health care BUDGETING

goals, structure, attitudes

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Edgar Borgenhammar

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FOREWORD

This study reflects my interest, going back many years, in the budgeting of medical care. My Master's thesis at the University of California in Berkeley at the beginning of the 1960's was influenced by the growing interest in program budgeting that was so marked just then. I discussed the possibility of applying this type of budgeting to hospitals. My dissertation for the degree of Licentiate at the Stockholm School of Economics in 1967 was concerned with the economic management of hospitals and emphasized the role of the budget.

As director at the Danderyd Hospital in the late 1960's, one of my first tasks was to cut the budget. Again, as administrative manager for the southern district of the Stockholm County Council's Health Care Board from 1971 to 1978, I was concerned with budgeting as a central issue. During the last 15 years I have held many courses on the management of health services and here, too, I have frequently emphasized the importance of a dialogue on budgetary issues.

In the present study I have tried to systematize various ideas and experiences, both my own and other people's. My point of departure has been my Licentiate dissertation and the interviews that I held in that connection with leading politicians, physicians, and administrators in the medical care system. The interviews took place during 1966. On certain points they have now been complemented to reflect conditions in 1977-78.

Science consists of building bridges between facts. By this means it may become possible to reach a better understanding of human actions. By describing, explaining and predicting we can provide ourselves with some guidance for the future. In the present case my overriding purpose has been to seek knowledge: to describe and to analyze rather than to prescribe how budgeting should be carried out.

The need to change direction is more marked in a stagnating or declining economy than in an expanding one. In a really harsh situation it may be necessary to re-assess even areas of top priority. The budget should then be regarded

as one of the main steering instruments at the disposal of the actors, just as it is in an expanding economy.

My warmest thanks go to all those people who have answered my questions, and to those who have inspired and criticized me. Without their commitment it would never have been possible for me to produce a study of this kind. I owe thanks especially to professors Aaron Wildavsky at the University of California, Berkeley, and Thomas Thorburn at the Stockholm School of Economics for their advice over the years. Thanks also to the secretaries who have typed several versions of this manuscript, especially to Mrs Lena Spångberg and Mrs Ingrid Rosenvinge.

The 1966 investigation was made possible by a grant from SJURA, forerunner of the Swedish Planning and Rationalization Institute, Spri. The translation into English has been made by Mrs Nancy Adler and has been financed by the Swedish Institute for Health Economics.

Gothenburg, the Nordic School of Public Health
August 15, 1979

Edgar Borgenhammar

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SUMMARY

In many highly developed countries medical care is one of the fastest growing sectors in the economy. In 1977 it received about 9 per cent of the Swedish gross national product.

A budget functions as an instrument for rationing. Applied in the health care field it provides opportunities for cost containment that insurance policies, for example, cannot provide. As a consequence, interest in budgetary control can be expected to increase as concern grows about medical care expenditures.

PURPOSE OF THE STUDY

The purpose of this study is to increase our knowledge in the tools of health care budgeting and its goals, and to analyze the relation between goals and action alternatives. Attitudes among the key groups are investigated. In this way I hope to create a better understanding of the problems that people meet in budgeting.

THE STRUCTURE OF THE BOOK

The empirical material in the study is from Sweden. In this country the health service system is decentralized (see Chapter 2). There are 23 county councils and three municipalities which are responsible for the provision of health care. Most of the costs are financed by a proportional county council income tax. In 1977 only 3.4 per cent of the county councils' medical service costs were financed by patient fees.

The development of health care costs can be seen as an effect of countervailing powers. Some of these contribute to the increasing costs; others stimulate cost containment (see Chapter 3).

An analysis of goals for the budgetary system is presented in Chapter 4. The budget is seen as an instrument for political priority-setting, for influencing action, and for cost control. Twelve budgetary aspects are also described (see Chapter 5).

For each aspect a number of action alternatives are introduced and analyzed in relation to the goals of the budgetary system. Interviews and enquiries have been made in order to reflect attitudes among key groups: political and administrative actors at the central county council level, as well as senior physicians and people in hospital managerial positions. Some developments in budgeting over recent decades are discussed. Areas for further research are suggested (see Chapter 6).

METHODS

The study has its roots in the classical analytical approach to scientific method (see Chapter 1). However, my long connection with the practical management of health care, and the dialogues that went with it, have increased my understanding for a more actor-oriented approach. This may be reflected in the presentation of the interviews and in the discussions.

In 1966 I held 153 interviews with decision-makers from four management categories in all the government health care agencies in Sweden (see Appendix 1). In order to get an idea for the changes over a decade, I interviewed county council managers in 1977 and sent questionnaires in 1978 to administrators and physicians (see Appendices 2-4).

SOME FINDINGS

Different interest groups, such as physicians, administrators, and political decision-makers, view the goal of the budget system differently. Executive committee chairmen ranked "instrument for priority-setting" higher as a budgetary goal than did the other interviewed groups (see Chapter 4, pp. 35-36). Senior physicians were more skeptical than were the other groups toward a budget system which provides the politicians with more opportunity than at present to decide where the utility of an increase in appropriations is greatest (see p. 37).

Chairmen of county council executive committees, who have occupied their posts for a longer period of time, judged their own influence to be higher than did their colleagues with shorter experience. The same difference is observed between full-time and non-full-time political decision-makers: the former judged their own influence to be higher, particularly in connection with new constructions and rebuilding (see pp. 38-41).

Hospital administrators were more reserved than were the other three groups with regard to providing politicians with more information than at present about what happens in the hospital (see pp. 39,42). All four categories interviewed were in favor of more cost information for physicians, though senior physicians and political decision-makers were less in favor than the other two interviewed groups (see pp. 43-44). Senior physicians and political decision-makers also showed

similarities in their reactions toward making the budget system a better basis for control than it is at present. Control was considered particularly important by central and local administrators (see pp. 44-46).

The 1966 interviews seem to reveal more expansionist tendencies than the enquiries in 1978, as regards senior physicians. This refers to attitudes toward costs at the national level. The physicians in the 1978 study considered the politicians to be more expansionist than they would be themselves if they were to decide. However, when their own medical field is concerned, a fair number of the respondents favored "considerable increase" (see pp. 47-50).

Hospital administrators is the group which showed least satisfaction with the budget system (see Chapter 5, pp. 54-56). Proposed changes are more likely to be critically examined in the budgetary work than existing projects, which tend to continue from one year to the next. In other words, budgeting is incremental, not comprehensive (see pp. 56-61). Build-up budgeting is the usual form, but in some county councils steps have been taken toward break-down budgeting (see pp. 62-65). Both revenues and expenses are reported as a whole, that is, gross budgets are applied (see pp. 66-68).

A cost center budget was favored by the four categories interviewed in preference to program, performance and cost classification budgets. The use of official cost center budget has been increasing slowly in the counties during the last decade. The majority of the central hospitals were still using cost classification budgets in 1978. The dissatisfaction among hospital administrators with respect to the structure of the budget seems to have increased between 1966 and 1978 (see pp. 54-56, 77-78).

Central decision-makers in the county councils were more skeptical than hospital administrators and senior physicians toward more local control over funds, or framework budgets (see pp. 86-88). The so-called 7 kronor reform in 1970, when physicians went on to fixed salaries, constituted a change in incentives with respect to ambulatory care (see pp. 97-100).

The more competitive the financial situation, the more likely it is that tactical elements will enter into budget applications (see pp. 110-118). Major changes have taken place during the 1970's with respect to increased personnel participation in the budgetary process. The Swedish Co-determination Act of 1977 formalizes union involvement (see pp. 119-122). Since 1966 the interest in and use of long-range planning in the health field has increased. The willingness to re-examine earlier allocations is assumed to be greater in budgets designed to last two or more years than in one-year budgets (see pp. 124-130).

1 PROBLEMS AND METHODS

PROBLEMS

Two methods based on different principles are available for the financing of health services. One is the method of the free market, where demand and supply are balanced by means of prices. The other is grounded on the allocation of tax revenues according to a formal political decision process. The second of these will be the subject of examination in the present study. There are no exact procedures in decision processes of this kind to indicate the size of the expenditure. No methods are available for stating objectively which demands should be given priority. In public administration contexts priority-setting and resource allocation generally emerge as a process of political negotiation.

Importance of the budget

A *budget* is a systematic economic plan for a specific period of time. It registers politically determined appropriations, indicating in what way or for what purposes resources are to be used.

The concept of the *budget system* refers to the formal composition of the combined appropriations in the budget and the principles applying to their preparation and allocation. Within given legal, political, organizational and administrative limits, a budget system can be designed in different ways. The concept of *budgeting* designates the process by means of which a budget comes into being.

What roles does the budget play in Swedish medical care? One answer could be that it has no real significance. If the argument runs that all medical care is valuable and everything spent on it is a good thing, if there are no problems of scarcity - then such an answer may be valid. If there is no limit on the expenditure allowed, no budgeting should be necessary. Such a system can work as long as someone is prepared to pay.

Alternatively, the answer could be that the budget is of great importance as a rationing system, since resources are limited; that two budgets based on political decisions will result in different allocations of resources; that there are implications for patients with different diagnoses, patients in different geographical areas or different institutions etc.

If the latter view is correct, the budget can be regarded as an instrument of practical politics. The allocation of resources can then be expected to reflect political values. In the former case, on the other hand, the budget is hardly a political instrument. But when the budget is imbued with authority, it is an instrument - and an important one - in particular for the medical care politicians.

If the budget is of no importance, then the same will be true of the budget system. At best it could then be regarded as a summarizing of demands. If, on the other hand, the budget is important, two assumptions can be made about the budget system: it lacks, or it does not lack, importance. Subsequent discussion in this study is based on the assumption that the budget system is not without importance.

Role of values and norms

Budgeting in medical care is directly or indirectly concerned with life and death, illness, relief and cure. In some respects it touches upon the value of dignity of human life. An understanding of the budgetary process must allow for the important role of values and ethical norms. The interplay between different actors - the bearers of ethical norms - is therefore of fundamental importance (Blomquist, 1977).

Government budgets provide the grounds for tax assessment and are a means of redistributing resources. Certain groups and individuals are subjected to a reduction in their economic resources for the benefit of others. And resources are redistributed between different periods in a person's life. In a way this redistribution fills the function of an insurance for the individual.

Budget research

My interest in studying budgeting was aroused in 1963 after listening to a lecture by Professor Aaron Wildavsky at the University of California in Berkeley. He had recently completed his study, *The Politics of the Budgetary Process*, which involved an analysis of American federal budgeting. Since I had been working for a county council office a few years before in an administrative capacity, I recognized many of his findings from my own experience. His frame of reference included actors, intentions and dialogue. There was an awareness of the complexity of budgetary tactics in public administration. Demands are never limited in the way that resources are, and for this reason budgeting can become a question of

conflict and the resolution of conflict. Professional, political and administrative ambitions, influence and power, strategies and tactics for the achievement of particular goals - all these can play a part in the budgetary process. Groups representing different interests may have different ideas about the action alternatives to be chosen. When it is impossible to satisfy all demands, the result of the budgetary process tends to satisfy some claimants more than others.

Process-oriented budget research

Wildavsky's approach highlights the process of budgeting and conflict resolution in government organizations. This kind of research, which sets the actors in the budgetary process in the focus of attention, represents one of many approaches (see for example Argyris, 1952; Anton, 1966; and Hofstede, 1967).

Another area of study concerns the reduction of uncertainty in the budgetary process. How and on what bases are directives given? How are claims presented? What are the forms for coordination and review? To a greater or lesser extent a budget is based on forecasts of the outcome of factors over which the decision makers cannot have complete control. With plans and forecasts uncertainty enters the picture. It affects various groups: initiators, physicians, administrators, politicians, trade union representatives, and other pressure groups. Some of it is genuine uncertainty; knowledge is actually lacking. Some of it is practical uncertainty; because of a lack of overview, it is not always possible to make use of such knowledge as does exist. The budgetary process provides a method of absorbing uncertainty, but very little detailed study has been devoted to this aspect of it (Cyert & March, 1963; Näslund, 1967).

Another aspect concerns the strategic alliances that are formed during the budgetary process, the ideological platforms that are created in connection with various issues, and the influence of countervailing forces. Various interest groups depend on the result of the budgeting, and it is therefore natural that they should try to exert influence on decisions regarding expenditure (Lindblom, 1959; Dye, 1972; Sharkansky, 1967).

A further process-oriented approach involves the study of major public projects in specific areas. Although the budgetary process is not the central factor in such cases, large projects do lead to significant budgetary consequences. It can be rewarding, for instance, to study strategies for crossing critical thresholds. Examples of projects that have been examined in this way, to some extent at least, are the Viggen airplane (Dörfer, 1973), Huddinge hospital (Björklöf, 1975), and Tromsö medical school (Rommetveit, 1976).

There are also approaches which focus on the effects on budgeting of innovation and diffusion processes. How are new ideas disseminated (Lukasiewicz, 1972; Coleman, Katz & Menzel, 1966; Bunker et al., 1977; Rogers, 1971)? Why do some innovations quickly catch on, while others arouse no particular interest? What part do the market mechanisms play in this context? What molds attitudes towards innovations among the élite and more generally; and how do these attitudes affect the expansion of the medical care system? All this - what we can call the dependence of medical care budgeting on medico-technical innovations - seems to provide an interesting field for study (Gordon & Fisher, 1975).

A field of study which has interested some process-oriented researchers is the construction of mathematical methods or simulation models for budgeting (Weitzman, 1970; Stedry, 1960; Mattessich, 1964; Crecine, 1969, 1974). The application of such models presupposes detailed descriptions of the conditions on which they are based.

Function-oriented budget research

There are also approaches which focus on certain functions related to the budget. Different *planning* methods have been proposed (Etzioni, 1968; Blum, 1974; Wiseman, 1979). Among other problems, it has been pointed out that data collection in health care is not generally carried out with an eye to planning needs, and that a systematic analysis of problems and goals is rarely in evidence (Blum, 1978 b).

Since the budget indicates the limits on expenditures, it provides an instrument for *control*. Hitherto, comparatively little interest seems to have been shown in budgetary literature in the detailed analysis of results. There are, however, some exceptions (Frenckner, 1963; Welsch, 1966; Hedberg, 1972; Magnusson, 1974). Concepts such as responsibility and controllability are of central importance in such studies. Related to this are studies regarding the outcome of the performance of medical care (Jonsson & Jonsson, 1972 a & b; Anderson, 1976; Rutstein, 1976; Belloc & Breslow, 1972).

Tool-oriented budget research

A number of concepts, representing tools in the structuring of a budget, have been presented in the literature: program budget, performance budget, zero-based budgeting, etc. They can be seen as expressions of the prevailing paradigm of rationality; a search for efficiency. One of the researchers in the field has pointed out that "budgeting is one of the most ubiquitous topics in the literature of management as budgetary fads come and go with alarming regularity" (Herzlinger, 1979, p. 3). Herzlinger assumes that the breadth of the literature on this subject is due to the fact that the budgeting process is rarely successfully executed. "So far as I know", says Wildavsky (1978, p. 2), "the traditional

budget has never been compared systematically, characteristic for characteristic, with the leading alternatives".

Up to a point this classification of three research areas represents a simplification. In budgetary literature it is not unusual to find that several of these approaches are discussed in one and the same context.

The present study

My own study of budgets has its roots in the tool-oriented type of research. In the present book an ends-means analysis occupies a central position. I examine twelve budgetary aspects related to the structure of the budget. For each the different related action alternatives are analyzed in light of certain hypothetical budgetary goals. The attitudes of certain key groups toward a number of budgetary issues will also be reviewed. Changes in budgeting over a decade from the mid 1960's are discussed, and a number of cases, illustrating countervailing powers in cost development, are presented. Here, the effect of processes over time and of changes in the planning function can be observed.

METHODS

Scientific method must be considered in relation to different frames of reference. In connection with the present investigation I will now discuss two such frames of reference: the classical analytical approach and the actor-oriented approach.

The classical analytical approach

The classical analytical or positivistic frame of reference is based on the use of theories, models and hypotheses. These are applied to the studied situation together with given techniques for testing and generalization (Selltiz et al., 1959; Inghe, 1973). Causal relationships are mapped out under ideal conditions. One way of doing this involves experiments using control groups. Measurements are taken ex ante and ex post. It is assumed that the knowledge achieved is independent of the individual, and is based on explanations founded on verified statements. It is also assumed that the studied whole is equal to the sum of its parts.

In companies and administrative organizations it is generally difficult to conduct experiments where the relation between an independent and a dependent variable can be isolated in this way. However, it is possible in various ways to try to approach the ideal, perhaps by using standardized questions and alternative standardized answers, or by applying special statistical methods, or by generally striving for precision and reliability.

The actor-oriented approach

When the actor-oriented approach is followed, man in his character of actor and concept-creator has a central role. For this reason it is preferable to speak of actions rather than behavior. The element of intention makes man an acting and creating being and not simply a passive receiver of impressions. An understanding of social processes, and a human approach to the problems at issue - these are points which are emphasized. Sometimes, however, it is found necessary for the researcher to stand back from his material in order to get a broader view. Among the instruments available to a researcher in this case is the dialogue, which, it is felt, provides more intensive interaction and better understanding than interviews or enquiries with predetermined questions. Dialectics is another possible element, building on the fact that different points of view contradict one another. In order to understand a situation, it may be necessary to have some historical knowledge about the studied organization and its actors. This knowledge can also help to bridge a language gap between the researcher and the actors. One aim of a subsequent dialogue can be to increase the actors' ability to solve their own problems (Arbnor & Bjerke, 1977).

Methods in this study

In the present study my starting-point has been the classical analytical approach. However, over time, the importance of letting the actors occupy the center of the stage has increased. In this study I focus on the problems they face and the attitudes they represent. It has not been possible to islolate all the aspects I wish to consider, as the classical analytical approach would require. Instead, we are dealing here with interdependencies.

My long connection with the management of medical care has certainly helped to mold the shape of this study. My selection of factors and criteria for rating the importance of different circumstances must be viewed against this background.

I have tried to obtain a picture of the existing theory in the area: I have studied the relevant literature; I have had discussions with researchers in the field of public administration and medical care management, particularly in the Anglo-Saxon world. I have maintained a dialogue with various categories of actors, and observed and participated in ongoing administrative health care activities. I have tried to use this experience to reflect the systems from many angles.

Interviews and enquiries

In 1966, in order to be able to chart attitudes and problems in medical care budgeting, I held 153 interviews with decision-makers from four categories in all the authorities

concerned. During 1977 I interviewed central county council managers from every county council by telephone. In 1978 a questionnaire was sent to hospital administrators at all the regional and central hospitals or their equivalent. The aim of these last two enquiries was to reveal certain development trends. In 1978 I also sent an enquiry to senior and district physicians in the county council of Stockholm.

The 1966 investigation

The basis of the 1966 investigation was as follows. Starting from the relevant literature and from my own and other people's experience, I made a number of assumptions about certain relationships. A questionnaire was designed and tested. Most of the questions had fixed alternative answers. After sending an introductory letter I contacted by telephone those whom I wished to interview. Appointments were arranged. I visited most of the interview subjects in their own communities within the then 25 county councils, the three major metropolitan areas and certain localities where there was a state mental hospital. Some people suggested that I should hold group interviews, but I turned the idea down as I was keen to obtain individual opinions. The length of the interviews ranged from 30 minutes to two hours, but the average was about 60 minutes.

I conducted all the interviews myself. I have to admit that I was a bit uncertain of myself when I first set out. However, I discovered that people like being interviewed about things they consider important. Several people remarked how pleased they were that someone was making this field the subject of research. Some of the senior physicians, however, were a bit doubtful at first about taking part in an investigation about budgeting. "I've absolutely nothing to do with the economic side of things", they would say, or "We don't have to bother about costs, we're lucky", or "There's never been any difficulty about the budget, we've always got whatever we wanted".

Selection of interview subjects

Who should be interviewed in a study of medical care budgeting? Naturally, the choice included the leading hospital administrators at the regional and central hospitals, generally known as hospital directors or hospital superintendents. In some cases there was more than one large hospital under one county council. For this reason 27 hospital administrators have been interviewed from the 25 county councils.

I did not make a random selection of the senior physicians to be interviewed. It seemed to me essential that the study should include opinions of people who had shown themselves to be leading actors in this context. There are, for instance, those who had documented particular interest in

administrative issues in their writings or in their special commitment to this side of their work.

Twelve chief medical officers or hospital medical directors were included. Internal medicine and surgery are among the specialist fields particularly well represented. At least one senior physician is included from every authority.

Twenty-six county council managers were included, although there are only 25 county councils. At that time in fact only 23 county councils had an official holding that title. In the other two cases I interviewed the official who most closely resembled this function. In one county two people seemed to fit the case. For the sake of simplicity I will use the designation county council managers for the whole group.

All the chairmen of the executive committees were interviewed. Altogether 108 interviews were held in the county councils.

When I made this investigation, the county councils had not yet taken over the mental hospitals. This occurred in 1967. Three psychiatric hospitals are included, as well as nine general hospitals in the major metropolitan areas. At these hospitals 12 administrators and 15 senior physicians were interviewed. Five of the senior physicians were professors. Eight top executive officers and 10 leading local politicians in the big-city areas were included in the investigation. They were chosen either because in their jobs they dealt solely with medical care matters, or because they had such matters as a part of their area of responsibility. Altogether 45 interviews were held in the big-city areas, which brought the number of interviews in the 1966 investigation to 153.

Among those originally selected for interview, only one failed to respond: a physician who despite about 40 telephone calls and five letters over a period of eight months could not be reached.

The questions are attached as Appendix 1 to this study.

The 1977 telephone interviews

At the beginning of 1977 I called the central administrative offices of the county councils - 23 of them now. In some cases I spoke to the county council managers, in others to some other top official. Sixteen of the county councils had county council managers. Instead of specific questions and set answers, I now asked questions on certain areas or topics. The interviews were then typed and in some cases sent to the interviewees for checking. Any adjustments made proved to be mainly concerned with style. The areas or topics covered are reproduced in Appendix 2.

All the respondents in both 1966 and 1977 were men.

The 1978 enquiry

At the beginning of 1978 I carried out an enquiry covering 27 hospital administrators in central and regional hospitals or their equivalents. I received answers from all but two of them. In these two cases the questions were put and the answers received by telephone. These 27 people represent all the medical care authorities in the country. The questions are presented in Appendix 3.

The 1978 Stockholm study

In 1978 a questionnaire was sent to the 207 senior physicians with responsibilities as department heads, all in the county council of Stockholm. One hundred and sixtyfive, or 80 per cent answered. Some of the questions were also directed to 73 district physicians in the county of Stockholm with more than one year in that position. Fiftyseven, or 78 per cent answered. The questions relevant to this study are to be found in Appendix 4.

An analysis of nonrespondents reveals a relatively equal distribution with respect to medical speciality. Long term care is an exception with the highest proportion of answers. The drop off is low in the age group up to 50, higher between 51 and 60, and proportional over 60.

Sources of error

When it comes to choosing factors, we have to allow for selective perception: it is easier to discover something that confirms a preconceived picture, rather than something which does not. My background as an economist and hospital administrator has probably affected my behavior in this respect.

It has been pointed out that there is a difference between what people say they are doing in an investigation, and what they actually do (Becker & Neuhauser, 1975). I would not like to deny the possibility that this is also the case here.

Were the questions similarly presented? Since I posed them myself in all the interviews, uniformity was probably greater than it is when several interviewers are used. Questioning by the spoken word has made it possible to clarify certain points when necessary.

Were the questions too abstract? Are they likely to have been understood in the same way? Their formulation in the 1966 investigation seems to have been more in line with the thinking of administrators and politicians than of physicians. The 12 chief medical officers and hospital medical directors asked fewer questions about the actual meaning of the questions than did the other senior physicians. This suggests that experience of hospital management made it easier to

understand the questions. For instance, some of the senior physicians found the question about the ranking of the aims of the budget system rather abstract (Table 4:2). And no less than one-third of the senior physicians refrained from an opinion when they were asked about their satisfaction with the present budget system (Table 5:3).

One of the questions in the 1966 investigation ran: "What do you think of the following statement: hospital management's powers to make decisions about the utilization of funds is strictly limited today?" Three alternative answers were supplied: absolutely correct, not altogether correct, incorrect (Table 5:9). It appeared that the right of decision varied from one county council to another. Thus the answers refer to different situations. I have not related the answers to the different circumstances, and it may therefore be difficult to draw general conclusions. The answers should be regarded rather as a reflection of attitudes, where the interest lies mainly in the differences between respondent categories.

A problem that arises when a respondent is asked for an opinion about budgetary alternatives is that he may only have experience of one, and he may find it difficult to comment on another of which he has no personal experience. Furthermore, some respondents can express themselves more precisely than others. Different expressions can stand for the same thing, or the same expression may have different meanings for different people. Also, attitudes are to some extent dependent on time; I cannot guarantee that statements made in 1966, 1977 or 1978 are valid for any time other than when they were made.

