 Implementation research

Implementation research focuses on the role of implementation as a distinct phenomenon in the creation of policy outputs (Palumbo & Calista 1990a, b). Implementation research is especially interested in how policies are translated into administrative action, and the explanations of how this happens (e.g. Elmore 1993, Trnobranski 1995). However, Michael Hill (1997, also Walt 1994, 153 – 177, Lane 2000, 101) warns that there has been a dangerous trend to separate implementation issues from policy-making processes. It has been also assumed that those who define the policy are different to those who implement it. Instead, it is important to understand the inter-relationships of policy-making and implementation processes, since obstacles for successful implementation can be found in initial policy-making processes.

A major re-evaluation in understanding the process of policy formation itself is also required, since policy-making continues at the implementation stage (Winter 1985, cited in Matland 1995, Palumbo & Calista 1990a, xi, Piirainen & Suikkanen 1993, Walt 1999, Hill & Hupe

¹⁷ Rajavaara (1999, 46) emphasises that the interests of evaluation research focused more on the implementation issues of programmes and reforms in the 1970's, and this was the beginning of implementation research.

2002, 8). In addition, Richard Elmore (1993) notes that to understand implementation, information is needed on the organisations that actually implement the political decisions.

The core idea of implementation research is systematically analyse the programmes at the political (macro) level, and not the actions of one actor at micro level (Piiirainen & Suikkanen 1992). It has even been suggested that the unit of analysis should be a strategy of several policies or a group of action programmes to avoid the "little-effect phenomenon", i.e. that the intended objectives of policy programmes usually fail (Kiviniemi 1986, see also Hietaniemi – Virtanen 2002).

The main focus of the research is to design some institutional mechanisms through which implementation can work. These can vary from control, command and hierarchy to more 'humanistic' mechanisms, such as learning, negotiating, bargaining and coalition-building. However, the mechanisms are context-dependent and there is no one set of mechanisms suitable for every situation, and this complicates the definition of successful implementation. What brings about successful implementation for one group might lead to failure in another. (Lane 2000, 97-117.) Comparing what is achieved to what was expected leads to the implementation gap. This means that the observer or other actors give normative qualification to comparison. The approach, however, neglects the idea that implementation is a process (Hill & Hupe 2002, 10-11, 140).

3.1.3 Three generations of implementation research

The focus of implementation research has changed over the past thirty years from a narrow and technical view, to exercises in continuous problem-solving (Palumbo & Calista 1990b, 5-6, Lane 2000, 101). Malcolm Goggin et al. (1990, 182) have demonstrated the broader view of implementation by describing it as an "exceedingly complex process – a series of administrative and political decisions and actions that take place across time and space". Jenkins continues by stating that studying implementation is studying change, how it occurs, and how it may be induced in the microstructure of political life (Parsons 1995, 461).

Three generations of implementation research can be identified (Goggin et al. 1990, 181-197, Parsons 1995, 463, see also Hietaniemi-Virtanen 2002, 20-25). During the first phase, the main interest was on how policies formulated in the policy process were implemented at operational level, and whether they achieved what they were expected to, and why they

usually failed (e.g. Parsons 1995, 463¹⁸). The complexities of the implementation process were of interest in the intensive analyses of a small number of cases (Goggin et al. 1990, 182). The first period theorists made a clear distinction between a policy and its implementation: “policy implementation encompasses those actions by public and private individuals (or groups) that are directed at achievement of objectives set forth in prior policy decisions” (Van Meter & van Horn 1975, Palumbo & Calista 1990a, Goggin et al. 1990, 183, Winter 1990, 19). The reasons for implementation gaps were identified as follows: symbolic legislation; no sound theory identifying the design conditions; changes in socio-economic and political conditions; other types of programmes were supposed to work better; insufficient resources; and implementers’ lack of know-how (Palumbo & Calista 1990b, 4).

One of the theoreticians representing the first generation is Eugene Bardach (Hietaniemi-Virtanen 2002, 21). Bardach (1978, 36-37, 55-58) uses the game¹⁹ metaphor to describe implementation. He considers implementation as a game of bargaining, persuasion, and manoeuvring to avoid responsibility, scrutiny, and blame between different actors. The actors are playing to gain as much control as possible, and to achieve their goals and objectives (Parsons 1995, 470). The following elements can be present in implementation processes, and are usually in the hands of different actors. 1) Administrative and financial accountability mechanisms; 2) the participation of potential clients; 3) private and public service providers; 4) clearances or permits by public regulatory agencies or elected officials; 5) innovations in programme conception and design; 6) sources of funds; 7) trouble shooters assisting to solve problems and coordinate some activities; 8) political support for the process. (Bardach 1978, 36-37).

Eugene Bardach (1978, 66-177) has identified four types of game (Table 2) typically played during the implementation phase, which have undesired effects on the implementation: 1) The diversion of resources (especially money); 2) the deflection of goals; 3) the dilemmas of administration; and 4) the dissipation of energies. The games can be either organisational-wide or individual games. Every policy and its implementation is affected by at least of some

¹⁸ Jeffrey Pressman and Aaron Wildavsky’s (1973) classic study “Implementation: how great expectations in Washington are dashed in Oakland or why it’s amazing that federal programs work at all” pointed out that implementation was not the final point of policy process, rather it was a crucial point for the success of the whole policy. It also pointed out the importance of bureaucracy as a contributor to public policy (Palumbo & Calista 1990a, xi, Leskinen 2001, 72). However, in 1972, Martha Derthick published a study ‘New towns in Town: Why a federal program failed’ which brought the neglect of implementation to an end. Still, Pressman and Wildavsky are called the founding fathers of implementation research. (Parsons 1995, 463.)

of these games. Concurrently, the games can be mixed with each other and, therefore, they might not be easily identified as such at the implementation phase. (Bardach 1978.)

The game model extends politics beyond the traditional political organisations. It redefines the boundaries between politics and bureaucracy, suggesting that politics ends in neither political process nor in decision-making process. Implementation is another type of politics that is conducted by non-elected power. In other words, implementation is the dynamic continuation of politics by other means (Bardach 1978, 42-43, 85, Parsons 1995, 470-471.)

Table 2. Different types of implementation games with possible adverse effects on the implementation process (Bardach 1978, 66-177).

Type of game	Central features
<u>The diversion of resources</u>	
• Easy money	This is a game in which actors provide less in the way of exchange than they are expected to. Politicians and the public get less value for their money. The easy money game has an impact on cost escalation, and it may include abuse of public trust and public money within legal frames.
• The budget game	The main aim of actors is to maximise their budgets. Implementation depends on incentives shaped for them by those who control their budgets. They try to satisfy their upper officials. The funding game follows a similar logic, with the assumption that the actors can use the money with flexibility.
• Easy life	Some public employees feel entitled to take additional compensation by tailoring their work environment to that best suited to them. The easy life is an effective game against the public who wish to utilise the services provided by the public sector. The easy life, for example, manifests itself to the public as long queues.
• Pork barrel	This type of game is used by elected officials to divert and dissipate scarce financial resources. The pork barrel includes the idea that the programme defines different kinds of expectations, and legitimises all kinds of demands. These growing expectations and demands may prevent the program from focusing on achieving its original objectives. The pork barrel leads to ineffective use of money.
<u>The deflection of goals</u>	
• Piling on	When the other actors notice the programme is moving in the intended direction, they see it as a new political resource, the opportunity to include their own goals and objectives in it. Adding goals to the original programme may lead to disintegration between the actors due to a heavier or unbearable political burden. This is partly a game of chance. Piling on is worth playing when there is little to lose.
• Up for grabs	An ambiguous or half-hearted policy mandate might lead to the identification of only some programme elements, without clarity on which other elements should be included. These elements are up for grabs by different clientele groups, to be converted into political resources in order to shape the policy or programme goals suitable for themselves. The basic strategy used by clientele is orientated toward top personnel. They either attempt to control the appointment process or they attempt to re-educate the individuals with power.

¹⁹ The game metaphor leads, for example, to the following questions related to different actors: What are the players' roles, strategies, tactics, and resources? What are the game rules, especially the rules of fair play? What is the nature of mutual communications? Who is not playing, and why? Different actors are equipped with varying skills and competence to participate in these games.

<ul style="list-style-type: none"> • Keeping the peace 	<p>If the policy is considered as unacceptable or bad, implementation opportunities emerge for activists trying to change the policy direction. This leads to counterreformation of goals. The political leaders are usually the players who aim to calm the activists. The play is unruly, and includes elements of foul play. The game is about constant change and development.</p>
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The dilemmas of administration

<ul style="list-style-type: none"> • Tokenism 	<p>Tokenism is played by identifiable actors, both controllers and resisters. Actors publicly give signs of contributing to a programme seriously, when in private, they intend only to contribute to a small extent, or with a low quality contribution. Tokenism is especially a problem if the actor(s) have a monopoly or quasi-monopoly.</p>
<ul style="list-style-type: none"> • Massive resistance 	<p>Massive resistance is played by identifiable actors, both controllers and resisters. The actors simply withhold the critical programme elements, and ignore the responsibility specified in the policy mandate. This can lead to the total failure of the control system due to non-compliance. It can be either a product of self-conscious coordination, or numerous uncoordinated and independent actions. Massive resistance reflects the classical issue of how the few can control the many.</p>
<ul style="list-style-type: none"> • Social entropy 	<p>Social entropy describes the social nature that follows the laws of entropy, and has a tendency to lose energy. Social entropy raises three kinds of problems: 1) the problem of incompetence among the implementers, i.e. the individual is not able to perform the task required, or at organisational level, the turnover of personnel is rapid, 2) the variability in the objects of control, i.e. no commonly agreed guidelines for work, work processes are not standardised, or the control mechanism is lacking; and 3) the problem of coordination.</p>
<ul style="list-style-type: none"> • The management game 	<p>The management game is played against social entropy in order to achieve better control. Players demand better information systems, more audits and controls, detailed instructions, more explicit procedures, etc. The tendency in the management game is to centralise the processes.</p>

The dissipation of energies

<ul style="list-style-type: none"> • Tenacity 	<p>Tenacity is a game for everyone. It requires the ability and will to restrain the completion of a programme until one's particular terms are satisfied. To some extent, there are risks of altering the programme goals. The consequences of playing tenacity might include programme delays, even the death of programme, and the withdrawal of political and financial support.</p>
<ul style="list-style-type: none"> • Territory 	<p>This is a typical game for bureaucratic organisations. It is a positive game as long as no one wins, i.e. as long as the competitive forces generate information that enables an evaluation of their performance. Organisations are typically willing to enlarge their territory.</p>
<ul style="list-style-type: none"> • Not our problem 	<p>Typical for bureaucratic organisations. The organisation realises that the programme requires a heavy workload, it takes the organisation into the realm of controversy, or the jobs are difficult. An organisation might shift the responsibilities to others. A sub-game of this is 'Their fault' in which the actors seek to avoid blame, and shift it to other actors.</p>
<ul style="list-style-type: none"> • Odd man out 	<p>The potential actions or non-actions by other actors create uncertainty in the process. The players attempt to create or maintain their option to withdraw and cut losses while they monitor the uncertainty, and at the same time they attempt to manipulate others into foregoing their own options.</p>
<ul style="list-style-type: none"> • Reputation 	<p>An individual game which is played in order to fulfil personal need or ambition. The realisation of ambition is related to individuals' ability to play the above-mentioned games well or poorly. Players seek reputation as an end itself, but also as an instrument to achieve other ends.</p>

There are also problems related to game model, and the game metaphor assumes that implementation is not successful (Hietaniemi-Virtanen 2002, 21). In addition, the game includes implicit assumption that someone wins the game. However, in health care prioritisation, the goal of the process more resembles a win-win situation. In other words, everyone gains something as a result of the health care prioritisation process.

In the second phase, two main approaches to implementation were identified; the top-down and bottom-up approaches, and research was carried out using either of these (e.g. Teittinen 1985, Sabatier 1986, Mazmanian & Sabatier 1989, Hjerm & Porter 1993). The main features of these approaches are summarised in Table 3. Explanations for the success and failure of implementation were emphasised, and reliance on explicit or implicit models of implementation was typical for the second generation. Both approaches, however, have been criticised, the differences between the roles of implementers are huge, and neither model has explained why implementation occurs as it does (Sabatier 1986, Goggin et al. 1990, 183, Hjerm & Porter 1993, Hogwood & Gunn 1993, Matland 1995, Parsons 1995, 463, Walt 1994, 1999).

Table 3. Comparison of top-down and bottom-up approaches (based on Kiviniemi 1986, Sabatier 1986, Goggin et al. 1990, Hjerm & Porter 1993, Hogwood & Gunn 1993, Matland 1995, Parsons 1995, Walt 1994, 1999)

Characteristic	Top-down	Bottom-up
Basic assumption	Reflects the 'traditional' approach in public administration: policy environments are stable; a fairly clear distinction exists between politics and administration; bureaucratic organisations are implementers	Recognised implementation's variation over time and across policies and units. Implementation process must involve interaction between the policy and context. Human interaction is a key for successful implementation
Starting point of analysis	Begins with policy decision, and examines the meeting of objectives of different policies, and manipulation of essential factors at the central level.	Begins with an analysis of the network of actors involved in service provision at local level, and identifies their goals, strategies, activities, and contacts
Aim	To identify the factors, which make implementation successful	To describe the factors that cause difficulty in reaching goals
Key actors	Policy designers	Target groups and service providers
Theoretical basis	Rational decision-making, bureaucracy. The policy-making process is linear (rational)	Networking, policy process is iterative and political while implementation is characterised by negotiation and conflict.
Implementation structure	Implementation is considered as the administrative or managerial part of the process. The core is the relationship between governmental (subject) and non-governmental (object) actors.	Clusters of public and private actors as well as parts of many organisations form the implementation structure.

From a top-down perspective, the success of implementation is measured in terms of specific outcomes, which are directly linked to the programme. Some advice has been given for successful implementation. Richard Matland (1995) summarises the promoting factors of implementation on the basis of previous works (Pressman & Wildavsky 1973, Van Meter & van Horn 1975, Mazmanian & Sabatier 1989) as follows: make policy goals clear and consistent, minimise the number of actors, limit the extent of change necessary, and place the responsibility for implementation in an agency sympathetic with the policy's goals.

A top-down approach is a prescriptive theory, with an emphasis on rational decision-making and responsibility (Lane 2000, 108), and the criticism is based on this. Too much emphasis is placed on the top level and its goals, while the workers on the line are neglected. Furthermore, the different levels of decision-making are not taken into consideration, and the assumptions of human behaviour are erroneous. There is no causality in an implementation process where *x* follows *y*. (Parsons 1995, 467). As Lane (2000, 110) states: "top down models over-emphasise the responsibility side, trying to nail down the inherent uncertainties of implementation process in accordance with a firm plan or an outlined structure of control".

A bottom-up approach adopts the principles of networks working together, offering an approach of analytical induction into research. Richard Elmore (1993) terms a bottom-up approach as the backward mapping of problems and policy, which involves defining the success in human or behavioural terms, rather than as the completion of a 'hypothesis' (Parsons 1995, 468). Trust is a key concept for bottom-up analysts. However, these models underline the trust side too much in an attempt to safeguard as many degrees of freedom as possible for the implementer, as a tool for handling the uncertainties by flexibility and learning (Lane 2000, 110).

The delivery of services shapes more policy outcomes than the design of policy and, therefore, implementation failure is more complex than just the result of bureaucratic incompetence. Bottom-up analysts consider every positive effect as a sign of successful implementation. Effective implementation is a condition that can be built up from the knowledge and experience of those in the front line of service delivery (Parsons 1995, 470). However, bottom-up analysts have succeeded in giving only a few recommendations, since implementation is dependent on context, and local variation is allowed (Matland 1995).

It is considered that implementation research is now in its third generation, one that focuses on how to combine these two approaches (e.g. Sabatier 1986, Goggin et al. 1990, Kettunen 1994, Matland 1995, Leskinen 2001). Parsons (1995, 463) calls the third generation one of

hybrid theories, interested in implementation as evolution, learning, a policy-action continuum, inter-organisational analysis, part of a policy sub-system, and public sector management. An iterative methodological approach has been developed in response to previous approaches. Empirical and theoretical research concentrates on comparative methods of policy analysis. Theory building and validation based on quantitative hypothesis testing is the objective for third generation researchers. The focus is gradually changing from theory construction to theory testing (Goggin et al. 1990, 182-183).

One of the problems encountered in implementation research has been the scant accumulation of theory. Theoretical pluralism including different perspectives, strategies, and theoretical findings is typical for implementation research. (Winter 1990, 20). A crucial problem in implementation research has been the lack of definition of the concept. The concept of implementation basically has two meanings: an outcome or a process. From the process perspective, policy execution is a crucial point, while in an outcome-oriented approach, the focus is on policy achievement. This inaccuracy has reflected on existing theories, and therefore, any theory about the conditions for successful implementation has remained ambiguous. (Lane 2000, 97- 117.)

Nowadays, it is accepted that administrators have as important a role in policy-making as executives and legislators do. The implementation gaps are merely explained by differences in party policy ideology, and group or personal attitudes and perceptions. Implementation problems are the consequences of flaws in the policy formulation process. (Palumbo & Calista 1990b, 5-6).

In the field of health care, Michael Harrison (2004, 173) found in his analysis that the most important factors formulating implementation are power distributions in the health and political system, accepted decision processes in health and politics, previous policies, and established political values. Dynamic social, economic and political developments also have an effect on implementation.

In terms of health care prioritisation, procedural issues have received increasing attention (e.g. Holm 2000, Daniels & Sabin 2002, Ham & Robert 2003). The way in which even reasonable decisions are made and defended to those affected by them determines whether the political system responsible for limits can implement and stand by them. Four conditions that are relevant for legitimate decision-making have been identified. However, meeting these conditions does not mean that the decisions made will be implemented.

- 1) The publicity condition: limit setting must be public, and include both decisions and their justification to guarantee transparency.
- 2) The relevancy condition: the justification of decisions must be such that fair-minded people can agree with, and be relevant to meeting health care needs fairly within limited resources.
- 3) Revision and appeal: limit setting must be subject to revision and appeal, and decisions should be revisable in light of better evidence, etc.
- 4) Some form of regulation is also needed to ensure that the above-mentioned conditions are met. (Daniels & Sabin 2002, 5-12.)

The implementation structure in health care prioritisation is complex, and includes multiple actors from different levels (e.g. Ham 1997, Rynänen et al. 1999). Moreover, strong professions have been very active in resisting the decisions made by politicians. It has been shown that their occupational cultures achieve only minor changes during the health care reforms (e.g. Harrison 2004, 18, 187-188). In addition, professions have few incentives for explicit prioritisation and practically no support from health authorities (Norheim 2000a, Bäckman et al. 2004). Rudolf Klein et al. (1996, 26) warn that service providers' self-interest or bias reduce the equity in prioritisation. Finally, the response from the target group has been strong, and largely dismissive. For them, health care prioritisation might be a question of life and death.

The struggles among stakeholders intensify at the implementation stage for two reasons, 1) many implications of the policy become clear to them during implementation, and 2) actors who did not participate in the policy formulation become involved at the implementation phase. (Harrison 2004, 195.) Marianne Hanning and Mats Lundström (1998) analysed the implementation of care guarantee in Sweden, and discovered that there is variation between units because of differences in prioritisation policies and production. The means for implementation included financial resources during the first period, no explicit regulations were given, only some guidelines to change the behaviour of hospital units. The main outcome of the implementation of this policy was that the consequences were short term (2 years) because of loosened indications to include patients, and therefore, inability to balance demand with supply.

3.2 Health care prioritisation from the policy-analytic perspective

Next, health care prioritisation from the implementation perspective is analysed empirically. The first sub-study is a part of the PRIHC project (Prioritisation in Health Care) conducted at the University of Kuopio since 1995. There were two aims for this sub-study: 1) to gain information on the general public's, nurses', physicians', and politicians' attitudes to health care prioritisation, and compare them and 2) to find out whether the politicians' attitudes and real spending at municipal level correlated. The main interest concerning the first aim was particularly on the question of how these groups would prioritise health care services within certain budget frames.

The policy-analytical and economic point of view was taken in this sub-study (Leemans 1984). A policy-analytical approach means that municipal political administrative decision-making, including budgeting, is defined and interpreted as an arena in which to make value-based choices on health care priorities. Representatives of each key group are involved, and the solutions are compromises between interests and power positions. The focus is on the annual budgeting process, because it has direct consequences and outcomes at the clinical level. In Jan-Erik Lane's (2000) terms, interest is in outcomes, not implementation processes.