PLAN OF THE STUDY

The study has been arranged as follows. In Chapter 2 the focus is on special features of the Swedish system of medical care. Chapter 3 discusses some countervailing powers working for expansion versus cost containment; this chapter is based on a number of short cases. Chapters 4 and 5 constitute the real core of the study. First, in Chapter 4, I assume certain goals for the budget system which I then discuss. Chapter 5 includes an end-means analysis based on 12 aspects of budgeting and budgets and the different related action alternatives. In these chapters I also present the results of the interviews and the enquiries. Chapter 6 consists of some conclusions and suggestions for further research.

SUMMARY

The budget is defined as a systematic economic plan for a specific period of time. In public administration it registers politically determined appropriations, indicating in what way or for what purposes resources are to be used. The

budget system refers to the formal composition of the combined appropriations in the budget, and the principles applying to their preparation and allocation. Budgeting designates the process by means of which a budget comes into being.

The aim of the study is to gain greater insight into some budgetary tools, into the strategies and attitudes prevailing in Swedish health care, and into the goals of the budget system. The purpose is to describe and analyze the structure of budgeting rather than to prescribe how budgeting should be carried out.

2 THE SWEDISH HEALTH CARE SYSTEM

If an analysis of health services budgeting is to be fully comprehensible, the system has to be set in its context. The aim of this chapter is to provide a brief description of the Swedish health care system. There is a great many studies which describe and analyze this system (Sidel & Sidel, 1978; Engel, 1968; Simanis, 1975; Navarro, 1974; Blanpain et al., 1978; Anderson, 1972a; Andersen, Smedby & Anderson, 1969). The following pages will present some fundamental characteristics.

POLITICAL CONTROL

Swedish medical care is regionalized. Political control is substantially decentralized. Twenty-three county councils and two big cities, Göteborg and Malmö, plus the municipality of Gotland, an island in the middle of the Baltic, are responsible for providing primary care and hospital services. This responsibility refers to both acute and long-stay patients, for somatic as well as psychiatric care.

Until 1967 the state was responsible for the care of the mentally ill in special mental hospitals. Until 1963 the district medical officer service was state run. In 1979 there is one fully state owned hospital, the Karolinska Hospital in Stockholm. It is related to one of the six medical schools in Sweden. The city of Stockholm merged its health services with the county council of Stockholm in 1971.

The National Board of Health and Welfare is the highest controlling authority. The right of decision in disciplinary matters is vested in the special disciplinary committee for medical care questions, attached to the Board. Formally, the decisions are not supposed to constitute precedents, but they often tend to be interpreted in that way. Otherwise, the state authorities exert influence mainly by means of laws, regulations and inspections. Central decisions regarding free abortions, painless childbirth and the care of the intoxicated all affect the claims that will be made on medical care resources. Alcohol legislation is another example. The

state also sometimes steers developments by granting financial support to certain activities that it regards as highly desirable. An example is the building of long-term care institutions during the 1960's. Otherwise central control is imposed chiefly through the authorization of new positions for physicians. The division of the country into seven regions with nine regional hospitals is based on voluntary agreements between the different health care authorities. The idea is to avoid costly duplication of the most specialized types of care.

The social welfare services are the responsibility of the 277 municipalities. The way the services function locally affects the claims that are made on the medical care system. For instance, if a municipality has not developed its care for the elderly to meet the demands, then claims on the medical care system may be correspondingly greater.

METHODS OF FUNDING

In 1977 patient fees covered only 3.4 per cent of the county councils' medical services costs. The county council tax, a proportional income tax, is the most important source of funding, covering 71.9 per cent of the costs. Subsidies from the Swedish state take care of 13.8 per cent, and social insurance covers another 8.7 per cent. This is just another form of tax financing. Other incomes, for example from goods sold, adds 2.2 per cent.

LARGELY HOSPITAL-BASED CARE

In Sweden there are about 17 beds in the various health care institutions per 1 000 inhabitants. The number of admissions to hospitals per year and 1 000 inhabitants is about 150. The average number of physician visits per inhabitant is close to three per year. A relatively high proportion, about 50 per cent, of these visits are at the hospitals. Great efforts are being made to extend and man primary care for the future. Primary care can be seen as the weakest part of the Swedish health care system.

There are several kinds of general hospitals. The smallest type, the *county district hospital* or *local hospital*, is able to provide specialized services in internal medicine, surgery, radiology and anesthetics.

A *central hospital* generally has 10-20 specialty areas, in some cases more. There is at least one central hospital in every county council area.

There are also some hospitals that could be classified somewhere between these two types.

A *regional hospital* is a special kind of central hospital with a higher degree of specialization. It is generally linked to a medical faculty, and medical research is conducted there. Each of the seven regions has an average of a little over one million inhabitants in its catchment area. The regional hospitals have 1 200 - 2 000 beds. Their special fields include thoracic surgery, neurosurgery, pediatric surgery, plastic surgery and radiotherapy.

Special-purpose hospitals of various kinds used to be common: epidemic hospitals, tuberculosis sanatoria, maternity hospitals, children's hospitals and orthopedic hospitals. Today these various special fields have been integrated into the equivalent clinics in the central hospitals. Special mental hospitals are no longer being built. In this field, too, the aim is to integrate as much as possible. Hospitals for long-stay patients, on the other hand, have become more common and represent an important link in the medical care chain.

Primary care with district medical officers, district nurses, maternity and child clinics and specialists of various kinds is integrated organizationally as far as possible with the hospital system into district health care organizations.

STAFF STRUCTURE

As regards the number of physicians per 10 000 inhabitants, Sweden comes below such countries as the Soviet Union, Italy, West Germany and the USA (Maxwell, 1975). About eight of ten physicians are hospital-based specialists. Nor is Sweden near the top of the league when it comes to nurses. Holland and the Soviet Union are among those countries which have more. Sweden is in a top position when it comes to the number of dentists.

Studies of staffing in individual hospitals show a higher number of staff per bed in the USA than in Sweden (Jonsson & Neuhauser, 1975). The care is more intensive, and the length of stay shorter in the USA. Internationally, there are big differences in the work done by different personnel groups which are known by similar names. Certain tasks which in Sweden are handled by nursing staff are carried out in other countries by doctors.

The voluntary field in the health care system is very small. The private sector for medical services is also small, but there are private nursing homes and physician offices, specially in the big cities.

HEALTH LEVELS

Sweden has the lowest reported perinatal mortality rate in the world. The figures for death in childbirth are also very

low. The average length of life is among the highest reported. On the other hand, the number of days of reported sickness per person and year is relatively high. The relation, if any, between health levels and the health care system is very unclear.

SUMMARY

Swedish medical care can be described as highly knowledge-oriented. In international comparisons Sweden has a high number of hospital beds in proportion to the population. Primary care can be seen as the weakest link in the chain of care. Most physicians are hospital-based specialists. Sweden does not rank particularly high among developed countries with respect to the number of doctors or nurses per head of population, but is highly modernized as regards buildings and equipment. The perinatal mortality rate is the lowest in the world. The average length of life is relatively high.

3 COUNTERVAILING POWERS IN MEDICAL COST DEVELOPMENT

The costs for medical services have increased from about 6 per cent of the Swedish gross national product (GNP) in 1963 to about 9 per cent in 1977. This can be seen as the effect of a number of forces in the country as a whole, as well as at the local decision-making levels. This chapter highlights a number of variously critical developments. Some of these have stimulated cost containment, others have increased expenditures, while others have been neutral.

A great many transformations in society as a whole are reflected in a growing consumption of care. There is a tendency to extend the range of responsibilities of the health care system. Societal problems are often seen as medical problems. Changes in the role of the family have affected the possibilities of providing care at home for relatives who are old and sick. Alterations in the structure of employment and in the patterns of living have had their repercussions. Expectations about what can be achieved by physicians' certificates, hospital beds and pharmaceutical specialities seem to be growing.

Cost trends have been similar in several highly developed countries. In the USA, Canada, Holland, Switzerland, West Germany, and Sweden, where the political and organizational approaches toward medical care are different but where GNP per person is largely the same, the percentage of GNP which is devoted to medical care is similar (Ståhl, 1979). The proportion of different types of costs, however, is somewhat different. Thus, the share directed towards hospital and pharmacy costs varies a great deal between different countries (Abel-Smith & Maynard, 1979).

Four groups of factors will be presented in the following pages. They are politically related factors, patient-related factors, medical-service-related factors, and administratively related factors. The presentation is based partly on my own observations and experience, partly on information from colleagues in administrative positions, and partly on literature. The purpose is to develop a basis for an understanding of the next two chapters.

POLITICALLY RELATED FACTORS

Do the five major political parties in Sweden have different approaches toward medical care costs? A study of their programs shows very small differences. All of them favor "better care". In order to achieve this goal, the expansion of primary care and long-term care is emphasized. The similarities between the parties are much more striking than the differences (Allander, 1976).

Setting priorities

A glance through the literature of the last few decades verifies that the controversial issues in Swedish health politics have been few. However, the presentation in 1948 of the "Höjer report" stimulated a debate on the principles involved. The proposed reforms would have meant, among other things, a major increase in primary care, a greater number of medical students, and a change in the status of physicians from more or less free entrepreneurs to public employees. A sharply negative reaction from the Swedish Medical Association, as well as from others, discouraged the implementation of the proposed reorganization. The rapid growth of medical care that followed was largely built on the traditions of the hospitals. It was not until the 1970's that Höjer's ideas were accepted. Difficulties persist, however, in the development of primary care.

Example 1

The chairman of the Association of Swedish County Councils pointed out during the annual conference in 1978 that the counties had failed in their efforts to realize the major priorities of the health care system. During the last few years only one of four new positions for physicians had gone to high priority areas, such as ambulatory care outside hospitals, long-term care, and psychiatry. Three of four new positions had gone to traditional acute hospital care. Shortage of physicians, trained in priority areas, was said to be one of the main causes. He pointed out that his political colleagues had allowed themselves to be influenced too much by physicians. The politically elected decision-makers had not been courageous enough to oppose requests for new resources from hospital-based physicians.

Building and staffing

The influence of decision-makers at the national level is obvious on building projects. Before construction starts, permission has to be obtained from decision-makers in Stockholm.

Example 2

A county council in southern Sweden obtained a political majority for building a new 200-bed general hospital in a municipality with an intended catchment area of about 40 000 people. Two other county hospitals, both risking a shortage of patients, were

within 20 minutes reach by car or bus. When the central authorities opposed the building, the county council appealed to the Ministers who could not find any legal ground for refusal. However, the National Board of Health and Welfare (NBHW) warned that they would not approve any positions for physicians. When the hospital was built and equipped, foreign physicians on temporary assignments kept the hospital running for some months, until the county decided to ask NBHW what was to be done. It was then rebuilt, as NBHW proposed, into a long-term care hospital and a center for ambulatory care.

Belt laws

Traffic accidents are one of the major causes of injury and have caused about 1 000 deaths per year.

Example 3

Belt laws for drivers and passengers in the front seat came into effect in Sweden in 1975. The use of belts has increased from about 30 per cent to about 80 per cent. It has been calculated that the welfare gain for the first year was about 160 million kronor. About 70 millions of this consisted of reduced hospital costs.

Alcohol policy

The national policy regarding alcohol affects medical care costs. The law as regards driving after drinking alcohol is very strict. From 1919 to 1955 a rationing system was operated and special purchasing books were issued. From the abolition of the system in 1955 and up to 1978, the consumption of pure alcohol per Swede above the age of 15 increased by about 42 per cent.

Example 4

A law, in effect from 1977, laid responsibility for people intoxicated by alcohol on the hospitals. Formerly this had generally been the responsibility of the police. As a result the workload of hospital emergency units increased. In one county no less than 26 new positions in casualty units had to be established.

Occupational safety

Laws regarding occupational conditions are intended to protect employees from health risks at work.

Example 5

A new law (1978) regarding the work environment states that a break should be made after five hours of work instead of after six as before. Even after some reorganization of schedules, many acute hospitals faced the necessity of an increase in personnel. In one central hospital seven more people were required.

Taxes

Wage and salary negotiations take place mainly on a national basis by agreements between the Association of Swedish County Councils (ASCC) and the unions. As the counties have unlimited authority to levy proportional income taxes on its inhabitants, the national government sometimes finds it necessary to negotiate with ASCC regarding tax policy. It should be mentioned that the municipalities have the same right as the county councils to levy their own income taxes.

Example 6

According to an agreement reached in 1975 between the National Government of Sweden on the one hand and ASCC and the Swedish Confederation of Municipalities on the other, the increase in taxes in county councils and municipalities for 1976 and 1977 was to be limited to one krona at most. The National Government was to contribute 1 200 million kronor in order to limit the necessity for tax increases. What was the outcome? For 1976 the county councils increased their taxes by 0.56 kronor and the municipalities by 0.32 kronor on the average, leaving 0.12 kronor at most for tax increases in 1977. During 1977, the counties increased their taxes by 0.45 kronor and the municipalities by 0.23 kronor on the average. For the two years together the tax increases were 56 per cent higher than planned.

According to the agreement for 1978, the municipalities and the county councils were to be recommended to examine their expenditures carefully during the budgeting process. The National Government promised 720 million kronor to limit the need for further tax increases. The outcome was an increase in the county councils' taxes by 1.09 kronor to an average of 11.22 per cent of income, and an additional increase by 0.73 kronor in the municipal tax, to 16.51 per cent of income, on an average, in all 27.73 kronor, besides the progressive state income tax.

Patient insurance

Malpractice suits play very little part in Swedish medical care. A general patient insurance is intended to simplify the claims process.

Example 7

The general patient insurance was introduced in 1975. Each county council pays a small amount for each inhabitant to an insurance consortium, in 1978 about 3 kronor per head. The insurance has been regarded as a factor contributing to the decrease in the number of malpractice cases, from 833 in 1974 to 679 in 1977. There have been about 2 000 claims on patient insurance per year, two-thirds of which result in payments. The amounts are relatively low, the maximum amount in 1978 being 125 000 kronor in a case of 100 per cent disability for a 25-year old person. This must be viewed in light of the total system of social "safety nets" in Sweden. Since 1978 there

is a similar general insurance for damage caused by pharmaceuticals. This is financed by a fee of one per cent on drugs sold in Sweden.

PATIENT-RELATED FACTORS

The demand for medical services is largely derived from the demand for health. The definition of health can be assumed to have a great impact on the consumption of care. A lay person and a physician often judge similar conditions differently (Allander & Håkansson, 1973). And opinions often vary even within a group of physicians. According to the principle of medical uncertainty, there is always something more to be done for health. It might be an extra examination, a new pharmacy, another consultation or treatment. The patient reduces his uncertainty by asking for more, the physician by prescribing more (Wildavsky, 1975).

Population estimates

The number of people who live in a certain catchment area, and population projections for the future, are among the bases in planning for health care facilities. A tendency has been observed in several county councils to be overly optimistic with respect to population trends.

Example 8

Two planning bodies, one for a city and one for a surrounding rural area, were each designing a major teaching hospital, located a few miles from each other. Revised prognoses for population development and a merger between the county council's and the city's medical care organizations made a reconsideration necessary. Only one of the two hospitals was built. The cost of plans, programming, and land development for the other hospital amounted to over 50 million kronor. A smaller hospital for long-term care was later built on the site.

Patient organizations

Patient organizations, which function as watchdogs for various special medical interests, seem to be growing in influence.

Example 9

An organization, which represents patients with a certain disease, succeeded in convincing the political decision-making body in the county council of the need for new treatment facilities and staff, in cooperation with the senior physician in the special field concerned. The unit was built and operated by the county council. Later, when the question of an alternative use arose on grounds of low utilization, the patient organization strongly opposed the suggestion as the unit had been set up for patients with their particular disease.

Specialization

The trend toward further specialization and subspecialization continues. Better opportunities for providing for patients' needs are linked to professional interests. In 1979 there are more than 40 medical specialities in Sweden, and the number of subspecialities is many times greater. There is a tendency for costs to increase with medical specialization.

Example 10

The surgical specialities in the Swedish Medical Association have worked out a series of recommendations regarding medical organization in central hospitals. On a basis of these recommendations one hospital decided to allot one surgical nursing unit exclusively to urology patients. Formerly, patients with such diagnoses had occupied beds in all four surgical nursing units. Six new full-time positions were requested in connection with this change.

Patient misadventures

The occurrence of an accident in a hospital, which attracts wide attention in the mass media, can be assumed to affect costs. There are exceptions, however, as can be illustrated by the following case.

Example 11

The operating theatre in a department of obstetrics and gynecology was open Monday through Friday from 8 a.m. - 8 p.m. and on Saturdays from 8 a.m. - 2 p.m. At other times surgery was performed in the main surgical department of the hospital.

One night a hydrogen compressor was to be installed. For this reason the electric current was cut off in certain parts of the hospital from 4 a.m. to 6.30 a.m. An obstetrics patient suffering from low hemoglobine arrived at 4 a.m. This patient needed a Caesarian section. Information about the closure of the electric current had not reached the delivery unit. As the elevators did not function, the patient was carried to the fifth floor, which took 20-25 minutes. A baby was born in good condition at 6.15 a.m. The mother suffered repeated hemorrhages, and further operations as well as intensive care were necessary. In the course of further transport, the mother's heart stopped for 3-4 minutes. She did not regain consciousness and died later.

This case received wide attention in the mass media, but there were no budgetary consequences. There were no alterations in the planning of obstetric surgery at nights, nor any organizational changes of any other kind. What had happened was attributed to a series of unfortunate events. However, efforts were made to improve communications within the hospital.

MEDICAL-SERVICE-RELATED FACTORS

The largest proportion of costs, ordinarily between two-thirds and three-fourths of the total operating budget of a hospital, consists of wages and salaries and related costs. The total number of people employed in Swedish health care more than doubled between 1966 and 1976. In part this is connected with a reduction in the working week from 42.5 to 40 hours. In part it must also be regarded as an attempt to improve the quality of care.

The availability of such resources as hospital beds has a considerable impact on physicians' judgements. The consumption of care is influenced more by available resources than by the health status of the population (Roemer, 1978; Feldstein, 1967; Allander, 1976).

Length of stay

There is a relation between length of stay and bed needs. Consequently, efforts toward efficiency often focus on how long patients are hospitalized for different diseases.

Example 12

A study of the average length of stay for uncomplicated inguinal hernia showed differences of about 60 per cent between rural hospitals and central hospitals. To a great extent the stays reflected a general philosophy among senior physicians. As the differences were brought into the open, the longer stays at rural hospitals were reduced.

Equipment

During the last few decades the use of medical-technical equipment has become more extensive. Automatic laboratory equipment, CAT-scanners and linear accelerators are examples. No central authority investigates the need for this kind of equipment; it is up to the individual county council to make their own decisions. Since the mid 1960's intensive care units have been built in an increasing number of acute hospitals, but evaluations are rare (Mather et al., 1976). A growing interest in operation analysis and cost-benefit analysis has so far resulted mainly in theoretical contributions (Stimson & Stimson, 1972). This is partly connected with difficulties in identifying, quantifying and valuing benefits in cases where human lives and suffering are involved (Mattsson, 1970; Jonsson & Marké, 1977).

Example 13

A five-digit bill for medical equipment appeared on the desk of a hospital administrator. No order number was to be found. The order had been placed by a senior physician who had told the supplier that the equipment was urgently needed. When it was pointed out to the physician that orders must be authorized in

a formal way, he sent a cheque to the administrator for the amount required out of his own pocket. After some discussion at hospital management level, it was decided that it would be unfair to keep the money, and it was then returned.

Personnel safety

Personnel safety is regarded as highly important, and there are examples of rapid action in cases of emergency.

Example 14

In a psychiatric unit in a general hospital, a nurse working alone at night was killed by a patient. Her union requested an immediate reevaluation of the staffing patterns. Of 63 psychiatric units in the country, 32 were considered to be so quiet that one person per unit was sufficient during the night. At the other 31 double manning was felt to be necessary. Fifty new positions were added at short notice.

Tenured positions

Efforts to create job security is a significant feature of Swedish labor policy.

Example 15

A physician's position had long been vacant; no applicants had appeared. The chief of service then requested that a person with a background in engineering should be employed temporarily in order to handle some of the tasks. After the engineer had been employed for a little over six months, a physician applied for the job and was engaged. The laws on job security made it impossible to remove the engineer from the post as he had been employed for more than six months.

Hospital buildings

Medical care costs are closely related to investment in hospital buildings. A marked change has taken place between 1963 and 1974 in the type of hospital buildings being built. While general hospitals for acute care accounted for 81.9 per cent of the costs and long-term care for 7.6 per cent during 1963, the relation had shifted to 33.7 per cent and 33.6 per cent in 1974 (Ståhl, 1976).

ADMINISTRATIVELY RELATED FACTORS

Administration is related to information and its production, processing and transmission. This is intended to influence and support medical services. The concept also has to do with organizational structures, personnel policy and work instructions.

Organization

Almost all health care authorities in Sweden conduct studies regarding their organization structure.

Example 16

A study was carried out with the support of an external management consultant to examine the question of a new organization for health services. The study took some years, and the cost was well over one million kronor. The proposal only resulted in a new study, calling for the services of another consultant.

Limiting costs

The budget process ordinarily means that senior physicians submit requests for new equipment and personnel, and the hospital or district administration makes cuts which the Board follows. Further cuts may be proposed by central administrative bodies, and some additions may be made by politicians at top levels.

Example 17

In order to stimulate efficiency, the political levels often request cost-saving proposals up to a certain amount which local administrators generally submit. However, the realization of these proposals require political decisions which have proved difficult to reach.

SUMMARY

This chapter presents a number of variously critical developments which are structured under four headings: politically related factors, patient-related factors, medical-service-related factors, and administratively related factors. They illustrate cases of which some have stimulated cost containment, some have increased expenditures, and some have been neutral as far as costs are concerned.

4 GOALS OF THE BUDGET SYSTEM

The budget determines the financial limits of the health care services system. The budget is presumably affected by the budget system which in turn may be influenced by the goals of the budget system. Questions related to the goals of the budget system will be discussed in this chapter.

Opinions differ about the goals of the budget system. One writer may suggest a single goal, while another may refer to ten. In previous studies (Borgenhammar, 1967, 1968) I have discussed the question of goals, and I then suggested four purposes for the budget system in Swedish medical care. In the present discussion I start from three of these, namely: to provide an instrument for priority-setting by the politicians, to influence activities within the medical care system, and to provide a basis for administrative control. I designate the first of these as a main goal, and the other two as subgoals. The first can probably also be regarded as more clearly specified than the other two. And whereas the first and the second are relatively long-term, the third is more of a short-term goal. It is important in so far as it stimulates learning and helps to steer action in the organization. This action can in turn influence the political decisions about appropriations for future budget periods. The goal on which I now place less emphasize in comparison with previous studies is to help in providing a base for price setting.

Table 4:1. Classification of the goals of the budget system

Goals	Level	Degree of formalization	Time range
Instrument for priority-setting by the politicians	Main goal	Specified	Long-term goal
Instrument for influencing action	Subsidiary goal	Vague	Long-term goal
Instrument for administrative control	Subsidiary goal	Vague	Short-term goal

THE BUDGET SYSTEM AS AN INSTRUMENT FOR PRIORITY-SETTING BY THE POLITICIANS

In a democracy the decisions of the democratically elected politicians should govern public activities. These decisions concern the relative size of public and private consumption, the amount of real resources to be assigned to health services, how the resources should be divided between different fields in these sectors, and how a balance should be struck between immediate and future care - i.e. between investment and consumption.

From an economic viewpoint, it can be said that the striking of a balance between medical care and other societal fields requires knowledge of what the resources will yield, given different uses. Classical economic theory has put the problem as follows. In the choice between a battleship and social welfare, expenses should be divided in such a way that the last monetary unit invested in each of these yields the same utility (Pigou, 1949). How much better could teaching or medical care become in return for a certain invested sum? To be able to answer this, the decision-makers have to know about alternative areas of resource use and their effects - something which suggests a need for centralization or central analysis. The greater the area that can be surveyed, the greater is the chance of total optimization. But our human ability to comprehend is limited. In practice these considerations are assigned to political decisions. By means of the budget process, resources are allocated to different sectors on a basis of the ideas of the political assembly - and other relevant units - about ways of realizing social utility. In a decentralized medical care system it becomes a question of suboptimizations, or of obtaining a satisfactory decision within a limited organizational framework. The more limited the areas that a tax-levying organization is responsible for, the greater priority do these areas tend to receive.

The economic marginal-utility argument represents a theoretical viewpoint; the political represents a practical viewpoint. When the latter is applied to the area of medical care, a number of factors have to be taken into account. Medical care is a field in which values relating to human compassion play an important part. Humanity, solidarity with those of meager resources, the desire to help those who are in trouble, are important parts of the value system of medical care. Juridical norms must also be satisfied. And of course the medical aspects are fundamental, the very base of operations.

In every public sphere activities can be pointed in different directions and developed in different ways. In the field of public health and medical care, for example, it is possible to concentrate more on measures for the prevention of disease and to give less weight to hospital care. Long-

term care can be expanded at the cost of intensive care, and so on. Are the goals of public health and medical care better fulfilled in the home or in institutions? Are screening campaigns, anti-smoking actions or other practices most efficient in improving the general state of public health? Does one type of examination, therapy, rehabilitation, prophylactic treatment etc. lead to better results than another? Is it better to invest in measures for the discovery and treatment of high blood pressure, rather than in neuro-surgery? Should we invest in dialysis or kidney transplants, or in preventive medicine to cut down bladder infections and reduce the necessity for the more exclusive therapies later? When such questions have to be answered, the need for health services goals is felt. The overriding political goals applying in the areas of public health and medical care are as a rule unclear, unspecified, and very general. A certain vagueness in goals may of course fulfil a purpose: it may make it possible for people holding different views to work together. Nor is it perhaps always necessary for explicit goals to precede action.

The need for devices to measure the effect of various actions has been discussed in the international literature of medical care economics (Anderson, 1976; Becker & Neuhauser, 1975; Dumbaugh, 1978; Fuchs, 1974; McNerney, 1976; Miller et al., 1976; Neuhauser, 1977; Rutstein et al., 1976). Although none suggested so far is perfect, such measuring devices may be useful in throwing some light on the consequences of alternative courses of action.

The utility of economic investments above a certain level may start to diminish, or even disappear altogether. To be able usefully to discuss utility, it is necessary to be able to identify, quantify and evaluate the performance obtained and the resources it has required. Can this be done with respect to different disease families, different diagnoses, or patient categories? Probably not, except in a very few cases. And even if it could be done, would it then be possible to aggregate the utility values obtained and find a total measure of societal utility? The value to society as a whole of investments in public health and medical care may be greater, or the same, or less than the corresponding value to the individual cared for. When a person suffering from epidemic disease is isolated and cured, the public's risk of exposure to infection is also reduced. In that case the value to society is greater than the value to the individual. But how are we to judge the value of extensive life-maintaining treatment when the prognosis is pessimistic? Can we establish which of the resources have been necessary, or what extent might have been sufficient? What weight should we assign to the idea of the "quality of life"?

It is hardly possible to give exact answers to such questions at the present time. A further complication is the possibility of interdependence between different spheres of

social action. The utility of investments in public health and medical care may depend, for example, on what has been put into education. If there are no nurses to recruit, some beds may be left unfilled. It has been thought that education and information in hygiene can provide an alternative to some expansion in the public health and medical care systems. Sometimes self-care can replace physician care. More insight into the importance of personal hygiene can reduce the risk of infection. Information about the benefits of an all-round diet and exercise can lead to a change in life style that helps to control certain of the diseases of affluence. Many symptoms do require a visit to the doctor, but many banal complaints can be dealt with personally, provided the patient can assess the importance of his symptoms.

Saying "yes" or "no" to requests for grants is an important method by which the politicians on the county council exert influence. Some consider it to be the most important (Tersman, 1970). But it is not the only one. They can also appoint top office-holders with the qualifications, the experience and the values that they, the politicians, consider desirable. Another method consists of informal information-exchange between the politicians and office-holders, choice of organizational form, and personnel policy.

Commitments and external factors of various kinds set limits on the politicians' scope for action: central recommendations, agreements, the state of economic activity, taxation, and so on. Earlier decisions that initiated present activities are another determining factor. Promises may have been made to various stakeholder groups; these must be made good in the budget. Laws and regulations also set their own limits.

Political decisions concerning medical care are a complex matter; they have to be made in areas of great uncertainty. The budget process can be seen as a method of political priority-setting: one line of action is chosen, another is rejected.

THE BUDGET SYSTEM AS AN INSTRUMENT FOR INFLUENCING ACTION

If a budget is to work, it must be conformed to. Obviously, medical care activities cannot be performed if the necessary means are not made available. But the intentions behind the decisions of the politicians may be more or less fully realized: an allocation can be used or not used, outlay may exceed or fall short of the sum allowed, and so on.

The action that will follow from an allocation of a particular size and orientation depends on various factors, for instance, the medical knowledge that is applied to it, administrative knowledge, pressure from patients, the values held by the senior physician, the views of other staff, trade union attitudes, information about costs and performance,

motivation, as well as the prevailing system of rewards, professional and otherwise. Action is probably also influenced by the way budget deviations are dealt with. And the structure of the budget system can also be important in this context.

Some authors have strongly emphasized the dysfunctional effects of a budget that is not accepted by the personnel concerned (Argyris, 1952). This may lead to aggression towards management, a sense of failure among supervisors whose units do not live up to expectations, and a tendency to consider exclusively the problems and needs of one's own unit. The budget can also become the scapegoat for failures of quite other kinds.

The budget's reception will largely depend on the head of the unit concerned, on his ability to organize, to create motivation and stimulate his staff to learn. The following quotation (Vroom, 1964, p.80) provides an illustration of the importance of motivation: "The highest level of performance should occur when the worker strongly desires acceptance by his co-workers, and anticipates that he will receive this acceptance only if he performs effectively".

The information that arrives along official channels is only one of many such flows. Different social systems have competing systems of rewards. The rewards at the disposal of the management may not necessarily be regarded by the staff as the most attractive. Thus the influence on action exerted by the budget system is limited.

THE BUDGET SYSTEM AS AN INSTRUMENT OF ADMINISTRATIVE CONTROL

The budget system is also supposed to provide a means of exercising administrative control, i.e. of checking the way resources are actually used, the performance they generate in relation to the intentions of the politicians. Control in organizations has been defined as the process by means of which one element (person, group, machine, institution or norm) intentionally influences the actions of other elements (Hofstede, 1967). Swedish usage is broader, however, and includes an element of auditing. Administrative control may conflict with the individual's strivings for autonomy, and is therefore sometimes regarded in a negative way by the people subjected to it.

The budget is implemented by people who have knowledge, goals and values of their own. These personal or professional goals are not limited as resources are, and this can be one reason for a tendency to deviate from the budget. The budget is one link in a control process which aims in turn at influencing action.

Administrative control may seem more necessary to certain personnel groups than to others. People responsible for economic matters will look for aids to make their work easier: for instance, instruments for comparisons between plans and outcomes. In this kind of follow-up it may be necessary for practical reasons to disregard individual circumstances. The reasons for the deviations may not be clear, understandable or acceptable. There is a risk of misunderstanding and of conflict between the controlled and the controller. Administrative control is concerned not only with the more limited comparison between budgets and outcomes, but also with a broader analysis of goals. The intended purpose of the particular activity should have been achieved. Thus, this kind of control has a wider range and scope than mere financial control.

A common reaction to deviations is to demand an explanation from the responsible office-holder, the one who was supposed to have seen that the budget was followed. The importance assigned to the control by the person subjected to it may depend on the way the original allocation was decided: if the same sort of control is exerted when the budget has been based on approximate assessments as when it has been based on more detailed and reliable calculations, then this sort of control may well be regarded as unfair.

Control may be directed towards performance, costs, and quality, as well as quantity, prices, use of resources etc. Falling short of costs can be as serious a matter as exceeding them. It may indicate an inability to obtain staff or to keep activities going, making it more difficult to supply health services. It may also indicate that the quality of the services has been less than it should be. The care provided may have been of such a kind that patients have refrained from making use of it. Exceeding the budgeted costs, on the other hand, may depend on some exceptional occurrence which meant that demand was higher than estimated.

Standardized checks carried out by inexperienced staff may upset the personnel concerned and inhibit their development. There may be boomerang effects so that people feel alienated and afraid to take initiatives - effects in other words that contradict the intentions of the control system.

It has been pointed out that in exercising control inexperienced administrative staff, more often than others, have to rely solely on figures (Hofstede, 1967). This may increase the risk of conflict. The cultural background and the personality of the assessor can also affect the way the control is conducted. Control can in some cases be felt as a restriction on the individual's opportunities for influencing his own environment and work situation. It is important that control should not involve loss of dignity for either the controller or the controlled. If those who are responsible for control are in close contact with the work being done, there should be less risk of unfortunate conse-

quences. At the same time the danger of becoming too involved should be considered.

RANKING OF GOALS

What do the occupants of leading positions in the Swedish medical care system think about the purpose of the budget system? In the 1966 interview study which can only reflect attitudes at that time, the subjects were asked to rank the following possible purposes that might shape the design of the budget system in hospitals:

- As an instrument for priority-setting by the politicians
- As an instrument for influencing behavior
- As a base for administrative control
- As a base for price-setting

I assumed that the first of these aims would be ranked highest by the politicians. The answers from respondents at county council level are shown in Table 4:2 in the form of percentages.

Table 4:2. Which goal of the budget system was ranked highest?

	Instrument for priority setting	Instrument for influencing behavior	Base for administrative control	Base for price setting
County council				
Senior physicians (30 people)	27	30	40	0
Hospital administrators (27 people)	41	33	26	0
County council managers (26 people)	42	23	42	4
Executive committee chairmen (25 people)	56	20	28	0

The material supports my assumption. It may seem surprising that the purpose "As an instrument for priority-setting by the politicians" was not ranked highest by even more people. In their comments the respondents pointed out that many factors affect the political decisions. Reports may have been published, general principles may already have been laid down, various promises and commitments may hamper the

freedom of action. Often the budget merely confirms a predetermined line of action.

How was the possible purpose "As an instrument for influencing behavior" ranked? About one-third of the hospital administrators and senior physicians gave this purpose the highest ranking. In comments the difficulties were pointed out of influencing costs, regardless of how much effort is put into budgeting.

How was "control" ranked as a possible goal of the budget? Two of five county council managers and senior physicians ranked this purpose highest. Several respondents also pointed out that since staff costs are so dominating, it is a question first and foremost of achieving efficiency in that sphere. Comments were also made to the effect that, regardless of the quality of the budgetary technique and the control techniques that are designed, there is still the question of how knowledge can be made good in the decisions. Even if the economic decisions are more or less under control on the political and administrative side of things, this does not apply to the medical side. "We can't just say: 'We can't afford to treat these particular patients'. There is an irrational side to our work which must be allowed for." - "Hospital management is stuck in a fog."

The goal "As a base for price-setting" was ranked lowest. Those who nevertheless ranked it relatively high referred to the occasional need for absorption costing. This becomes necessary, for instance, in setting prices for the care of patients resident in other county council areas, but who are being treated under the arrangements for regional medical care or other agreements, or in an emergency. However, it is possible to produce this type of analysis separately and almost independently of the way the budget system is designed.

As can be seen from the tables, the respondents did not always rank the purposes from one to four. Some of them gave the same ranking to more than one purpose.

From now on we will discuss the first three of these purposes only.

BETTER OPPORTUNITIES FOR THE POLITICIANS TO SET PRIORITIES?

To find out more about attitudes towards the purposes of the budget system, some interlocking questions were posed. One of them was as follows: "What do you think of the following statement: The budget system should provide the politicians with more opportunity than at present to decide where the utility of an increase in appropriations is greatest?" Three alternative answers were given: Very much agree, agree up to a point, do not agree. I assumed that the respondent categories would differ in their views on this point. The percentage distribution of responses is shown in Table 4:3.

Table 4:3. Should the budget system provide the politicians with more opportunity than at present to decide where the utility of an increase in appropriations is greatest?

	Very much agree	Agree up to a point	Do not agree	Different answer or no answer
County council				
Senior physicians (30 people)	23	23	50	3
Hospital administrators (27 people)	59	22	19	0
County council managers (26 people)	69	8	23	0
Executive committee chairmen (25 people)	52	32	16	0
Major metropolitan areas and the state				
Senior physicians (15 people)	20	27	40	13
Hospital administrators (12 people)	42	17	42	0
Top executive officers (8 people)	75	12	12	0
Top politicians (10 people)	60	10	30	0

The material strongly supports the assumption. The senior physicians' views deviated considerably from the others.

Political influence

The respondents were asked to comment freely on this question. One of the senior physicians who disagreed with the statement thought that the politicians already had plenty of opportunities; rather should the various medical specialists be given greater freedom. Another physician explained how important it is that doctors put their arguments in language that the elected representatives can understand. He had once asked for an expensive new piece of equipment for his department, and the chairman of the hospital management committee asked

skeptically what he intended to use it for. "I shall use it to operate on you when you are ill", was the answer. The chairman's next question was: "Is there anything else you need?"

Should the politicians be given training by the administration in the fields in which they have to make decisions? Some respondents felt on principle that this was not a good idea: the politicians might lose something of their direct approach and their overview - qualities which are very important to them. Others claimed the opposite: it is important that the politicians should have internal training. This difference in opinion is also reflected in the comments. How, asked one physician, can a politician who knows very little about the field judge, for example, whether or not a radiologist's request for equipment is reasonable? Others pointed out that many of the decisions which have major economic consequences for medical care are really beyond the scope of the politicians. And more information does not necessarily make for better decisions. One physician said that an infirm hemophiliac may cost a million or more in medical care, but no politician would dare to interfere. Since party considerations are so important to a politician, there is no chance of getting very far with pure economic or medical arguments. "Very often appropriations are granted for purposes which are pretty doubtful. Even as a doctor I don't always know what my own colleague's applications mean".

Some politicians said they felt entirely in the hands of experts - physicians as regards day-to-day hospital activities and architects when new buildings were being put up. Some physicians and hospital administrators considered that officials at the central county council office had too much influence compared with the politicians. One of the executive committee chairmen said he would like to turn the question round. The politicians should feel responsible for seeing that they had better opportunities for determining the implications of different action alternatives.

According to the comments, various ways of seeking more objective information are used. Some county councils call in an external advisor, perhaps a physician with high competence in the relevant field, to assess some of the requests for equipment. There was also a certain amount of informal investigation among colleagues in other county councils.

Influence on different areas

My 1966 investigation included the following question to chairman of the county council executive committees: "When the budget is being decided, how much influence have you in the following areas?" Twelve areas were indicated for each of which the respondents were to estimate their influence on a scale from one to seven. On this scale, one meant no influence at all, and seven a great deal of influence. New

constructions and rebuilding were given the highest rankings. From the answers it appears that the 14 people who had been chairmen of the executive committee for more than four years, judged their influence to be higher than the 11 people who had held the equivalent post for a shorter time. See Figure 4:1.

Is there a connection between the time required by the political undertaking and the opportunity for exercising influence? If we divide the respondents into one group of full-time chairmen (10) and one of non-full-time chairmen (15), we will find certain differences. The former have on an average judged their influence to be greater. See Figure 4:2.

More information about the hospital?

To get some more light on the political priority-setting purpose of the budget, the following question was put: "What do you think of the following statement: The politicians should be provided with more information about what happens in the hospital than is at present the case?" The alternative answers were: Very much agree, agree up to a point, do not agree. I assumed that the politicians would be more positive than the others towards this statement. The percentage distribution of the responses can be seen in Table 4:4.

The hospital administrators, regardless of whether they were inside or outside the county councils, were the least positive group in their attitude towards this statement. Altogether the answers show less agreement outside the county councils than within them. The material provides no support for the assumption that the politicians would be more positive than others to this statement.

Scope of the information

When this study was made, I found that the scope of information to the politicians varied considerably in the different county councils. Examples of the forms it can take are: official statements, verbal submissions, minutes, monthly cash reports, county council papers and information sheets. Visits to departments and wards are also mentioned. In some quarters the information is judged to be extensive, in others kept to a minimum.

People from hospitals - i.e. some of the senior physicians and hospital administrators - complained about the meager interest in information shown by the politicians. "Sometimes", three of the hospital administrators reported spontaneously,"they don't even look at the agenda and the other papers they've received until the meeting has already started". They declared further that the politicians seldom or never raised any objections. The opportunity for demanding further information existed, but was very little exploited.

Group investigated: Chairmen of county council executive committees

Question: When the budget is being decided, how much influence have you on the following areas? (Estimate on a scale from 1-7)

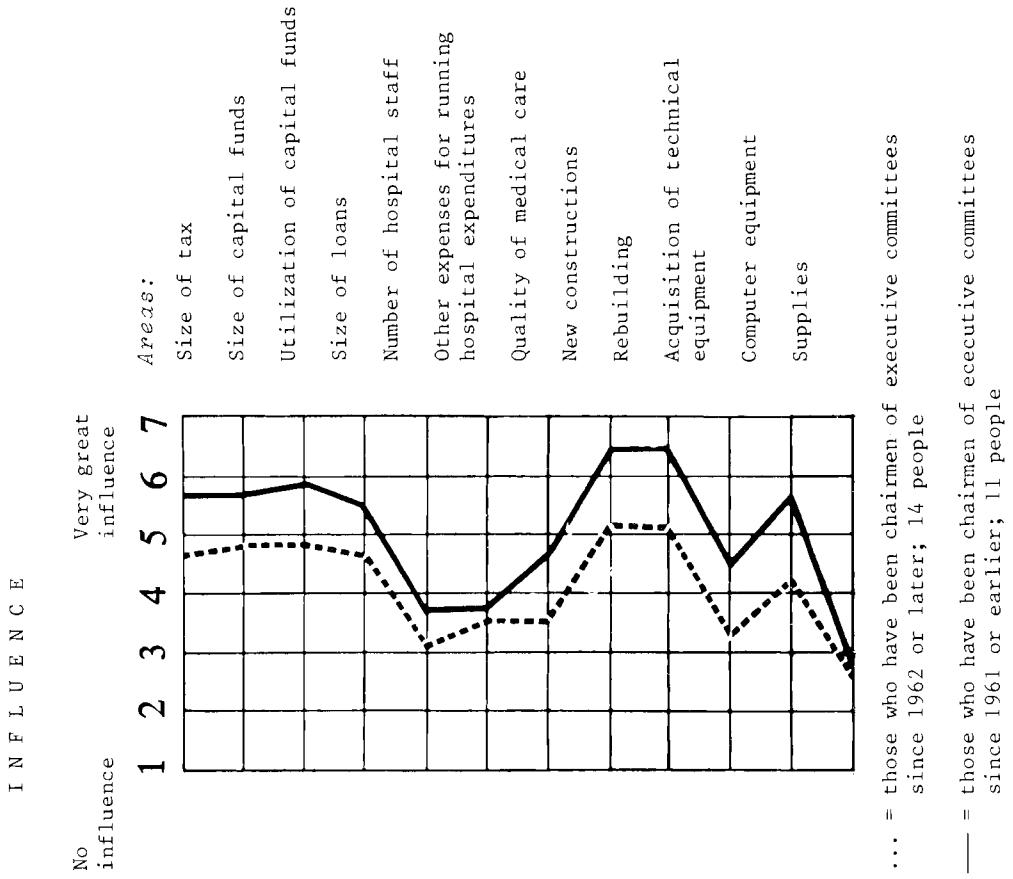

Figure 4:1. Influence - chairmen of county council executive committees who have occupied their posts for periods of different duration

Group investigated: Chairmen of county council executive committees

Question: When the budget is being decided, how much influence have you on the following areas? (Estimate on a scale from 1-7)

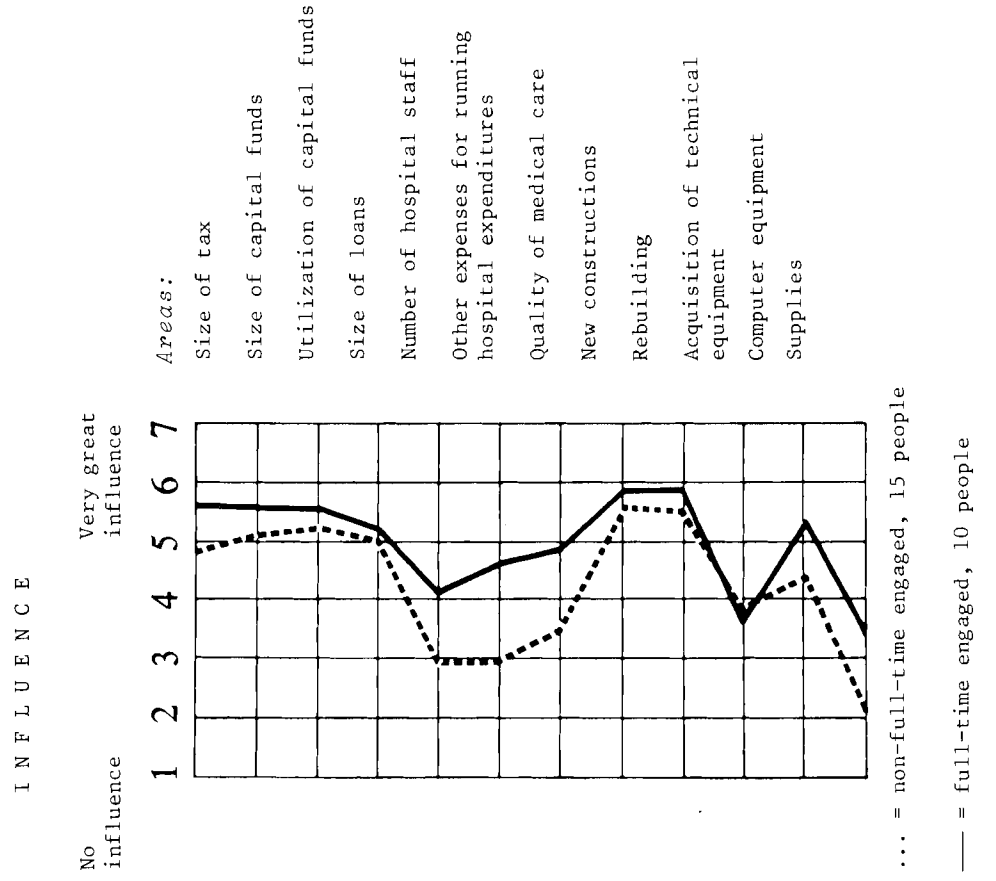

Figure 4:2. Influence - chairmen of county council executive committees, full-time and non-full-time

Table 4:4. Should politicians be provided with more information about what happens in the hospital than is at present the case?

	Very much agree %	Agree up to a point %	Do not agree %	Different answer or no answer %
County council				
Senior physicians (30 people)	53	20	17	10
Hospital administrators (27 people)	33	37	30	0
County council managers (26 people)	65	19	12	4
Executive committee chairmen (25 people)	52	24	24	0
Major metropolitan areas and the state				
Senior physicians (15 people)	33	20	33	13
Hospital administrators (12 people)	17	17	58	8
Top executive officers (8 people)	38	25	25	12
Top politicians (10 people)	40	20	40	0

The difference between the greater interest shown by the chairmen and the other members' lack of interest was emphasized. Staff questions and some purchasing questions seemed to attract most interest.

One senior physician claimed that so long as there is a competent hospital management, the politicians did not need any more information than they had. Lack of time was also mentioned as a problem. The administrators warned that an increase in information might make the workload too heavy. One county council manager said that the best way of getting people to leave you in peace is to swamp them in information that they haven't time to read. Then they go around struggling continually with a bad conscience. A lot depends on the individual person's interest. Some people get bogged down in detail.

The risk of being swamped by information was also mentioned by several executive committee chairmen. The fact that all documents in the county council not referring to individual patients are public and available to anyone who wishes to see them, means that a lot of information is anyway available.

MORE COST INFORMATION FOR PHYSICIANS?

Is it necessary for physicians to know more about medical care costs? In 1966 two central hospitals were using a system of current bookkeeping for each department. It was an attempt to allocate separable costs, and to some extent common costs as well, to each department or corresponding unit. However, most hospitals had no such detailed cost allocation systems. Instead, a general cost accounting report used to be presented to the senior physicians about ten months after the end of the year. Some hospitals arranged demonstrations of various disposable articles at which costs would be indicated. At others there were drug committees which tried to restrict the assortment of drugs and to make recommendations. The joint management and employee committees were also mentioned as bodies which could supply information about costs.

The following question was put: "What do you think of the following statement: Physicians should be given more information by the administration than is at present the case, for instance about the cost of different activities?" The alternative answers were: Very much agree, agree up to a point, do not agree. The percentage distribution of the responses is shown in Table 4:5.

In all respondents categories without exception there was a positive attitude towards the idea of more cost information for the physicians. This was even true of the physicians in the main, although in this group there was a greater proportion of non-agreements than in the others. Three of the top politicians outside the county council abstained from answering on the grounds that they did not know what information was being provided.

Physicians who very much agreed often emphasized that economic aspects are not sufficiently considered in medical care. More cost-awareness was therefore felt to be desireable. Such reporting as existed was not always particularly easy to understand. Some of them pointed out that it would be better to provide oral information about running costs, instead of providing it in writing and much too late, as was the custom.

Other senior physicians were more skeptical; they referred to the possible risks of too much thrift. "Swedish medical care can consider itself lucky that no one looks at the price." - "Anyone who is interested can get hold of information."

Table 4:5. Should the physicians be given more cost information?