3.2.1 The methodology used in the first sub - study

The methodological choices made for this sub-study were slightly different from "traditional" prioritisation research. The empirical research in the mid 1990's emphasised the rankings of different services or patients, and focused on surveying the attitudes of different groups (e.g. Bowling et al. 1993, see also Main Chapter 4). The same logic is followed in this sub-study, but with an exception; while it was typical merely to request an organisation of the services in rank order without any information on resources needed, this sub-study also provided information on available resources to the respondents (see appendix 1). In addition, the attitudes of politicians were compared to actual occurrences at municipal level.

However, in general, there are contradictory views on how much, and which information concerning health services or individuals should be given to respondents when researching health care prioritisation. These views vary from no information to almost all the information available (e.g. Cookson & Dolan 1999, Roberts et al. 1999). In their study, Tracy Roberts et al. (1999) discovered that people acted more emotionally when they received information on

patient cases they were expected to select. Certainly, one crucial question in this debate is “information on what”? Information on resources needed for services is more neutral than information on hypothetical or real patient cases with e.g. different life styles and age.

Surveying attitudes on health care prioritisation has received a great deal of criticism. The most common themes mentioned by critics are as follows:

- 1) Questionnaires assume that the meaning of any question is the same for everyone, researchers and researched alike. Yet there is no evidence that the general public shares a community of meaning about priority setting;
- 2) The questions asked reflect the researchers' values and attitudes, which may potentially cause bias;
- 3) The views of the respondents can be appreciably shaped by the way that survey questions are framed;
- 4) A survey can be criticised on the grounds that people may take time to form a view or opinion. Responses may reflect social desirability; respondents tend to give favourable answers to positive questions, and vice versa. Answers tend to reflect public opinion formulated by, e.g., mass media (see Miettinen 2003);
- 5) Representing priority setting as a trade off between equity and efficiency oversimplifies a highly differentiated decision. Moreover, it is impossible to make generalisations on the basis of public opinion or attitudes to decision-making. (Dicker & Armstrong 1995, Ryyänen et al. 1998, Dolan et al. 1999, Martin et al. 2001.)

Some of the problems were avoided here by using approaches that differed methodologically, and also by bringing contextual factors into the judgement process. The respondents were shown the actual share of resources in the average municipality, which reduces the potential bias through researchers' attitudes. This method was exceptional because 1) the budget was like that of an average Finnish municipal health care budget; 2) the budgeting categories were real; 3) the share of costs of each health services presented in the questionnaire was like average resource volume at municipalities and 4) seven per cent was the real level of resource cutback at the time. (Kinnunen et al. 1998.)

The data was gathered using self-administered postal questionnaires that were sent in March 1995 to a total of 6700 respondents, of whom 3830 replied (57%). The questionnaires consisted of multiple parts, including questions concerning resource allocation at municipal level (appendix 1). The samples, sample sizes and number of respondents are summarised in Table 4.

Table 4. Summary of the survey data sampling, sizes of the groups, and response rates

Group	Sample	Total size of the group	Response rate
The general public	Random sample of those aged 18-65 from the national register	2000	1178 (59%)
Nurses	Random sample from the register of the Finnish Nurse Association	1000	682 (68%)
Physicians	Random sample from the register of the Finnish Medical Association	1500	837 (56%)
Politicians	All chairpersons and vice chairpersons of municipal social and health boards	2200	1133 (52%)
In total		6700	3830 (57%)

The average age among the general public was 43 years (min 18 / max 65). The general public represented both genders quite well (males 46%, females 54%). There was female dominance among the nurses (96%), which reflected the balance between genders among this profession quite well. The nurses' group was the youngest among the four groups; the average age being 38 years (min 21 / max 61). The physicians' group was the second youngest group, with an average age of 41 years (min 25 / max 63), and almost equal representation of both genders (males 56%) concerning respondents. The politicians' group was both the oldest (average age 52 years, min 27 / max 77) and the male-dominant group (82%). However, the non-respondent analysis has not been carried out in detail.

The survey data was analysed using SPSS software. First, the frequencies were taken to find out how many units of resources the respondents would not save from each service (this was expressed in the questionnaire with symbols). When the respondents were asked to add to the health care budget, the frequencies indicated how many per cent of each group would not add at all. Then the averages of the savings and additions were counted for every type of service. This described the average number of savings or additions of each health service. Following this, the ratio of savings for each health service was counted in relation to the resources available. After this, the services were organised in rank order based on the ratio. This was done separately in each case, i.e. in the context of decreasing resources and in the context of increasing resources.

In further analysis, the aim was to find out whether the politicians' attitudes and real spending at municipal level correlated. The group of politicians was analysed further, and statistical data gathered from the Sotka²⁰ database. In total, 45 municipalities (10% of the total number of Finnish municipalities) were chosen for this analysis. Every tenth municipality was chosen

²⁰ Sotka is a Finnish database, consisting of information on municipal activities.

from the list of municipalities in alphabetical order. Information regarding the total social and health care expenditure, share of primary health care and specialised health care, as well as environmental health care was gathered from the years 1995, 1997 and 1999 (see Appendix 2). Some of the information was not available in monetary units, but as visits. Those were taken into the analysis because they at least showed the trend of use of a particular service. The changes in these figures were calculated, and reported as percentages. The study design of this research task is summarised in Figure 3.

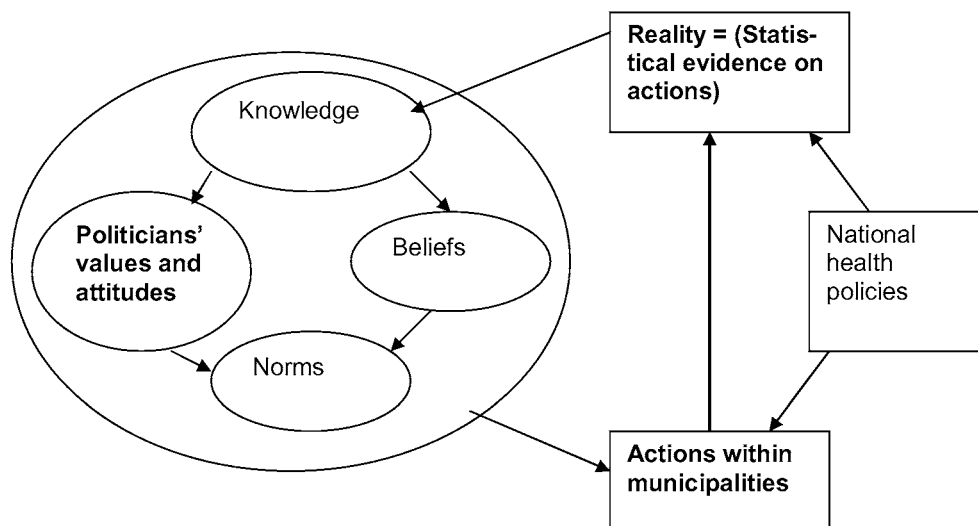


Figure 3. The study design of the second research task (modified from Knutinen 1998, 214)

3.2.2 The attitudes of different respondent groups to health care prioritisation

The four groups studied prioritised initially secondary and tertiary care and their supportive services (radiological and laboratory services) when the resources decreased (see Table 5). However, nurses, physicians and politicians gave home nursing services top priority. The general public disagreed, and instead prioritised ambulance and patient transportation services highest. Preventive care services, such as health education, environmental health care and occupational health services, as well as dental services were posteriorised in all respondent groups. These services were ranked between 11 and 16 on the priority list in the context of decreasing resources.

Table 5. Priorities of health services among the general public, nurses, physicians and politicians. The respondents were asked to cut the average health care budget of the Finnish municipality by seven per cent (Kinnunen et al. 1998)

Type of service	The general public n=1178		Nurses n=682		Physicians n=837		Politicians n=1133	
	Adjusted mean	Rank order	Adjusted mean	Rank order	Adjusted mean	Rank order	Adjusted mean	Rank order
Ambulance services	0.03	1	0.03	2	0.04	4	0.06	7
Surgery	0.03	2	0.04	5	0.04	2	0.03	2
Radiological services	0.03	3	0.05	7	0.07	8	0.04	3
Internal medicine	0.04	4	0.04	6	0.04	5	0.04	4
Psychiatric care	0.05	5	0.03	3	0.04	3	0.05	5
Laboratory services	0.06	6	0.13	12	0.13	10	0.08	9
Home nursing	0.06	7	0.01	1	0.01	1	0.02	1
School health care	0.06	8	0.03	4	0.14	11	0.05	6
Health centre hospital	0.07	9	0.06	9	0.05	7	0.07	8
Visits to GPs	0.08	10	0.10	10	0.05	6	0.09	11
Rehabilitation	0.09	11	0.06	8	0.11	9	0.09	10
Dental services	0.10	12	0.12	11	0.15	13	0.14	13
Other specialised care	0.11	13	0.18	15	0.15	12	0.13	12
Occupational health services	0.16	14	0.17	14	0.23	15	0.18	15
Health education	0.22	15	0.20	16	0.23	16	0.16	14
Environmental health care	0.23	16	0.15	13	0.16	14	0.18	16

The priorities changed when resources increased (Table 6). All groups preferred home nursing and preventive services, such as school health care and occupational health care. Rehabilitation services were also highly prioritised. Specialised care services and health centre hospital services were at the bottom of the lists. The rankings for these services in these two lists varied from 9 to 16. The position of supportive services was also lower than in the situation of decreasing resources. The groups' attitudes were more similar if the resources increased than if the resources decreased.

Table 6. Priorities of health services among the general public, nurses, physicians and politicians. The respondents were asked to add seven percent to the average health care budget of the Finnish municipality (Kinnunen et al. 1998)

Type of service	The general public n=1178		Nurses n=682		Physicians n=837		Politicians N=1133	
	Adjusted mean	Rank order	Adjusted mean	Rank order	Adjusted mean	Rank order	Adjusted mean	Rank order
Home nursing	0.61	1	1.08	1	0.85	1	0.87	1
Rehabilitation	0.31	2	0.38	2	0.25	2	0.30	2
School health care	0.31	3	0.32	3	0.13	6	0.27	3
Occupational health services	0.27	4	0.24	4	0.16	4	0.25	4
Ambulance services	0.21	5	0.11	7	0.05	10	0.07	9
Radiological services	0.18	6	0.06	10	0.09	8	0.11	7
Health education	0.13	7	0.18	6	0.12	7	0.17	5
Laboratory services	0.12	8	0.04	12	0.05	11	0.09	8
Environmental health care	0.12	9	0.18	5	0.16	3	0.16	6
Dental services	0.11	10	0.07	8	0.04	12	0.06	11
Visits to GPs	0.08	11	0.05	11	0.13	5	0.06	10
Internal medicine	0.05	12	0.06	9	0.06	9	0.05	12
Surgery	0.02	13	0.02	15	0.03	15	0.02	14
Health centre hospital	0.02	14	0.03	14	0.03	13	0.03	13
Psychiatric care	0.02	15	0.04	13	0.03	14	0.03	15
Other specialised care	0.02	16	0.01	16	0.02	16	0.02	16

Certain differences occurred between the groups studied, the most obvious of which was the general public's attitude to home nursing if the resources decreased. The general public placed this in position 7 on the list, while all the other groups placed it in the position of highest priority. The opinions of physicians and nurses differed concerning the importance of school health care. Nurses preferred school health care services more in both cases (i.e. decreasing and increasing resources) than the physicians did. The physicians preferred visits to a general practitioner more than the other groups did when resources decreased or increased.

The general public preferred supportive services (laboratory and radiological) more than the professionals did, especially when resources decreased. The general public and the politicians disagreed about the importance of ambulance and patient transportation services. The general public prioritised these higher (1) than the physicians did (4) and especially politicians (7) when resources decreased. Similarly, when resources increased, the physicians (10) and the politicians (9) were more unwilling to increase resources to ambulance services (10) than the general public was (5).

When the resources increased, the general public and physicians disagreed about the importance of environmental health care services. Its position was 9 on the general public's list, and 3 on the list of physicians' preferences. Another difference on the increasing resources list occurred between physicians' and nurses' attitudes to dental care services. Nurses placed dental care in a higher position (8) than the physicians did (12).

In general, home nursing was the only type of service that remained a top priority whatever the resources. Attitudes to rehabilitation services, school health care, ambulance and patient transport services and radiological services were fairly positive, while those towards visits to the GP, and laboratory services were somewhat neutral. Dental care services, health centre hospital care services, and other specialised care were at the bottom of the list in both cases.

The other specialised care services constitute an interesting group, as it includes both laboratory and radiological services. These services held top priority when integrated with primary health care, especially among the general public. However, as part of specialised care, their priority ranking was low. Are these services considered more valuable if they are integrated with primary health care, or is this just an indicator of public health policy influencing decisions? The general public might think that the services are more easily available to them if they are organised by primary care rather than by specialised care services.

3.2.3 Health care prioritisation at the municipal level

The attitudes of Finnish politicians to cuts and additions in the health care budget were reported above. The questionnaire also included a question concerning the integrated social and health care budget (Table 7). If they had to cut the integrated budget, the politicians again showed a preference for home nursing services. Social and health care administration were at the bottom of the list. As was expected, services based on subjective rights were given a high priority. According to Finnish law, citizens have subjective rights to some social services (e.g. child day care for those under 6 years of age). Such subjective rights do not exist in health care, with exception of emergency care.

Table 7. Priority order of social and health services as rated by local Finnish politicians in 1995 (the smallest average indicating the least willingness to cut resources to the service) (Lammintakanen & Kinnunen 2004)

Rank order if the budget has to be cut by 7%	Adjusted mean
1. Home nursing	0.03
2. Out-patient care in the health centre	0.03
3. Housing services	0.04
4. Child day care	0.05
5. Social work	0.05
6. Institutionalised care in the social sector	0.05
7. Secondary health care (central and district hospitals)	0.05
8. Income support	0.06
9. In-patient care in health centre	0.06
10. Other social services	0.10
11. Dental services	0.11
12. Other health centre services	0.12
13. Social care administration	0.20
14. Health care administration	0.26

At the beginning of the 1990's, between 1991-1993, the total health expenditure decreased by 12.3%, and was at its lowest in 1994. The economic situation improved in the mid 1990's, and the total health expenditure increased steadily, approaching the same level as in 1991 (KELA [*The Social Insurance Institution of Finland*] 2001). As a result of this, politicians' attitudes to health care in the context of increasing budget are compared to actual processes in municipalities.

As a whole, social and health care costs increased between 1993-1999 in the observed municipalities (see Appendix 2). However, the costs of primary health care decreased by 2.7% between 1998-1999, as can also be seen in the net expenditure on total social and health care. The share of primary health care has also steadily decreased (-6.6% from 1995 to 1999). The reason for this change is not clear. For decades, Finnish health policy guidelines have had a strong emphasis on primary health care (e.g. Primary health care act 1972, 'Health for All' programme by WHO 1986). In addition, the politicians ranked these fairly highly in the context of increasing resources.

As a consequence of this national emphasis on primary health care, it was expected that secondary care services would decrease or slightly increase in number during 1993-1999. However, their costs grew by 26.4% between 1995-1999, and the budget share increased by 7.6% during the same years²¹. This is partly due to the implementation of new and more expensive technologies, increased use of secondary care services, and unspecified division

of labour between primary and secondary health care. However, local politicians' attitudes towards secondary health care services were quite hard in 1995, and they were ranked low.

Home care costs increased by 45.3% in the observed municipalities during the years 1993-1999. The number of home care visits by the GP also increased by 29.8% during 1995-1999. At the same time, visits to the GP increased by 1.2% (an average of 2.3 visits per inhabitant in the observed municipalities in 1999). Growth in both home care costs and the number of visits reflects the trends of the current national social and health policy in Finland. (E.g. Vaarama & Kautto 1998, STM 1999). The local politicians' opinion was that home nursing services should be prioritised regardless of resources, and they clearly expressed their willingness to allocate more resources to these services.

One very alarming observation in the statistical data is the decrease in the number of visits to school health care. From 1995-1999, the number of visits decreased by 26.0% in these municipalities. However, politicians at municipal level considered school health care fairly important (3). In addition, the Ministry of Social Affairs and Health noticed this trend in municipalities, and required better organisation, and more resources for school health care in its 'Target and Action Plan for Social Welfare and Health Care 2000-2003', which is a recommendation to municipalities, not an obligatory plan.

Dental services were allocated more resources (17.4%) during 1995-1999, although the politicians considered these only moderately important. Another interesting feature in comparison with politicians' attitudes is the huge growth (52.8%) of social and health care administration costs between 1993-1999. In 1995, administrative services were ranked last on the local politicians' list.

The share of social care decreased by 7.9% between 1995-1999. This is mainly due to the decrease in income support since 1995. Politicians ranked income support moderately, and they were quite willing to reduce resources to this service. However, it must be remembered that in spring 1995, even though there was a dire need for income support because of high unemployment rates, the politicians were unwilling to increase the budget.

Attitudes toward environmental health care are interesting. Local politicians ranked this as a fairly high priority on a list of 16 health services, and its costs increased by 17.6% between

²¹ See also STM 2004, use of human resources in primary care has been stable during last ten years while in specialised care it has grown by 31 %.

1995-1999. However, its budget share is so little compared to the total costs that its share of the total budget has decreased.

3.3 *Prioritisation of health care services – discussion and conclusions*

Implementation research offers an analytical frame for this sub-study to discuss those issues which are important in terms of implementation, and which should be taken into account in prioritisation policies. As a framework, implementation research assumes that there is an explicit policy (object), the implementation of which is analysed (Hill & Hupe 2002, 3-4). It seems, however, that in Finland, non-decision has become a policy in its own right in terms of health care prioritisation (e.g. Weiss 1986, Rist 1994). For this reason, a “policy” was given to the respondents. However, in further analysis the actual occurrences of real municipal policies were compared to the attitudes revealed by the hypothetical policy.

This sub-study generated three main results. Firstly, the results show that the attitudes towards priorities were not stable; instead they were very context-dependent. Home nursing was the only service that was clearly given top priority regardless of the resources. Otherwise, the importance of services such as occupational health services, health education and environmental health care depended on the resources. If there were more resources, the respondents supported these services, but if not, these were the services that could be cut. It is clear that attitudes and value statements are contingent, and strongly dependent on the situation at the time of asking.

Secondly, the four groups' attitudes differed somewhat towards health care services. The respondents agreed only on increases, but disagreed on reductions. The ranking list provides an idea of the priority of certain health services if this kind of resource allocation needs to be done. Budget frames made it easier to consider cuts in resources rather than cuts in services. It might also have been easier to argue for equal responsibility when participating in reductions than to discuss service rankings and their value base. (See Möttönen 1999, also Thorslund et al. 1997.) Budget frames also guided the respondents in their consideration of the limits of the health care budget and the resources used for a certain health service when making their value-based choices. The formulation of questions might have lead respondents to think of the effects in the short term (one fiscal year).

Thirdly, the second research task focused on comparison of the politicians' attitudes concerning the importance of certain services with actual occurrences in municipalities,

measured by statistical information. Certain differences were found between the attitudes and the actual service provision. The most visible difference was that politicians' preferred preventive health services (something which is also emphasised by national health policies), but the resources were allocated in specialised health care alone. This indicates that there is a need to analyse deeper the actual implementation phase. The shortcoming of this is that the processes of implementation remain unaccounted for, only the outcomes are known (statistical data). Therefore, possible explanations for this discrepancy are drawn from both implementation literature (e.g. Bardach 1978, Sihto 1997, Hill & Hupe 2002, Harrison 2004), and the experiences of other countries as described in Chapter 2. They can be summarised as policy related issues, organisational issues, and stakeholders.

The effect of previous policies is recognised as having an influence on policy implementation. For example, in Finland, it has been noted that 90 per cent of political discussion focuses on a 10-percent share of the budget. The remainder is already allocated through operating and fixed costs (Oulasvirta 1995). In addition, on the basis of interviews of key decision-makers, Craig Mitton and Cam Donaldson (2002) discovered that the allocation of resources occurs on the basis of historical trends. Actual redesign or reallocation of services does not usually take place. Policy changes are fairly slow, and usually take place incrementally. One of the effects of implementation games is delays or even the termination of implementation processes (Bardach 1978).

The content of policies is an important factor in terms of policy implementation (compare to the Oregon experiences). Policies may be too contradictory or do not offer anything new to municipalities (Sihto 1997). In addition, the implementers might be willing to change the content of the policy, add new objectives in the policy or even resist the whole policy (Bardach 1978). Donald Van Meter and Carl van Horn (1975) consider that the effectiveness of implementation varies across policy types and policy issues. Riplin and Franklin add that the relative difficulties of success in implementation are low in distributive policies, moderate in regulative policies, and low in re-distributive policies. (Parsons 1995, 481.) As Mats Thorslund et al. (1997) note, technical solutions (i.e. decisions on the optimal use of existing resources, providing more services per resource unit, and improving the fit of services to actual needs) are easier for politicians than the reallocation of resources between sectors and recipient groups, which entails difficult political and administrative decisions.