	Very much agree %	Agree up to a point %	Do not agree %	Different answer or no answer %
County council				
Senior physicians (30 people)	63	10	27	0
Hospital administrators (27 people)	74	19	7	0
County council managers (26 people)	88	4	4	4
Executive committee chairmen (25 people)	60	20	16	4
Major metropolitan areas and the state				
Senior physicians (15 people)	53	7	33	7
Hospital administrators (12 people)	75	17	8	0
Top executive officers (8 people)	63	37	0	0
Top politicians (10 people)	60	0	10	30

Some of the costs that people felt more should be known about were X-ray and laboratory examinations, extra duty, and other staff costs. The politicians and administrators emphasized that senior consultants can really be regarded as business managers but without management training. As specialists they are medically, but not always economically, aware of their responsibilities.

BETTER BASIS FOR CONTROL?

Is more control over the use of resources necessary in the medical care system? The following question was posed: "What do you think of the following statement: The budget system should provide the hospital administration with a better basis

for control than it does at present?" The alternative answers were: Very much agree, agree up to a point, do not agree. I assumed that the senior physicians, who would be particularly affected by such an exercise of control, would be less positive towards this suggestion than the others. And Table 4:6 does in fact show big differences between the senior physicians and the others.

Table 4:6. Should the budget system provide hospital administration with a better basis for control than it does at present?

	Very much agree %	Agree up to a point %	Do not agree %	Different answer or no answer %
County council				
Senior physicians (30 people)	17	20	60	3
Hospital administrators (27 people)	67	22	11	0
County council managers (26 people)	69	15	15	0
Executive committee chairmen (25 people)	48	8	32	12
Major metropolitan areas and the state				
Senior physicians (15 people)	20	27	40	13
Hospital administrators (12 people)	58	25	17	0
Top executive officers (8 people)	63	37	0	0
Top politicians (10 people)	40	40	0	20

It turned out that running drug costs were generally followed up separately by the department or ward. But one senior physician remarked that the hospital administration cannot possibly check whether drug consumption is reasonable, any more than it can check whether the time of the nursing staff has been used in the most satisfactory way. It is

better to urge economy generally than to go in for farreaching cost control. It was mentioned that the need for control seemed to vary with whoever was in charge. And it was felt that the administration had already swollen enough.

One of the senior physicians said that the way medical work is carried out is largely a matter of temperament. If the head of a department is the least bit easy-going, then six interns in the department may have six different ways of working. Up to a point it could be interesting to know, for example, the length of stay in other places. "But the risk then is that the administrators start interfering in the form that the care of patients should take."

The two following quotations, both from senior physicians, bear witness to the wide range of opinions on this question. "I've nothing against someone telling me the hospital costs. Nor do I mind providing information. But I don't want to be told how much it *should* cost." - "It isn't a budget at all if you can exceed it as much as you like."

One hospital administrator emphasized that the conflict which is sometimes apparent between a medical and an administrative function depends partly on the physicians' belief that the administrators always want to save. But if an attempt is made to track down the cause of an increase in costs, then the physicians become interested in things that might result in savings. Examples are medical records, blood wastage and the consumption of drugs.

One county council manager, referring to the ambiguity in the concept of control, recounted how on many occasions he had turned to professors in the university hospitals for an authoritative opinion on some equipment or expansion issue. The result was often that those who were applying for funds should have asked for very much more. One executive committee chairman felt on the other hand that the requests of the senior consultants were all too often left unchallenged. "I'm not happy about reducing everything to the same level, but we should at least try to have a similar standard throughout the country."

DEVELOPMENTS DURING THE 1970'S

Has the role of the budget as an instrument for political priority-setting altered during the years since the 1966 interview study? That the budget is still of primary importance as a means of realizing the intentions of the authorities is quite clear, but other plans - in part complementary - also play an important role today. Chief among these are the long-term plans for medical care. These include fundamental guidelines which are reflected, wholly or in part, in appropriation decisions. The greater time span of the budget system is one reflection of this development.

Medical care is still an area of high political priority in Sweden. The county council politicians are still geared to the idea of growth, although expansion is now directed increasingly towards long-term care and primary care. Political decision-making has become more open, more subject to debate, as witness among other things the element of majority power on boards and committees. Perhaps, too, there is more understanding of the political decision processes involved since employee representation on boards was introduced in 1973. As the economic situation has enforced priorities, which may sometimes have seemed harsh in view of the rapid developments in medical technology, there may also have been a growing realization of the fact that medical care functions in a political system.

As regards the role of the budget as an instrument for influencing action in the medical care system, it appears that the use of resources in the system has still not been subjected to any very detailed discussion. The opportunity for exercising influence has probably been somewhat restricted by the fact that department-related budgets and accounting have not been introduced everywhere, although their use has increased. There is still great emphasis on the right to independent action among the professional groups. The system of rewards encourages the emergence of academic élites. The structure of the medical care system is based to a great extent on the notion of high scientific quality.

As regards the role of the budget system as a basis for administrative control, here, too, recent years have brought an increase in access on the part of the public. A contributing factor here has been the use of a department-related system for the regular follow-up of costs and performance. At the same time it has to be noted that hopes of better control over the use of resources, with or without the help of sophisticated computer technology, have only been fulfilled to a limited extent.

HEALTH SERVICES AND NATIONAL INCOME

In 1966 I asked the 153 interviewed people to answer the following question: "Which of the following four statements agrees best with your own view?

1. Provision for in-patient care should be adjusted so that the care provided is the best possible within the limits of the total medical care appropriation. This may imply that the share of the national income devoted to medical care be reduced.
2. Provision for in-patient care should be adjusted so that the care provided is the best possible within the limits of the total medical care appropriation. The share of the national income devoted to medical care should be maintained at approximately the present level.

3. Provision for in-patient care should be adjusted so that the care provided is the best possible within the limits of the total medical care appropriation. Increases in the total appropriation to medical care compared with the present situation, estimated as a percentage of the national income, are strongly motivated.
4. Provision for in-patient care should be adjusted so that the care provided is the best possible. Cost should not be given too much consideration."

It was clearly explained to the respondents that the idea of these statements was to note differences of degree in attitude towards the costs of medical care. One hundred and eight of those interviewed were from the 25 county councils, while 45 were from the big-city areas or the central government which at that time was responsible for the care of the mentally ill. The answers can be seen in Table 4:7.

Table 4:7. Attitudes in different respondent classes towards future hospital care claims on the national income, percentage distribution of answers

Principal category of answer	Alternative answers				
	Statement 1	Statement 2	Statement 3	Statement 4	No answer
County council					
Senior physicians (30 people)	13	30	33	23	0
Hospital administrators (27 people)	15	15	33	30	7
County council managers (26 people)	27	23	38	12	0
Executive committee chairmen (25 people)	8	28	32	32	0
Major metropolitan areas and the state					
Senior physicians (15 people)	13	13	40	27	7
Hospital admins-trators (12 people)	8	17	50	25	0
Executive officers (8 people)	12	25	38	12	12
Top politicians (10 people)	20	10	60	0	10

The difference between the different groups in the county councils were relatively small. A slightly more moderate line was taken in particular by the county council mangers. The chairmen of the executive committees do not differ noticeably from the hospital administrators. According to these answers it is not the physicians who are most eager to assign less importance to the cost side, but the politicians and the hospital adminstrators.

In the major metropolitan areas and the central government the picture is somewhat more varied. The fact that medical care has been operating under tougher conditions there, and claims have had to be restricted, might have encouraged a tendency to choose statement 4. That this did not happen may perhaps reflect a fairly solid training in the economic facts of life.

In the 1978 Stockholm study addressed to senior physicians and district physicians, I posed a similar question, worded as follows: "Which of the following statements agrees best with your own view?

1. Medical care should reduce its share of the national income during the next decade.
2. Medical care should maintain the same share as now of the national income during the next decade.
3. Medical care should increase its share of the national income somewhat during the next decade.
4. Medical care should increase its share of the national income considerably during the next decade."

The answers are presented in Table 4:8.

Table 4:8. Attitudes among senior physicians and district physicians in the Stockholm county council towards future medical care claims on the national income, percentage distribution of answers

Principal categories of answer	Alternative answers			
	Statement 1	Statement 2	Statement 3	Statement 4
Senior physicians (160 answers)	12	49	32	8
District physicians (56 answers)	23	43	30	2

"Which development with respect to health care cost is most likely because of political decisions?"

The answers to this question are found in Table 4:9.

Table 4:9. Most likely cost development as a consequence of political decisions, percentage distribution of answers

	Alternative answers			
	Smaller share than now	The same share as now	Some increase	Considerable increase
Senior physicians (160 people)	8	22	59	11
District physicians (56 people)	7	29	59	5

The answers in Table 4:9 compared with Table 4:8 indicate that the physicians consider the politicians to be more generous in their budget allocations toward health care than the physicians find desirable.

"Which development do you find desirable within your own medical field?" Four alternative answers were given:

The answers as a percentage will be found in Table 4:10.

Table 4:10. Desirable development within the respondents' own medical field

	Alternative answers			
	Smaller resources than now	The same as now	Some increase	Considerable increase
Senior physicians (160 people)	1	27	49	23
District physicians (57 people)	2	18	39	42

Only 8 per cent of the senior physicians give as their opinion that medical care costs as a whole should increase considerably, but 23 per cent claim that a considerable increase is desirable in their own field. The difference is more marked for district physicians; 2 and 42 per cent. This must be seen in relation to the fact that primary care is a top priority area.

SUMMARY

In this chapter I have analyzed three purposes of the budget system in medical care: to provide an instrument for priority-setting by the politicians, to provide an instrument for influencing action in medical care, and to furnish a basis for administrative control. Certain differences in the ranking of these goals among different categories can be posited on the basis of an interview study carried out in 1966. The role of the budget as an instrument of control was ranked highest by the senior physicians, the political purpose was ranked first by the chairmen of the executive committees and the hospital administrators, while the county council managers ranked these two purposes equally high.

In 1978 a study in the Stockholm county council showed that while only 2 per cent of district physicians and 8 per cent of senior physicians feel that a considerable increase in medical care claims of the national income is desirable, no less than 42 per cent of the former and 23 per cent of the latter group find a considerable increase desirable in their own medical field.

5 STRUCTURE OF THE BUDGET

The budget is a systematic economic plan for a specific period of time. It registers politically determined appropriations, indicating in what way or for what purposes resources are to be used. The concept of *the budget system* refers to the formal composition of the combined appropriations in the budget and the principles applying to their preparation and allocation. The concept of *the structure of the budget system* refers to a number of budgetary aspects, the substance of which will be explained in more detail in the course of this chapter. For every budgetary aspect it is assumed that action alternatives in point of principle exist. See Table 5:1.

FORMAL RULES FOR BUDGETS

According to the Swedish Local Government Act, municipalities and county councils have to make budgets annually for the coming calender year. These budgets should contain plans for the year, registering the appropriations which should be made and how fund requirements are to be met. The regulations contained in the Act are brief and leave plenty of room for the authority to determine in more detail the structure of the budget system. The central recommendations of the Association of Swedish County Councils have to some extent affected the way the budget and the accounting system are designed in practice. Experiments and development work of various kinds are also being undertaken by the medical care authorities.

CENTRAL RECOMMENDATIONS

Until the end of the 1960's the budget and accounting systems of the county councils were designed in a variety of ways. An ambition to achieve a more "businesslike" approach lay behind a suggestion put forward by the Association in 1961 about "operating accounting in the hospitals" (Driftbokföring

Table 5:1. Budgetary aspects and action alternatives

Budgetary aspects	Action alternatives
Budget's revaluation method	Increment budgeting Zero-base budgeting
Starting-point of budgeting	Build-up budgeting Break-down budgeting
Scope of the budget	Gross budget Net budget
Specification of allocations in the budget	Cost classification budget Cost center budget Program budget Performance budget
Responsibility within the budget	Detailed budget Framework budget
The budget as incentive to economic management	Non-incentive budget Incentive budget
Realism of the budget	Over-budgeting Under-budgeting
Budget's period flexibility	Tied budget Flexible budget
Tactical elements in budgeting	Tactical budgeting Open budgeting
Degree of participation in budgeting	Budgeting with staff consultation Budgeting without staff consultation
Time horizon of the budget	One-year budget Multi-year budget
Periodization of the budget	Cash budget Cost budget

vid sjukhus 1961). This recommendation involved a farreaching distribution of costs to the wards and reception stations. It was only used in two hospitals, and even there only for a short time.

During the latter part of the 1960's a survey was made of the budget and accounting system under the auspices of the Association of County Councils. The result was the "L-plan", the first part of which, covering the financial accounting,

was ready in 1971. The second part, which included a recommendation about budgeting and the reporting of costs and performance in cost centers, was ready in 1974. According to this suggestion, total costs are to be reported once a year. In addition, regular reports can be made with different periodic cut-offs and different levels of ambition. They may appear every month, every other month, every quarter and so on. The lowest level of ambition involves the distribution of direct costs only (wages, materials, etc.). At the second level of ambition, performance in the cost centers is also reported. The most ambitious version requires a full distribution of costs to all cost centers, and this can be done with the help of predetermined standard prices. Accounting data can be collected either on a basis of actual costs, or with the help of random samples.

To facilitate the processing, the Association of County Councils and the Swedish Planning and Rationalization Institute together worked out a computer system adapted to the L-plan in 1974.

Most of the county councils have approved the L-plan in principle, but the budget and accounting systems in the different county councils reveal different levels of ambition.

The design of the budget system under different medical care authorities may be related to a number of factors. Apart from laws and regulations and central recommendations, the traditions of the organization may come into the picture. There may have been local surveys, and experiments may have been started. Expectations and goals among the actors in the organization may also have implications for the design. Presumably, too, the goals prescribed for the budget system can affect its structure.

The twelve budgetary aspects illustrated in Table 5:1 can be considered in terms of types of design and types of structure. See Table 5:2.

SATISFACTION WITH THE BUDGET SYSTEM

In the 1966 study I asked the following question: "Are you satisfied with the present formal design of the budget for the hospital? Note that the question does not refer to the actual sums of money involved." The answers were classified in four categories: Not all satisfied, not altogether satisfied, satisfied on the whole, entirely satisfied.

At this time increment budgeting was the rule. There was a system of build-up budgets, based on the principle of gross budgets. Cost classification budgets were the most usual sort with occasional specification by cost centers. Detailed budgets were the accepted rule. In most cases there was an incentive for physicians to see many ambulatory patients, as payment was received per visit. There was on the whole no

Table 5:2. Budgetary aspects according to type of design and type of structure

Type of structure	Type of design	
	Organization design	Administrative design
Motivation structure	Specification of allocations in the budget	Budget's revaluation method
	Responsibility within the budget	Scope of the budget
	Degree of participation in budgeting	The budget as an incentive to economic management
		Realism of the budget
		Tactical elements in budgeting
Time structure	Starting-point of budgeting	Time horizon of the budget
	Budget's period flexibility	Periodization of the budget

tendency to under-budget health care in the county councils, as this was an area of high priority. Principally there was very low period flexibility. The need in the counties for tactical budgeting seems on the whole to have been small. There was comparatively little staff consultation in the budgetary process. One year-budgets were used, predominantly as cash budgets.

The answers from the county councils given in the form of a percentage are shown in Table 5:3.

One-third of the senior physicians refrained from answering. They gave as their reasons that they had little contact with economic matters, that they got what they wanted, or that they had little insight into the more detailed structure of the budget.

A comparatively large number of the hospital administrators said that they were not at all satisfied with the design of the budget system. They represent the group among the respondents who have most to do with hospital budgeting in their daily work. What were they dissatisfied with? One gave as an example that new positions requested were introduced before there had been time to check whether they were justified. The administration is also subjected to pressure from the staff to fill the new positions. Once this has been done, it is practically impossible to withdraw them again,

Table 5:3. Satisfaction with the budget system (percentage)

	Entirely satisfied	Satisfied on the whole	Not altogether satisfied	Not at all satisfied	No answer
County council					
Senior physicians (30 people)	20	33	10	3	33
Hospital administrators (27 people)	11	30	22	37	0
County council managers (26 people)	23	46	23	8	0
Executive committee chairmen (25 people)	12	64	20	4	0

even if there are strong reasons for questioning their necessity. Another criticism was that the budget was specified in too much detail: perhaps economic management would benefit if resources were not tied in advance in detail to certain classes of costs. To be able to work more freely, it was felt, would lead to more in-fighting between different department heads in the hospital, but it would make their work more stimulating.

BUDGET'S REVALUATION METHOD

Under this heading we will discuss the extent of budgetary analysis. Two methods will be presented, increment budgeting, and zero-base budgeting.

Increment budgeting

In increment budgeting the point of departure for the budgetary analysis is the existing budget with its cost items and totals. Only marginal increases or reductions are considered.

Zero-base budgeting

In zero-base or comprehensive budgeting every allocation should be related to demand. All parts of the program and all cost items are questioned every time in the budgetary analysis. Existing projects are ranked in relation to those which are being suggested (Davis, Dempster & Wildavsky, 1975; Herzlinger, 1979).

The concept of zero-base budgeting was developed in the USA and can be traced back to 1924. Its first formal use in the Federal Government occurred in 1962 (Wildavsky & Hammond, 1965). Its use in a private company, Texas Instrument, has been reported as valuable (Phyrr, 1973). Implemented by Governor Carter in the State of Georgia, the process is said to have resulted in an improvement in the quality of management information and a greater involvement with budgeting. However, it did not change the resource allocation or evaluation process in the State (Minmer, 1974, as referred by Herzlinger, 1979). As President, Carter made zero-base budgeting part of his platform. It was implemented soon after his election. The intention was to review the entire budget in three steps:

- Identification of decision units
- Formulation of decision packages
- Ranking and consolidation

After an analysis of the experience of this process in the Public Health Service in the USA, Herzlinger concludes that the technique was misused. The process appeared as threatening and created hostility. In one case a list that appeared as a ranking was put together, but turned out to be an alphabetic list. Part of the method was a proposal for a 20 per cent cut for greater efficiency. As Wildavsky puts it, since a zero-base was too absurd, zero moved up until it reached, say, 80 per cent of the base. The burden of conflict and calculation declined, but so did any real difference from traditional incremental budgeting (Wildavsky, 1978). For the National Cancer Institute the thought of a 20 per cent cut did not make sense, since the Institute works in a political environment, traumatized by the disease. The outcome proved to be no discernible change from the normal rate of growth. Few fundamental changes took place in the distribution of the budget. Not many programs were analyzed from the ground up (Herzlinger, 1979). The assumption that "there is no yesterday" and that nothing is to be taken for granted did not prove valid. History provides a strong base on which to rest a case (Wildavsky, 1978).

The 1966 interview study

In the 1966 interview study I asked for a reaction to the following statement: "Only changes in relation to previous allocations are subjected to critical review in the budgetary work." The alternative answers were: Absolutely correct, correct up to a point, hardly correct at all, incorrect. I assumed that the answers from the county councils would imply agreements more often than the answers from the others. See Table 5:4 for percentages.

Table 5:4. Are only changes subjected to critical examination in the budgetary work?

	Absolutely correct	Correct up to a point	Hardly correct at all	Incorrect	No answer
County councils					
Senior physicians (30 people)	53	23	17	3	3
Hospital administrators (27 people)	41	30	11	19	0
County council managers (26 people)	46	35	15	4	0
Executive committee chairmen (25 people)	40	28	28	4	0
Major metropolitan areas and the state					
Senior physicians (15 people)	33	13	20	20	13
Hospital administrators (12 people)	33	0	25	42	0
Top executive officers (8 people)	25	50	0	25	0
Top politicians (10 people)	20	50	0	30	0

As expected, a difference can be observed between the answers from the county councils and those from outside the councils. Thus, the alternative "incorrect" was chosen less often by respondents in the county councils, while the opposite was true of the answer "absolutely correct". The senior physicians felt more often than other groups in the county councils that the statement was "absolutely correct". Among those who considered it to be incorrect, the hospital administrators were the relatively largest group both in the county councils and outside.

Some people were irritated by this question, particularly those who chose the alternative "incorrect" or "hardly correct at all". One of the respondents explained with some

emphasis that the statement was unfair and based on inadequate understanding. Others claimed that the statement referred to a working method that just has to be accepted. As one executive committee chairman put it: "The county council's documentation consists of several thousand pages. If they had to examine everything in detail and decide that one allocation could be increased and another cut, it wouldn't be possible to get through the budgetary work. We generally just say: 'Same as before'. Of course there's a risk of temporary allocations becoming permanent. Once you've approved something, it's likely simply to go on and on. That's why we're afraid to take on anything new".

Respondents in all categories mentioned how difficult it is to cancel staff allocations once they have been made. "I wish I could say that the statement is incorrect, but unfortunately it isn't", one county council manager remarked. "The statement is 98 per cent correct. We had an example when patient numbers in the lung department began to fall, while other departments - dermatology, for instance - were getting more. But it still wasn't possible to reduce the number of physicians in the lung department".

Several administrators explained the unwillingness to reassess applications at least in part by the hospitals' unwieldy administrative structure. Every senior consultant was regarded as having his right of veto, which was difficult to by-pass. As one administrator put it: "Lack of economic thinking, shortage of planning resources, traditional division of labor, and senior physicians dominating from their seats of power on the medical side - it's been difficult to do anything about any of this."

The respondents were also asked the following question: "If an allocation for the current program is fully used one year, is it then likely that it will not be reduced in a subsequent budget?" The answers were classed as affirmative or negative. The percentage distribution can be seen in Table 5:5.

As can be seen from the table, a majority from all categories, regardless of which authority they came under, felt that an allocation that had been fully utilized would be automatically renewed.

Developments in recent years

In the 1977 telephone interviews county council managers or other top central officials were asked about the extent to which existing programs are reassessed in the course of making the new budget. Most of them seemed to think that such reassessment is still minimal. In one county council the central office simply goes through the last budget to see that the figures are up-to-date. The hospital management committees are only asked to add specified incremental require-

Table 5:5. Does utilization of an allocation mean automatic renewal?

	Affirmative answer	Negative answer	No answer or other answer
County councils			
Senior physicians (30 people)	77	13	10
Hospital administrators (27 people)	70	11	19
County council managers (26 people)	96	4	0
Executive committee chairmen (25 people)	88	4	8
Major metropolitan areas and the state			
Senior physicians (15 people)	80	7	13
Hospital administrators (12 people)	92	8	0
Top executive officers (8 people)	50	38	12
Top politicians (10 people)	80	20	0

ments. In this way it is not necessary to review existing programs locally. It is difficult to release existing resources to pay for anything new: the requisite instruments are simply not available. This worries several of the respondents. A children's department is mentioned as an example: the department is getting fewer patients all the time, and yet it has been impossible to release any of the comparatively large workforce to support a neighbouring department whose load is on the increase. The attitude of the trade-union organizations, together with the actions of certain other stakeholder groups, have been seen as an obstacle.

A few years ago a fairly extensive survey about the need for reviewing was undertaken in one county council. It was based on strictly political directives. Suggestions for savings amounting to several million kronor were made. Al-

though much time was devoted to this, it turned out that the politicians did not want to make any decisions about savings. The closure of beds met with opposition.

Some of the respondents said that a good deal is being done to review whole areas: one year long-term care, another psychiatry, a third ambulatory care, and so on. Recommendations are based on a systematic policy and on the basic action programs included in the long-term plans. However, such reassessments as are undertaken generally result in an increase in costs.

Many people emphasized that all this touches on a sensitive spot: there isn't time to do more than investigate the requests for new positions. Nonetheless, so it is claimed, existing programs are not just left to their fate. They are the subject of continual interest from the operations and methods departments, for instance, particularly when new positions are being requested.

The dilemma of revaluating present activities can be illustrated by an analysis of the health care budget in one county council for 1979. Apart from effects of wage negotiations and inflation, 96.2 per cent is accounted for by the prolongation of operations which existed at the beginning of 1978. 1.5 per cent is year-long effects of political decisions taken in 1978. 1 per cent is related to increases in primary care, a high priority area. 0.9 per cent consists of automatic increases, mainly due to external contracts or agreements. Only 0.4 per cent refers to effects of budgetary requests of a traditional kind from senior physicians and department heads.

Goals of the budget system and the budget's revaluation method

If we can ignore the administrative costs of a review, we can say that in principle a zero-base budget must be preferable as an instrument for political decisions. It cannot be in the interest of the politicians that programs continue to be carried out without relation to current demands. But when we take into account the complexity of the necessary reassessments and what it costs to carry them out, the picture is likely to look rather different. This explains current praxis.

Zero-base budgeting appears to be fundamentally more appropriate than increment budgeting, but it may at the same time imply a centralistic tendency. The former encourages reorientation and, in doing so, expresses confidence in the intellectual ability of the workforce to carry out change. However, there are limits to how much change people feel they can cope with. Where these limits lie depends on a whole series of circumstances, among other things the extent to which employees can participate in the decision-making process at different levels.

Practical considerations favor increment budgeting, and these are stronger when economic conditions are not perceived as obvious restrictions. This is illustrated in the following quotation:

> Budgeting is incremental, not comprehensive. The beginning of wisdom about an agency is that it is almost never actively reviewed as a whole every year in the sense of reconsidering the value of all existing programs as compared to all possible alternatives. Instead, it is based on last year's budget with special attention given to a narrow range of increases and decreases. Thus the men who make the budget are concerned with relatively small increments to an existing base. Their attention is focused on a small number of items over which the budgetary battle is fought.
> (Wildavsky, 1964, p. 14)

If adequate efficiency is to be ensured, intermediate forms between increment budgeting and zero-base budgeting must be sought. It must be possible to review any particular part of an existing program that appears to call for it (Anthony & Herzlinger, 1975).

Etzioni (1968) has emphasized the necessity of separating fundamental decisions from item decisions for analytical purposes. The former are characterized by an exploration of the main alternatives, omitting details and specifications, as seen by the actors in view of their conceptions of their goals. The latter are made incrementally within the context set by a number of fundamental decisions and reviews. It is possible that part of the opposing views, mirrored in Table 5:4, can be explained by means of these concepts. Such decisions as new buildings can be considered fundamental. The operation of activities in progress may be counted as item decisions. According to Etzioni a set of increments, rather than single items, has to be compared with comprehensive budgeting in order to draw conclusions regarding the efficiency of one or the other type of budgeting.

STARTING-POINT OF THE BUDGETING

Two essentially different approaches to the planning of budgets have been suggested in the literature. They are build-up and break-down budgeting (Frenckner, 1953; Madsen, 1970; Widebäck, 1970; Bergstrand, 1974).

Build-up budgeting

In build-up budgeting the economic initiative to the budget work rests with the local department. Applications are based in the first case on what is considered desirable locally. When the applications have been formulated, they are passed

through the different organizational levels and political bodies. There they are checked, assessed, aggregated, sifted and negotiated. Finally, the budget is fixed by the county council's elected representatives. The basic procedure can be seen in a simplified example presented in Figure 5:1.

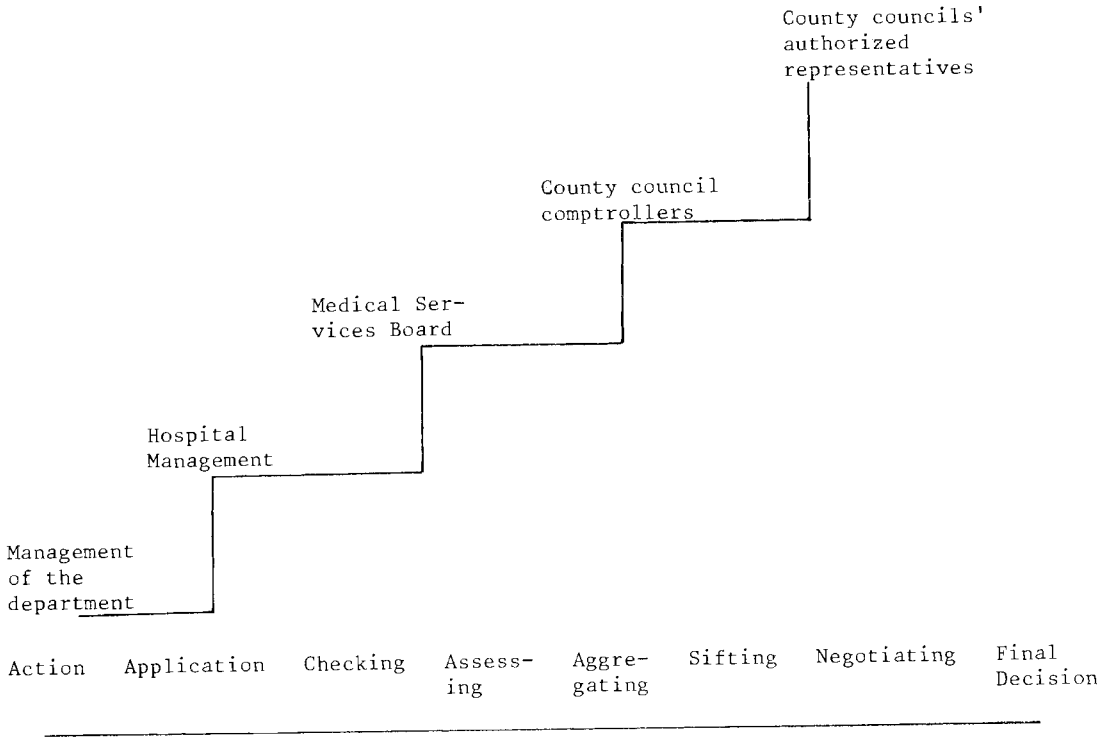

Figure 5:1. Example of build-up budgeting

Break-down budgeting

In break-down budgeting the economic initiative to the budgetary activities rests at the leading political level, i.e. in the case of medical care generally the county council's elected representatives. They indicate the limits within which applications should remain. These can have been determined according to what seems an acceptable tax rate. Figure 5:2 illustrates a simplified example.

Intermediate forms between pure build-up and pure break-down budgeting are possible.

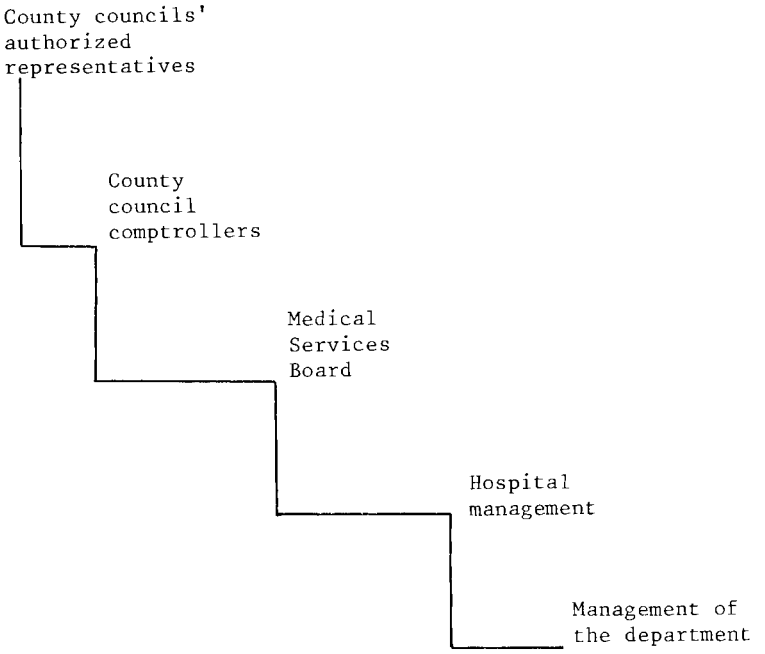

Figure 5:2. Example of break-down budgeting

Praxis with regard to the starting-point of the budgeting

In 1966 build-up budgeting was the usual form, although in some medical care authorities tentative steps towards break-down budgeting had been taken. Now, towards the end of the 1970's it has become more common to set economic limits for the budget activities, generally for both operating and capital expenditures. A point of departure is generally provided by the 5-year plans which have become widespread during the 1970's. The total appropriation for medical care within a county is divided among different medical care regions or institutions. For two reasons, however, they have not yet directly affected the departments' applications for funds. First, they usually come too late, often between January and March. Sometimes because the economic outcome

of the previous year's budget and the latest tax forecast have to be studied first. By that time the departments' applications have generally already been prepared. Secondly, the frames are not generally broken down to department level. This means that they can influence developments first in the subsequent priority-setting. Sometimes, too, the frames are adjusted, up as well as down, in the course of their journey.

In one county council provisional budget frames are furnished as early as October, 15 months before the relevant budget year will begin. Definite limits are set first in March. The frames often contain both operating and capital costs. There are some examples of frames for staff costs, but not for other running costs.

In some county councils all applications with their motivations are sent to all the members of the medical services board. In other cases only a summary or a selection are presented. Major questions of principle have sometimes been dealt with earlier. Sometimes parts of the applications are set aside for closer examination. The results may not come until a large part of the budget year has already passed. Prevailing forms towards the end of the 1970's cannot be described as either pure build-up or pure break-down budgeting. It is rather a question of an intermediate form.

Goals of the budget system and the starting-point of the budgeting

In the following pages we will discuss possible relations between the three goals of the budget system presented in Chapter 4 and the two alternative starting-points for budgeting, namely build-up and break-down budgeting.

As an instrument in political decision-making, break-down budgeting seems to have certain advantages. Coordinated planning with other elements of public expenditure policy becomes possible at an earlier stage. Long-term economic planning is easier, since the concept of the economic management of given resources plays such a central role. Coordination with the other activities of the county council is also easier.

One prerequisite for break-down budgeting is that communications are good, so that the politicians recognize what consequences can be expected from the decisions made. And political drive is required: the politicians must dare to set an economic limit on grounds that are not based on a survey of what is wanted.

A changeover from build-up to break-down budgeting may come up against difficulties to start with. If an organization is accustomed to build-up budgeting where applications are presented at a specific time during the budget period, there may be a tendency to make lists based on "we want ...".

As Wildavsky points out, the question cannot be "what do you want?" as if there were no limits; instead it should be "what do you want compared to what you can get?" Ignoring resources is as bad as neglecting objectives. Resources affect objectives as well as the other way around (Wildavsky, 1978). Build-up budgeting no doubt encourages expansion.

A disadvantage of break-down budgeting as opposed to build-up budgeting is the risk that the politicians may assume a particular view of operations at too early a stage. It may turn out later that another view, or another orientation, would have been more reasonable. If there is no opportunity for adjustment, this may have a detrimental effect.

What opportunities for influencing action are provided under break-down and build-up budgeting? The local units fulfil different roles in the two systems. Under a system of break-down budgeting they are given a fixed economic limit for their budget proposals instead of drawing up applications whose realism in relation to resources can vary. The application process is thus simpler. It is no longer necessary to make plans which will be cut back later. In other words, break-down budgeting in this respect is labor-saving. However, the risk of haggling is not removed. Under this system some of the work of priority-setting is transferred to the person making the application. Should not this type of decision really fall to the politicians? Should not every request be sent to the political level for decision? For purely practical reasons this kind of demand is difficult, if not impossible, to satisfy in a large medical care organization. Some scrutinizing of claims, as well as some priority-setting, probably often has to be delegated in so far as it is not anyway regarded as part of the everyday working decision-making. The documents are public according to Swedish law; open inspection should not be hampered. The politicians are completely within their rights in imposing cuts or making additions to what has been asked for or suggested. Applications which are not passed on, can reach the politicians by other routes.

The opportunities for administrative control are probably the same, regardless of whether build-up or break-down budgeting is used.

SCOPE OF THE BUDGET

By the scope of the budget is meant the extent to which the budget covers revenues and expenses. Two alternatives are discussed: gross budget and net budget.

Gross budgets

In a gross budget revenues and expenses are both reported in their entirety. This is the usual procedure in the public administration. In Swedish state-run undertakings, however,

exceptions are made for such organizations as the public utilities where only investments and any contributions to operations are reported on the expenditure side in the national budget. On the revenue side any surplus on operations and transfers of depreciation funds are taken up. The real operating expenses are then right outside the national budget (Vinde, 1971).

Net budgets

The method in which basically only net sums are included in the budget is here called the net budget. Thus, all that is included in this case is what the administration receives from the medical care authority or, if revenues should be greater than expenses, what is paid over to the authority.

In its time the committee on local government law discussed the possibility of net budgets for their public utilities (Kommunala bolag, 1965). It was felt that applications to the budget should contain both costs and revenues. The actual budget itself, on the other hand, would only include the estimated net result. But the net budget was considered unsuitable for capital expenditures. The committee's recommendation has not yet been carried out.

Before the "7-kronor reform" in Swedish medical care in 1970 there was a special form of net budget for the system of physicians' ambulatory patients, in that the physicians' fees from these patients were not included in the official hospital budget. On the revenue side these activities were reflected only in a symbolical sum which the physicians paid to the hospital for the premises used, the hospital staff which served in their outpatient units, equipment, etc.

Goals of the budget system and scope of the budget

Does the net budget or the gross budget correspond best to the goal that the budget system should provide an instrument for political priority setting? The gross budget appears to be the more effective instrument. In the case of an extreme net budget the politicians have little chance of exerting any very great influence on the choice of resources. However, there can be intermediate forms in which the difference in effect between the net and the gross budget is fairly small. An example could be a budget with restrictions on the revenue side due to a fixed fee policy, and restrictions on the expenditure side in that the establishment of new positions can only be decided by the politicians.

Much of the cost of physiotherapy and ambulatory physicians' visits, for example, is covered by fees which the authority obtains from the local social insurance office, together with limited fees direct from the patients. As a result of this, the question of a net budget for parts of the medical care system has been discussed. Some hospitals and

regions would like to have the right to appoint staff who "pay for themselves" direct by means of this kind of income.

Is there a connection between the scope of the budget and behavior in the organization? Requests for funds may occupy a more modest role in the net budget. In implementation, the gross budget provides a narrower action framework. Consequently, it might do less to stimulate innovation.

If a whole hospital was running on a net budget, there could be opportunities for locally inspired improvements in efficiency, and for building up local research and development resources etc. From the hospital's point of view, this can generate a greater feeling of commitment. It also makes more demands on hospital management's judgement and energy. Results in such a case would come to depend not least on the loyalty of the decision makers, their motivation and their skill. Differences between hospitals would presumably be greater than at present.

One senior physicians motivated his interest in the introduction of net budgets as follows: "If I want to buy a machine for 50 000 kronor, with the help of which I can save 100 000 kronor in a year, I have to refrain at present if I haven't the requisite grant."

On the question of administrative control it is probably true to say that insight into the economy of the organization tends to be more limited with a net budget. But this insight can be secured in other ways. From the point of view of control the net budget does not therefore necessarily need to be a weaker instrument than the gross budget.

SPECIFICATION OF ALLOCATIONS IN THE BUDGET

There are different ways of specifying the allocations in a budget. They can be linked to cost classes, to cost centers, to programs or to performance, for example.

Cost classification budgets

In the traditional cost classification budget allocations are linked to different production factors or cost classes. Examples are wages, office costs, drugs, sanitary articles, foodstuffs, disposable articles and maintenance. In medical care the cost class "wages and remunerations" alone answers for the greater part of total costs. An example, an extract from a cost classification budget, is reproduced in Table 5:6.

Table 5:6. Example of a cost classification budget

Beds: 700

Estimated number of bed-days for year 3: 200 000

	Final accounts for year 1	Budget for year 2	Suggestion for year 3
Costs (in 1 000 kronor)			
Wages and remunerations			
Physicians	1 800	1 900	2 305
Medical staff	7 808	8 702	10 596
Administrative staff	169	172	225
Financial staff	762	1 354	1 293
Political appointees	1	2	4
Other	463	568	673
Pensions	982	1 470	1 742
Other staff costs	226	284	347
Total	13 211	14 452	17 185
Drugs and medical articles			
Pharmaceuticals	752	650	870
Blood and blood plasma	67	65	70
Medical gauzes	20	19	21
Other drugs	22	23	23
Dressings	154	150	175
X-ray film etc.	342	340	360
Other medical articles	215	200	250
Total	1 572	1 447	1 679
Disposable articles and raw materials			
Maintenance and buildings	50	50	50
Maintenance of equipment	55	55	55
Foodstuffs	1 230	1 200	1 250
Fuel etc.	148	130	150
Consumable equipment	156	150	160
Soap and detergents	20	21	22
Paper articles	56	55	65
Other consumables	95	90	105
Total	1 810	1 751	1 857

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	Final accounts for year 1	Budget for year 2	Suggestion for year 3
Costs (in 1 000 kronor)			
Administration and miscellaneous			
Office materials, advertisement	81	80	85
Telephone and post	102	100	115
Professional journals, newspapers etc.	10	9	10
Other costs	7	8	10
Total	200	198	220
Outside services			
Maintenance of real estate	80	140	150
Maintenance of equipment	130	150	180
Laundry	340	370	450
Transport	7	6	8
Entertainment	4	5	6
Laboratory examinations	126	120	150
Heating	300	400	460
Insurance premiums	10	10	10
Other	6	6	6
Total	1 003	1 208	1 420
Total	17 796	19 056	22 361

Cost center budgets

In a cost center budget the allocations are related to different organizational units, departments and wards which are under common management. An example, an extract from a cost center budget, is reproduced in Table 5:7.

Program budgets

In a program budget the allocations are related to the "ultimate" activities performed (the program) and are intended to express the goals and tasks of the undertaking concerned (Programbudgetering, 1967). Attention is focused on the services to be performed. That the activities are the "ultimate" expression of the undertaking as a whole means that they directly benefit the patient or some other outsider. Activities which are not "ultimate" in this sense are those that a ward or department performs for someone else within the hospital. Programs can vary in size and exist at different levels. A bloc of departments, for example a surgical bloc or an inter-

Table 5:7. Example of a cost center budget

Beds: 700

Estimated number of bed-days for year 3: 200 000

	Final accounts for year 1	Budget for year 2	Suggestion for year 3
MEDICAL DEPARTMENT 135 beds 40 000 bed-days			
Costs (in 1 000 kronor)			
Wages and other staff costs			
Physicians	276	312	350
Ward sisters	132	149	168
Other medical staff	1 155	1 240	1 401
Administrative staff	40	79	85
Total wages	1 603	1 780	2 004
Drugs, laboratory tests and X-rays	287	350	460
Consumable articles	94	113	162
Laundry and foodstuffs	305	359	376
Other	65	99	117
Total for the medical department	2 354	2 701	3 119
SURGICAL DEPARTMENT etc.			

LIST OF POSITIONS IN A MEDICAL DEPARTMENT

	Number of positions	Of which new	Wage sum (tkr)
Department and staff *Common personnel*			
Senior physician	1		60
Ass. senior physicians	2		80
Interns	4		140
Hospital secretaries	4		68
Nurses	2		40
Reception			
Senior nurse	1		22
Nurses	3	1	60
Assistant nurses	2		36
Hospital auxiliaries	4		70

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	Number of positions	Of which, new	Wage sum (tkr)
Wards A, B, C and D (4 x 30 beds)			
Ward sisters	4		90
Nurses	8		160
Assistant nurses	4		72
Hospital auxiliaries	32		544
Ward E (15 beds)			
Ward sister	1		22
Nurse	1		20
Assistant nurses	2		34
Hospital auxiliaries	5		85
Total			1 603
25 per cent general increment			401
			2 004
SURGICAL DEPARTMENT etc.			

nal medicine bloc, can be regarded as a program. Since it is so large, however, it may be desirable for practical reasons to break it down further, perhaps into intensive care, intermediate care, rehabilitation, long-term care, non-specialized care, and so on. However, this means that the programs will vary very much in size. Intermediate care and long-term care dominate. Programs can also be created around such areas as neurological care, rheumatic care or pediatrics, regardless of whether the patient is being looked after in the relevant department or not. On the other hand, a division of programs that breaks with the organizational structure can create problems of responsibility: if the organization and the program do not run parallel, who is to be responsible for the program? This question has to be solved in planning the budget structure. Cross-border programs are also possible, for instance around projects of various kinds. An example of a program budget is reproduced in Table 5:8. Two alternative bases for the program are presented.

Performance budgets

In a performance budget the allocations are related to parts of programs. Thus, there is only a difference of degree between a program budget and a performance budget. In fact any individual hospital visit can be regarded as a program. Every

Table 5:8. Example of a program budget

ALTERNATIVE I. FUNCTIONAL PROGRAMS	Final accounts for year 1	Budget for year 2	Suggestion for year 3
Costs (in 1 000 kronor)			
Hospital care (700 beds)			
Sub-program			
Medical care	4 580	4 793	5 478
Surgical care	4 432	4 690	4 980
Gynaecological care	998	1 004	1 138
Maternity care	845	850	823
Ear/nose/throat care	579	600	620
Psychiatric care	1 200	1 400	1 632
Total	12 634	13 337	14 671
Primary care (80 000 visits) etc.			

ALTERNATIVE II. DIFFERENTIATED PROGRAMS	Final accounts for year 1	Budget for year 2	Suggestion for year 3
Costs (in 1 000 kronor)			
Program			
Intensive care	4 893	4 938	5 263
Intermediate care	9 204	9 108	9 336
Rehabilitation	1 200	1 246	1 723
Long-term care	680	630	592
Non-specialized or general care	357	316	317
Day care	1 208	1 200	1 329
Patient hotel	115	120	123
Home care	1 416	1 473	1 634
Total	19 073	19 031	20 317

individual treated and cared for is in some way or other unique. Every therapy has to some extent to be adapted to the individual patient. However, behind the concept of the performance budget is the assumption that several similar performances will occur during the budget period. The more differentiated the units designated as one performance, the more difficult it will be to get any overview of a performance budget. The greater the number of units that are lumped

together in broader categories, the more information is lost. However, different summations can be included in one and the same budget. These factors must be weighed against one another. Just as the time used for twenty steps in a job is not necessarily exactly twice as much as the time required for ten steps because of learning time, set-up time and terminating time, allowance may have to be made for the fact that resource requirements vary for different volumes of work.

Such measures of performance as bed-days, diagnoses made, average treatment times, number of patients treated and number of visits are all inadequate on their own, but in combination they can be more useful (Jonsson & Jonsson, 1972). For example, when the number of admitted patients and bed-days are compared with costs, it should be remembered that the longer the patient stays in the hospital, the lower the average cost per bed-day generally becomes. Cost for diagnosis, surgical operation and drugs are generally particularly high during the first few days. "Hotel" costs on the other hand, vary little from one day to the next. Table 5:9 provides an example of a possible performance budget.

How should the budget be specified?

To get some idea of opinions about different budget specifications among leading categories of people in medical care, I presented the four examples just described to the respondents in the 1966 interview study. They were asked to rank the examples with a view to their suitability as a decision base. Table 5:10 shows which specification was ranked highest. Answers came from the county councils, as well as the three major metropolitan areas and the state. As the total percentage units amount to more than 100, alternatives must sometimes have been given the highest rank jointly. In studying the answers, the reader should remember that the respondents' practical experience of the alternatives varied.

It was not the traditional cost classification budget, but the cost center budget which received the highest rating. The politicians' particularly positive assessment of the cost center budget is worth noting. Few of the county council managers and other top officials ranked the traditional cost classification budget highest. The program budget was placed comparatively high by the hospital administrators, but the county council managers and other top officials were also relatively positive. It may be mentioned, although it cannot be seen from Table 5:10, that the politicians gave the program budget its lowest rating. No less than 37 per cent of them ranked the performance budget second best.

Justifying his high rating of the cost classification budget, one executive committee chairman drew attention to the fact that about 80 per cent of all costs refer to the cost class "wages". In common with several of his colleagues he was afraid that another type of budget specification might

Table 5:9. Example of a performance budget

Disease group	Number of patients	Average bed-days	Per patients				Suggestion		Comparative figures	
			Wages	Drugs, laboratory tests, X-rays, etc.	Disposable articles, laundry, foodstuffs etc.	Total	Per disease group		Budget year 1	Final accounts
							Total bed-days	Total kronor		
Metabolic	60	27	1 620	189	297	2 106	1 620	126 360	114 090	103 650
Cardiovascular	195	30	1 800	270	330	2 400	5 850	468 000	405 000	320 350
Respiratory	50	19	1 140	171	209	1 520	950	76 000	70 000	62 000
Digestive	145	31	1 860	372	341	2 573	4 495	373 085	350 000	312 000
Motoric	60	45	2 700	595	495	3 790	2 700	227 400	220 000	225 000
Geriatric	240	23	1 380	162	297	1 839	5 520	441 360	430 000	402 000
Observation cases	70	15	900	285	165	1 350	1 050	94 500	90 000	92 000
Other	380	20	1 200	300	220	1 720	7 600	635 600	650 000	603 980
Per patient										
Estimate for year 3	1 200	24.6	1 489	279	281	2 050				
Budget for year 2	1 200	24.8	1 410	237	279	1 943				
Final accounts for year 1	1 170	25	1 300	257	266	1 813				
Per bed-day										
Estimate for year 3						82:60	29 785			
Budget for year 2						78:25	29 760			
Final accounts for year 1						72:50	29 250			
Total for year 3			1 787 100	335 001	338 195	2 460 305				
Budget for year 2			1 692 080	285 575	335 775	2 329 090				
Final accounts for year 1			1 521 200	301 235	311 205	2 120 980				

Table 5:10. Which budget specification was ranked highest?

Respondent category	Cost classification budget %	Cost center budget %	Program budget %	Performance budget %	No answer %
Senior physicians (45 people)	18	49	11	22	4
Hospital administrators (39 people)	21	36	26	13	5
County council managers and top executive officers (34 people)	15	53	18	18	0
Executive committee chairmen and other top politicians (35 people)	20	71	6	6	0

make it more difficult for the politicians to control costs. In the case of the cost center budget, some of the respondents wanted to go even further, recommending that costs be distributed to the different wards in the departments. A possible disadvantage of specifying by the departments according to one senior physician can be that ambitious department heads tend to push their cost-consuming patients off into neighbouring departments.