Organisational and structural factors include a lack of steering power from the Ministry of Social Affairs and Health. In Finland, one of the factors complicating the municipalities' role, and obscuring the implementation of policies is the conflict between the guidelines of

different Ministries, especially in the field of health care. With regard to prioritisation issues, the power has shifted from the Ministry of Social Affairs and Health to the Ministries of the Interior and Finance (Björni & Christiansson 1996, compare to Bardach 1978, Territory game), and furthermore, these ministries have policies that are different, and may even be contradictory. This may partly explain why the national health policies have not been fully implemented at the municipal level, or why they have been interpreted differently in different municipalities.

As the international examples have shown, the decentralised health care system has an impact on implementation. Nevertheless, some policy analysts consider that guidance from the top political level is needed. In the absence of national decisions, equity is in danger (Klein 1998), professionals are put in an impossible bind (Berg & van der Grinten 2003, 139), and municipalities face an impossible task when trying to balance different needs and demands, usually within shrinking budget frames. The decentralisation might lead to Up for Grabs game where the implementers try to figure out, how to implement policies and which parts to implement (Bardach 1978).

One factor influencing policy implementation is the resistance of strong professions (compare to Bardach's games e.g. massive resistance, easy life, not our problem). Professions might interpret policies differently, giving them a meaning different to that intended by the policy-makers, or they may neglect the implementation of policies. Changing contextual factors may prevent implementation of the policies, professionals and policy-makers' goals concerning health care may differ, and therefore, the effects of policies may remain modest. (Virtanen 1995.) In Finland especially, municipalities feel that they are quite powerless concerning specialised health care (e.g. Knuutinen 1998, Rissanen & Häkkinen 1999, Harrison 2004).

The question remains, what are the real possibilities influencing health care and health policy at municipal level? Municipalities have an independent position in the Finnish welfare system (e.g. Heuru 2002, Myllymäki 2002), and Finns do prefer municipalities as a proper decision-making level (e.g. Niemelä et al. 1995). However, in health care issues, the decision-making power lies partly outside of the municipality (e.g. hospital districts, federations of municipalities), where local politicians might have a role conflict between representing the provider and the purchaser. Both top-down and bottom-up processes are needed in order to avoid scattered processes, as is the situation in Norway (or the problems of a too decentralised system, as is the case in the Netherlands).

In summary, studying attitudes to health care prioritisation is a difficult task, and the evidence produced with regard to decision-making is questionable (e.g. Martin et al. 2001). Attitudes and preferences concerning health care prioritisation are context-dependent, although in some studies, it has been found that, despite cultural factors, attitudes remain fairly similar (e.g. Ryyänen et al. 1998). Attitudes are dynamic and constantly changing through cultural, temporal, and individual factors. Therefore, attitudes cannot be used as the only basis of health care prioritisation decisions. In addition, different techniques used to obtain the general public's or professionals' views may generate different results. As shown in Chapter 4, relying purely on attitudes may lead to an unbearable situation (e.g. research results on the use of age as a criterion for health care prioritisation).

The implementation of public policies is becoming increasingly difficult for two reasons: social norms are changing, and heterogeneous organisations have greater independence, which reduces the effectiveness of traditional authority (Pfeffer 1996). In terms of health care prioritisation, much effort nowadays is given to the just processes of policy-making (e.g. accountability of reasonableness, Daniels & Sabin 2002), with the perspective of justice and fairness. Although the policy formulation phase has an impact on policy implementation, the correct process does not remove the concerns of the actual implementation process.

4 Systematic review of health care prioritisation research

Empirical research on health care prioritisation has been carried out since the late 1980's. One of the pioneers in terms of public and attitude measurement in this field is the State of Oregon and its Health Services Commission, who carried out telephone surveys, community meetings and public hearings as a basis for its prioritisation work (Rosén 2002, 10). During the 1990's, the amount of research rapidly increased. The debate on health care prioritisation has also grown in different types of media (e.g. Miettinen 2003). Although the discussion on health care prioritisation has been active for quite some time, it still is considered as unscientific because of a lack of appropriate data (Frankel et al. 2000).

Many scientific articles on prioritisation have been published, but theoretical knowledge of the issue is weak (Martin & Singer 2000). There are several reasons for this – the complexity of the phenomenon, the difficulty in fulfilling different needs and interests, and the 'instability' of health care systems (Tymstra & Andela 1993, Mossialos & King 1999). In addition, at the political level²², there has been uncertainty about using research results on a small scale in decision-making.

There has been much discussion on health care prioritisation; policy decisions have been made, but what kind of scientific evidence can be found for the decisions? After reading many scientific articles, books and other types of writing on health care prioritisation, I was quite confused. The impression gained from these publications about the reality of prioritisation was manifold, complex, and also scattered, and the results found were sometimes contrary.

I was willing to gain a deeper understanding of the phenomenon, and was interested in the methods of how scientific knowledge was produced, what the premises were behind the

²² Many authors (e.g. Weiss 1986, Orosz 1994, Davis & Howden-Chapman 1996, Klein 2000, Black 2001, Innvaer et al. 2002, Pawson 2002) have described the problem of making use of research results in political decision-making. They have found many reasons for this, mainly due to policy process or evidence, although there are many interacting factors. Problems related to the policy process can be summarised as follows: the nature of policy process itself; policy-makers' goals are multiple; there are power and budget struggles as well as mutual mistrust between actors in the process; the timing of research is not relevant in terms of the policy process; policy cycle is quicker than research cycle; the social environment does not accept policy change; and social research tends to raise as many new questions as it answers. The problems related to evidence are: evidence is considered as irrelevant; there is lack of consensus on evidence or there are other types of competing evidence; and quality of knowledge is poor. There may also be problems in the ideological acceptability and practicability of the results.

studies, and the evidence they provided for decision-making. The aim of this chapter is to discuss the development of the body of research during the 1990's in selected countries. The question steering the analysis of the previous research is what kind of evidence is offered to policy-making in selected studies on health care prioritisation.

4.1 Evidence-based policy-making

Decisions on health care prioritisation are constantly made nationally and internationally, but the question remains, on what basis? Whether discussing evidence-based policy-making (EBP) or political decision-making, information (or evidence) has a crucial role, especially in strategic decision-making, operational planning and evaluation (Leys 2003). At present, fragmented and inefficient resource allocation processes are seen as a universal problem and evidence based resource allocation process needs to be developed (Maynard & McDaid 2003). Evidence-based decision-making has been seen as a means towards transparency and the rationalisation of the decision-making processes in health care (Niessen et al. 2000, Dobrow et al. 2004, compare with Daniels & Sabin 2002) since policy-makers and managers have lacked the relevant information in issues related to health care decision-making (e.g. Björk & Rosén 1993, Harrison 2004, 180).

Moreover, the use of scientific evidence in political decision-making has been confusing (Weiss 1986, Davis & Howden-Chapman 1996). There has been a markedly low use of, and scarcity of evidence in health care prioritisation in particular (Kapiriri et al. 2003, Bäckman et al. 2004, see also Rist 1994). However, Garpenby (2003) notes that the problem is not the lack of information but the inability to interpret and manage it. According to Simon Dixon et al. (1997) research evidence did influence the initial assessment of proposals, but the strength of evidence was not associated with priority choices made by a district health authority (see also Plomer et al. 1999: the marginal role of evidence in IVF rationing strategies).

Evidence-based ideology is widespread in health care. It refers to systematically collected proof on the effects of health-related interventions from social and health sciences (Niessen et al. 2000). Although EBP has been seen as a means of improving decision-making, it has also received a great deal of criticism. The main reasons for this are 1) the narrow understanding of evidence, and 2) it is based on a simplistic view of policy-making (Klein 2000, see also Weiss 1986, Rist 1994, Hunter 2003, Leys 2003). In terms of policy-making, evidence has to be understood more broadly than in evidence-based medicine. EBP is

qualitatively different because of the changing decision-making context (from individual to meso to macro levels). Mark Dobrow et al. (2004, see also Leys 2003) approach evidence from two perspectives: 1) the philosophical-normative²³ perspective addresses what sources of evidence would be most ideal for decisions (i.e. the question of quality of evidence), while 2) the practical-operational perspective emphasises the meaning of context in determining what is evidence (i.e. evidence is related to context and time). The latter definition is more useful in terms of political decision-making.

From the policy-making perspective, research evidence is complex, and even very clear findings may be hard to implement. However, Carol Weiss (1986) reminds that although the research results are not directly utilised in policy process, social sciences has contributed by altering the terms of policy discussion. It is clear that decisions on resource allocation and application of care to individuals will always be made under uncertainty (Freemantle 1995). Yet even if information were more complete, the results of, for example, economic analysis would still have to be interpreted by policy-makers, supposing the aim of health policy is not simply to maximise health gain for the resources available (Ham & Coulter 2003, 6).

Scientific evidence is only one factor affecting decision-making (e.g. Rist 1994, Dixon et al. 1997), and its role is to inform both politicians and citizens about the severity of a problem, and the effectiveness and cost-effectiveness of interventions (Norheim 2002). Rudolf Klein (2000) notes that practical wisdom based on experience, evidence of the workability of policy, and the implementability and acceptability of policy should be taken into consideration in policy-making. In addition, Nick Black (2001) notes that personal experiences, local information, eminent colleagues' opinions, and medicolegal reports are relevant to political decision-making. Evidence-based policy-making should also combine values and evidence (e.g. Frith 1999, Norheim 2002).

Evidence has also different functions in decision-making. Rational decision-making uses evidence instrumentally, for example, to solve a problem. Acquiring best available (scientific) information is the most important activity. In incremental decision-making, evidence is used conceptually, and the consequences are indirect, and seen as long-term policy change.

²³ Evidence-based medicine relies on the scientific concept of evidence. It aims at using the best current evidence in patient care. Evidence is developed through systematic and methodologically rigorous clinical research, emphasising the use of science while de-emphasising the use of intuition, unsystematic clinical experience, patient and professional values and pathophysiologic rationale (Evidence-based Medicine Working Group 1992, in Dobrow et al. 2004). Evidence is based on the positivist science tradition: facts have an independent existence, forming a truth. The status of evidence (i.e. what facts are considered evidence) is the product of historical, social and cultural processes (Leys 2003).

Mixed scanning makes strategic use of evidence (Garpenby 2003, Bekker et al. 2004). In addition, research evidence has different meaning at different levels of policy making. At agenda setting level research evidence has a quite small role while at level where policy intentions are translated to policy realities the role of research evidence is stronger. (Rist 1994.)

Another critical point in the utilisation of evidence is related to the policy-making process. The demand for a stronger evidence base partly ignores the real nature of the policy-making process, that is, that policy decisions are the outcome of complicated political processes between different interests and values among different stakeholders (e.g. Weiss 1986²⁴, Stronks et al. 1997). Policy-making can be rationalised to a certain point of view only. A rationalist idea of policy-making shows the government and its agents as purposive, goal-oriented problem-solvers seeking optimal solutions. Rational policy processes require comprehensive information about all alternatives, and aim at maximising benefits and minimising the costs (Tenbenseel 2000).

Herbert Simon (1966), however, indicates the cognitive limitations of rational decision-making. Prescriptions are highly impractical and impossible to implement because of the system's inability to handle the amount of knowledge required, although Charles Lindblom (1973) has shown that these limitations can be compensated for to some extent with social interaction (Tenbenseel 2000, Hill & Hupe 2002, 163). Rationalism is deficient as a normative ideal of policy-making because it privileges technical expertise, and restricts public participation (Tenbenseel 2000). In addition, making decisions more explicit may not improve overall decision-making, but could lead to more incremental and conservative decision-making (Hunter 1995). An unclear understanding of the goals of health policy, and the lack of relevant measurement instruments are clear obstacles to evidence-based policy (Niessen et al. 2000).

Moreover, David Hunter (2003) states that rationalising policy-making with evidence raises false hopes among the policy-makers. The rhetoric of a science-based health policy is only likely to arouse unrealisable expectations. There is a risk of regarding evidence-based decision-making as something that transforms political, subjective matters into technical and objective ones (Hunter 1995). Evidence-based health policy-makers face conflict when

²⁴ Carol Weiss (1986) describes eight different non-decisional processes that might lead to policy outcomes. They are: reliance on custom, improvisation, mutual adjustment, accretion, negotiation, move and countermove, a window for solutions and indirection. In addition, choosing not to decide might also lead to policy outcome (Rist 1994).

attempting to apply the highest quality evidence possible, and similarly, recognise that evidentiary thresholds may have to be relaxed to incorporate a broader range of evidence sources (Dobrow et al 2004).

In conclusion, there are growing demands for evidence-based policy-making in health care, but these demands face the rapid reality of the policy-making process: the need to make compromises, include values in policy-making, competing interests as well as evidence, and the fear of “rationalising the policy process” too much. The basic nature of policy-making is still incremental or based on limited rationality bounded in time and location with unclear objectives and decision alternatives. In addition, it is an iterative process consisting of different cycles with no sequential order. (Weiss 1986, Rist 1994.) However, policy-makers do need information and evidence in order to be able to make “better informed” decisions. Scientific evidence provides one type of evidence to assist political decision-making, also in health care prioritisation. But, how the research has been conducted in order to provide evidence for decision-making in this field, and how does research paradigm look like?

4.2 A paradigm for health care prioritisation research

The term paradigm has been used with many meanings in scientific writing. One of the most known and controversial presentations of the development of science is that of Thomas Kuhn (1970), who uses the concept paradigm with many various meanings in his book. A typical interpretation is that paradigm is a shared understanding of how to conduct research among a specific field/discipline at a given time. For example, Egon Guba and Yvonne Lincoln (1994, 105) define paradigm as the basic belief system or worldview that guides the investigator, not only in choices of method, but also in ontologically and epistemologically fundamental ways.

The existence of a dominant and uniform paradigm at a given time (Kuhn 1970) has also been criticised, especially by the post-modernist scientists who recognised no single authority, method or paradigm (e.g. Denzin & Lincoln 1994, 15). However, Stewart Clegg (2002) points out that the academic concerns with paradigms still remain separate from the concerns of practitioners. The core question is a division between local and contextual paradigms versus universalistic ones. Still, Jessica Corner (1996) considers that a paradigm is a useful concept in analysing and exploring a body of research in a specific area. Moreover, paradigm is useful when the bases of the previous studies are analysed as a whole, not only from the point of view of methodology or empirical reality (Raunio 1999, 40).

Health care prioritisation has been of interest in many different disciplines; medicine, public health (e.g. Ayres 1994, 1996, Wensig et al. 1998) in particular; health economics (e.g. Williams 1988, Nord 1992, Maynard 1999); philosophy (e.g. Daniels 2000a, b, Daniels & Sabin 2002); health management and policy (e.g. Klein 1993, Klein et al. 1996, Ham 1997, Hunter 1997); and sociology (e.g. Light & Hughes 2001). Åke Bergmark et al. (2000) consider that the very core of the concept of prioritisation is closely related to both economics and politics and hence, prioritisation belongs equally to both disciplines.

The economic perspective emphasises the allocation of limited resources with alternative uses, while politics is concerned about who gets what, and under which circumstances. In addition, Donald Light and David Hughes (2001) note that sociology has much to offer by helping us to understand how economic transactions are embedded in social relations, and exploring the power relations in health care systems. However, this multidisciplinary orientation may raise doubts about a coherent understanding of paradigmatic issues.

Every discipline uses its own methods and orientations to approach the issue of health care prioritisation. Jessica Corner (1996) notes that perhaps the best source of evidence for a research paradigm is an examination of the research itself. Therefore, a systematic analysis was carried out on previous empirical studies. Johan Galtung's²⁵ views on bilateral science offer a frame of analysis for research on health care prioritisation.

4.3 Systematic review as an approach of this sub-study

Systematic review is a suitable method for integrating and synthesising an existing body of research and to identify research paradigm. Systematic review is used for two purposes: 1) to ascertain what is already known about the phenomenon; and 2) as guidance for further studies, theory construction, and practical work. Its main aim is to collect systematically information from previous research, and to summarise it (Varonen et al. 1999). Ray Pawson (2002) describes it as follows "research strategy which is called meta-analysis, review, and synthesis aims at resolving knowledge disputes". Systematic review has its origins in the criticism of narrative summaries which neither integrate nor criticise the existing literature (Curllette & Cannella 1985). In addition, the rapid production of information, cumulation of knowledge, research ethics, advanced electronic databases and their availability, and research economy have all lead researchers to be more interested in systematic reviews.

²⁵ Compare to Egon Guba's and Yvonne Lincoln's (1994) classification of paradigms: positivism, post-positivism, critical theory and constructivism.

Some crucial points concerning systematic review as adopted in this study are discussed next.

4.3.1 Systematic review

Research and studies are usually divided into three classes, primary, secondary and meta-analysis (e.g. Moody 1990). Meta-analysis is used as the common denominator of research synthesis, but there are different approaches to meta-analytic methods (Smith 1988). Furthermore, meta-analysis refers to a certain type of systematic review, and the third class could instead be called research on research (Kylmä et al. 2000). Meta-analysis and systematic review are a methodology used in many different disciplines, especially with the rise of evidence-based ideology, and the increasing interest in technology assessment in health care (Roine 1999). Although the first notions on combining the results of different research were introduced by Fisher, Pearson and Cochrane during the 1930's (Smith 1988; Smith & Stullenbarger 1991), it was Gene Glass who first introduced the term 'meta-analysis' in 1976 (Smith 1988). There is some confusion in the use of the concepts meta-analysis and systematic review because of the different paradigms (Kylmä et al. 2000).

Later, another school of thought considered that meta-analysis could be used to synthesise the results of non-experimental studies, and that it could have a descriptive function (Smith 1988, Smith & Stullenbarger 1991). Instead of focusing on the results of primary studies, this strategy also takes into account methodological and substantive study characteristics (Smith & Stullenbarger 1991). This approach is more general, and can be called research on research, meaning that the whole study is of interest, not only the results or data from primary study. (Moody 1990, Kylmä & Vehviläinen-Julkunen 1997, Kylmä et al. 2000)

The basic difference between traditional (narrative) literature review and systematic review can be summarised as follows. In systematic review, the arguments for the selection of data, and the rules for integrating studies are explicitly expressed, and contradictory findings are resolved systematically. The studies included are selected widely to avoid the effect of subjectivity on selection. Systematic review is reported as an independent study, opening the crucial methodological choices for evaluation and criticism. In addition, reviewing the conclusions made in the original research may provide misleading information. In traditional literature reviews, the reviewer does not identify the basis for choices clearly, nor does she or he express the methods for summarising the data. Systematic review offers a more objective

and unbiased approach than traditional 'subjective' review. (Curllette & Cannella 1985, see also Moody 1990, Lemmer et al. 1999, Acton 2001).

More specifically, systematic review is a piece of research itself, which makes use of the primary research as its data. Systematic review responds to a well-defined question, it uses scientific methods, with the aim of avoiding bias in review, as well as a systematic approach to appraise the quality of each primary study. One core issue is the rigour of the research process. (Droogan & Cullum 1998). The process begins with a definition of the phenomenon, the purpose of the systematic review, and the research tasks. The inclusion criteria of primary research are defined following this. After collecting suitable reports and articles, the unit of analysis is determined, and the data analysed using appropriate methods, whether quantitative or qualitative (Kylmä et al. 2000). However, systematic review does not itself indicate a method for data analysis (compare with meta-analysis and meta-synthesis).

4.3.2 Meta-analysis

Meta-analysis is a method of quantitative data analysis (a statistical procedure) which pools the data from different studies by, for example, counting the effect sizes for combining research results from primary studies, and producing an aggregate of primary studies (e.g. Curllette & Cannella 1985, Mäkelä et al. 1996). Ray Pawson (2002) defines the key output of meta-analysis as a grand summary of summaries, i.e. each individual intervention is boiled down to a single measure, which is drawn together in an aggregate measure, and which is then compared with an average effect for other categories. Meta-analysis yields effect magnitudes, variability explanations, interrelationships, and differences (Smith 1988). In other words, meta-analysis is a comparison of different studies, eventually leading to statistically significant results (Leys 2003).

Mary Smith (1988) describes meta-analysis as a rigorous research method demanding strict protection against validity threats at each stage. One validity concern is the formulation and measurement of concepts if integrating studies from different disciplines. Other threats for validity include publication bias (selection), representativeness of the data, the quality of data analysis in primary studies, and the independence of data. The quality requirements for primary studies are very high, and meta-analyses are usually based on randomised controlled trials, at least in medicine and natural sciences (e.g. Kunnamo 1999).