Several hospital administrators who were interested in the program alternative in principle, expressed some fear that this system might put hospital management under more pressure. Heavy demands for allocations from many quarters can lead to conflicting priorities within the economic boundaries. The politicians who were positive towards this alternative claimed that it provided a budget that anyone could understand. Several hospital administrators were also attracted by the idea of a fairly generally specified framework within which authority could be exercised. It was felt, however, that this might call for an increase in administrative resources.

Most comments were reserved for the performance budget. Several respondents declared it to be the most attractive alternative in theory. But, in fact, because of the great burden of work it was expected to generate, most of them gave it a poor rating. "For example", said one senior physician, "hypercholestromy may count as a metabolic or cardiovascular

disorder." Since combinations of different disease groups are common, it is not easy to carry out the simplifications that this alternative requires. As one county council manager put it: "As an intellectual romp the performance budget is fun, but it's difficult to come to any conclusions".

Different ways of specifying the budget need different amounts of resources. It is natural for an economist to question the profitability of a change. What can a particular specification be expected to give in the shape of an improved decision base, a better overview, or better opportunities for control with subsequent reductions in costs or improvements in performance? The literature has little to say about this question.

The 1978 enquiry

How are the budget proposals structured that come before the politicians for decision in 1978? Is the budget organized according to cost class, cost center, program or performance? In an enquiry addressed to hospital administrators, respondents were asked whether the budget was specified by the departments (or equivalent). Their answers show that in only 8 of 27 authorities is this so. The others are all using the more traditional cost classification budget. Often, however, the staff budget is specified according to the department when it is a question of new applications for allocations. The same applies to new investments. However, even when the official budget is not specified by the department, it is possible to break it down internally so that the calculated costs are indicated in this way. In 19 of the medical care authorities which do not gear their official budget to the departments, 13 employ an internal budget of this kind.

How are cost developments reported to the senior physician who heads the department? In 20 of 27 authorities information is sent out several times each year about costs in the particular area of operations. In some cases these include only a selection, such as drugs or extra staff for special observation duties. In one or two cases more persistent attempts have been made to allocate indirect costs as well, such as costs for X-rays and laboratory examinations.

How often are these reports sent out? Generally monthly, in some cases every quarter or every three months or after the 4th, 8th, 10th and 12th months of the year. Cost estimates are often compared with outcomes. For how long have such reports been in use? Only three authorities were using them before 1967; most started using them during the 1970's. In about half of these cases some kind of performance is indicated in the cost reports.

The physicians receive other kinds of cost information as well. This can assume various forms, from the oral exchange of information at regular meetings with the departmental staff, price lists for laboratory and X-ray examina-

tions, consumption statistics for store supplies and rehabilitation aids, as well as sporadic circulars and annual tables of total costs department by department.

Are the hospital administrators satisfied with the present accounting system? Only three answered "yes", 22 "no", while two gave other replies. What changes would they like to see? Several emphasized the advantage of being able to relate performance to resource input in some satisfactory way. Many felt it was important to develop the specification. The need for better performance measures was emphasized, as well as a link-up with responsibility. There should be more opportunities for analyzing changes in price and volume. Also, a better way of measuring the internal services that are debited to the departments is needed, as well as better forecasts of each month's share of the year's consumption.

Quicker and more comprehensible reporting was urged; also better opportunities for analyzing personnel costs, among other things for the staff in "pool" service. The need for devices by which to measure quality was also mentioned; also that it would be helpful to know what the different office-holders are supposed to be able to influence. And some respondents saw it as a problem in budgetary contexts that the politicians fail to stipulate clearly what yield they want to see from the allocations granted.

Goals of the budget system and specification of allocations

In the following section we will look at some connections between the three goals described in Chapter 4 and different ways of specifying the budget.

Instrument for priority-setting and the specification of allocations

We have suggested that a major role for the budget system is to provide an instrument for priority setting of the people or bodies making the appropriations. Is any one method of specifying the budget better than others from this point of view?

In itself the traditional cost classification budget gives no indication of goals or of the expected final products of the activities concerned. It gives no information about the outcome resulting from the input of resources. The cost center budget specifies the units which the different allocations concern. It has been claimed that the program budget provides a better idea of the purpose of operations (Novick, 1968). The catchy sort of argument that has been put forward in support of this kind of budget has been criticized (Schwarz, 1974). The concept of a "program" gives the impression of something indivisible which you have to be for or against; there is no point in negotiating about a little more or a little less. In this way the politicians' chances

of exerting influence can be reduced. It is more difficult to evaluate a large program than a number of clearly delimited parts (Wildavsky, 1964). It has also been claimed that it may be easier for the politicians to agree about an increase or a decrease of a few thousand dollars than to agree on a whole program.

How far does this line of argument apply to Swedish medical care budgeting? Is it more difficult for a politician to judge the reasonableness of an increase from 4 938 000 kronor to 5 263 000 kronor in the allocation to the intensive care program than it is for him to judge an increase from 55 000 kronor to 65 000 kronor in the allocation for stationery? When a program budget is being designed, it is probably not possible to do without a calculation of the size of the various cost classes. The politicians can ask to see such a calculation. It is of course possible to make also quite small changes in the size of the program; you do not in fact have to accept or reject it as a whole. However, it is possible that this is a real tendency: large programs with all the appearance of compact wholes are much more likely to impress the politicians as a *fait accompli* than ordinary cost classification budgets. Too much uncertainty is being absorbed; too much may be hidden behind the figures. Nevertheless, a program budget could well have some advantages for the politicians. The material is more manageable. It may be easier to grasp and to make decisions about. And the threat of conflicts in budget work should not be taken too seriously. In so far as conflict helps new alternatives to emerge or encourages analysis, it may in some cases be fruitful and desirable. But the risk of delays in the decision process should be noted.

What are the advantages and the disadvantages of a performance budget in this context? Does the performance budget promote the efficient allocation of resources? A performance budget which contains a number of performance items and costs per item can be read in different ways: either with the emphasis on the cost, i.e. from the production point of view; or with the emphasis on the outcome, i.e. from the consumption point of view. The performance budget can be useful if, by stimulating the politicians to a more detailed analysis of performance and costs and alternatives, it can help them to become more cost-conscious. Such a focus on performance in the budget may help to bring the whole question of the economics of the medical care system more vividly before the electors. But a perfomance budget can be misleading if it is used without due consideration of its construction. Let us assume that a cost which has been calculated for separate units of performance includes some fixed costs, or costs which change in jumps according to the volume of performance. If this volume changes, estimates based on average costs for a different volume may not hold any longer. And the performance budget can be risky if the decision base which is pre-

sented is so extensive that the politicians cannot come to grips with the essentials. It is obvious that there may be such a risk.

Is it not rather a big step from the cost classification budget to the program and performance budget? When the cost classification budget is being used, cost center budgeting evidently appears in most cases as the most suitable alternative. This is suggested by the answers shown in Table 5:10. In the long-term, however, the program and performance budget could probably be a valuable aid to the politicians in their decision-making.

We have now discussed four ways of specifying the budget on a basis of given examples. There can also be intermediate forms. A pattern starting from the cost classification budget, but based in part on cost-center budget thinking, may give us the advantages of the latter without involving us in extensive administrative work. Or the cost classification budget can be furnished with a specified staff establishment for every department or ward. Major purchases can be registered for every department or ward. The dominating expenditures in medical care consist of wages and wage costs. As regards costs for drugs, disposables and other items used daily for the routine work, the politicians can hardly be said to have much chance of exercising any influence. They presumable have very little interest in seeing these costs specified in detail for the different cost center. New building and reconstructions, on the other hand, involve single weighty decisions quite different from the current operating budget, but with a big impact on it.

Influence on action and the specification of allocations

We suggested in Chapter 4 that a subgoal of the budget system is to supply an instrument for influencing action in the medical care system. How does the way allocations are specified tie up with this goal? Which type of specification - cost classification, cost center, program of performance budget - is to be preferred in this context?

First, we can discuss this in connection with the claims made on the budget. It has been pointed out in the literature that the cost classification budget can make people too allocation-conscious (Frenckner, 1953). It is suggested that the budget work may become a battle: every man for himself, every man trying to get the largest possible allocation. But is this tendency exclusive to the cost classification budget? It has been considered important from the economic point of view to be able to assess the value of performance and claims on resources at the same time. There are a few areas in medical care in which comparisons with the market price of the activities may sometimes be possible: laundry, kitchen, some laboratory services, decoration and painting, and "hotel" facilities for the care of mild cases. But in other areas

evaluations of this kind are impossible or at least more complicated. Claims on resources are easy to observe. Performances may be enumerated, but it is more difficult to assign relevant values to such things as, for example, the care of the seriously ill, operations, X-ray examinations and so on. Can the performance budget make it possible to replace the general insistence on "need" by less categorical analyses of the advantages and disadvantages of different action alternatives because it focuses to some extent both on resource claims and on the performance these resources are to result in? The answer to these questions will depend, among other things, on the appropriateness of the devices by which performance is measured.

What implications has the cost center budget for the goal we are discussing? It must be good for the economically responsible department head to be able to get an overview of the costs of his work, or at least of the size of the more important expenditure items in the unit. That there might be a certain tendency toward "parochial thinking" cannot be denied. One manifestation of this may be an unwillingness to allow staff whose wages are charged to one department to help in any other. In certain unfortunate circumstances territorial behavior could run counter to the interests of the patients.

The person responsible for applying for an allocation will later be subject to control. This may encourage people to allow for substantial margins in their applications. Can this sort of tendency be counteracted by making comparisons between costs centers in different institutions? As between one hospital and another there will be variations in the size of the staff, in other resources and in performance. This means that there will also be variations in cost. As a result of the comparisons which they readily give rise to, cost center budgets may reduce cost variations between similar departments: those with relatively high costs might try to reduce their claims on resources, while those with low costs might feel justified in raising their claims.

Does the program budget in connection with applications for funds promote the budgetary goal at present under discussion? The answer has to be that it does not seem very likely to encourage more factual motivations or the analysis of more efficient action alternatives.

As regards the implementation of the budget, it has been assumed that the cost classification budget expresses what can - or even what should - be consumed, regardless of actual needs. But it seems uncertain that this is a feature exclusively of the cost classification budget. It is essential if the budget system should have any impact at all on implementation that information about developments in costs and performance is imparted to those concerned. The staff's cost-awareness would probably be encouraged by quick, regular and understandable reporting.

Administrative control and the specification of allocations

We have suggested that a subgoal of the budget system is to furnish an instrument for administrative control. Is its aptness for this purpose affected by the way allocations are specified? Let us assume that a deviation has arisen between budget and outcome. In a cost classification budget with no cost center link-up and no connection with programs or performance, the analysis of the deviation is likely to be a formal one, focusing chiefly on whether the allocations have been adhered to. In cost center budgets or program budgets or performance budgets it is possible to combine the cost classes in different ways within the bounds of the allocation. Control can then take the shape of a formal check that the bounds of the allocation have not been exceeded, together with a managerial analysis. This may mean seeing whether different cost classes have been appropriately combined. In conjunction with this sort of analysis, control will probably constitute a more sensitive instrument than it can do in the case of the cost classification budget.

In an auditing context it is probably helpful to be able to trace a deviation back to the person responsible. Here the cost center budget may appear to offer the best possibilities of the four.

RESPONSIBILITY WITHIN THE BUDGET

By responsibility within the budget is meant the right of the local office-holders to alter a budget in the course of its implementation. This right involves the possibility of transferring funds from one specified destination to another without asking for permission. In the following pages we will discuss two opposite poles, the detailed budget and the framework budget. In practice, of course, there can be anything along a scale from non-existent rights to extensive rights to alter the budget. The right to alter a specified allocation can be delegated to officials or to political levels below the conclusive decision-making political level. A proposal has also been made in Sweden that it should be possible to delegate this right to a body composed of the parties concerned, and including representatives of employers and employees (Företagsdemokrati i kommuner och landstingskommuner, 1977). This proposal has resulted in rather unimportant changes during 1979 in the municipal law.

Detailed budgets

The detailed budget formally excludes the possibility that local departmental heads should replace one allocation item by another without a special decision at the controlling political level. Fewer action alternatives are available in the execution of the budgeted activities than under a framework budget.

Framework budgets

In a framework budget the management of a local organizational unit or a lower political level than the conclusive one is given the right to substitute one specified allocation for another purpose during the period of the budget. This does not mean that the controlling organ is denied the possibility of influencing operations during the period: delegated rights can be withdrawn, for example. If general attitudes at different levels are in good accord, this kind of budget is probably more likely to be appropriate.

The choice of responsibility within the budget should be related to the amount of expected flexibility in the area of operations concerned. If operations are relatively stable, detailed budgets are presumably more appropriate than when changes are pending. Some specialities in the medical care field are more stable than others; the need for reorientation varies. Buffers of various kinds can be built into the budget to make it possible to handle the necessary change. A framework budget allows for reassessment and a redistribution of resources. But how far such a formal possibility is actually used will depend among other things on the attitude to change of the person or persons with the power to bring change about.

The 1966 interview study

In the 1966 interview study I put a number of questions connected with the amount of responsibility allowed within the framework of the budget. These will be reproduced in the following pages.

Are the powers of the hospital management strictly limited?

One of the questions ran: "What do you think of the following statement: The powers of hospital management to make decisions about the use of funds are limited strictly today?" There were three alternative answers: Absolutely correct, not altogether correct, incorrect. It was explained that the question referred to the respondents' own experience. The answers are given in Table 5:11 as a percentage.

It can be seen from the table that the group in the councils which is most closely involved - the hospital administrators - most often considers the statement to be incorrect. A higher proportion of senior physicians than of the other respondent groups consider the statement to be absolutely correct. The administrators feel that they are clearly in possession of a certain freedom of action. The difference in attitude between the administrators and the senior physicians may be connected with the fact that the doctors' suggestions about new positions and equipment or other changes had not perhaps been satisfied as fully as they would have wished during the budget year.

Table 5:11. Are the powers of hospital management to make decisions about the use of resources strictly limited?

	Absolutely correct %	Not altogether correct %	Incorrect %	No answer or other answer %
County councils				
Senior physicians (30 people)	43	10	43	3
Hospital administrators (27 people)	11	15	70	4
County council managers (26 people)	27	15	58	0
Executive committee chairmen (25 people)	28	16	56	0
Major metropolitan areas and the state				
Senior physicians (15 people)	53	13	20	13
Hospital administrators (12 people)	33	33	33	0
Executive officers (8 people)	25	13	50	11
Top politicians (10 people)	30	10	20	40

It appeared that hospital management's right of decision varied somewhat in the different medical care authorities. In some cases it could spend no more than 1 500 kronor from its appropriation on unforeseen capital expenditure without a political decision. Sometimes the permitted amount was substantially higher, in some cases 50 000 kronor and in others three times as much.

One of the hospital administrators who considered the statement to be incorrect explained his view as follows: "Whether or not hospital management feels very restricted depends on what it's made of - whether it wants to take responsibility and act, or whether it doesn't. I would rather be blamed for acting too freely than for failing to act at all."

Another said that although the total appropriation sum was divided into various specific allocations, there was still quite a lot of leeway, and allocations could be exceeded if necessary. Some authorities might, on some occasions, then ask for a special explanation. But in most cases this did not happen. Whatever it was that had caused the situation could probably be regarded as generally understood.

Are the powers of the departmental heads strictly limited?

A corresponding question concerned the leeway available to departmental heads: "What do you think of the following statement: The powers of the departmental heads to make decisions about the use of funds are strictly limited today." Here, too, the alternative answers were: Absolutely correct, not altogether correct, incorrect. The percentage distribution of the answers can be seen in Table 5:12.

Table 5:12. Are the powers of the departmental heads to make decisions about the use of resources strictly limited?

	Absolutely correct	Not altogether correct	Incorrect	No answer or other answer
County councils				
Senior physicians (30 people)	47	10	43	0
Hospital administrators (27 people)	22	15	59	4
County council managers (26 people)	38	27	35	0
Executive committee chairmen (25 people)	44	24	28	4
Major metropolitan areas and the state				
Senior physicians (15 people)	53	13	20	13
Hospital administrators (12 people)	58	17	25	0
Executive officers (8 people)	13	25	25	38
Top politicians (10 people)	40	0	20	40

Barely half of the senior physicians under the county councils considered that their powers were strictly limited. Almost as many held the opposite view. Without exception and without any economic restitution physicians in charge have the right to admit and discharge patients, to prescribe drugs, to decide what tests would be made and analyzed, to order extra personnel on duty, and make other decisions concerning the day-to-day medical care provided.

There is a difference in the answers of the hospital administrators inside and outside the county councils. Those outside more often find the statement to be absolutely correct than those inside. This may depend on the harsher economic climate in the authorities outside the county councils.

A comparison between Tables 5:11 and 5:12 reveals substantial agreement in the answers on the local plane, particularly in the case of the senior physicians. This could mean that their answers reflect the way they perceive their own situation in general vis-à-vis the various authorities over them.

A great many executive officers and top politicians outside the county councils abstained from answering. They said that they did not feel familiar enough with the situation.

To have recourse to a sum within certain bounds

The following question was put: "What do you think of the following statement: The budget system ought to provide decision-makers in the hospital with more freedom than they have at present to dispose of sums of money, within certain bounds, for whatever purpose they consider most suitable." The alternative answers were: Very much agree, agree up to a point, do not agree. I assumed that the respondents in the hospitals, i.e. the senior physicians and hospital administrators, would be more positive towards this statement than the others. These categories would after all acquire greater freedom of action from such a change as the question suggested. The percentage distribution of the answers can be seen in Table 5:13.

My assumption about differences between the local and central levels proved correct as far as the county councils were concerned. The hospital administrators, particularly in three big-city areas and in the state hospitals, were especially positive towards the statement. This may reflect the cooler economic climate outside the county councils. The executive committee chairmen and the county council managers were the least positive. It was pointed out among other things that further decentralization would call for further training and would take a long time to carry out. Examples were given of how smoothly special inputs are made when unforeseen demands make them necessary. Respirators were quickly acquired, for instance, when one hospital had to admit more than the usual number of patients whith chest disorders. One

Table 5:13. Would more local control over funds be a good thing?

	Very much agree %	Agree up to a point %	Do not agree %	No answer or other answer %
County councils				
Senior physicians (30 people)	50	20	30	0
Hospital administrators (27 people)	67	15	19	0
County council managers (26 people)	19	38	42	0
Executive committee chairmen (25 people)	16	36	48	0
Major metropolitan areas and the state				
Senior physicians (15 people)	47	33	13	7
Hospital administrators (12 people)	92	0	8	0
Executive officers (8 people)	50	10	40	0
Top politicians (10 people)	25	37	37	0

member of the more skeptical political group commented: "Some people certainly shouldn't have more freedom than they already give themselves."

Areas calling for greater independence

The following question was put to senior physicians and hospital administrators: "Can you suggest any areas where you feel it would be rational for you to make independent decisions within a certain given framework where at present permission is required about how funds should be used?

Of 30 senior physicians in the county councils, 19 suggested areas for independent decision-making, while 11 made no such suggestion. The corresponding figures for senior physicians in the three big-city areas and in the state in-

stitutions were 11 and 4 respectively. Of 27 hospital administrators in the county councils, 17 suggested such areas. Of 12 in the same category outside the county councils, possible areas were pointed out by 9. The most frequent suggestions concerned the purchase of capital equipment, wage-setting for the physician's or administrator's own staff, the right to transfer staff, the approval of study trips and the purchase of services instead of establishing a position inside the organization. Many of the suggestions cannot be considered very realistic. The difficulty of rewarding good work by the staff was emphasized, particularly by the senior physicians. Some of them, however, admitted to giving their secretaries and receptionists something "under the counter". At the time of this investigation in 1966, doctors still received part of their remunerations in the form of fees from ambulatory patients.

One aspiration that was mentioned particularly by the administrators was to be able to use freely those revenues generated during the year, in other words, to have a net budget. The unwieldy process in certain purchasing questions was also criticized as unnecessary. And it should be easier to make indpendent decisions about repairs of buildings. The right to transfer people, so that the bottlenecks that often arose on the secretarial side could be eliminated, was also discussed. A suction apparatus, a heart-bed or a decubitus mattress cannot just be "prescribed"; they all call for approval by various bodies, whereas drugs that are more expensive can be ordered independently. Among those who did not suggest any areas for independent decisions was a senior physician who pointed out the risk that a piece of equipment, one of which was only needed for the hospital, might be obtained by several departments in different parts of the hospital.

These answers suggest that the effect of a framework budget will probably depend partly on how broad the framework is, and partly on the way in which it is designed. For instance, what accompanying requirements are made about performance, follow-up and so on might be important. Attitudes to this kind of budget may depend on how much real freedom of action it permits. A broader framework can be expected to receive a more positive attitude than a narrower one.

Development since 1966

In 1967 the transfer of the mental hospitals from the state to the county councils was a step towards decentralization. During the first part of the 1970's the hospital boards in several county councils were either discontinued or altered. In some cases the medical services board also acted as the hospital board. In others the hospital boards were given responsibility for both primary and hospital care on a district bases. When the district medical services were taken over from the state by the county councils in 1963, the political responsibility was generally vested in a special board for

primary care. The establishment of district boards and a district administration now marked an ambition to integrate primary and hospital care.

Since the mid 1970's there has been increasing interest in finding ways to strengthen local layman influence. In some cases this has meant giving the district boards wider decision-making powers than before. However, these tendencies seem to be relatively limited both in number and scope.

In some cases attempts have been made during the 1970's to increase the right of decision of the hospital departmental heads. The purpose is to stimulate physicians and others to economize and to check tendencies toward formalism. One example can be briefly described here. Three quarters of any savings, particularly in the staff budget - perhaps by leaving certain positions vacant during the summer - could be used for other purposes within the department. Half of the savings can be used, for instance, to pay for a physician to attend a conference abroad, provided production in the department as a whole is maintained. In fact, one of the conditions of the experiment is that the quality of performance should remain unchanged. One quarter of the savings is going to be used for various staff amenities: color television in the staff dayroom, redecorating, new furniture and so on. Another example of a use to which savings can be put is one-day or two-day personnel conferences at which the work of the department is discussed. Such conferences have often been held on the staff's free days. The department relinquishes a quarter of its savings. A fundamental condition has also been that the department does not exceed its overall budget for the year - which the staff has claimed it will not do. But the hospital management has felt some doubt. Some important technical defects in the budgeting and accounting, and delays in reporting, may partly explain these differences in opinion. One general restriction is that no transfers may be made between the operating budget and the capital budget.

The experiment has been critized by some of the other units, and it is felt that a certain amount of envy has been caused. One disputed question has concerned loyalty - where does it, and where should it, lie? How far does solidarity with others stretch? Might it not be possible to let other units with less favorable economic conditions share the savings, instead of using three-quarters of them within the department? And would there be any savings if the right to use them did not exist?

The purpose for which the funds are now being used are regarded by hospital management as, in themselves, well motivated. Previously, though, they have not held their own in comparison with other purposes and have therefore had to be neglected in the total priority-setting for the hospital.

The use of service units has also been a controversial subject. A system of internal pricing has been used in the hospital for service transactions between different units. When the use of X-ray diagnosis was cut down, there were complaints that the X-ray department was no longer getting enough to cover its fixed costs.

Although there have been one or two experiments of the kind described here, budgets in general towards the end of the 1970's tend to be of the detailed kind. Changes, once the budget has been settled, have to be made by the executive committee. However, in some county councils a fairly large unspecified allocation is included which is at the disposal of the district board. In one case, for instance, 1 per cent of the running costs is allowed without specification for new staff costs, and 1/2 per cent for other new expenses. Another method which is used in some cases, and which has something of the framework structure about it, is to give perhaps half of the funds requested for specified purposes without indicating which they are intended for.

In primary care where there are difficulties in recruiting doctors, some medical care authorities take up a round sum for unspecified services. When this method is used in a district which handles both primary and hospital care, there has been a tendency to want to use the remaining funds that are really intended for the primary sector for hospital-based services.

In one county council a tendency is mentioned at the local level to try to shift difficult decisions up to a higher level, even if the formal right to decision is vested in the local organization. Convenience or unwillingness to make decisions is not necessarily the reason for this. Instead, it may be that someone has burnt his fingers previously; perhaps a request was turned down locally and then given an affirmative answer at a higher level.

The 1978 enquiry

Have economic decisions become more or less centralized in medical care during the last ten years? This question was put to hospital administrators in 1978. Of 27 administrators 19 felt that centralization has increased, five that it has decreased, and three that it is the same as it was before. In several instances where it is felt to have decreased, the reason was said to be experiments - ongoing or planned - with framework budgets. This lack of decentralization is perceived by many as a source of frustration and dissatisfaction at work. There is a feeling that the delays involved in centralized decision-making do not promote efficiency, also that there has been a general tendency to play down the local institutions to the benefit of the central administration in the county councils.

The 1978 Stockholm enquiry

In an enquiry in 1978 to 207 senior physicians working in the county council of Stockholm, the same question as in 1966 was used: "What do you think of the following statement: The budget system ought to provide decision-makers in the hospital with more freedom than they have at present to dispose of sums of money within certain bounds for whatever purpose they consider most suitable." The alternative answers were, as last time: Very much agree, agree up to a point, do not agree. Of 165 answers, 79 per cent chose the first, 16 per cent the second, and 5 per cent the third answer.

Even if a definite conclusion cannot be drawn from a comparison with 1966 - the selection of respondents is different - one can hypothesize about an increased interest in framwork budgets. This might be an effect partly of a tougher economic climate, partly of a high estimation of the possibilities.

The comments include a desire to be able to purchase services from other users, e.g. from administration, or to use the resources in alternative ways. The power to dispose of resources is not considered to be in accord with the responsibility that can be expected from a department head. Those who present opposite views emphasize the risk that too much consideration might be given to personnel and union requests at the expense of the patient.

Should the physicians be totally responsible for the unit or only medically responsible? The answers to this question is seen as percentages in Table 5:14. This question was also put to district physicians.

Table 5:14. Should the physician be totally or only medically responsible?

	Totally responsible	Only medically responsible
Senior physicians (146 people)	82	18
District physicians	28	72

More than four out of five senior physicians emphasize that their responsibility ought to be total, but only about one of four district physicians share their view with respect to themselves. The difference should be seen in relation to the formulation of legal responsibilities which is administratively more inclusive for the former group of physicians.

Administrative responsibility

What contents should be given to the concept of administrative responsibility? In the 1978 enquiry senior physicians were asked to rank four areas according to importance. The answers are presented as percentages in Table 5:15.

Table 5:15. What should be meant by administrative responsibility?

	Very important	Important up to a point	Unimportant
Loyalty toward the ratified budget (158 people)	57	42	1
External loyalty toward personnel (158 people)	85	15	0
Loyalty toward the needs of the patient (162 people)	96	4	0
Loyalty toward long-range health care plans (156 people)	31	57	12

Loyalty toward the needs of the patients has been ranked highest, followed by external loyalty toward personnel. The ratified budget has been given a lower ranking. Long-range health care plans were ranked lowest. Reasons can be found in the fact that the budget and the long-run plans were felt to be vaguely defined parameters.

Goals of the budget system and responsibility within the budget

How does the responsibility within the budget, as discussed above, tie up with our three budgetary goals as described in Chapter 4?

Instrument for priority-setting and responsibility

Is the detailed budget or the framework budget to be preferred from the point of view of political decision-making? Since the detailed budget does not allow allocation items to be swapped without a decision from above, this may seem to be the most effective instrument for the politicians. By specifying allocations in detail, it is possible also to regulate the use of resources in detail. However, this presupposes that the politicians have the necessary information to decide how large one allocation should be in comparison with another. Since applications are formulated well in advance, circum-

stances may no longer apply when the budget comes into force. It is therefore possible that things may in fact be run in closer agreement with the intentions of the politicians, if detailed decisions on economic matters are made by the staff in accordance with current needs, as a framework budget allows.

It should be noted that a budget does not automatically assume a framework character just because some other specification method than cost classification budgeting is being used. Let us assume that a performance budget is being used instead. In a detailed budget this means that an allocation for a certain set of activities should not be used for a different set. In a framework budget, on the other hand, such changes are permitted. In a program budget a detailed budget means that the allocations for one program should not be substituted for another, while this is allowed in a framework budget. But if the programs are large, the practical effect can be similar to the framework budget even if the formal rights are those of the detailed budget.

Influence on action and responsibility

Is the detailed budget or the framework budget most suitable with respect to the influence on action? The various parts of the detailed budget are settled a fairly long time before the budget as a whole will come into force. During that time changes may occur in the circumstances on which the budget is based. A pessimistic type of petitioner may want to prepare for this by including "reserves" of various sorts. Against this can be claimed that since the detailed budget calls for quite detailed calculations, it can encourage a thorough examination of available alternatives. In preparing a framework budget there may be a greater risk of arbitrary estimates, since corrections can be made later within the framework laid down.

When it comes to implementation, the framework budget may have the advantage over the detailed budget in that adjustments can be made to the current situation. With a detailed budget it may be a complicated business to get permission to use an allocation for some purpose other than the one originally specified, and a good deal of time may be lost. All this can cause some disaffection vis-à-vis the authorities higher up.

If there has been some haggling about a particular allocation item, it may be necessary later to combine allocations differently. The framework budget is presumably perceived as a trust. This may have a positive effect on attitudes if conditions otherwise are favorable.

The need to substitute one allocation for another is more likely to arise when decisions have been made a long time in advance. The longer the time horizon of the budget, the more important it is from this point of view to use a framework budget.

Does the inflexibility of the detailed budget cause attention to shift from the contents to the administrative framework? Something of the sort has sometimes been assumed, but it seems uncertain whether this is a problem generally attaching to the detailed budget.

Is there a risk that local goals play too important a part in the framework budget? Do favorite schemes get advantageous treatment? The framework budget gives the energetic initiator a chance. The maturity and experience of those who are assigned the right to make changes is important. A politically conditioned desire to make changes can be brought to bear in a detailed budget. This may be particularly important when willingness to change seems lacking in those who are to carry out the budget. Figure 5:3 illustrates some factors in the interplay between a framework budget which is introduced as an alternative to a detailed budget in a department, and the influence that this has on actions for change. The results must be judged in light of a number of other factors: different departmental heads, different senior consultants see their role as the administratively and economically responsible person in different ways. Some may consider that the most important thing is to work for consolidation and stability within the department so that the work continue in the same sort of way as before, while others are more anxious that the work should be adjusted to new conditions and demands. The rest of the staff - their goals and attitudes - can also affect the possibilities of change. It has been emphasized in the literature that it is difficulties more than opportunities that provide the impetus for change (Hedberg et al., 1976). The Co-determination Act of 1976 has also partly altered the conditions for bringing about change (Borgenhammar, 1977 a).

The strength of the demand on the part of patients and other pressure groups for change must also be included in the picture. Medical and medico-technological development can hasten decisions for change, regardless of where the formal powers in the budget lie.

The resources that are available, as well as their orientation, scope and the amount they are used, will have implications for change. They may contain the seed of efficiency improvements. Are reorientations more likely, the greater the unutilized resources? Or are reorientations forced upon us when resources do not answer our demands upon them? Can the lack of wider bounds become a scapegoat, an excuse for not carrying out inconvenient - but quite possible - restructurings? If this is the case, the granting of extended powers may have no effect on behavior.

Local office holders who are clever but who work in an organization where there is little delegation may well feel frustrated. They may become resigned or react by escapism or aggression. They feel that their own role in the organization

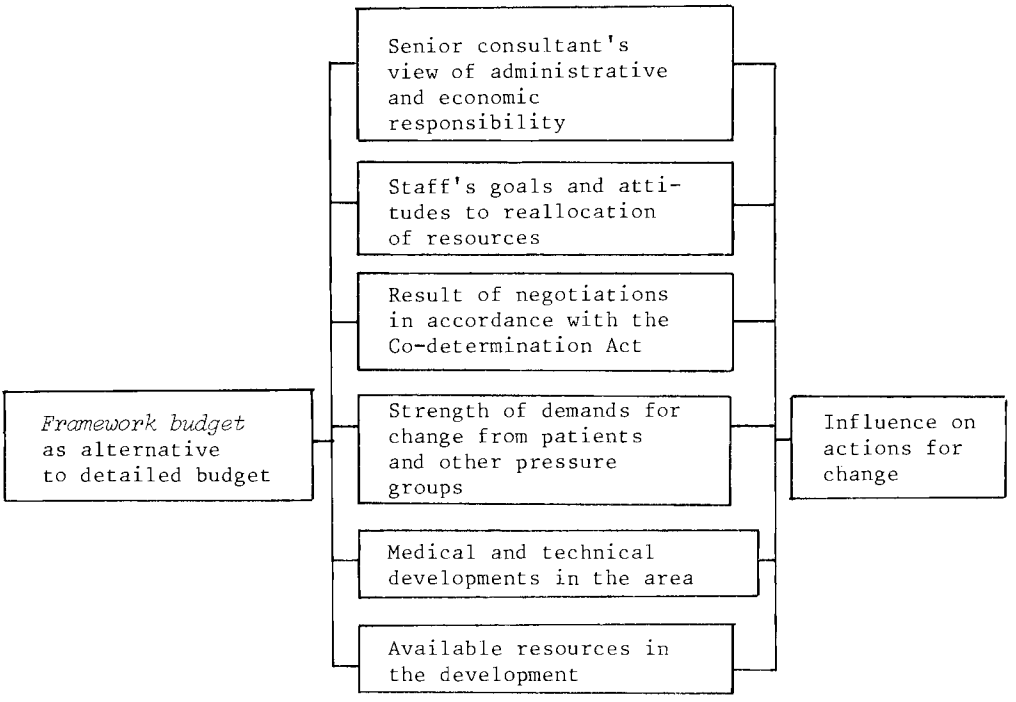

Figure 5:3. Framework budgets and influence on actions

is viewed somewhat negatively by others. But it is no better if a less efficient man stands in line for considerable delegation. This can lead to irrational behavior, segregation tendencies and fixations. The former situation is probably more common among local administrators in Swedish medical care today than the latter.

Administrative control and responsibility

Are there differences in the opportunities for administrative control in connection with detailed budgets as compared with framework budgets? In the latter case the control will probably put the emphasis on managerial analysis, whereas in the case of the detailed budget formal control is more likely. A management analysis may be based on other factors besides the budget. And as regards the budget, the main question will be to see how consistently the budget has been implemented during the budget period. With a detailed budget, control is traditionally concerned with deviations within the different components. But despite this difference, both methods provide ample opportunity for administrative control.

One way of getting round the limitations of the detailed budget can be to use a system of consistent error coding. With framework budgets this should be unnecessary. In this way different items can be reported more correctly.

THE BUDGET AS AN INCENTIVE TO ECONOMIC MANAGEMENT

Under this heading we will discuss various kinds of incentive devices in connection with the budget. Their aim is to encourage changes that imply better economic management or to promote better results. The *incentive budget* and the *non-incentive budget* represent two opposite poles.

Non-incentive budgets

The term non-incentive budget is used when there is no direct link between remuneration and the volume of activities in the organization.

Incentive budgets

In an incentive budget there are connections between remuneration and the volume of activities in the organization.

Various theories exist as to what constitutes incentive. Those with a background in economics talk about the possibility of constructing reward systems which stimulate efficiency. The education-minded emphasizes the importance of learning, induction, training and development. Some assign more importance to job descriptions and written instructions, while others emphasize the importance of objectives. The social psychologists are especially interested in factors that promote the individual in a cooperative relationship. They underscore the importance of a challenging job and professional recognition. Those of a legal mind emphasize the importance of creating conditions for responsibility, and of imposing sanctions when action deviates from the approved path.

Since senior physicians represent the professional group which, apart from management proper, has probably had most direct contact with budgets up to now, it seems natural to focus our discussion upon them. This applies in particular to the department heads. The changes in the remuneration system for physicians in the Swedish public health service which took place in 1970 are also of fundamental interest in this context.

In a financing system such as the Swedish, the physicians can affect county council revenues mainly by taking on more or less ambulatory patients. On the expenditure side it is possible to have some effect on the cost of staff, drugs and disposable articles, as well as on the number of bed-days and the amount of technical equipment used.

Financial remuneration

Doctors as a professional group in the public services have a top salary level in Sweden. It should also be mentioned that before the "7-kronor reform" of 1970 many physicians had extremely long working hours (Sjukhusläkares arbetsförhållanden, 1967).

Before 1970 the physicians in the public health system generally received their remuneration partly as a fixed salary and partly in the form of payments for individual ambulatory patients. The size of these remunerations depended on the nature of the consultation; it was decided after negotiations between the Association of Swedish County Councils and the Swedish Medical Association. Although this system had certain advantages, some aspects were felt to be unsatisfactory. There were big variations in salary between different medical specialities. When the medical care authority acquired automatic laboratory aids, the pathologists were able to increase their salaries substantially. The machines and the laboratory staff carried out the tests; wages and acquisition costs were paid by the county council. But the pathologist, as the one bearing the medical responsibility, was paid for every test for ambulatory patients. Holiday compensation paid by the authority to the physicians consisted of a certain percentage of ambulatory-patient revenues and regular salary. Some senior physicians might get 35 000 kronor in such extra holiday pay each year; others received perhaps a few hundred kronor. The most highly qualified and responsible physicians were tempted to occupy themselves with lucrative but not always from the medical point of view essential ambulatory visits, while inexperienced interns had to operate on complicated cases.

In 1966 I asked various groups of top officials in the county councils to give me their views on alternative ways of remunerating physicians. The percentage distribution of their answers can be seen in Table 5:16.

The answers showed a strong opinion in favor of retaining the then prevailing remuneration system. It was not the senior physicians but the other interview objects, in particular the hospital administrators, who proved most positive in their attitude to the then current system.

Those who championed a system of pure fixed salaries mentioned - apart from the reasons referred to above - that such a system would stimulate better cooperation between different departments. More time would be devoted to essential internal communications, which would promote greater job satisfaction and a better quality of medical care.

Those who wanted to retain a system of remuneration geared to performance mentioned in particular that fixed salaries might be accompanied by a deterioration in standards. One reason for a stronger link with performance was that such a

Table 5:16. Attitudes towards physicians' remuneration system in 1966

	Physicians should receive a fixed salary only	Present system should be retained (fixed salary plus remuneration for ambulatory patients)	Physicians' remuneration should be linked more closely than at present to performance	No answer or other answer
	%	%	%	%
Senior physicians (30 people)	10	47	17	27
Hospital administrators (27 people)	15	70	11	3
County council managers (26 people)	15	54	15	15
Executive committee chairmen (25 people)	20	48	20	12

system could better allow for the number of beds: a physician who had only 30 beds in his department could devote more time to ambulatory patients than a physician covering 150 beds. For both, however, the salary from the authority was the same.

The "7-kronor reform"

Most of the more extensive changes decided by the Swedish parliament are based on government commissions. But this was not so in the case of the "7-kronor reform". In the autumn of 1968 the Association of Swedish County Councils and the Ministry for Social Affairs initiated a survey of the whole question of patients' fees. The Swedish Medical Association was informed in December of the same year. The plan to introduce a uniform fee for physician visits was announced in the mass media in the spring of 1969. A Bill was prepared, and in December 1969 the parliament decided that a visit to a physician in the public health system should cost 7 kronor from January 1, 1970. This sum was to include possible laboratory tests and X-ray examinations. Since the physicians would no longer receive direct payment from the patient, the salary system also had to be changed. A few months later, after lengthy negotiations, an overall remuneration system for physicians in the public health service was arrived at. The Swedish Medical Association had itself asked that the

old salary system should be abandoned (Hjern, 1976a) The intention of the government and the Association of County Councils was not to reduce the total incomes of Sweden's physicians, but rather in cooperation with the Medical Association to distribute incomes in a more acceptable and fair way. The successful outcome of the negotiations probably depended in part on the decision to allow a 3-year transition period, during which the salaries of those who were above the average could be gradually reduced. At the same time a 40-hour working week was established for physicians, and a system of overtime pay introduced. These changes went through with remarkably little trouble, although many physicians found their salaries reduced.

What have been the consequences of the "7-kronor reform"? As expected, qualified specialists are now able to devote more time to the real medical problems of their patients. Patient and doctor can concentrate on what really matters during their consultation without being disturbed by the thought of financial dealings. Part of the agreement was that physicians' performance standards should remain unchanged. Some people have taken this to mean that the number of ambulatory visits per department should be maintained, regardless of the number of physicians added. Others have assumed that the average numbers of ambulatory visits per physician should remain the same.

The number of patient visits per physician has dropped since the "7-kronor reform". In one county council there were 5 000 visits per district medical officer in 1971, while in 1976 this had dropped to 4 100. At the same time the ancillary staff (nurses, secretaries, medical attendants and so on) rose from an average of 1.5 to 2.5. And in many places there is a similar trend in the hospitals' out-patient departments. Up to a point this drop can be said to have been intended; the time for each patient was often too short before. The proportion of physicians undergoing training in specialist areas has increased. A greater prcportion of the time goes to teaching and learning. Part of the decline can be explained on this account. Nor is it impossible that the urge to take on a great many ambulatory patients has declined because there is now no special incentive for it. This, too, may be reflected in the figures.

According to the Swedish Medical Association only a small minority of Swedish physicians would now prefer to return to a system of remuneration along the old lines, if the choice were there (Hjern, 1976a). However, in 1978 the Chairman of the Local Government Financing Commission suggested that a changeover to incentive remuneration ought to be investigated for the dental sector and for some parts of the primary care system (Svenska Dagbladet, January 7, 1978). Political disagreement on this issue can be expected.

Decisions about forms of remuneration are based on agreements over which the individual county council has little influence. But what we will now discuss - job contents and work organization - does provide more opportunities for action at the local level.

Job contents and work organization

While considerable efforts have been made to improve induction schemes for other staff, little has been done to introduce any systematic induction for new doctors. Many of them also get into difficulties, because they do not know how the medical care organization is structured (Läkarnas framtidsroll 1977).

Doctors have an important supervisory role in the medical care system. Medical care legislation gives the head of a department some responsibility for personnel administration. In this sphere, too, the authorities' educational programs have been very limited.

Many department heads feel that although the medical side of their work often gives them very considerable satisfaction, the same can rarely be said of the administrative side. Requests often have to pass through so many levels before reaching the deciding instance that the whole unwieldy process may leave a feeling of powerlessness which can have a paralyzing effect. More administrative influence would in fact be desirable for personnel in medical care, they feel: it should make for higher quality and productivity, more job satisfaction and more genuine democracy at work.

When we discussed responsibility within the budget above, mention was made of attempts to use framework budgets. Clinics were able to use three-quarters of any savings they effected. Another medical care authority has been discussing the possibility of bonuses for any reduction in the cost of current operations. Their argument runs as follows. In a large medical care organization there are always some things which are no longer as essential as they once were. One way of doing something about this is to suggest and examine possible ways of reducing costs, taking into account performance and cost statistics and the prevailing operational goals. The bonus method represents another approach. In this case if costs are reduced by some other means not related to any general changes in operational costs and revenues, the savings generated are retained in the unit. In one county it has been suggested that an equal sum should be provided from a central appropriation to be used as seems suitable locally. There should be no central control of the purpose chosen, only of the relevant calculations. The hospital management should be the deciding instance. It was suggested that the domain for such a bonus should be about 1 pro mille of net expenditures. Various objections were raised to this suggestion. Fictitious savings could be made for tactical reasons

and for a limited time, if it were known that the prize would be twice as much! It was also felt that people might find it hard to grasp the real meaning of economic management if there always seemed to be "hidden" money to draw on. As there was so much criticism from the start, the suggestion was dropped.

Are allocations reduced following a surplus?

Do departmental heads regard efficiency improvement as a kind of self-provoked punishment? Will it simply mean that resources are withdrawn? Is there a risk of a small allocation next year?

In 1966 I put the following question: "If an allocation for the current year is not fully utilized, is it likely to be reduced in a later budget allocation?" The respondents were asked to answer from their own experience. Their answers have been divided into affirmative and negative. The percentage distribution can be seen in Table 5:17.

Table 5:17. Are allocations reduced following a surplus?

	Affirmative answers	Negative answers	No answer or other answer
County councils			
Senior physicians (30 people)	27	63	10
Hospital administrators (27 people)	37	56	7
County council managers (26 people)	50	39	11
Executive committee chairmen (25 people)	44	40	16

The local office-holders, i.e. the senior physicians and hospital administrators, were more inclined than the central office-holders to claim that allocations were not reduced for this reason. One senior physician declared that in fact it was not unusual to receive a reminder from the administration if an allocation - it was a question of capital equipment - was not used. As regards operational costs, in only a few cases were budgets so designed that costs could be followed up separately for each department. One of the hospital administrators said that allocations were generally reduced if they had previously shown a surplus. But if an explanation could be produced, there would not be any reduction. The hospital administrators generally seemed to adapt their

applications for funds according to earlier utilizations. For various reasons it was generally a case of asking for more. One county council manager explained that they did not want to make people feel they had better use up their allocations, simply so that they wouldn't get less the next time. This could easily lead to the sort of game which certainly did not encourage sensible economic management.

Developments during the 1970's

In a series of telephone interviews with county council managers or other top administrative officers during 1977, the question of incentives for economic management was discussed. A general reaction was that this is a major management problem. A persistent comment was that the department head has no really clear motivation for holding his expenses down. The cost-reporting system and the devices for measuring performance are both inadequate. It was felt that the more sophisticated reporting systems require an unreasonable amount of work. Simple keys and rules of thumb are called for. And perhaps a special training program could help department heads to read and understand the computer lists which are sometimes used. Information transmitted by word of mouth was generally felt to produce better results than written reports.

Since the middle of the 1970's many hospitals have been developing a system of manpower pools. The idea has been to make it easier to recruit replacements for short-term absence, and to give the relief staff some security of tenure. These pools have generally turned out much more expensive than estimated and have been one reason for excess costs.

What, then, is done in practice? "We try to encourage those who have made really special efforts", says one county council manager. He explains further that if a departmental head has been careful with his allocation, he is likely to meet a generally positive reaction: an application for a travel allowance, for example, will be judged more favorably. "Sometimes we even take the initiative ourselves in such cases."

Several respondents pointed out the value of being able to provide some sort of stimulus - a "carrot". Since the budget is generally largely accounted for by regular operations, it is felt that opportunities for any redistribution are very small.

When a budget is exceeded, the following are some of the steps that may be taken:

- An explanation is requested. What was the cause? How can the same thing be prevented in the future?

- Discussions are held, education takes place. Further reflection is urged. Some county councils mount savings campaigns at regular intervals, but it is felt that the effects are rather shortlived.
- Routines are established for more exact and more frequent reports. A system for supplies is drawn up, with or without the help of computers, to make it easier to identify costs.
- Sometimes people from the central county council office come in to help local units with the analysis of costs. Some hospital administrators accept this quite happily; others feel that their toes are being trodden on.
- Sometimes a number of beds or even whole departments are closed, perhaps as an extension of a closure for vacations or public holidays. Politically, however, it is sometimes difficult to get a sympathetic hearing for this method.

The need for economic management is met by the loyalty of the individual staff members. Reaction when a budget is exceeded is mainly psychological; in reality it is hardly possible to demand funds back or to level accusations against those responsible.

The 1978 Stockholm enquiry

The 1978 enquiry among senior physicians in the county council of Stockholm included the following question: "What provides stimulus in your work as head of a department?" The most frequent answer was good cooperation with colleagues. Other answers were: a constructive atmosphere, opportunities for solving conflicts, development, and patient satisfaction. Independence, influence, insight into decisions, and a rich network of contacts were also mentioned. One physician wrote: "To manage my responsibility and my budget." Others mentioned the joy of seeing new activities gain ground. "It is stimulating to be a physician in a society which basically has a positive approach toward health care, even if a number of details are questionable." Some answers emphasize the need for better contacts between physicians and management.

Goals of the budget system and incentives to economic management

The politicians' goals have many dimensions. One is good medical care, another is that budgets should be kept. From their actions we can conclude that they judge the former to be more important than the latter. Since the middle of the 1970's unemployment, particularly among young people and women, has brought another aspect out into the open: in many county council areas where unemployment is a dominating problem, medical care is the major employer; this has meant that

much less is heard about the cost of operations and how far budgets are being exceeded. Basically, though, it must be in the politicians' interest that there is some kind of incentive to economic management. It seems likely that the question of incentives to economic management will be given more thought by politicians as well as by health services managers in the future.

REALISM OF THE BUDGET

Under this heading we will study the match between the size of the allocations and the activities which it is expected will be carried out. On one side of the realistic budget we have over-budgeting, and on the other under-budgeting.

Under-budgeting

Under-budgeting means that the amounts in the budget are too small for the expected activities.

Over-budgeting

In the case of over-budgeting the amounts in the budget are too great in relation to the activities which are expected to be carried out.

In several county councils a marked difference could be observed between the realism of the budget for primary care and the budget for hospital care. Difficulties in recruiting district medical officers has led all along the line to elements of over-budgeting in the primary care system. In the case of hospital care the picture has sometimes been the opposite. And inflation eats up parts of the allocations, e.g. for such things as building. One method of dealing with this problem during the budget year has been to postpone the start of buildings or new operations, another has been to ask for an additional grant.

Formally the county councils do not use the designation "estimated grants". Contributions to the care of invalids at home, handicap aids and spectacles are provided according to general norms. The necessary additional allocation is usually granted when the original amount proves insufficient. This means that in reality such allocations are fulfilling the same role as estimated grants.