The main focus of meta-analysis is on the reorganisation of the primary data, and the other parts of the study are less relevant. The epistemological and ontological foundations of meta-analysis are in positivism (e.g. Leys 2003). The underlying epistemological motivation in meta-analysis is the search for a unified body of knowledge. Can this, however, exist? (Smith 1988.)

4.3.3 Integrative research, meta-synthesis

There continues to be a problem among medical and health care scientists in considering qualitative findings as 'real' evidence in health care. However, such findings should be given a higher ranking in the evidentiary hierarchy. (Leys 2003.) As Mary Smith (1988, 77-78, also Reynolds et al. 1992) points out, the main aim of qualitative meta-analysis is both to describe the data, and to reorganise and synthesise the existing information. It can be used either for analysing qualitative studies, or can take the form of using qualitative data analysis methods in systematic reviews.

One crucial issue in integrating qualitative studies has been whether or not studies with different qualitative methods can be combined. Margarete Sandelowski et al. (1997) state that qualitative research is resistant to synthesis, and one reason for this is the existence of multiple philosophical origins and diverse inquirers. However, they present three different kinds of syntheses to be used in combining qualitative research: 1) the integration of findings from multiple analytic paths by the same investigator; 2) the synthesis of findings across studies by different investigators; and 3) the use of quantitative methods to aggregate qualitative findings from cases across different studies. In addition, Louise Jensen and Marion Allen (1996) emphasise that only studies using the same qualitative methods can be combined²⁶. They have developed a technique (meta-synthesis) of comparative textual analysis for combining interpretive studies (also Sandelowski et al. 1997, see aggregated analysis by Estabrooks et al. 1994). The aim of meta-synthesis is to gain a holistic interpretation of a particular issue.

In summary, the methods of combining data in systematic review can vary from quantitative to qualitative, with a different philosophical orientation (Figure 3). However, the following issues are crucial at both ends of the continuum – the quality of the primary studies, the

²⁶ Compare with discussion on 'apples and oranges' or the integration of homogeneous vs. heterogeneous studies in meta-analysis (Curlette & Cannella 1985, Lynn 1989).

appropriateness of the inclusion criteria, and avoiding bias through the publication or the researcher her/himself.

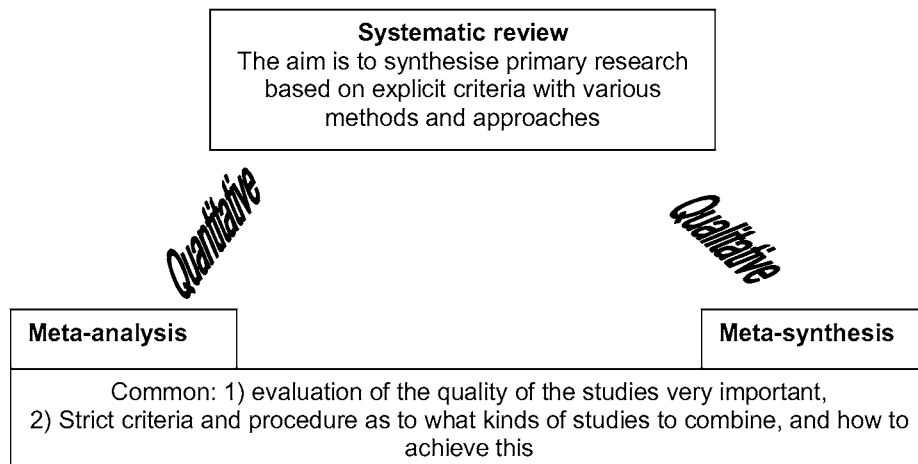


Figure 4. Relations of the concepts of systematic review, meta-analysis, and meta-synthesis as adopted in this study

4.4 A systematic review of empirical research on health care prioritisation

In this sub-study, systematic review is understood as a research strategy that aims to combine primary research, paying specific attention to the rigour of the research process. As a consequence, the emphasis of analysis is on the following variables – theoretical structures of individual studies and their methodology, and research results. (Moody 1990, Smith & Stullenbarger 1991, Kylmä & Vehviläinen-Julkunen 1997). The aim of this sub-study was to 1) describe health care prioritisation paradigm and 2) to identify what kind of evidence the previous research has provided in terms of health policy making.

4.4.1 The data gathering and analysis

The data used in this sub-study consisted of research articles. A systematic database search was performed during 2000-2001. Various databases such as Medline, Cinahl, Cambridge Scientific Abstracts (including PsycINFO, Eric and Sociofile) EbscoHost; and Academic Search Elite were searched using 'health care priority setting', 'choices', 'rationing', 'rationalisation', and 'prioritisation' as keywords. In addition, two well-known publishers'

databases were searched in June 2001: Elsevier (<http://www.sciencedirect.com>) and Emerald journals (<http://www.emeraldinsight.com/journals/index.htm>).

The search was limited by time (1990-2000), by country (Finland, Sweden, the Netherlands and the UK), and by research article with empirical results. Although much has been written about priority setting and rationing in health care,²⁷ quite few articles based on empirical studies were found in this search. The search was completed by checking the reference lists of suitable articles found in the database search.

As a result, 59 articles relevant for this stub-study were found. The main criteria for including the articles for this review were as follows:

- 1) The topic of the article was health care rationing or prioritisation, focusing on health services organisation, or principles how to organise the health services. For example, clinical experiments focusing on comparing treatments, and their effectiveness were excluded.
- 2) The articles were primary scientific publications reporting results based on empirical data.
- 3) The articles were published in peer-reviewed journals during 1990-2000.
- 4) The studies were carried out either in Finland, Sweden, the Netherlands or the UK²⁸.

A further three articles reporting on multinational studies were also accepted, since two or more of the countries of interest were included. In total, 47 out of the 59 articles found were accepted for the detailed analysis (Appendix 3). The reasons why some articles were excluded were: 1) the article was not a primary scientific publication with empirical results (8); 2) the focus was on micro level prioritisation issues (3); and 3) article reported a comparative study including only one of the countries of interest (1).

Analysis

The unit of analysis was one research article. The main analysis method for this part was both deductive and inductive content analysis (Pietilä 1973, Tuomi & Sarajärvi 2002).

²⁷ In the Medline search in autumn 2001, a total of 3292 references were gained using the word 'rationing', 171 references with the term 'priority setting', and 'prioritisation' provided 33 references (limitations 1990-2000, English, human). A total of 472 articles were found from Academic Search Elite using 'rationing and health' (without any limitations) as keywords, and if using 'priority setting' and 'health', a total of 89 articles were found in the same database. These numbers include all types of publications, i.e. from letters, commentaries and editorials to original research articles.

²⁸ These countries were chosen for two reasons – 1) their health care systems are based on quite similar principles, and 2) they have been active in health care prioritisation research and discussion.

Content analysis is more of a family of procedures for studying the contents and themes of written or transcribed text than an exact method. It can consist of a set of qualitative and/or quantitative methods, which is a process for systematically analysing messages in any type of communication (Insch et al. 1997, Kondracki et al. 2002). Initially, it was a quantitative technique (deductive), developed in the field of media (e.g. Holsti 1968, Krippendorf 1986), and is still considered by some researchers as a quantitative method (e.g. Silverman 2001).

The analysis was carried out in three phases. First, the articles were read through with the aid of a form specially designed for this study on the basis of Moody's (1990) views on meta-analysis (also Drummond et al. 1996, see Appendix 4). It consisted of five main parts: general information on the article; concept definition; study design; methods and results; conclusions and recommendations. Very minor changes were made to the form after piloting it by analysing four research articles (e.g. some structured questions were reformulated as open questions). The articles' suitability for analysis was ensured during the first phase. Secondly, the articles were re-read and analysed with the help of the form. Thirdly, they were read again with the form to test the decision-making. Some articles required deeper reading to clarify, for example, aspects concerning the methodology. At the analysis stage, some details were randomly checked from the original articles.

4.4.2 Results of the systematic review

Altogether 47 articles were included in this analysis. Respectively, the publication activity was higher in the latter part of the observed time period. In terms of journals, Health Policy, the British Medical Journal, and Social Science and Medicine were the most dominant channels of publication (47% of all publications in these three journals).

The concepts of prioritisation and rationing were mainly used as synonyms in the research articles analysed (47%). Priority setting was also commonly used (36%). Every fifth article provided an explicit definition of the concept, some examples of which were as follows:

"What ethical principles should govern the decisions about the distribution or rationing of limited health care resources" (Cookson & Dolan 1999)

"In the absence of market forces as the basis for resource allocation policy-makers seek alternative means for choosing between competing demands of the health care budget i.e. they set priorities." (Farrar et al. 2000)

"Prioritisation or rationing of health services is a method that has been used to control health care costs." (Ryynänen et al. 1998)

“The concept of rationing itself is hard to define and its extent difficult to measure. This article defines rationing as a deliberate or non-deliberate limitation of access to potentially beneficial health care through financial or organisational features of health care in question. An underlying assumption is that the actual selection of patients is influenced by financial characteristics such as limits of capacity (e.g. availability of beds allocated to a specific procedure) or organisational features, such as the referral system” (Norheim 2000b)

On the basis of the definitions (n = 9), prioritisation is about decision, determination, choice, method of control or limitation, therefore, any activity related to it is either positive (distribution, allocation, choice, given priority, or seek for alternative means) or negative (exclusion, denial, withholding, or control). The object of prioritisation is (limited) health care resources or costs, potentially beneficial health care services, needs, competing demands, or different options. In addition, it is associated with cuts and economising.

Although the concept was not defined explicitly in all the articles, the author(s) describe the phenomenon by answering the question either why or how. Prioritisation was mainly defined with reasons (46%) answering the question why we must prioritise (lack of resources, increasing needs and expectations, advances in technology, economic depression, medicalisation, ageing population). In addition, the criteria used in prioritisation at the individual level were described in many articles (28%, e.g. chronological age, need, benefit for society, severity of disease, effect of treatment, cause of disease). The methods for prioritisation (e.g. markets, waiting lists, treatment and/or administrative decisions, referral standards, increased fees) were also described in many articles (24%). Six articles (13%) also described different levels of prioritisation, and another six articles (13%) focused on explicit and implicit features of prioritisation. In addition, public involvement in prioritisation, and the case of Child B²⁹ were used to describe the health care prioritisation in these articles. However, the question ‘what’ remained largely unanswered.

Health care prioritisation was considered inevitable in 17 articles (36%), the main reasons for this being a lack of or limited resources (8), recent changes in the health care system or health policy (4), always being a part of health care (3), and because of a lack of market forces as well as increased demands. Three common features of prioritisation, complex, difficult and process, were identified in one third of the articles (33%).

The purpose of the studies, population or respondents, methods for data collection and analysis were studied as indicators of epistemological considerations (see Kylmä &

²⁹ Child B has given a human face to prioritisation discussion in the UK. Child B was a 10-year-old girl suffering from leukaemia. Health authorities refused to give her a second bone marrow transplant, and she died. The tragic case is very well documented (e.g. Entwistle et al. 1996, Ham 1999).

Vehviläinen-Julkunen 1997). The respondents to the studies analysed are presented in Table 8. Researchers strongly believed that the general public is the best informant concerning this issue. Physicians, as a group, have also often participated in studies. Many studies collected data from many groups rather than just one. However, there were only seven studies that clearly obtained patients' views on prioritisation.

Regarding the gender of respondents, there were no significant differences between males (53%) and females (47%). The percentages represent the average from those studies where the information was available. Overall, the respondents represented the views of working age adults. Neither younger people (under 25), nor older people (over 65) were well represented among these respondents. In almost half (44%) of the studies, the respondents represented a specific area (e.g. health authority). One third of the studies had national coverage, and 17% focused on a single practice.

Table 8. Respondents of the analysed studies (number of occurrence)

Respondent group	Number of occurrence in studies	Number of Respondents
The general public	30	27471
Public	22	23311
Community groups	1	350
Patients	7	3810
		53 households
Physicians	24	6721
Family doctors	1	200
GPs	4	217
Consultants	3	339
Not specified	16	5965
Nurses	11	4202
Professionals	2	304
Politicians	10	5809
Medical and social workers	3	666
Insurers	1	N/a
Civil Servants	1	85
Medical or nursing students	1	148

The data were gathered mainly through structured questionnaires (45%). The second most common method for data gathering was a combination of different methods (26%). Different types of interviews were used in 9 studies (19%). The size of the samples varied from 20 to 6742, the average being 1738. On average, the response rate was 70% (47-100). The data analysis methods were mainly quantitative (64%), varying from descriptive statistics (frequencies and means) to correlations and multivariable analysis, such as logistic regression analysis. Twelve studies used qualitative analysis, for example, the grounded theory approach, and different types of content analysis. Some also used computerised

qualitative analysis programmes. Only three studies combined different data analysis methods.

Evidence for policy-making consisted of three main categories (see Table 9): 1) health care prioritisation is messy; 2) the basis and practice of current health care system needs to be clarified; and 3) contradictory views on methodological innovations, and their suitability for studying health care prioritisation.

Health care prioritisation is messy described the contradictory views on prioritisation among the respondents. Some considered health care prioritisation as a necessary process, while others found it totally avoidable. There was also disagreement on the different actors' role in the prioritisation processes: should the public be involved or not, or should the prioritisation be left only to doctors? A third indicator of complexity was the criteria used in health care prioritisation. The thought that multiple, context-dependent criteria were used in complex health care prioritisation decisions reflected the disagreement among respondents on the use of different criteria and arguments in prioritisation decisions. For example, the use of age as a criterion generated contradictory views among analysed studies.

"Chronological age is both used and it should be used as a criterion."

"Elderly people are prioritised"

"High cost technology should be available for all regardless of age"

"People are willing to sacrifice older to save younger"

Contextual and individual factors had an effect on both attitudes to prioritisation and actions in health care practice.

The second main category dealt with the need to clarify the basis and practice of current health care system. The most notable message from the previous studies in terms of policy-making is that the health care system needs to be developed both at the political and practical level. The respondents did not fully support the current policies and values of the health care system.

"There is a discrepancy between the official guidelines and professional and public attitudes with the risk of a double standard of morality."

"The goals of health care are not met, and they are not fully accepted (health promotion)"

This was indicated by the emphasis on curative and caring services, although the goals of health care systems focused on health promotion. The need to improve health policy-making procedures also emerged. From a practical point of view, the health care system must also

be reformed. For example, current practices, which are influenced by policy decisions, lead to different ways of prioritisation.

"New forms of implicit rationing have been developed"

"Direct decisions by tertiary care constitute an important aspect of implicit rationing"

The third main category concerned methodological issues. Researchers themselves are fairly critical of the methodology developed for studying and improving health care prioritisation decisions. Even though criticism is an integral part of scientific work, it may raise questions on the usefulness of the results among policy-makers.

"Methodology might be superficial in relation to the complex issue"

Table 9. Main categories of the evidence for policy-making on the basis of empirical studies (n = 47)

Sub-categories (based on reduced expressions)	Integrating sub-category	Main categories	Combining category
<ul style="list-style-type: none"> • A combination of criteria preferred in prioritisation • Attitudes and criteria used are context-dependent • The bases of the choices vary in complex situations 	<ul style="list-style-type: none"> • Multiple, context-dependent criteria are preferred in complex health care prioritisation decisions. 	<ul style="list-style-type: none"> • Health care prioritisation is messy 	
<ul style="list-style-type: none"> • The public has no real opportunity to participate • The public's role in the process is unclear • Different actors' role in prioritisation is unclear 	<ul style="list-style-type: none"> • Roles of different actors are unclear in the prioritisation process. 		
<ul style="list-style-type: none"> • Contradictory views on the necessity of prioritisation • A lack of resources and public pressures lead to prioritisation 	<ul style="list-style-type: none"> • Necessity of prioritisation is questionable 		
<ul style="list-style-type: none"> • Acute health care services, care and some social services were important • Contradictory views on the importance of preventive services • Non-life saving and some marginal groups' services were not prioritised 	<ul style="list-style-type: none"> • Curing and caring services were considered important. 	<ul style="list-style-type: none"> • The basis and practice of current health care system needs to be clarified 	<ul style="list-style-type: none"> • Evidence for policy-making from previous empirical studies
<ul style="list-style-type: none"> • Agreement on the use of different prioritisation methods varied • Current practice leads to alternative ways of prioritisation • Some problems in health care practice need to be solved 	<ul style="list-style-type: none"> • A need to develop current health care practice 		
<ul style="list-style-type: none"> • The current health care system with its values and policies is not fully supported • Current health care policy-making needs to be improved 	<ul style="list-style-type: none"> • Some reconsideration of the basis of the current health care system is needed 		
<ul style="list-style-type: none"> • Managers coped with organisational instability by relying on existing service networks and work practices 	<ul style="list-style-type: none"> • Managers coped with existing service networks and work practices 		
<ul style="list-style-type: none"> • Many challenges for nurses' education • Methodology needs to be developed • Different views on the suitability of different methods • Methodological solutions have been developed to aid decision-making • Further research is needed 		<ul style="list-style-type: none"> • Contradictory views on methodological innovations and their suitability 	

4.5 Health care prioritisation research paradigm - discussion and conclusions

Different kinds of evaluation criteria have been presented for systematic review. These can be summarised as follows; the best criteria are when the authors have described the process explicitly, explained their solutions, and made them open to criticism. The objective was to make a systematic review of empirical research concerning health care prioritisation. However, the criteria used for selection may not have been accurate enough, and there may be some space for interpretation. The purpose of this study also restricted the sampling to research articles only, excluding other publications on this topic.

This raises the question of whether the best evidence for policy-making can be found from scientific articles. Articles in scientific journals are targeted at a wider audience than purely at policy-makers. Nevertheless, it was felt that it was important to study these articles since, especially in applied sciences, one premise is that they are also relevant to society. In addition, this limitation was necessary in order for the researcher to be able to manage the research.

It has been estimated that only 50-70% of the relevant literature can be found in a database search (Mäkelä et al. 1996), and research is poorly indexed in electronic databases, with regard to social sciences in particular (Innvaer et al. 2002). For this reason, references in the articles were checked, and other relevant publications were also investigated to discover suitable articles (ancestry search, Moody 1990). A manual search of journal volumes, however, was not conducted. The articles found were mainly from the fields of medicine and social sciences, and this was due mainly to the databases used.

The combination of results of qualitative and quantitative studies might be a threat to the validity since it may be debatable as to whether or not such results can be combined. In this case, it is assumed that they can, since the actual aim was to find evidence for policy-making, and a message to decision-makers based on the results by using both quantitative and qualitative content analysis. The quality of the original studies is one of the evaluation criteria used in the systematic reviews, and the limitations of the reviews reflect the limitations of the original studies (Innvaer et al. 2002).

Three criteria were used in evaluating the quality of the articles. 1) The assumption was made that when an article is published in a scientific journal, and has passed the peer review process, its quality should be guaranteed. 2) The articles were examined specifically to verify

that certain parts of the study were explicit in them, in other words, that the aim of the research and/or research tasks, data and methods used, and results were described. 3) As regards the status of the studies included in this review, they were almost all descriptive studies. The highest level of credible evidence is usually differentiated by the methodology; the highest level being a randomised control trial in positivistic scientific context (Leys 2003). In other words, the articles provide weak evidence from this perspective. However, this phenomenon is difficult to approach with randomised controlled trials, and therefore, the evidence provided from these studies is considered as valid.

There is a clear “UK dominance” in this sample (half of studies conducted in this context), which is important in terms of interpreting the results. In addition, one concern regarding validity is that over half of the articles are from three journals: Health Policy, the British Medical Journal, and Social Science and Medicine. However, this shows the ‘opinion leaders’ in the discussion on priority setting, as well as reflecting the editorial policy of these journals.

The research paradigm focused on empirical scientific activity (Galtung 1977). It was difficult to find decent theoretical aspects to reflect the problems Stephen Frankel et al. (2000) and Douglas Martin and Peter Singer (2000) notice. In his study, Mikko Knuutinen (1998, 213) discovered that, despite being a pragmatic phenomenon, prioritisation is also a theoretically multiple phenomena, and has clear connections to core questions of social sciences as well as to theories of decision-making, policy-making, and economics (e.g. Bergmark et al. 2000). In previous empirical studies, however, prioritisation was seen as a pragmatic phenomenon, and its theoretical underpinnings were not discussed. Instead, the theoretical background described different health systems, diseases or contexts where prioritisation takes place. In addition, the concept was seldom clearly defined, although it was measured in a number of ways.

In particular, the political orientation was missing from the studies analysed. This may be due to this review’s search strategies, and also fundamentally to the scarcity of policy analysis on health care prioritisation. Whether all relevant studies in field of politics are labelled as prioritisation or rationing is a matter worthy of consideration. A search strategy after a proper concept analysis would have filled this gap.

The review of previous research revealed that there have been changes in the understanding of how to conduct research in this field. At least in Kuhnian terms, a small scientific revolution has taken place over the last decade. These changes reflect the changes in scientific activity in general. The main stream in the 1990’s was descriptive studies, focusing mainly on the

attitudes of different groups. Later on, the methodologies have expanded from positivist to constructivist, for example, the study designs were varied (e.g. Cookson & Dolan 1999, Dolan et al. 1999). In addition, the emphasis of research has shifted from investigating attitudes to analysing practical situations (e.g. Hughes & Griffiths 1996, 1997, Varekamp et al. 1998, Rogers et al. 1999). To some degree, researchers do accept that the reality is complex, and that no single truth or simple explanation for the phenomenon can be found.

Health policy-making is a complex issue, in which values, evidence, personal experiences, and competing interests are combined (Stronks et al. 1997, Black 2001). Therefore, although science has been the subject of a great deal of expectation to solve health care prioritisation problems, scientific evidence has a limited role in health policy-making. Taking into consideration the terms of these conditions, the results of this study are of a nature that generates greater awareness, rather than that of being ready to be implemented. The main finding is that, despite the many efforts that have been made to improve decision-making by focusing on the procedural issues, these problems are still topical (Daniels & Sabin 2002).

The evidence gained from this review can be summarised as follows. There is an obvious need to reconsider both the practice and basis of the current health care system, since the goals and values are not fully shared by the stakeholders. Articles that described actual prioritisation in different contexts, as well as attitudes toward prioritisation, showed that there is some discrepancy between the objectives of the action, and the actual action or attitudes. Some findings indicated that the health care goals were not accepted among the respondents. Redefinition of the goals is one of the policy-makers' tasks (Callahan 2002).

The development of health care practice is mainly in the hands of the professionals, but the politicians create the frames in which health care is practised. In addition, clearer responsibilities between different actors are needed, and if the public is supposed to participate in the process, then this should be enhanced by the politicians. Some important issues emerge from the policy-making point of view, and these are the procedure of decision-making (criteria cannot be found), the acceptance of prioritisation, and clearer responsibilities between actors.

Policy-makers cannot develop the methodology of researching health care prioritisation, and may be confused when experts have different views on suitable methodological choices (compare to e.g. Rist 1994 the development of methodologies has not led to greater clarity in policy making). However, it is useful to understand some of the basic principles guiding research in order to make use of the research findings. In future, a closer relationship

between policy-makers and researchers would provide more useful evidence for policy-making (Rist 1994, Davis & Howden-Chapman 1996).

There is one particularly interesting discrepancy from the research paradigm point of view. On the one hand, the phenomenon is such that multiple approaches are needed in order to gain an insight into the complex and changing phenomenon. This reflects the post-modern conception of science, with no uniform and single methods and truths. Conversely, there is growing pressure towards positivist views on the phenomenon, and in particular, towards the requirements of evidence-based policy-making. This approach assumes a linear relationship³⁰ between research and evidence, and that the research should influence the policy.

Such an approach is consistent with both a positivist model of science, and professional dominance, in which the views and priorities of health care professionals dominate health care policies. (Black 2001.) However, this approach supposes the policy-making process to be rational, and this is the main shortcoming.

³⁰ For example Rist (1994) criticises that the linear relationship is not possible. The relation is more subtle and tenuous.

5 Concept analysis of health care prioritisation and rationing

The concept of health care prioritisation is used in many ways, and is also used interchangeably with the concept of rationing. It has different meanings both in scientific writing, and in ordinary language (e.g. Isomäki 1998, Ubel & Goold 1998, Mossialos & King 1999, Ham & Coulter 2000, Rosén 2002, Russell 2002). Marja-Liisa Kakkuri-Knuutila (1998) emphasises the meaning of concept definition, especially in those research areas, in which there are different schools of thought, and the concepts are used slightly differently (see the previous chapter on the multidisciplinary orientation of this phenomenon). Therefore, the concept of health care prioritisation should be examined in more depth. This chapter discusses the concept definition of prioritisation, concept analysis as an approach, and then represents the results of concept analysis of health care prioritisation and rationing.

5.1 *Defining health care prioritisation*

In health care, the concepts of priority setting, prioritisation, rationing and making choices are all used as synonyms to describe the same phenomenon: making difficult choices in different health care settings (Priorities in health care 1995, 41, Mossialos & King 1999, Ham & Coulter 2000). Although much has been written on health care prioritisation, actual analyses of the concepts are scarce (Russell 2002), and different connotations are associated with the concepts. The concept of rationing is value-laden and emotionally charged, and therefore, it is seldom used at governmental or national levels (Coast & Donovan 1996, Wayland & Kleiner 1997, Russell 2002). In addition, Joanne Coast and Jenny Donovan (1996, 5) relate rationing to wartime³¹ memories and a lack of necessities. Rationing is also related to life in suffering or discomfort, and death (Maynard & Bloor 1995, Klein, Day & Redmayne 1996, 2, Maynard & Mossialos 1999), and can even be seen as violating basic human rights and the right to be treated.

For these reasons, the preferred term instead of rationing has been priority setting or prioritisation, especially in public health care systems (e.g. Wells 1995, Rosén 2002, 20).

³¹ Michael Reagan (1990) states that during wartime, rationing pertained to the scarce goods that were distributed equally (according to collective standards rather than the ability to pay). In this sense rationing is not due to money problems, and is a deliberate conscious policy chosen by representatives of the community, and not a financial strategy. In addition, van den Ven (1995) notes that rationing refers to severe scarcity. However, in developed countries 7-14% of the GNP is spent on health care, and therefore, there is no real scarcity, but a definite need to make choices in health care.

However, health care prioritisation also includes the assumption that those in need³² of care will be left without treatment. International examples show, however, that when evaluating the health care system critically, some reallocation can be made in preference for the most needy (for example, in the Netherlands, care for the elderly was prioritised; Kauhanen et al. 1998, 317, also the Hastings Center 1996). Furthermore, examples from Oregon and Canada have shown that rationing and prioritisation efforts have lead to successful negotiations concerning an increase in resources (Martin et al. 2001, Gutmann & Thompson 2002).

Moreover, the most used terms, priority setting and rationing, include some implicit assumptions on why choices have to be made, and how they are made. Health economists (e.g. Williams 1988, Maynard 1999) see these choices as having the following dimensions: who determines, who receives, what service or treatment, when and who pays (opportunity costs). Rudolf Klein (1994) split the decisions into two parts: who should be treated, and how to manage the care of the patients.

One of the difficulties in defining health care prioritisation is the complexity of the phenomenon in practice (see e.g. *Priorities in health care* 1995, 41, Knuutinen 1998). For example, Elias Mossialos and David King (1999, 75) state that "it has become a label for a broad range of policy concerns ranging from policies to contain expenditure at macroeconomic level to the establishment of practice guidelines for doctors." In empirical research, the concept is seldom defined explicitly, but measured in multiple ways. This complexity has also reflected on empirical research and theoretical work, and, for example, no decent concept analysis by using concept analysis methodology has been carried out.

³² The need-demand discussion has its origins in classic philosophical debate on necessary needs and wants/demands. The definition of the need for care is very problematic because clients and health professionals may have totally different views on the need. As Rudolf Klein and colleagues (1996, 9) note, in health care, 'supply is limited by consideration of cost, but demand is not limited by consideration of price'. According to David Hunter (1997, 6-7), it is very important to distinguish the need for care from demand. In the health sector, however, it is important to meet the need for care, not the demand for care. Michael Cooper (1975, 11-20) for example, has analysed the difference between need and demand as follows: a client wants better health, s/he converts her or his want into demand (expressed want for health services) and need is defined by health professionals, i.e., need is demand which in the doctor's opinion requires medical attention. Also Daniel Callahan (1990): "A medical need is usually understood as a need that if fulfilled would bring life and health and there is no end to what we can want for that purpose". Matthew (1971, cited in Maynard & Bloor 1995) makes a difference between need, demand and utilization: "A need for medical care exists when there is an effective and acceptable treatment or cure. A demand for care exists when an individual considers that he has a need and wishes to receive care. Utilization occurs when an individual actually receives care." Lind and Wiseman (1978) offer another view on need. They see need as a relative concept, which is conditional on a multitude of factors, such as culture, social and economic conditions, the availability of treatments and the provision of services. However, Stephen Frankel et al. (2000) point out that the greater problems in health care are misunderstanding, vested interests and parsimony rather than the potential level of demand.

Next comes the problem of defining health care prioritisation. One dictionary definition³³, from the Oxford English Dictionary online version (2003) states that prioritisation is “1) to designate as worthy of prior attention, to give priority to (in the sense of priority). 2) To determine the order in which (items) are to be dealt with, to establish priorities for (a set of items)”. In the same dictionary, rationing is defined as follows, “rationing by the purse, raising the price of a commodity so as to restrict the number of people who can afford to buy it. Similarly rationing by price.”

Concepts can be defined, for example, using their functions, structural parts and phases as well as actors participating in process³⁴ (Kakkuri-Knuuttila 1998). For example, Barbara Russell (2002) defines the concept of rationing using three approaches, which have been used to explain the concept in the context of the health care system. Each of these answers the questions either how or where. The first approach uses clinical scenarios to illustrate the kinds of decisional factors that do or do not imply rationing (how). The second approach examines bureaucratic ways of putting rationing into operation effectively (how). The third approach focuses on the level of health care system (where). One shortcoming in concept definition is usually that researchers offer different definitions by different authors, and even make some synthesis based on these definitions, but they seldom point out why they chose the literature, and how they made the analysis and integration of different definitions. (Compare to the ideology of systematic reviews in the previous chapter).

Concept analysis differs from concept definition, as it is a scientifically more rigorous process. Barbara Russell (2002) has continued with concept analysis, and identifies three essential attributes. The first is **quantity**, which refers to finitude and actuality, and devolves to less than enough of, something that is not unique, and a non-dismissible presence of others with competing demands. Secondly **value**, signifying that something that is rationed must be both commonly and substantively valued. The third feature is **control**, meaning transfer or withholding something from someone. In addition, either an explicit or implicit

³³ The dictionary definitions are problematic since they usually use synonyms to define the concept. There is a danger for circular definition. In addition, dictionary definitions are too skimpy, inadequate and usually too narrow. However, dictionary definitions are a good starting point. (Morse et al. 1996)

³⁴ In health care prioritisation, concept definition has been used a great deal, for example, by defining prioritisation by different levels (Klein et al. 1996, Ham 1997, Ryyänen et al. 1999); by different methods used (e.g. Harrison & Hunter 1994, Klein et al. 1996, Myllykangas et al. 1997) by different criteria used (e.g. Lewis & Charny 1989, Kuder & Roeder 1995, Nilstun & Ohlsson 1995, Myllykangas et al. 1996, Grimley Evans 1997, Bowling 1999, Dey & Fraser 2000, Lammintakanen et al. 2004) by the connotations related to the concepts (e.g. Coast & Donovan 1996, Klein et al. 1996, Hunter 1997, Ubel & Goold 1998, Maynard 1999) or whether the process of prioritisation should be explicit or implicit, or if there is a middle way (Klein 1994, Hunter 1995, Mechanic 1995, 1997, Coast et al. 1996).

distributive criterion is needed. She concludes: "rationing is someone or some institute's deliberate decision to distribute a scarce good among competing persons".

5.2 Concept analysis of health care prioritisation and rationing

The most scientific way of defining concepts is concept analysis, which can be seen as a specific type of research (concept-analytic). In addition, concept analysis is an essential part of knowledge and theory development within a discipline. In general terms, concept analysis focuses on the analysis of the attributes of the concept, trying to identify the words/concepts that provide the meaning of the analysed concept, and their relations (intension = a group of attributes describing the things that belong to the field of the concept)³⁵. Extension refers to all real or unreal objectives to which the concept can be applied (Kakkuri-Knuuttila 1998, 329 – 335, Järvinen & Järvinen 2000, 19). Concept definition (an outcome of the concept analysis process) requires a proper analysis of previous uses of the concept to find out the differences and similarities between the definitions. In addition, a meaningful definition enables the concept to be referred to, to be communicated, to be identifiable and to be recognisable to others (Morse et al. 1996).

5.2.1 Philosophical bases of concept analysis models

In terms of philosophical foundations, two schools of thought can be identified in concept analysis. The essentialist (Entity) view of concept regards concept as a type of entity, such as an abstract mental image or a word with a specific grammatical function (epistemological foundation in correspondence theory, e.g. Lammenranta 1997). It focuses on the entity itself, and in particular, on its physical aspects. These entities are supposed to correspond with actual elements of reality (existing concepts). The approach has its origins in Aristotle³⁶ who aimed at defining the being of the concept, i.e., what the concept is / the essence of things (genus and differentia). An object of real truth is unchanging. (E.g. Niiniluoto 1980, Rodgers 1989a, 1993a, b)

³⁵ Concept analysis refers to the description of all attributes that define the concept with the required level of accuracy (Järvinen & Järvinen 2000, 19).

³⁶ Aristotle was the first to present a systematic theory of the nature of definitions and their role in scientific work (theory of traditional definitions, which has no difference between conceptual and factual reality; A is B). (Niiniluoto 1980, 155)

Concept analysis based on the essentialist tradition provides a rigid set of conditions of the concepts with an empirical orientation of analysis. The concepts are thought to have clear boundaries, and are supposed to be unchanging and universal (context-free), possessing a true value. (Rodgers 1989a, 1993b.) The logical positivism movement continued this tradition (e.g. Niiniluoto 1980, Rodgers 1989a, 1993a, b), although they were not interested in concept definition and analysis as such. Their interest focused on the relationship between concepts, and observations in the empirical world. (Kakkuri-Knuuttila 1998, 329).

The dispositional approach is interested in the use of the concept, i.e., it views concepts as habits or abilities to perform certain behaviours. Behaviours include the ability to use language effectively, and the performance of specific mental or physical acts. Dispositional theories emphasise the use of the concept and the behaviours that they make possible. It emphasises concepts as dynamic, fuzzy and context dependent, possessing pragmatic utility. For example, the later writings of Ludwig Wittgenstein represent the dispositional approach, though this tradition is less common. (Rodgers 1989a, 1993a, b, see Toumlin 1972)

5.2.2 Rodgers' evolutionary concept analysis model

Beth Rodgers (1989a, 1993b) integrates the views of dispositional philosophers in her evolutionary concept analysis model. In this model, a concept is considered as an abstraction that is expressed either in discursive or non-discursive form. The evolutionary analysis is a means for identifying what is common in the existing use of the concept, not a means for imposing strict criteria, expectations or view of reality on the concept. Rodgers' concept analysis aims at producing the consensus statement on a selected concept (Rodgers 1993b, 77). The results of the concept analysis do not provide the infinite definition of the concept, but do help to define and clarify the concept in the context where it is used. (Rodgers 1989a, 333)

Evolutionary concept analysis was developed in the field of nursing science, but it is a general approach to analysing concepts, and also offers an approach to concept analysis in health management sciences. It is flexible enough to enable different purposes, and variation of goals in concept analysis (Rodgers 1989a, b, 1993b). This model is based on several assumptions that differentiate it from the essentialist approach: 1) the concepts are not stable but change over time due to societal influences; 2) the contextual factors (discipline, social, cultural and/or theoretical) are taken in consideration when analysing the concepts; and 3) it

offers a scientifically rigorous approach to concept analysis,³⁷ e.g. by emphasising the strict search strategy for data, and explicit methodological choices. (Rodgers 1989a, 1993b.) In addition, concept development is an ongoing process.

Evolutionary concept analysis has several phases. First, the concept and associate expression, and the appropriate realm for data collection are identified; secondly, the actual data is collected regarding the essential characteristics of the analysis (see Table 10), followed by data analysis and interdisciplinary and temporal comparisons if needed. Finally, a model case is identified, and hypotheses and implications for further development suggested. (Rodgers 1993b.)

Table 10. The dimensions of Rodgers' concept analysis model (Rodgers 1989a, b, 1993b)

Dimension	Description
Attribute	Primary characteristics of the concept
Antecedent	Event or phenomena that generally precede the concept
Consequence	Follows an occurrence of the concept
Reference	The range of events, situations, phenomena after the appropriate application, i.e. the actual situation of application
Surrogate term	Philosophical position that a concept may be expressed in different ways, i.e. interchange of terminology, manifestation of the concept
Related concept	Connection to other concepts

Inductive, descriptive means of inquiry are used to clarify the current status of a concept by identifying a consensus to examine the historical or evolutionary background of the concept, and to determine the areas of agreement and disagreement in its use among diverse disciplines (Rodgers 1993b, Cowles & Rodgers 1993, 94). The utilisation of every piece of data recorded is a concern for researchers, however, there are always data which shed only a little light on the characteristics of the concept. In sum, some of the data collected might be irrelevant as the concept becomes clearer through analysis (Cowles & Rodgers 1993, 97).

Rodgers' model of concept analysis was chosen for this sub-study because it allows focus both on the current use of the concept in different contexts, and on temporal changes in the use. At the same time, it provides a systematic frame of analysis, as it is dynamic and sufficiently flexible.

³⁷ Sampling has important effects on the findings (e.g. Rodgers 1989a). A discrepancy in Rodgers' concept analysis model is in its emphasis on both quantitative and qualitative traditions. The systematic search, and in particular, the explicitly given instructions for the size of the sample represent a positivist orientation, while the analysis method itself is purely interpretative and inductive (see also Juvakka 1996).

5.2.3 The data used in the concept analysis of health care prioritisation and rationing

The aim of the concept analysis affects the selection of the setting and sample for data collection (Rodgers 1993b). In this sub-study, the aim was to find out how the concept has evolved temporally. The data were gathered systematically from different databases. In January and February 2003, three databases (Medline, Cinahl and Cambridge Scientific Abstracts (CSA)) were searched systematically using the keywords 'priority setting', 'rationing' and 'prioritisation'.

The search was limited with options such as 'resources', 'policy', 'political', and 'organisation' in order to gain information on the use of the concept at the macro level in particular. The sample included articles and editorials, while letters, news, commentaries, interviews and columns were excluded. In addition, reference lists containing a total of 47 articles (see the previous chapter) were searched manually to identify the classics in this field. Altogether 12 articles received 6 or more mentions in reference lists, and these were considered as classical volumes (see Appendix 5; compare to Cowles & Rodgers 1993).

To ascertain the evolution of the concept, the data was divided into three periods; before 1990, 1991-1996 and 1997 onwards. These phases are named as the first, second and third phase later in the text. Publication activity has emerged exponentially since the 1990's (see Table 11). All the classics were published before 1997.

Table 11. Summary of the literature search for the concept analysis

Sample	Before 1990	1991-1996	1997-2002
Database search			
Total number (685)	89	306	290
Number (Overlaps excluded, 343)	49	151	143
Sample	15 (31%)	15 (10%)	15 (11%)
Available	13	13	15
Classics 1990-2000 (n =12)	3	9	0
Total number in stratum	16	22	15

The results from the systematic database search were first organised by year in alphabetical order to obtain the total number of the articles in each stratum, and to guarantee that articles from different years would be presented in the actual data. At this stage, some duplicates were excluded. It soon appeared that the first phase was the smallest stratum (n = 49) while the others were much larger (n = c.150). Beth Rodgers (1993 a, b) recommends that the sample should be either 20% of the total number of data, or at least 30 pieces, depending on which is greater.

However, while the chosen analysis method was inductive content analysis (as recommended by Rodgers 1993b), it was felt that the total number of articles included in the analysis should not be too large. Therefore, it was decided that 15 articles would be selected from each stratum. Systematic sampling was used so that every third article was included from the first stratum, and every tenth article from the two others. In summary, the total number of articles included in the data was 57 including 12 classics, too. Each stratum was considered as a separate population.

Once the selection had been made, the suitable articles were acquired, and this proved to be somewhat problematic in some cases. The decision was made that those articles not available in Finland would be excluded. This was due mainly to the limit in time and financial resources. To maintain the total number of data, when an article from the original sample was unavailable, the one appearing alphabetically on the list before it was included in its place.

This problem was relevant to the first and second strata only, as all the articles in the third stratum were available. However, some articles from these strata still had to be left out of the study. This was largely because they ultimately proved to be unsuitable, and this was realised only after having obtained them (in other words, the article did not deal with the issue or was a column or commentary). A total of 53 available articles were suitable for the analysis.

Analysis

Beth Rodgers (1993b) states that in analysis, the emphasis is on an inductive, discovery approach, focusing on the identification of the relevant aspects of the concept. The standard procedure of content analysis or thematic analysis is a suitable technique³⁸. In this instance, inductive content analysis was the analysis method chosen. Klaus Krippendorff (1986, 65) states that two kinds of decision are needed when using content analysis. The first is that the analyst must employ all the knowledge she or he can possibly obtain, to distinguish between relevant and irrelevant material. The second pertains to the election of random sampling if the relevant material remains too large. The sample should be large enough to contain sufficient information, and remain small enough for analysis. These considerations were described earlier in the section on obtaining data.

³⁸ Although it can be questioned whether a standard procedure for content analysis exists; (e.g. Insch et al. 1997, Cavanagh 1997).

A qualitative content analysis coding scheme consists of categories, classification rules, and the words (units) assigned to the categories. Defining categories is central to this method; it is usually useful to define categories that illustrate similarities or differences. The central focus in this method is distillation through analysis of words into fewer content-related categories. Basically, words in the same category share the same meaning. There are some other important issues to be considered when using content analysis. 1) What is the unit of analysis: a word, word sense or a phrase, sentence, paragraph or document? 2) Is the aim to analyse manifest or latent content, or both? 3) In the analysis process, are single or multiple classifications used if a word has attributes of more than one category? (Cavanagh 1997, Insch et al. 1997, Bos & Tarnai 1999, Kyngäs & Vanhanen 1999, Kondracki et al. 2002)

The articles were first read through to acquire their general tone. After this, they were re-read, and antecedents, consequences, etc. were marked by underlining them. The aim was to find manifest content, but the researcher also analysed latent content when making decisions, which sentences are essential in terms of analysing the concept. The unit of analysis was a meaningful expression, and each stratum was analysed individually. Following this, own files for every strata and dimension (for example, antecedents 1990; antecedents 1991-1996) were created. At the analysis stage, multiple classifications were used if it was evident that the word or sentence belonged to more than one category.

The analysis began with reading through the plain expressions from the articles (e.g. Kyngäs & Vanhanen 1999, Tuomi & Sarajärvi 2002). These were then reduced, and the reduced expressions categorised, and new categories formulated, as long as they were meaningful. The results presented here are the main categories. These could have been categorised even further, but this was not done, since it was felt that the categories would become too general. The categories were also compared with each other in time and order, to ascertain the kind of changes, if any, that have taken place concerning the use of the concept. Some pieces of data did not fit in the main category system, but were still relevant in terms of understanding the concept, and therefore were presented in a category of their own. (Rodgers 1993b, Cowles & Rodgers 1993, 97).

5.2.4 Results of the concept analysis of health care prioritisation and rationing

In general, the concept of health care prioritisation has changed moderately during the analysed period of time, and over the years, the use of the concept has become more common. The antecedents have changed during the studied period, reflecting the development of society and health care systems, and the attributes of health care prioritisation have expanded. The consequences of the concept remain somewhat unclear; they were merely guesses and predictions of what might happen. Health care prioritisation is a “process” concept. In other words, the boundaries between antecedents, attributes, and consequences were not clear, and therefore, the same theme could be categorised in different categories depending on the context of use.

The attributes of both prioritisation and rationing are presented in Table 12. The concept of rationing changed moderately during the observed time. The common attribute for rationing was ‘restriction’. In addition, it was clear that rationing is also about decision-making. As an attribute, ‘decision-making’ has increased from the first to the third phase. During the first phase, the focus was on methods and the basis of decision-making, while in the third phase, procedure and rationale were also considered important. During the second phase, the attribute ‘ambivalent’ also emerged from the literature. This means that rationing was seen as having both positive and negative components, for example; *“A cure for health care”* and *“Rationing is not necessary: there are gains to be made in improving the efficiency of both care provision and purchasing decisions”*

Table 12. The evolution of attributes of the concepts health care prioritisation and rationing

	- 1990	1991 – 1996	1997 -
Prioritisation	<ul style="list-style-type: none"> • Relative • Comprehensive and complicated • A process of decisions 	<ul style="list-style-type: none"> • Relative • Changing and universal • Context-related and complex process of decisions • A solution • Softer than rationing • Unreachable 	<ul style="list-style-type: none"> • Relative • Difficult and tragic • A decision-making process • A slow change
Rationing	<ul style="list-style-type: none"> • Restrictive • Selective choice • Decision-making 	<ul style="list-style-type: none"> • Restrictive • Decision-making • Ambivalent • A change • Unclear 	<ul style="list-style-type: none"> • Restriction • Decision-making • Ambivalent • Problematic • Instituted

The attributes of the concept of health care prioritisation during the observed time were: 1) a relation between two or more; 2) a fair and justified decision-making process; and 3) complexity and difficulty due to values and the changing nature of prioritisation. The attribute 'a relation between two or more' means that some kind of reference (group, services, individuals, etc.) is needed when assessing a priority. "*A priority itself has no practical meaning (1st phase)*". An explicit criterion, such as individual characteristics or decision-making rules, might be used in such an assessment.

A fair and justified decision-making process is the second attribute. Based on this analysis, the aim of the prioritisation decisions is to achieve the optimal decision in difficult and complex settings, using a rigorous procedure. During the first phase, decision-making focused mainly on resource allocation, and later, the focus expanded to cover other aspects of health care, too (access to care, health care services). However, resource allocation remained such an important element of the decision-making category, that in the second phase, prioritisation was seen as a solution to resource allocation problems.

Since the 1990's, justifying decision-making has become an important element. This justification was pursued in both the rationale of the decisions, and the procedure by which the decisions were made. Changes in the economical and societal contexts also create difficulties in the prioritisation process. From this perspective, its complexity and difficulty are due to two main factors; the individual and the societal value judgements involved in the process.

In the first and third phases, prioritisation was seen as also including a strategic orientation, while during the second phase, the attribute 'political' was related to the concept. Decision-making in the concept of prioritisation refers to political and strategic level decision-making, with the emphasis on the processes and procedures of decision-making. On this basis, prioritisation can be said to have a future orientation, and may be presumed to be a form of steering mechanism for health service provision.

Contradictory attributes also emerged during the second phase, as it was felt that attaining perfect or, at least, optimal decision-making is not possible. In addition, during the second phase, the emphasis was also on viewing prioritisation as a milder solution than rationing. An element of slow change was seen as an attribute in the third phase. In sum, while the attributes have evolved slightly temporally, the actual concept has expanded from resource allocation to include other types of decisions on health care services, and access to care. Lately, change has been considered an element of prioritisation.

If comparing these two concepts, it appears that they were quite closely related during the period 1991-1996. Since then, some form of separation has occurred; they have a common core (decision-making), but rationing has 'restriction' as an attribute, while for prioritisation it is question of 'relation' and 'assessment'. Rationing includes an element of 'ambivalence' in its use, whereas prioritisation includes 'problematic' or 'difficult' in its attributes. Temporarily, both concepts have gained some 'flesh', but as a concept, rationing appears to be more mature than prioritisation.

The concepts had fairly similar antecedents (Table 13), with some exceptions. While in terms of prioritisation, the importance of knowledge was mentioned in the two earlier phases, in the first phase, values and their changes were discussed in relation to rationing. During the second phase, rationing was seen as having growing conviction, and similarly, prioritisation was seen as a way to cutting through the present chaos. In additionally well-known individual cases were related to prioritisation in the third phase.

Some antecedents that occurred continually over the observed time were 'expanding needs and demands', 'cost containment requirements', 'allocation of limited resources' and the 'need to improve decision-making in health care'. 'Demographic changes', 'technological advances' and 'changes in the understanding of death' were found as reasons for increasing needs and demands, as were cost containment requirements.

From the evolutionary perspective, some notable changes in antecedents were apparent during the analysis. Although expanding health care needs and demands occurred through the observed time, the tone of the discussion changed. In the first phase, increased health care needs were merely discussed "*more people are in need (the 1st phase)*". During the analysed period, health care needs turned into health care demands. In the third phase, the stronger rights of citizen were seen as one of the reasons for increasing demands "*patients' pervasive vision of health care as a right leads to insatiable demand for services (the 3rd phase)*".

Table 13. The evolution of the antecedents of the concepts health care prioritisation and rationing (P= occurred only in relation to prioritisation, R= occurred only in relation to rationing)

-1990 categories	1991 - 1996 categories	1997 – categories
Expanding health care needs	Health care needs and demands are increasing	Increasing demand for health care
Cost containment pressures due to rising costs of care	Cost containment is needed	Cost containment requirements
Allocation and use of limited resources	Difficult resource allocation due to the widening gap between resources and possibilities	Difficult decisions in allocating limited resources
Need to improve decision-making in health care	Challenges to decision-making Recent health care reforms	Problems revealed in current organisation of health care and recent reforms
Knowledge needed in prioritisation (P)	Lack of relevant information for prioritisation (P) Access to care	Health and social services that should be offered to all
Fears of cutbacks	Priority setting as way of cutting through the chaos of the present system (P)	Well-publicised cases of individual exclusion (P)
A competitive free market system as a mechanism for distributing health care services	The growing conviction of the superiority of explicit rationing (R)	
Changing and even conflicting societal and individual values (R)		

These changes reflect at least two larger trends in society. 1) The professional-lead discussion on needs based on epidemiological knowledge has been replaced by the citizen's stronger position in decision-making, both concerning own health and as political decision-making. 2) The stronger emphasis on economics and its terms and ideas (e.g. the emergence of neo-liberalism, privatisation, and new public management).

Two themes were apparent as antecedents during the second phase: health care reform and access to care. Since the 1990's, it has been more common to plan and implement health care reforms. While health care reform was discussed generally in the second phase, inequalities, especially those revealed by the reforms, were the focus of the third phase. In addition, the 1990's brought the issue of access to care with all its associated problems into the discussion. A theme which was discussed in the two earlier phases, and which was not present in the third phase, was the role of information in decision-making. Do we have

enough information nowadays, or is the issue simply a question of consumer's choice, and not a big policy problem?

Some antecedents were apparent which were closely related to the time and context. For the first phase, these were the fear of cutbacks, and a competitive free market system as a mechanism for distributing health care services. During the second phase, prioritisation was identified as a way of cutting through the chaos of the present system. The third phase was marked by well-publicised cases of individual exclusion, which were mentioned as antecedents for prioritisation, mainly due to the widely published case of child B.

The consequences of health care prioritisation were not clear in the articles analysed. In addition, consequences were identified in only a minor part of the articles. It was worthy of note that in this context, the authors did not analyse the consequences, but rather focused on the goals of health care and achievement of those goals. Three common themes were found in the analysis (Table 14). Firstly, there is no consensus on the kinds of effects and outcomes due to changing priorities, and a philosophical point of view *"no consensus about priority setting outcomes (3rd phase)"*.

Secondly, consequences could be controversial, either positive or negative impacts on individuals, society, costs, and resources. Examples to highlight this from the first phase include *"life-threatening conditions were treated (1st phase)"* or *"some will be treated while others will not (1st phase)"*. In addition, the effects on costs were estimated as varying from having a very marginal influence to an effective way of cost containment. The third common theme was that prioritisation would cause certain kinds of changes in health service provision.

There were also themes that did not continue over time. In the first phase, it was assumed that the task of policy-makers and clinicians would become more difficult. In the third phase, one consequence was that, while prioritisation has revealed problems in decision-making, it has also improved it, *"improved legitimacy and fairness of priority setting decisions in organisations (3rd phase)"*.

The analysis of consequences revealed that we lack knowledge on the effects of health care prioritisation. We can be certain of some of the effects (e.g. in Oregon, the ranking list of treatments and conditions expanded coverage among certain part of the population), but others merely represent wishes or fears of what might happen. In addition, health care prioritisation was seen as a means of achieving the goals of health care reform, although

there were contradictory views on what these goals actually are, as well as on what those of the health care system are.

Table 14. The evolution of the consequences of the concepts health care prioritisation and rationing (P= occurred only in relation to prioritisation, R= occurred only in relation to rationing)

-1990 categories	1991-1996 categories	1997- categories
No consensus on the kinds of effects on the future of health care	The consequences are difficult to assess due to changing priorities (P)	No consensus about outcomes which could be reversed depending on philosophical framework (P)
Might have both positive and negative effects on individuals and values	Might have both positive and negative effects on both individuals and societal values	Might have both positive and negative effects on costs, resources, access to care and basic values and goals
Cost containment requires limits in health care delivery	Changes in the health care system and service provision in future	Consumers dislike the limited supply of services (R)
The task of both clinician and policy-maker are likely to become more difficult		Has revealed problems in decision-making but also improved it.
If doctors will not, the governments, bureaucrats and law will participate in health care rationing (R)		

The references of the concept describe the contexts in which it is commonly used. In this analysis, references are observed from three different perspectives, 1) country-basis, 2) level of the society, and 3) health care / services.

The references of the concept of health care prioritisation were fairly stable. Due to the search strategy, prioritisation is widely discussed in relation to Anglo-American countries (the UK, the USA, New Zealand, Canada, Australia). Some Scandinavian countries were included, especially in the second phase. The context was their health care systems either at national, regional or organisational level (macro – micro levels). This either means that the publication and discussion activity is most active in these countries, or this is due to the way in which the data was gathered. The databases were of Anglo-American origin, and the language of publication (English) guided the data gathering in this direction. All levels of society (macro – micro) were represented in this analysis, although it could have been that the micro level could have been excluded due to the limitations in data gathering.

Health care prioritisation is typically discussed in relation to life-saving treatments, for example, emergency care, both adult and neonatal intensive care, cardiac care, organ

transplantation and cancer care. In addition, nursing was seen as a reference in the first phase, and in the second phase, discussion also focused on mental health care. In addition, there were two patient groups that were regularly mentioned in relation to health care prioritisation – critically ill patients and elderly people. Furthermore, in the second phase, people with medical disabilities, and mentally ill, poor, and homeless people were also discussed, focussing in particular on discrimination against them. This phase also gave a human face to the discussion by introducing the case of child B. It was typical for this second phase that the phenomenon was discussed from two different perspectives; as a hypothetical issue, and as a part of real life. The third phase also focused on the terminally ill.

Rodgers recommends that surrogate and related terms each require an own concept analysis to be sure that they are surrogates and related terms. However, in this case, this is too distinctive (except for the concept rationing). Rationing was at first recognised as a surrogate term for prioritisation, but during the analysis, it became apparent that rationing is, in fact, a related term. Prioritisation and rationing share some similar attributes, but they also have different ones. In addition, they mainly share the same antecedents and consequences. Resource allocation was also seen as a related term. What these concepts all have in common is that they have a basis in decision-making (see Figure 5).

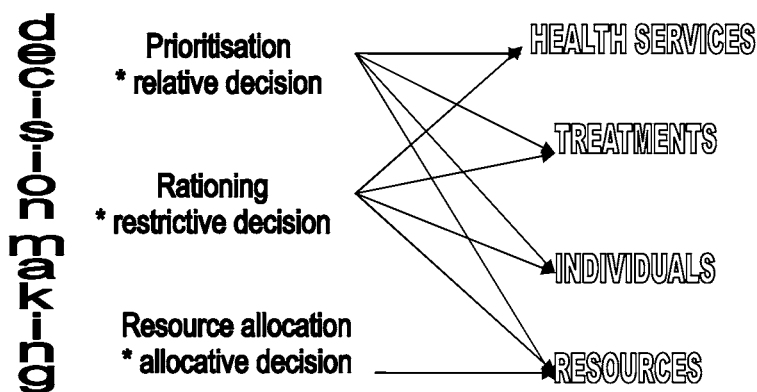


Figure 5. The relations between the concepts of health care prioritisation, rationing, and resource allocation.

A tentative definition for prioritisation has been made on the basis of the analysis. *“Health care prioritisation is a process of fair and justified decisions between different interests, in order to steer health care provision in changing and complex settings”*. The current consensus of the concepts of rationing and prioritisation are summarised in Table 15.

Table 15. The current consensus on the use of the concepts of health care prioritisation and rationing

Antecedents	Attributes	Consequences
<ul style="list-style-type: none"> • Increasing demand for health care • Cost containment requirements • Problems revealed in current organisation of health care and recent reforms • Health and social services that should be offered to all • Well-publicised cases of individual exclusion (P) • Difficult decisions in allocating limited resources 	<p>Rationing:</p> <ul style="list-style-type: none"> • Restrictive • Decision-making • Dilemma • Ambivalent • Instituted <p>Prioritisation:</p> <ul style="list-style-type: none"> • Relative • Difficult and tragic • A decision-making process • A slow change 	<ul style="list-style-type: none"> • No consensus about outcomes which could be reversed depending on philosophical framework (P) • Might have both positive and negative effects on costs, resources, access to care, and basic values and goals • Consumers dislike the limited supply of services (R) • Has revealed problems in decision-making but also improved it.

5.3 A conceptual clarification for health care prioritisation

In sum, these results present the consensus among Western, developed countries on health care prioritisation. Developing countries are completely missing from this sample. The reference is health care, although it was admitted in the first phase that “priority setting in other fields like social work, biomedical research, science policy and research is no less challenging”. From the health services perspective, prioritisation and rationing are typically used in relation to 1) specific disease groups (e.g. renal dialysis, organ transplantations), 2) a specific part of the population (e.g. elderly people, disabled people), or 3) certain types of health care services (high-technology services). Neither rationing nor prioritisation is used in relation to primary health care services or preventive services in this data, although these services should be discussed if health care prioritisation or rationing is focusing on the comprehensive development of health care services.

In the field of health management sciences, at least in Finland, concept analysis as applied in this study is still scarce, even though concepts are important tools for researchers and practitioners. In terms of the development of knowledge, the role of concept analysis is crucial. With a clearly defined concept, it is possible to classify or characterise phenomena more adequately, and in turn to evaluate the strengths and limitations of the concept. (Rodgers 1989a, 1993b, 75.)

The credibility of the sub-study has been approached from two different perspectives: an evaluation of the process of the analysis, and the evaluation of the outcome of the process.

In correspondence to Beth Rodgers' thoughts on concept analysis, and the ontological assumptions of qualitative research methodology, this analysis provides a way to understand the use of the concept at a specific time (Rodgers 1993b, Kymä et al. 2003). It reflects the view on health care prioritisation only of those articles included in the data. However, the sampling was systematic and, therefore, it could be stated that distortions in data sampling were controlled. The data included articles that held both negative and positive attitudes towards health care prioritisation, and offered different perspectives to the issue. The outcome of this analysis process is not a definite truth concerning health care prioritisation; rather it offers a preliminary phase for further research and theory construction.

The data in this concept analysis consisted of written texts, which meant that the analysis dealt with semantics. One crucial credibility concern deals with understanding the authors' thoughts and ideas from texts that have been written in different cultural settings as well as, from the analyser's perspective, in a foreign language. For these reasons, the texts were read through carefully many times to guarantee that everything that was considered essential in terms of analysis was identified from the articles, and included in the data.

At the analysis stage, the categorisation of meaningful expressions was repeated in order to agree the logic of analysis and the categories (Insch et al. 1997). Similarly, the analyser occasionally verified the interpretation of meaningful expressions from original articles during the analysis process, and research notes were also kept.

One crucial concern in any kind of study is the position of the researcher. Beth Rodgers (1993a, b) states that the researcher should not have any hypotheses on the data prior to analysis. In this instance, the researcher has been working with the topic for several years, and it would be impossible to expect a total relinquishing of all presumptions concerning it. However, the research notes were helpful in providing an insight into any presumptions the analyser might have had about the phenomenon. In addition, because of the nature of the researcher's education, the analysis was carried out from the perspective of health management sciences, and this has certainly had an effect on the results. One important factor is that the analysis process can also be described as a learning process for the researcher; some old presumptions changed, and a wider understanding of this phenomenon was attained.

Although Rodgers' concept analysis is a fairly flexible frame, providing that the researcher argues what she or he is doing in order to maintain the rigorous study design, some points still require attention. It is important to note that in this study, the sample sizes were smaller

than Rodgers recommended. However, the data was still rich enough to gain an overview of the concept and its temporal evolution. In qualitative analysis, the quantity is not crucial, to the extent that some qualitative researchers warn that too large samples are difficult to analyse qualitatively (e.g. Sandelowski, 1995). Therefore, the requirement of a certain number of pieces is contradictory to methodological approaches that encourage a qualitative approach. Another variation to Rodgers' recommendations for concept analysis is the formulation of a model case, which in this instance was not considered necessary, as the purpose of analysis was not to obtain a definitive truth.

Janice Morse et al. (1996) provide another perspective in the evaluation of concepts and their adequacy in their analysis. The emphasis of evaluation is on the maturity of the concept. In other words, a mature concept is well-defined, has clearly described characteristics, delineated boundaries, and documented preconditions and outcomes; hence it can be measured. Health care prioritisation is a still-evolving concept; there is no consensus and clear consistence in its use among theoreticians, researchers, and practitioners. For example, definitions of the concept of health care prioritisation varied from narrow to broad in the texts analysed. When health care prioritisation is defined narrowly, it is fairly close to health care rationing. One indicator for immaturity is the interchangeable use of the concepts to explain the same phenomenon. In addition, the outcomes of health care prioritisation are quite poorly recognised and described.

Summary of the results

Health care prioritisation is a complex issue and many factors affect it that are difficult to solve at once. The concept analysis revealed at least two reasons for this. Firstly, health care prioritisation is a constantly evolving, context-dependent phenomenon. The concept analysis showed that use of the concept has evolved in scientific writing over recent decades. Health care prioritisation closely reflects changes in the societal and cultural context. Mikko Knuutinen (1998) states that prioritisation is closely related to some mega trends – a decrease in legislative regulation, an emphasis on the local authority and changing economic policy. While there are also other mega trends, the effects of new public management, consumerism in health care, citizen's rights, market reforms in health care and their implementation, and growing concerns to access to care were discussed in relation to health care prioritisation during the 1990's (see e.g. Harrison 2004).

Secondly, because of the unclear goals and objectives of health care, there is no consensus on the outcomes of health care prioritisation, though they are important in terms of policy

making (Bäckman et al. 2004). As Marc Berg and Tom van der Grinten (2003, 132) note, the fundamental problem is that health care does not have just one goal; there is a complex composite of many goals, including fuzzy ones such as 'maintaining a sense of security in the population', or 'reassurance', 'improving quality of life', the 'need for a last hope', etc. The goals are variable and context-dependent, making their explication and formalisation over and above individuals excruciatingly difficult, they cannot be ranked or grouped in any harmonious way (Berg & van der Grinten 2003, 132).

As a concept, health care prioritisation is a social construct, as many social sciences concepts are clearly constructs, in use for both primary actors and secondary actors (Töttö 2000). As Stewart Clegg (2003) points out, it is critical for the legitimacy of second-order constructs that either managers see themselves within, and thus act in terms of these paradigmatically constitutive definitions and images, or that what managers might think and do is irrelevant for academic practice.

The academic concerns with paradigms remain separate from the concerns of practitioners. This concern is also valid in the field of health care prioritisation. Therefore, the social constructs of non-academics on health care prioritisation are also worthy of study. As Michael Reagan (1990) notes, because health care issues are high on government agendas, concepts are essential, and especially in policy-making disputes, since words are weapons. He refers to Stone and continues "the way we in which we think about problems is extremely sensitive to the language used to describe them". Discussion on health care prioritisation and rationing has indicated this.

Health care prioritisation is still immature as a concept (Morse et al. 1996). There is a form of conceptual diversion in prioritisation, which means that the phenomenon is either given new names or the extent of the concept is constantly increasing. There are many concepts that are close to health care prioritisation and rationing, such as cutback management, resource allocation, and cost containment. However, they all have their specific meanings, and these should not be mixed with health care prioritisation.

Janita Björni and Toini Christiansson (1996) even emphasise the negative side of health care prioritisation, stating that "health care prioritisation is seldom used when a new form of technology is implemented, it is called development instead". Alan Maynard and David McDaid (2003) consider rationing and resource allocation to be related concepts. Resource allocation means to designate resources for a special purpose, and allocation lacks the connotation that hard choices have to be made among individuals. Allocation decisions are

administrative decisions. Rationing differentiates between individuals, and aims at finding criteria that meet an equity test when making choices. It is non-price distribution with a comparative element. (Reagan 1990).

Michael Reagan (1990) differentiates rationing from cost containment by saying that rationing is a means to cost containment. The current consensus on the concepts is slightly different to what Reagan has analysed. Cost containment is seen as a one possible outcome of rationing and prioritisation processes. Furthermore, allocation is a sub-concept for both, i.e., both prioritisation and rationing might include allocative decisions.

5.4 A Model for the Analysis of Political Decision-making on Health Care Prioritisation

The purpose of the model (Figure 6) is to put the preconditions and requirements for health care prioritisation decisions into operation at both the meso and macro levels. This model has been created to help policy-makers set specific questions when formulating a prioritisation decision, and to ensure that the essential dimensions are taken into consideration in political decision-making on health care priorities. The model is based on the view of policy-making as a constant process with several phases (policy initiative, decision-making, implementation, evaluation and reformulation, which are in iterative relation to each other, see, e.g., Ham & Hill 1984, Rist 1994, Milio 1998).

I have followed the ideas promoted by Nancy Milio (1998) in terms of the interest groups, understanding of their actions, and the importance of policy environment analysis. Norman Daniels and James Sabin's (2002, see also Daniels 2000a) thoughts on the process of prioritisation (accountability for reasonableness) have also been made use of in this model. The content of the model is constructed on the basis of the results from both the concept analysis and the systematic review of previous empirical research (described in Chapters 4 and 5).

The model consists of the following parts: analysis of policy environment, analysis of policy process, analysis of policy decision, and analysis of policy outcomes.

Analysis of policy environment

Analysis of policy environment can be done from three different perspectives. The most general level, and that which is most usually taken for granted, is that of the social and health care system. Analysis of policy environment includes the analysis of the current health care

system, health care values and reforms, as well as the culture and history of health care. This can be called macro level analysis, since it also covers societal analysis.

The most important questions at the policy-making stage concern both values (what are the values guiding the health care system) and reforms (whether there is any reform ongoing, the adoption of new public management principles in health care, for example). In addition, it is important to take note of legislative, programmatic or other health policy guidelines that create a macro structure for health care prioritisation decisions. The analysis of the macro environment might be tacit knowledge among policy-makers, but as the systematic review points out, the goals of health care are not commonly shared, and this is also the case concerning the values guiding health care.

The next level is that of problems in society, which were revealed as antecedents in the concept analysis. The focus of analysis at this stage is how or why the issue has entered the policy agenda. The previous literature summarised six reasons for this in terms of health care prioritisation decisions: the increasing demand for health care; cost containment requirements; difficult resource allocation decisions; problems in the current health care organisation and reforms; universalism in access to health care; and the effect of the media. For health care prioritisation decision-making some of these problems can be recognised why the policy process has been activated.

The third aspect of the analysis of policy environment includes the analysis of previous decisions and decision-making patterns. The analysis can vary from the analysis of a single decision, to a group of decisions. Furthermore, these decisions may be recent, or may be those that were made some time ago. As was noted in the concept analysis, health care prioritisation is a decision-making process, and not a single decision. Therefore it might be useful to identify the “chain of decisions” that are related to each other.

Analysis of the policy decision

Analysis of the policy decision is the core action in health care prioritisation decisions. The analysis can be categorised as follows: the target of the decision; the decision alternatives; and how the relation aspect is included in these alternatives – what the grounds (evidence/criteria) are for the decisions, the policy instruments, and the degree of change compared to current practice.

Analysis of implementation is related to this phase since the previous policy-making stages have an effect on implementation. One crucial question is how the implementation is supposed to take place, who are the implementers, and what are the instruments for policy implementation?

Analysis of the policy process

In the concept analysis, one of the attributes of the concept of health care prioritisation was a fair and justified decision-making process that included both the rationale of the decisions, and the procedure through which the decisions are made. Norman Daniels and James Sabin (2002) offer four criteria for the policy process: 1) the publicity condition, i.e. decisions are public, and the grounds for the decisions are transparent; 2) the relevance condition, i.e. that the public can agree with the grounds; 3) revision and appeal, i.e. the decisions can be revised; and 4) regulation in order to meet the other three conditions. These four criteria can also be applied in this context.

In addition, the participants in decision-making can be analysed as part of the policy process. The participants can be divided into two categories, 1) those who are immediately involved in decision-making, and 2) those who have interests in decision-making. Analysis of both of these groups is important in terms of decision-making, and especially in the implementation of decisions. A great deal of discussion has been focused on the role of the public in health care prioritisation. Therefore, it should also be considered in this context.

Analysis of the policy outcomes

Analysis of the outcomes of the health care prioritisation process, based on the previous literature, was the most difficult part of the process. However, it is a very important phase, as it is through analysis of the outcomes that it can be ascertained whether or not the decision-making has been successful (e.g., in terms of health care goals). In addition, the actual effects of health care prioritisation can be shown by analysing the outcomes of the decision-making process. However, the analysis of outcomes requires the analysis of a group of decisions (process), not just a single one.

<p>The decision-making process and its requirements</p> <ul style="list-style-type: none"> • Publicity condition; relevancy condition; revision and appeal; and regulation (e.g. Daniels & Sabin 2002) • Participants in the decision-making process; interest groups; the role of the public in this process 		<p>The expected outcomes of the decision-making process</p> <ul style="list-style-type: none"> • Positive or negative in terms of costs, resources, access to care, and basic values and goals • Effects on decision-making in the future? • No consensus or knowledge on expected outcomes <p>How to measure the expected and actual outcomes?</p>		<p>The policy decision</p> <ul style="list-style-type: none"> • Is it a question of health care resources, services, coverage, treatments, or individuals? • Who is the target group? • What are the decision alternatives? • What choices are supposed to be made? (Relation to what?) • What is the evidence for the decision (different forms of evidence)? What are the grounds of the decision? (E.g. criteria, arguments for the decision) • What kinds of ethical/moral dilemmas are included? • What are the means of implementation? Who are the implementers? • What change is required compared to current practice? 		<p>The decision-making process</p>	
<p>Previous decisions and decision-making procedures</p> <ul style="list-style-type: none"> • Increasing demand for health care • Cost containment requirements • Allocation of limited resources • Problems in current health care organisation and recent reforms • What are the core services in social and health care? • Problems raised by the media 		<p>The mechanism through which the issue is raised on the policy agenda</p>		<p>Current health care system; values in health care; reforms in health care; culture in health care; history of health care</p>			

Figure 6. The analysis model for decision-making

It must be noted that this model is not a comprehensive one, and is not applicable to every situation (see e.g. Milio 1998). It can, however, aid in the acquiring of a comprehensive view of this field. Some phases of the policy process were somewhat poorly identified in the previous literature, and the analyses based on it, and therefore, they have received less attention in such models. Implementation issues, for example, have been one of the main themes of this study, but implementation did not emerge as a main issue from the systematic review or concept analysis. As noted earlier, however, it must be remembered that earlier phases of the policy process also have an effect on policy implementation.

A future challenge will be to test this model. The questions raised in the following list offer an aspect to formulate, for example, a questionnaire on this topic. One interesting point of study is whether these features can be identified, and whether this tool helps decision-makers to prioritise health care. If these conditions are met, then prioritisation decisions can be made. Similarly, if restriction is included in decision-making, then rationing decisions are made. Other decision-making cannot be called prioritisation or rationing.

6 DISCUSSION AND CONCLUSIONS

This research report corresponds to my own learning process that has taken place over recent years, and during which I have spent time studying, and also teaching issues related to health care prioritisation. During the process, I have reconsidered my basic beliefs on this phenomenon, and finally, have to admit that there is no easy solution or simple answer how to prioritise in health care. However, some points have been clarified during this research process, and they are discussed next. There is no repetition of the original research results; instead they are discussed in general. The discussion on the results is presented first, followed by some conclusions, and then, because many issues were beyond the scope of this study, the chapter ends with some recommendations for further research.

6.1 *The validity and credibility of this study*

This study consists of three sub-studies. Validity, reliability and credibility issues are discussed in relation to each chapter, and therefore, only some crucial points are considered here. One critical issue in both qualitative and quantitative research is that the researcher makes her choices explicit, and I have tried to follow this principle in this research report. The question still remains, is there something that could have been done differently? My answer is yes, but perhaps then the study would not be the same, and the results would not be as present. In a way, this research process has been done “upside down”, and if I were to begin the process again, the concept analysis would be the starting point. Now, however, it provides a good point for continuation (see section 6.3).

Clearly the strength of this study is in the effort to analyse the phenomenon systematically, and cumulate existing knowledge. The study contains both a systematic summary of previous research, and a conducted analysis of the concept. These are two of the less-studied areas in the field of health care prioritisation, although a fairly substantial body of research as such can be found. Some concept analyses (reviews) have been carried out both on priority setting (Lind & Wiseman 1978, Nilstun 2000, Liss 2002), and rationing (Liss 2002, Russell 2002), but their shortcomings are due to a lack of explicitness and system. In other words, neither of these authors described the material (how the data was acquired, where, and what the data actually was) on which they based their concept analysis, or the logic used in ana-

lysing it. In addition, concept analyses on priority setting are merely descriptions of the concept, and can be called concept definitions instead.

In addition, another strength of the study is in the application of methodology, which at least in Finland, is less used in health management science. It was found that the methodology of concept analysis is also suitable in this field. In the field of health management sciences, a concept analytic research orientation is needed in order to clarify the basic concepts used (if a concept is applied, e.g., from administrative sciences and used in the field of health care management, it needs to be analysed and defined in this “new” context, too)³⁹. Similarly, if the concept is used in many different disciplines, a concept analysis is required. Systematic review and concept analysis create a good basis for further research.

This thesis is written in English, as the topic has both international and national relevance, thus language becomes a critical issue. There is always the risk that one cannot express one’s deepest thoughts when writing in a foreign language. This was evident both in the systematic analysis and the concept analysis – were the original authors’ ideas understood as they were meant to be? The results are interpretations made by this author, and can be questioned. However, in the field of qualitative research, it is accepted that the researcher has an impact on the results as she or he makes interpretations on the basis of the data. In addition, the results present the current consensus on prioritisation, not a definitive and final truth of the issue. One basic premise is that the concepts are constantly evolving.

My own position as a researcher is a point worthy of consideration. As noted earlier, I have been working with this topic for a long time, and therefore, I am familiar with the phenomenon. I have also followed and participated in national and international discussion on this field for several years. This previous understanding may have had an effect on the results in the second and third sub-study, in which I analysed data mainly inductively⁴⁰. Beth Rodgers (1993b) specifies that the researcher should not have any previous understanding of the topic when conducting concept analysis. However, I do not see this as a major threat to credibility. Previous understanding has, in fact, helped me to interpret and understand the phenomenon more comprehensively.

³⁹ This critique is analogical to the critique of the application of general management models in health care practice without considering how these models will “work” in different settings (see e.g. Vuori 2004). My opinion is that in both cases, it is important to apply the concept or the model in the context of health care.

⁴⁰ The doubt exists, however, whether analysis can ever be purely inductive (i.e. the researcher has at least an intuitive assumption on the phenomenon) and therefore, it can be called abductive analysis instead (Grönfors 1985, 33).

A third critical issue emerged from the limitations made during the research process. My primary interest was to find out what health care prioritisation means as a macro/meso level issue, and this guided all the choices made. Obviously, the limitations raise the questions of whether the scope of the study was narrowed too much, or whether there should have been even stricter limits. Surely, for example, the results of the systematic review would have been different if more countries had been included. In addition, the study would have been more coherent if I had focused on implementation issues, e.g., by analysing an empirical case. While the focus of this study is on health management sciences and politics, more use could have been made of aspirations from other fields, such as health economics, public health and philosophy (e.g. the concept analysis could have been carried out by disciplines to compare how the concept is understood in different disciplines). Nevertheless, limitations are needed in order to complete the task.

With regard to the second and third sub-studies, it is important to consider the material used in the analysis. There are several perspectives to this issue: 1) the quality of the material; 2) the selection of the material; and 3) factors that are beyond the researcher's control (Hill & Hupe 2002, 119). I presumed that the peer review, and publication in a scientific journal ensured the quality of the material. Otherwise, the whole peer review process can be questioned.

Selection of the material used is another critical issue. A literature search requires special skills in order to make decent searches. I consulted a librarian during the search processes, but made the searches myself, and they could perhaps have been more accurate if conducted by the professional. In addition, more databases could have been included in the searches, although I considered the chosen ones the most important in terms of health care prioritisation.

The third point refers to the matter of what gets publicised and where it is published. In other words, it is a question of different journals' editorial policies. This affects the point of whether the findings advance the understanding of prioritisation or not. (Hill & Hupe 2002, 119). Another issue is that unpublished material (e.g. seminar papers) was entirely omitted from these sub-studies. Such material may have offered different perspectives to the discussion on health care prioritisation.

The question still remains of whether implementation research was a successful choice of frame for the two sub-studies. It offered a frame of analysis directing the scope to issues between politics and administration. It guided me to consider what really happens in between

the two. However, it was not possible to analyse a real prioritisation policy and its implementation, since there are none in Finland to date (at least no explicitly stated prioritisation policy).

The analysis did, nevertheless, reveal that politicians' attitudes do not correlate with budget decisions, and implementation theory offers some explanations why this is so. Moreover, it seems that implementation research is "old-fashioned" from the post-modern perspective (Hill & Hupe 2002, 85). An approach called governance offers fresh thinking that resembles implementation research, and makes a top-down approach, in particular, rather dated.

The change in epistemological and ontological assumptions during this research process are another issue worthy of consideration. This could make the structure of the report difficult to follow, and the whole study may suffer for it. Initially, I adopted an empirical view on the phenomenon, and considered that health care prioritisation was measurable and definable. I carefully considered what I could 'get' from this phenomenon using a positivist approach with a technical interest of knowledge, and my conclusion was that nothing more could be added to what had already been said and written. Nevertheless, this does not mean that I do not appreciate empirical research, or positivism as an approach, or that I do not value the empirical work done in this field.

Once this conclusion became clear, I sought alternatives, and two options emerged over the others, either to focus on previous publications and research, or to interview politicians and find out about the complicated issues surrounding implementation in more depth. I chose the first option, partly due to research economy, and attempted to understand the phenomenon.

This required changes in epistemology, ontology and methodological choices towards a hermeneutic interest of knowledge and constructivism using Galtung's (1977) terms. This decision reflected a paradigmatic shift that can be seen in the entire academic community, in which we also have the mere adoption of post-modern thinking with no acceptance of one truth and a dominant paradigm. The spirit of the modern age is one of intellectual relativism and post-modernist views that criticise the medical progressive view of history, and recognise that "the activity of science is a product of the very social world it tries to explain". Such relativism has undermined the scientific certainties of research. (Davis & Howden-Chapman 1996, referring to Fischer 1993.)

6.2 Discussion of the main results and conclusions

The main findings of this study were:

1. Health care prioritisation is a context-dependent phenomenon that evolves temporally. Both the survey data and concept analysis revealed this. Similarly, as the survey results showed, the attitudes toward health care prioritisation are also context-dependent. Furthermore, the results of the concept analysis revealed that the concept has evolved over time, reflecting larger societal changes.
2. It is important to analyse the decision-making processes of prioritisation, in order to understand the dynamics of policy processes, and to improve them. However, it is equally as important to study the implementation of these decisions. The attitudes and actions within municipalities, as compared to national health policy guidelines, displayed some differences, indicating that implementation is a crucial phase in the process. Concurrently, implementation is a less-known process in the policy cycle.
3. Previous research has provided contradictory evidence in terms of policy-making. Fundamental issues include whether decisions on prioritisation can be made on the basis of previous research, and vice versa, to what extent scientific evidence can be made use of in health care prioritisation. Further research is needed to support decision-making. Even though multiple analyses that focus on decision-making processes and different actors' actual behaviour have already been conducted, an understanding of decision-making processes in practice is still essential, and must be strengthened.
4. As a concept, health care prioritisation is still evolving, reflecting the contextual changes. While health care prioritisation is a universal concern both in developing and western countries, the phenomenon is different. There is no shared understanding of what we can achieve by prioritising health care, and this also reflects the unclear of goals of health care. As a concept, rationing has a more accurate meaning, and it has a strong theoretical basis in (health) economics. From this perspective, health care prioritisation as a concept is still immature.
5. As well as methods, different methodological approaches are needed in order to study the characteristics of health care prioritisation in more detail. Survey research has potential, but is also limited in this field, as is also the case for other methods. Multidisciplinary and multi-methodological approaches are needed in addition to "summative" research (e.g. systematic analyses).
6. An analytical tool for the health care prioritisation process was constructed on the basis of these results (see Figure 6). The tool can be used as a framework for policy-makers when making decisions on prioritisation, as well as being an analytical tool for academics conducting research in this field.

Health care prioritisation is about making decisions. As Jorma Palo (2001, 69) states, the goal of the individual's life is not to have it all, but to do it right, i.e. to develop right and wise solutions. This is also the core issue in the discussion on health care prioritisation. The right decisions are those in line with health care goals (Liss 2003). We cannot have all the possibilities of modern health care, but we must think about how to find wise solutions.

This is even more important in the near future, since the advances in health care technology are exponentially increasing, requiring an increasing number of resources for health care nationally. Similarly, the expectations of health care are increasing. The challenge is how to differentiate between needs, demands and expectations, and to decide whether or not health care is supposed to meet the needs, the demands or the expectations. We can all agree that needs must be met, but in terms of health care prioritisation, demands and expectations create a challenge. In addition, health care cannot be driven by technological imperative alone (see e.g. Rynänen et al. 2004), care should also be emphasised (e.g. the Hastings Center Report 1996).

Health care prioritisation is usually described as a difficult issue whether it occurs at the macro, meso, micro, or individual level. There are at least two different explanations why this is the case. Health care prioritisation is an emotionally charged concept. The concept of prioritisation is also used e.g. in the fields of infrastructure and business, although prioritising the investments in roads does not emerge as a huge discussion in the newspapers. Health care prioritisation decisions are made every day individually, in groups, organisations, municipalities, etc., but the decision-making context is that of health and illness, suffering, pain, and death. Because of this difficult context, I see a clear role for health management science, and an indication of its own paradigm. In this field, the challenging context of decision-making is combined with theories from administrative sciences, management theories, or other disciplines (see also Vuori 2004).

Another reason why health care prioritisation is difficult concerns the broad concepts related to prioritisation, and the different approaches to them. How, for example, we define health, disease or illness. Which philosophical orientation do we use when we approach the issue (liberalism, utilitarianism, egalitarianism, communitarianism)? With different understandings of these concepts, and by adopting a different ethical stance, we have different understandings of health care prioritisation. (Nilstun 2000, Hoedemaekers & Dekkers 2003a, b.) Therefore, it is important to clarify the concepts and approaches we use in discussion.

Health care prioritisation and the research focusing on it are in close relation to the wider societal context. Health care prioritisation can be seen as a social construct evolving in time. This study has both scientific and practical relevance that are discussed next.

One concern in the scientific debate on health care prioritisation has been the lack of theoretical foundations of the phenomenon, and the lack of an accumulation of knowledge. Both the systematic review and the concept analysis attempted, at least partly, to fill some dimension of this gap. The systematic review cumulated information on selected studies and the evidence they provided for decision-making. Rodgers' concept analysis model was also a good choice for this study. It revealed some important changes in the evolution of the concept, and pointed out the evolvement of the context where the concept is used.

The contribution to health management sciences is twofold. On the one hand, this study has strengthened the field's knowledge base by analysing health care prioritisation from the perspective that combines political science and health management science. On the other hand, two somewhat novel methodological approaches have been used. Systematic reviews have been used widely in other disciplines (e.g. medicine, nursing), but they occur much less as methods in health management sciences, at least in Finland. Similarly, there is a scarcity of concept analyses, as they are understood in this study.

From the health care prioritisation research perspective, this study offers a less-seen perspective to the issue. Although much attention has been paid to the process of prioritisation (e.g. Daniels & Sabin 2002), the decisions are not self-implementing, and therefore, implementation research or its applications also have a role in health care prioritisation.

Whether implementation research has its role in the post-modern world is another interesting issue. The emergence of governance discussion instead of implementation research indicates the changes in the social context. It reflects the effects of new public management, for example, and changes in organisational and political structures (Hill & Hupe 2002, 110). However, implementation issues as such still remain relevant and worthy of study. The approaches developed in the 1970's and 1980's may no longer be relevant, but the decisions are still implemented, and research on this phase of policy process is needed.

This study also makes some contributions to health care system research internationally, by offering a perspective on health care prioritisation in the Finnish context, as well as discussing it in relation to other countries' solutions. This can also be considered as practical relevance.

In terms of Finnish health policy, prioritisation decisions are constantly made, but are not called prioritisation. In the light of the examples from other countries, Finland is formulating a prioritisation model, although it is not called a prioritisation model as such. The formulation and implementation of evidence-based guidelines, and the growing emphasis on health technology assessment, have lately been implemented.

Furthermore, at the beginning of March 2005, a care guarantee⁴¹ will be implemented, and this is an indication of health care prioritisation. However, there are two factors that differentiate Finland from the other countries in terms of prioritisation. 1) In Finland, these processes are made separately with many different actors, and there is no coordinative actor (compare, e.g. the National Health Committee, New Zealand, the National Centre for Priority Setting in Health Care, Sweden). 2) The explicit processes are realised mainly by experts. Both public discussion and information on health care prioritisation is scarce in Finland. Perhaps Finland is still waiting for an individual catastrophe to happen (compare to the US, New Zealand, the UK) in order to be able to discuss health care prioritisation more explicitly?

The concept prioritisation can be abandoned or it can be used, this is not the point, but the issue is that the basic problem remains. Choices and decisions must be made in health care. The challenge in Finland should also be to accept the process of priority-setting as the political process that it inevitably is, to find optimal ways to institutionalise the process with and within the health care system, and to feed the process with meaningful information (Berg & van der Grinten 2003, 115). As Pekka Himanen (2004) notes, in order to maintain and develop the Finnish welfare state, we need to develop the deep structures of our society, and this means changes in the current organisational structures, and the adoption of new innovations.

6.3 Suggestions for further research

From the scientific point of view, health care prioritisation is not an easy phenomenon to study. Different kinds of approaches, data gathering and analysis methods are needed in order to gain an insight of the phenomenon at the different levels of the health care system. This requires the adoption of a variety of research strategies, as well as a multidisciplinary orientation. Health care prioritisation is not "owned" by a single discipline, it is a multidisciplinary field, and therefore, more co-operation is needed between the different

⁴¹ However the term "care guarantee" is not used in Finland because its use might give the wrong signal to citizens in terms of subjective rights to health care.

disciplines, as well as systematic analysis on what has already been done. Even though in its strictest sense, evidence-based policy-making is an impossible task, as academics, we need to offer different kinds of information to aid policy-makers in their difficult job.

As was the case in my Master's thesis, this research has again revealed more unanswered questions than it has provided answers (see e.g. Klein 2000). The suggestions for further research can be analysed from three perspectives, 1) theoretical-methodological, 2) empirical-practical, and 3) future-orientated.

Obviously, there is still much to be done to clarify the theoretical aspects of health care prioritisation for theory construction in the field. One option for this approach would be the further development and application of decision-making theories. Systematic reviews and concept analyses with different aims can be helpful in theory construction, but empirical research is also needed. In addition, new methods and methodologies are required to study health care prioritisation.

From the policy-making point of view, more effort should be made towards the implementation of different policies, including the initial policy-making stage. Policy formulation should be seen as a process, and it must be analysed more carefully than by merely asking what to choose in single non-contextual situations. Canadian colleagues (e.g. Singer et al. 2000, Martin et al. 2001) have done promising research with an in-depth analysis of specific committees and their decision-making processes on, e.g., new drugs.

From the Finnish point of view this is something we should learn about. From the empirical point of view (which of course supports the theory development), a focus for further studies would be to analyse decision-making practices and processes among politicians and/or civil servants, in order to understand the logic of health care prioritisation decisions. The tool presented in section 5.4 could be made use of in this type of research, as it points out the stages that need to be analysed, and helps to set specific questions in relation to these stages. However, the tool must be tested and modified for practical situations, as it currently still has an emphasis on use for academic purposes.

To return to comments made earlier about the choices made during this research process, I would now be ready to direct this process towards an empirical orientation. So far, health care prioritisation research has mainly been retrospective if conducted in real situations (e.g. Plomer et al. 1999, although there are also case studies that describe ongoing processes).

The future trends of health care prioritisation will be of interest, especially from the policy-makers' point of view in order to formulate health policies.

A prospective orientation is needed if health care prioritisation is intended to steer health care, and this can be achieved by studying its different future scenarios. Application of methodology used in the field of future studies is suitable for this kind of approach. The research group (see Ryyänen et al. 2004) will establish an expert panel of leading Finnish actors in this field during the spring 2005. The consensus or argument Delphi method (see e.g. Kuusi 1999, 2004) will be used with this panel to gain an insight into Finnish health care and health care prioritisation during 2015-2020. The main outcome of this will be different future health care scenarios, which may also reveal its future goals and priorities. In this process my contribution will be to analyse and interpret the data from political - administrative or implementation research perspective. The tool presented in section 5.4 will be utilised at this stage.

Secondly, these results will be presented to the general public via seminars, in which they will be able to have an effect on the scenarios. Optionally, the public's acceptance of the scenarios could be ascertained using questionnaires or interviews. The final results of this kind of process can be used as a basis for policy-making both at national and local level, and therefore, it can also be called parliamentary technology assessment.

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APPENDIX 1. An example of the question type in survey 1995

1) This is a health care budget in average municipality in Finland. A symbol in this budget means approximately 0.7 percent of total health care costs. If you have to cut seven percent of total costs, which are the services you would cut?

For example: 0.7 percent cut from visits to GP

Visits to GP	△△△△△△△△△
Primary health care:	
Visits to GP	△△△△△△△△△
Home nursing	△△
Laboratory services	△△△
Radiological services	△△
Rehabilitation	△△△
Patient´s transportation and ambulance services	△△
Dental services	△△△△△△
Environmental health care	△△
Health education	△△△
School health care	△△
Occupational health care	△△
Health centre hospital	△△△△△△△△△△△△ △△△△△△△△△△△△
Specialised care	
Surgery, gynaecology and obstetrics, otorhinolaryngology	△△△△△△△△△△△△△△ △△△△△△△△△△△△△△ △△△△△△△
Internal medicine, neurology and geriatrics	△△△△△△△△△△△△△△ △△△
Psychiatry, mental health services	△△△△△△△△△△△△△△ △△△△△△△△△△△△△△
Other specialised care, administration, radiological and laboratory services	△△△△△△△△△△△△△△

APPENDIX 2. Actual processes in Finnish municipalities (n = 45). Changes in the number of visits, costs, and percentages during 1993-1999.

Budget category, costs⁴²	1993	1995	1998⁴³	1999	Change 1993-1999 %	Change 1995-1999 %	Change 1998-1999 %
Social and health care (total costs / 1000 €)	805268	846291	956876	1010036	25,4	19,4	5,6
Social and health care administration (costs / 1000 €)	14994	16913	17783	22906	52,8	35,4	28,8
Primary health care (costs / 1000 €)	132812	134311	151032	146892	10,6	9,4	-2,7
Dental care in primary health care (costs / 1000 €)	19711	19188	22253	22529	14,3	17,4	1,3
Secondary health care (costs / 1000 €)	218666	229329	279075	289767	32,5	26,4	3,8
Home care (costs / 1000 €)	27612	30550	33174	40131	45,3	31,4	21,0
Income support (costs / 1000 €)	40853	47102	45468	41380	1,3	-12,2	-9,0
Environmental health care (costs / 1000 €)	4210	4058	4717	4773	13,4	17,6	1,2
Percentages of service group of total social and health care net expenditure⁴⁴	1993	1995	1998	1999			
Primary health care	23,1	22,7	21,7	21,2	-8,2	-6,6	-2,3
Secondary health care	30,1	28,9	31,0	31,1	3,3	7,6	0,3
Social care	46,1	48,2	44,5	44,4	-3,7	-7,9	-0,2
Environmental health care	0,85	0,86	0,78	0,78	-8,2	-9,3	0
Changes in number of visits	1994⁴⁵	1995	1998	1999			
Home nursing – visits of GP ⁴⁶	2 987	2 510	3 160	3 419	14,5	36,2	-5,3
Home nursing – visits of nurse	132 283	135 098	N/a	N/a			
School health care – visits to GP	22 050	22 472	18 631	17 051	-22,7	-24,1	-8,5
Occupational health care	16 794	25 053	35 632	40 265	139,8	59,8	13

⁴² Costs are calculated by summing the total costs of all 45 municipalities together

⁴³ Data of total costs is missing from 1 municipality in 1998

⁴⁴ The percentage is the mean of 45 municipalities

⁴⁵ Data not available from the year 1993

⁴⁶ Information is missing from 5 municipalities in 1998, and 7 in 1999

APPENDIX 3. Articles (n = 47) included in the systematic review (1/3)

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Tymstra T, Andela M. 1993. Opinions of Dutch physicians, nurses and citizens on health care policy, rationing and technology. *JAMA* 270, 2995-2999

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Wensing M, Mainz J, Ferreira P, Hearnshaw H, Hjortdahl P, Olesen F, Reis S, Ribacke M, Szecsenyi J, Grol R. 1998. General practice care and patients' priorities in Europe: an international comparison. *Health Policy* 45, 175-186

General information

Name of the author(s) and the name of the article:

1. Year of publication and source:
2. Country
3. Scientific background
 - a. Health economics
 - b. Health policy and management
 - c. Medicine
 - d. Public health
 - e. Multidisciplinary
 - f. No information
4. Is author
 - a. Practitioner
 - b. Consultant
 - c. Academic
5. Correspondent author's background institute:

Concept definition

1. Concept used
 - a. Priority setting
 - b. Rationing
 - c. Both
2. Why the used concept has been chosen?
 - a. No grounds for choice
 - b. Reason (s)
3. Has the concept used been defined
 - a. Yes
 - b. No
4. Write the definition:
5. If the concept has been defined or the issue discussed in theoretical frame, how has it been done?
 - a. With help of goals or aims
 - b. With help of levels
 - c. With help of reasons, what were mentioned?
 - d. With help of priority setting criteria, which one(s)
 - e. With help of methods for priority setting
 - f. By discussing the explicit / implicit priority setting
 - g. Other?

6. Are any characteristics of the phenomenon presented?
 - a. No
 - b. Yes
7. Is the process seen as inevitable?
 - a. Yes, why?
 - b. No, why?
8. What kind of structure does the theoretical background have? What is the main point?
9. Other comments on background section

Empirical study

10. The group(s) asked
11. The size of original sample
12. Response rate and number of respondents
13. Year of data gathering
 - a.
 - b. Not mentioned
14. Data gathering method
 - a. Structured questionnaire
 - b. Semi-structured questionnaire
 - c. Unstructured observation
 - d. Unstructured, in-depth interview
 - e. Semi-structured interview
 - f. Structured interview
 - g. Thematic interview
 - h. Delphi-technique
 - i. Focus groups
 - j. Panels
 - k. Analysis of existing data or documents
 - l. Combination of different data gathering methods, which?
15. Orientation
 - a. Qualitative
 - b. Quantitative
 - c. Triangulation
16. Sampling method
 - a. Simple random sample
 - b. Stratified sample
 - c. Quota sample
 - d. Systematic sample
 - e. Cluster sample
 - f. Discretionary sample

- g. Willingness to participate
- h. Total sample
- i. Combination
- j. Not expressed clearly

17. Sampling is focused on
- a. Whole country
 - b. Specific area or community:
 - c. One organisation

18. Type of the study
- a. Primary (original) research
 - b. Concept analysis
 - c. Evaluation research
 - d. Case study
 - e. Methodology testing
 - f. Intervention
 - g. Survey
 - h. International comparison

19. Aim of the study

20. Study questions:

21. Study design

22. Data analysis methods used:
- a. Statistical analysis, which?
 - b. Qualitative analysis, which?

23. Is the data analysis described in detailed and understandable way?
- a. Yes
 - b. No

24. Is the study part of a research project?
- a. Yes
 - b. No
 - c. Not mentioned

Operationalisation of the concept

25. Which level of priority setting the study is focused on?
- a. Macro
 - b. Meso
 - c. Micro
 - d. Individual
 - e. Macro and meso

- f. Meso, Micro and Individual
- g. Other

26. How the concept has been operationalised?

27. What are the main results the author presents?

28. What conclusion(s) the authors made?

29. Do the authors comment validity and reliability of the study?

30. Do the authors present any recommendations for priority setting or rationing especially to policy-makers?

31. Do the authors present any suggestions for further research?

Other comments:

APPENDIX 5. Articles (n = 53) included in the concept analysis (1/3)
(Articles belonging to classics stratum are in italics).

Aaron H. & Schwartz W. 1990. Rationing health care. The choice before us. *Science* 247, 418-422.

Anand P. 1999. QALYs and the integration of claims in health care rationing. *Health Care Analysis* 7, 239-253

Annas G. 1985. The Prostitute, The Playboy And The Poet: rationing schemes for organ transplantation. *Public Health and the Law* 75, 187 – 189.

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Bowie C., Richardson A. & Sykes W. 1995. Consulting the public about health service priorities. British Medical Journal 311, 1155-1158

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- Felder S. 1997. Costs of dying: alternatives to rationing. *Health Policy* 39, 167-176.
- Fisher M. & Raper R. 1990. Withdrawing and withholding treatment in intensive care. *The Medical Journal of Australia* 153, 217-220.
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APPENDIX 5 (3/3)

- Malone N. & Rycroft-Malone J. 1998. Equity and rationing in the NHS: past to present. *Journal of Nursing Management* 6, 325-332
- Martin D., Abelson J. & Singer P. 2002. Participation in health care priority setting through the eyes of the participants. *Journal of Health Services Research and Policy* 7, 222-229.
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1. Analysis of policy environment

- Macro level
 - What are the societal values guiding the decision / policy-making?
 - Is there a need to change (or try to change) societal values through the new policy?
 - Is the decision at hand consistent with societal values? Is it acceptable?
 - Is the decision/policy related to current health care reforms, and how?
 - What are the legislative regulations in terms of the choices in hand?
 - Are there any national guidelines that must be taken into consideration when formulating this policy/decision?
- Problems in society
 - What are the reasons why the issue requires political attention?
 - Increased demand, cost containment, resource allocation, organisational problems, content of basic package, effects of the media
 - What is the mechanism through which the issue emerged on the political agenda?
 - Professionals, media, public, civil servants, etc. paid attention to it
- Previous policies
 - What are the previous policies or decisions that have an influence on the decision in hand? For example, the resource allocation decisions, strategic guidelines, etc.
 - What is the typical procedure for making decisions? Who actually has the power regarding this decision/policy (civil servants, elected policy-makers, professionals...)?

NOTE: Some of these aspects could also be discussed under the other topic – boundaries are not clear between the sections.

2. Analysis of policy process

- Does the policy process meet the four criteria?
 - Are the decisions / is the policy public?
 - Is the process transparent so that the grounds of the decisions are also public? Are the grounds consistent between the decisions?
 - Can the general public agree with the grounds?
 - Can the decision be revised? Are there any revision mechanisms available if the decisions require revision? Who is responsible for making revisions?
 - Is the achievement of three criteria regulated, and if so, by whom?
- Who are the participants in the decision-making process?
 - Who actually made the decision?
 - How are the interest groups taken into consideration?
 - What is the role of health care professionals in this process?
 - What is the role of civil servants / elected policy-makers in this process?
 - How has the general public been involved in this process?

3. Analysis of policy decision

- What are the alternatives in terms of the policy/decision? How is the relation aspect taken into consideration?
- What are the competing interests in terms of the decision/policy?

APPENDIX 6 (2/2)

- Does the decision/policy target health care resources, services, coverage, treatments, or individuals?
- If individuals are the focus, what is the group?
 - Elderly people, critically ill patients, terminally ill patients, or mentally ill patients?
- What kind of evidence is used in decision-making?
 - Scientific, statistical, colleagues' opinions, etc.
 - How is the evidence available?
- Are there any criteria typical for health care prioritisation discussed in terms of the decision, and if yes, which one(s)?
 - Age, self-inflicted, severity of disease, deservedness of care, etc.
 - How are the different criteria combined in decision-making?
- Does the policy or decision change current health care practice, and if so, is the change minor or major?
- What kinds of ethical and moral problems does the decision /policy raise? (what makes the policy/decision difficult and tragic?)
- How has the implementation of policy decision been planned?
- What are the main policy instruments, i.e. the means to implement the policy/decision? (resources, regulation, education, administrative changes, etc., see Milio 1998)
- Have the main implementers been recognised?
- What kind of implementation games are expected to be played?

4. Analysis of policy outcomes

- What are the expected outcomes of the prioritisation decision for the public, health services, access to and demand for health care, allocation of resources, cost containment?
 - Are the expected outcomes negative or positive in terms of these groups?
 - Can these be evaluated?
- How does the decision/policy develop current health care practice?
- What are the actual outcomes of the prioritisation decision regarding the public, health services, access to and demand for health care, allocation of resources, cost containment?
 - How can these be measured?
 - Any statistical information available? When?
 - Any patient satisfaction data available?
 - Is it necessary to collect information for this purpose only?
 - Who is responsible for a) collecting the data, and b) providing feedback for the policy process?
- Did the policy/decisions promote the achievement of health care goals?
- Did the actual outcomes raise a need to reformulate the policy? How about the policy-making process?
- From which perspectives can the outcomes be interpreted?

NOTE: The problem in measuring the actual outcomes of the policy is how to identify the effects of one policy (the effects of one decision can be even more difficult to recognise).

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