Should full compensation be granted for inflation or not? If public agencies know they can count not on variable currency but on what the currency can buy - that is, on volume of activity - they can plan ahead as far as the budget runs. But who pays the price for budgeting by volume? The answer Wildavsky (1978, p.2) gives to his own question is: "The private sector and the central controller". He considers it questionable whether the public sector should be protected

against inflation by getting resources for a certain level of services before other needs are met.

Goals of the budget system and the realism of the budget

How does the medical workforce react if allocations are below the level that might be considered realistic? And how do they react if allocations are higher?

Under-budgeting may have a variety of causes. Cost developments may be unknown. It may not have been possible to foresee the inflation percentage. Wage agreements may not have been complete when the budget was fixed. Amounts may have been reserved by the financial administration in the county council, or may have been kept back for later distribution. In the meantime there is local uncertainty about whether the funds will be allocated, how much there will be and what priorities will be established.

Intentional under-budgeting - such restricted allocations that there will obviously not be sufficient for actual needs - may have a negative impact on motivation, and thus on behavior. It may also have a demoralizing effect, since people will lose respect for the budget as a whole. They may feel there is no point in even trying to keep within their allocations, since it is anyway impossible to live up to expectations. Nevertheless, it cannot be altogether ignored that a moderate cost cut-back may sometimes encourage people to think about possible economic alternatives. It might result in some restraint by underlining the necessity for economic management. But although this may be the case occasionally, the procedure must basically be considered of doubtful value.

In some countries a failure to keep within allocations one year is apparently followed by an equivalent reduction the next. This is then regarded as a way of enforcing the diminishing of the number of beds or the closure of hospitals (Borgenhammar, 1978).

Over-budgeting is risky for other reasons. If it is known that a surplus will be followed by an equivalent reduction in allocations the following year, it may be tempting to use up allocations for less urgent purposes during the budget period on the grounds that the amount may be required another year.

Both over-budgeting and under-budgeting can lead to inefficiency when the budget is being implemented. It is therefore necessary to try to make the allocations as realistic as possible. However, uncertainty and risk are in the very nature of budgeting, so a tendency in one direction or the other cannot be discounted.

Over-budgeting and under-budgeting can be associated not only with costs but also with performance. Performance can be calculated in different ways: on the basis of earlier experience or of guesswork; as a result of negotiations or uni-

laterally; according to central guidelines or to lines laid down locally. And the effect in the present context may depend on the way in which the measure of performance has been arrived at.

Where does the limit of tolerance lie? In the literature there is evidence that higher performance targets will be accepted up to a certain level and will result in improved performance. Beyond that level the goal will be rejected and results will deteriorate (Hofstede, 1967). Many factors can affect the level of acceptance, among other things the degree of co-determination (Vroom, 1964).

One aid in the following up resource consumption in relation to budgets is the day-to-day accounting. The report forms used can be designed in different ways, and for people who are unfamiliar with them, interpretation may sometimes be difficult. There may be delays. The coding principles may appear all too theoretical. Personal and tactful communication will make understanding easier (Hofstede, 1967).

In connection with follow-up it should be remembered that the staff who work directly with medical care and those who support them with administrative services probably find their job satisfaction in different things. The direct medical staff may find budgeting and follow-up, and the various forms and statistics that accompany it, rather irrelevant. They may see it as a source of irritation and stress. Not surprisingly they regard their medically-oriented tasks as the most interesting. The daily work of the administrative unit, on the other hand, is related in great part to matters of finance and economics. The less acceptance there is of budgeting and follow-up in the medical units, the more likely are the administrative units to experience a growing sense of alienation. They lack the importance and prestige of professional medical knowledge. Something that the administrators see as over-spending may be regarded from the department's point of view as an example of under-budgeting. In this area there is thus every opportunity for conflict. The immediate reaction of the administrative units to criticism may be to put more effort into yet further refinements of the accounting system, making it more detailed, with more frequent requests for information and a greater number of devices for measuring performance. And this may call for even more administrative resources. So more time than ever is needed for the senior consultant and his staff to cope with all the material they receive.

When allocations are exceeded, some sort of action will normally always follow: first of all, a request for an explanation. If there is no reaction from the politicians, then an administrative responsibility has been transformed into a political one.

THE BUDGET'S PERIOD FLEXIBILITY

How definite is it that an allocation must be used during a particular period? What flexibility is allowed between periods? The concept of period flexibility refers to the general right to carry a possible surplus over into the following budget period. The tied budget and the flexible budget are two alternatives.

Tied budgets

The designation tied budget is used when it is not permitted to carry over a surplus into the following budget period.

Flexible budgets

In a flexible budget, on the other hand, the postponement of a surplus into the following budget period is permitted.

In state agencies the concepts of extended grants, estimated grants and unspecified grants are used. The amount of an extended grant is maximized and it can be carried over. This type of appropriation is used mainly to cover expenses which can be expected to spread over more than one year, and where the total sum is more important from the parliament's point of view than the exact occasion of the expenditures. The reserved funds may be used freely for two years following the year the grant was made. Permission can also be given by the government for use during a third year, but further extension after this requires the permission of the parliament.

Estimated grants may be exceeded without the government having to ask permission of the parliament. This type of appropriation is used when a decision has been made about norms for the use of the funds, but the financial consequences cannot be estimated exactly in advance.

Unspecified grants may not be exceeded and cannot be carried over into later budget years. This type of appropriation occurs relatively seldom in the national budget (Vinde, 1971).

Law and praxis

In the county councils appropriations are basically of the kind which can be labeled "tied budgets". The 1977 Local Government Act states that the county council's elected representatives have the right to decide that special grants, which have not been used during the year for which they were allowed, may be used for the same purpose the following year. The decision then has to be made anew each year. The regulations were similar in 1966.

There is a need for flexible budget periods at the county council level, as there is at the national level. The 1977 interview study indicates that postponement is usually permitted with respect to capital grants and for projects which have been started but not completed. It is less common with respect to allocations for running operations. However, special contributions are mentioned as an exception. In one county council it was emphasized that there had been no question of carrying such allocations over to later years. "In our county council medical care gets everything it needs." In another county council it was said that although its budget was formally tied, and a written application was supposed to be made, in fact a telephone call was generally enough in practice: "We don't expect the units here to use up every last *öre* of their allocation like the state does. We aim at great flexibility."

Goals of the budget system and period flexibility

The tendency to use up surplus funds at the end of the budget period appears to be an international phenomenon (Wildavsky, 1975). This sort of behavior implies that accounting does not express the real size of the consumption need, which in turn means that the political intentions may be jeopardized.

Is a flexible budget to be preferred? Tying allocations to a single year leaves little time for carrying out any important changes. The reconsideration of funds which have not been used during the year involves extra administrative work as well as uncertainty. This speaks for a flexible budget. However, a disadvantage of this type of budget can be that it encourages a tendency to build up local reserves that may not be strictly necessary. This can lead to extra auditing work.

Formal rules and practical demands come into conflict as regards period flexibility. As the norms enforced vary from one county council and from one controller to another, a formalistic superior can sometimes use his authority to enforce the tied budget. This leads to conflicts which often seem to be solved in favor of the flexible budgets. Before then, however, much steam may have been raised.

TACTICAL ELEMENTS IN THE BUDGETING

The tactical elements in budgeting refers to the amount of tactics employed. On the one hand we may speak of open budgeting, while on the other we have tactical budgeting. Between the two lies a series of intermediate forms with features borrowed from one or the other of the two extreme types.

Open budgeting

Traditionally, budgeting in the public administration has been regarded officially as a form of open, rational decision-

making. In open budgeting a rational analysis of the facts provides the basis for budgeting.

Tactical budgeting

In tactical budgeting a game develops between the different "players". Only during the last few years has budgeting come to be studied as a process containing varying elements of tactical games (Wildavsky, 1964; Borgenhammar, 1968; Anthony & Herzlinger, 1975; Tarschys & Eduards, 1975). It is probably possible to get a better understanding of budgeting by acknowledging the irrational elements in it, rather than by closing our eyes to them. Sometimes the budget process may indeed proceed from goals, through the analysis of action alternatives, to decisions. But to a greater extent than is commonly supposed, decisions are probably based on coincidences, tactics and games. Very often there are opportunities for manipulation: needs can be presented in such a way that attention focuses upon them.

It is not generally considered polite to speak of tactics in connection with the budgetary process. The participants do not usually want to admit that their motives are not always tenable, or that there may be an element of game-playing. If the arguments put forward are the best available, it may appear unsporting to point out that hidden motives are also involved. It is difficult to analyze this phenomenon, since many of the rules of the game are unwritten or at least difficult to pin down in a simple description.

Classical economic theory versus the theory of limited rationality

According to classical economic theory, decision-making can be regarded as a rational process. Starting from given goals, action alternatives are produced and assessed in light of their ability to satisfy the goals. The theory of limited rationality does not start from expressed goals or systems of preferences (Simon, 1947; Cyert & March, 1963). The identification and definition of problems is regarded as one of the most important but in fact least investigated parts of the decision process. The available alternatives and their consequences are seldom wholly known. Choices are made to accord with the limitations and to keep conflict at a manageable level, not to maximize goals. Stakeholder groups with varying goals exert influence during the course of the decision-making. Coalitions are formed. A similar approach, based on the public administration, has been described as "the science of muddling through" (Lindblom, 1959). Lindblom, too, points out the difficulty of specifying goals and the problem of the inadequacy of relevant information. There is also the problem of welding together the different parts of a decision time-wise, and the drawback of people's limited ability to handle complex problems.

Arguments in the budget

How is a budget designed when there is active competition for resources? Is it possible to identify patterns in the motivations put forward?

It seems possible to make some distinction between the arguments used in support of new operations, those used to back claims for more resources for existing operations, and those put forward to oppose reductions in the resources previously available.

Extended or sub-specialized operations are often motivated on the grounds of recommendations on the part of appointed experts. It is in the nature of things that such recommendations are largely knowledge-centered. This does not mean that we lack experts capable of surveying a broader field. But to get a sympathetic hearing, arguments and authority are required of the kind that few possess.

Reference to economic arguments is sometimes made in connection with new operations. But in the medical care sector the techniques of economic evaluation are not well enough developed or sufficiently familiar to have been used much. Instead, people usually mention profitability as in the following quotation: "Sophisticated electronic equipment is now being used on a large scale in the hospital. The cost of visits for repairs and maintenance must be substantial. I therefore request the appointment of an electronics engineer." It is very possible that an electronics service unit in the organization would be profitable compared with relying on service from outside, but the application gives no details about this. Nor, very often, is there any information about the way the situation is being handled at present.

Behind the following argument, too, we glimpse real or alleged economy: "If ADP is introduced for supplies, we should be able to avoid an increase in staff."

If the applicant manages to get a foot in the door for a favorite project so that it receives initial support with a limited grant, it may be difficult for the politicians to back out when demands rise above a certain level.

Reference to a positive interest on the part of a higher authority is also sometimes made in the hope of getting an intermediate level to weaken. On occasions government subsidies are being granted for investment or production, a fact to which attentions is drawn in some budgetary proposals. The mass media can also be involved to arouse interest in a new project. It is then usual to make some mention of "medical progress". Expansion has a vitalizing effect. Personal needs can also be satisfied: with growth comes a feeling that the future is secure.

The people who have to examine or approve such representations are not entirely defenseless; they, too, can use tactics. Original or current cost calculations and profitability statements can be produced. Composite suggestions can be broken down into parts which can be more easily checked. Organizational policies, regulating the way matters should be handled, can be called into play. Long-term consequences, and not only the current year's, can be analyzed.

The arguments in favor of an increase in resources for existing operations are also very varied. There is the imbalance argument: if operations are to function well, a certain resource mix is required, new staff may have been acquired, but there is not enough equipment, or more employees may be required to use the available equipment in the best way. It is bad management to let highly trained people occupy themselves with relatively simple tasks. And so on.

The modernity argument emphasizes the importance of utilizing technological gains of keeping in step with developments, and offering patients the most up-to-date kinds of examination. The safety of the patients, the need for precision in diagnosis and therapy - all these come into the picture.

Then there is the justice argument: one unit should not be worse off than another if their tasks are comparable. The conditions enjoyed by patients and staff should not be worse in one unit than in another comparable unit. These argements can be used by all who are not "grant-leaders". Those who do occupy that position can claim instead that this leadership must be maintained in a field where special know-how has been developed.

Reference to external experts can also be used to emphasize the importance of a request. And the declaration that the petitioner cannot be held responsible for operations if the application is not satisfied is sometimes heard.

Growing demand, queues, waiting-times and an awareness that patients are dissatisfied with the present situation - these are all arguments put forward in favor of expansion. Also, the professional norms established by the various central professional organizations often promote the need for more resources.

Those who scrutinize or approve applications can respond to these demands by letting their own experts make further calculations. And if the application cannot be satisfied, there may be some reference to others who have even smaller workforces, older equipment or otherwise inferior resources. The argument that investigations are under way or about to start - regarding the planning of medical care or planning in general perhaps - may be used to justify postponing a decision. A growing realization that queues may not depend on the supply of resources alone, but in some cases also on

organization and motivation, has probably made this argument less viable than it used to be. Someone with a really cool head can tell the petitioner who forswears all further responsibility for operations to take the consequences. And sometimes a petitioner may be told that the demand has no place in the long-term plans, and that it must be seen in a longer perspecitve. When an issue is sensitive or in some way awkward, it may be passed back and forth between various bodies with long delays as a result.

Arguments against reductions or closures sometimes contain elements of the dramatic. And sometimes there is a show of strength. Staff and patients take part in demonstrations with or without placards and slogans. It is felt that the principle of "he who makes the most noise ..." must have some effect. Sometimes an application is accompanied by lists of names. Appeals are made to various interested parties. There are threats: people will quit, or there will be other terrible consequences. Since any statements made refer back, at least implicitly, to medical evaluations, and since the mass media are readily engaged, the politicians may sense an ultimatum. The demonstrators may represent a majority or a minority - in an enflamed situation it may be difficult to decide which.

The same tactics are used in different situations: the arguments described above can be applied more widely than may have appeared. It is sometimes requested that certain applications be marked "priority" to ease them through the sorting process. More urgent issues may then get pushed aside for tactical reasons. Coalitions may be formed with promises of "If you support my application, I'll support yours".

Sometimes senior consultants may make direct contact with the politicians on some issue for which they have not got the hospital management's support. Some politicians appreciate this, others reject it. Some make pledges, most do not.

One task for administrators is to see that a balance is struck between areas of activity, as regards both amounts granted and time given. Without the support of a clear policy there is no basis for such a balancing act.

Physicians who can develop a special field and get hold of more resources for it are often regarded as having more forceful characters. Their reputation is identified to some extent with their success in obtaining money for their unit. The idea of being moderate out of consideration for the county council's economic situation often weighs more lightly than the arguments for expansion. People point out the insignificance of their own demands in comparison with total expenditures. When limits are set for applications - perhaps no more than a certain number of positions may be applied for - these are often not accepted as absolute.

If the arguments against a suggested closure do not gain a hearing, they may - if there is someone involved who is both articulate and has enough time to spare - be followed by an even more wordy campaign. And this may receive wide publicity.

The authorities who have to support a suggested cut-back against its opponents may start by emphasizing the economic consequences. It is generally pointed out that plans must be followed as made, and that a change would be costly. Uncomfortable decisions also have to be made; that is in the nature of the work.

How do the central organs react to excessive applications? In some cases the most outrageous are weeded out before they get that far. In other cases they come up for scrutiny. A negative reaction can generally be expected if the proposed plans are altogether too extensive. Occasionally, though, the examining bodies apparently measure their own efficiency in terms of the cutting-down that they suggest.

Even if there are tactical attitudes, every application must be taken seriously until an assessment has been made of its realism. In most cases its background is not a desire to extend a personal territory just because it is advantageous to have a big department, a large workforce or the latest machines. Instead, the explanation is to be found in a desire for satisfactory conditions for the treatment and the care of patients, for the opportunity to do a certain amount of follow-up and development work, and a wish to show colleagues in the department that efforts are being made to lighten the burden of their work.

Tactical elements in the budgeting and management styles

It can be assumed that the professional reward of the senior consultant is linked above all to a leadership style which can be called the expansionist. We need attach no negative overtones to this concept. Expansion may be medically the most adequate solution, and in a given situation also what the politicians desire. For an administrator certain values concerning security may be connected with the formalist role. What happens in the budget process when the expansionist comes up against the formalist? And it seems clear that conflicts may arise, not only as a result of different roles and areas of responsibility but also because of conflicting loyalties and personalities.

It would be an oversimplification to describe the senior physicians generally as expansionists. Sometimes, instead, an interest in expanding comes first from the politicians, while the local people make difficulties. In such cases extra resources, over and above those directly required, are used as bait; sometimes they are made a requirement.

The 1966 interview study

Do applicants reckon that their requests will always be cut down? In the public sector it is known that budget applications are often subjected to substantial reductions (Heckscher, 1958). Thus, it is probably that to some extent applications are adjusted accordingly.

In the 1966 interview study I asked the respondents to recount their own experiences of this. Their answers have been divided into two main groups. Se Table 5:18. Apart from the hospital administrator group, there is a marked difference between the answers from, on the one hand, the county councils and, on the other, the three big-city areas and state hospitals. The former are more inclined to say that no margins are included in the applications. Three of four hospital administrators claim that no margins exist, while only one of four senior physicians outside the county councils shares their view. The politicians are more inclined than other groups to affirm the existence of margins.

Table 5:18. Are there margins in budget applications?

	No margins %	Margins %	No answer or other answer %
County councils			
Senior physicians (30 people)	73	23	3
Hospital administrators (27 people)	78	19	3
County council managers (26 people)	73	15	12
Executive committee chairmen (25 people)	60	36	4
Major metropolitan areas and the state			
Senior physicians (15 people)	27	60	13
Hospital administrators (12 people)	75	17	8
Top executive officers (8 people)	30	70	0
Top politicians (10 people)	12	88	0

"Over-application is a problem we discuss a great deal", several county council managers explained. A common feeling among them was a dislike of haggling; they prefer to maintain confidence. "Rather than give 8 000 when they are asking for 10 000, we cut out the grant altogether", one county council manager said. To avoid the haggling approach, hospital managements were urged to show moderation. Several people emphasized the importance of learning how to assess applicants. Some applicants regard it as good tactics to ask for too much, and then to give way during negotiations. Several hospital administrators said that although they tried to be accurate, it was possible to include hidden reserves in individual items in the budget. They try to keep expenses a little up and revenues a little down to have some margin to play with.

Several administrators commented that the physicians ask for what they feel they need, regardless of the cost. They want the latest and the best; simple equipment doesn't attract them. "But we can often manage to coax them."

Physicians with experience of both state and county council hospitals said they were struck by the difference between the strict economic management of the state and the county councils' generosity. One county council physicians who had been working in a state hospital before said that under the state everyone had expected to have the amount applied for cut down by half. In the mid 1960's there was no haggling at his hospital, but he felt that a tendency to ask for too much remained. Another senior physician remarked that the county council set a bad example. If a laboratory technician was requested, it perhaps granted a laboratory assistant - which was not what was needed.

The person applying and the person scrutinizing or approving may have different ideas about the need for funds; they may thus also disagree about whether it is a question of over-application or not. Several respondents mentioned this. It is therefore interesting to see how comparatively similar are the answers of different groups in the county councils.

Advance applications

Do people sometimes apply in advance for tactical reasons; that is to say, do they ask for grant which they know will not be allowed that year? The following question was put: "Do you put in for a grant when you assume that it will not be approved in the current budget recommendations?" I expected, as in the case of the previous question, that the answers from the county councils would differ from the others. I based this assumption on the fact that the medical care appropriation for the county councils competes with fewer other claims than the appropriations for the state and the big-city areas. It is usually possible to put through even

quite substantial increases in the county tax without much debate either among the county councillors or in the mass media. This circumstance can be expected to affect the tactics used in budgeting. The answers have been classified in two groups, affirmative and negative. Only senior physicians and hospital administrators have been questioned. See Table 5:19.

Table 5:19. Do advance applications occur?

	Affirmative answers %	Negative answers %	No answer or other answer %
County councils			
Senior physicians (30 people)	47	50	3
Hospital administrators (27 people)	25	72	3
Major metropolitan areas and the state			
Senior physicians (15 people)	73	20	7
Hospital administrators (12 people)	17	75	8

From the answers it can be seen that the senior physicians were more inclined than the administrators to admit putting in applications of this sort. The difference between the county councils and the others is marked. The answers of the hospital administrators were pretty similar, regardless of the type of authority.

One senior physician commented that he had sometimes applied for a new nurse or assistant nurse position when he did not expect to get it that year. But he wanted to show his staff that he had tried. "Sometimes", one senior physician explained, "I invite refusal by saying that if I don't get what I want this year, I will come back." One hospital administrator said that it was unpsychological to let yourself be the scapegoat. "You want to back up the applicant. I think I'm a bit of a coward about this, to be quite honest."

Does it pay to apply in advance?

As a tactic, does wearing out the opposition work? Can you "nag" your way to a grant for staff or equipment? In the 1966 study I put the following question to all respondents:

"In your view does it alter the chance of an allocation being approved that it has been previously refused?"

In the county councils there was a general verdict that applications were not very often refused. And when they were, it may simply have been that there were not enough funds that year. Also the politicians like to wait and see. Things may gradually sort themselves out. New machines may improve while you are waiting. Sometimes, on the other hand, an application is refused because it is regarded as unjustified or, in principle, impossible to satisfy. The chances of a reapplication are then considered less good. Sometimes you have to look for reasons for standing up to applicants. One of these may be that the request has already been refused once. Prestige may also be involved in standing by an earlier refusal, but there is probably less risk if new arguments are put foward. In a good many cases, wearing-down tactics can pay off.

Only in exceptional cases did respondents outside the county councils feel that such a tactic diminished their chances. This differs from what a small group in all categories felt in the county councils. What might this difference depend on? Obviously the greater tendency to refuse requests outside the county councils is part of the story. When there is a refusal in the county councils, it is often probably on a question of principle. Also, outside the county councils a technique may have been developed of rejecting an application the first time, unless the motivations are particularly strong. It is actually stated in the budget instructions of a state hospital that only applications for new positions that represent a follow-up of the previous year's rejected attempt, and which are still as urgent, should be passed on. And only if special new factors have arisen can any positions over and above these be considered.

Developments during recent years

Has it become more or less common than before that budget applicants allow themselves margins? I put this question in my telephone interviews in 1977. Most people thought that there was now less of a tendency to include margins. The main explanation, it was felt, was that long-term plans were understood to mark a limit on resources.

But one or two respondents felt that the tendency to allow for "good measure" had increased. One reason suggested was an increase in the internal competition between a growing number of senior physicians. Every specialist has his own ideas and wishes about the direction expansion should take. Another factor, it was felt, is that more people are now engaged in the budgetary process. And since the economic climate has become harsher, it seems necessary to make a great issue of your own unit's needs.

Several respondents commented that a cut in the amount granted need not mean that the central bodies thought the application was excessive. It was simply a case of adapting to economic realities. It happens, too, that coming aspirations are registered in advance to acquaint the politicians with development trends and innovations. The case was mentioned of a hospital which one year applied for 250 new positions. The hospital management committee contented itself with recommending 100, and the county councillors finally decided to approve 30 of them.

There is also a risk, it was said, that around the time when applications are due, a somewhat overheated atmosphere develops. A rather tired reflection was that, even if at other times of the year the workforce might have too little to do, suddenly at such a moment everyone calls for more staff. To counteract this it was important that hospital management should take the initiative and show solidarity vis-à-vis the senior physicians. Some administrators felt that by discussing development trends together continuously throughout the year, they had been able to simplify the work on the budget.

Goals of the budget system and tactical elements in the budget

In connection with the budget goals described in Chapter 4, open budgeting should be preferable to tactical budgeting. When tactical budgeting does occur, it is important that those involved in the budgetary work should as far as possible learn the rules of the game. Tactical budgeting may mean that allocations are made for purposes which, from the point of view of political priority, are not really the most urgent. Good sales arguments may have clouded the issue.

It should be emphasized that important changes in the health field are taking place not only by means of comprehensive planning, budgeting, and negotiations. It happens that someone in the system reacts against the prevailing norms and tries out new ways by making use of his own intelligence and creativity. New ideas are developed also in this way. This is a question of balance between the claim for freedom and the claim for equality. Freedom because of the necessity of using the initiatives that are available in the organization. Equality because of the necessity for order, experience and routine, and in order not to intrude on other people's rights.

LEVEL OF PARTICIPATION IN THE BUDGETING

Under this heading we discuss different ways in which employees can participate in the budgetary process. We can speak of budgeting with staff participation and budgeting without it, regarding the two kinds as points on a scale.

Budgeting without staff participation

Budgeting without staff participation means that employees are not informed until decisions have actually been made.

Budgeting with staff participation

Participation in the budgetary process can assume fundamentally different forms. There may be anything from the right of veto, through decisions in various bodies with representatives from both personnel or unions and management, further interpretative privilige, the right to negotiate or participate in preparing drafts, the right to make recommendations or to be present and speak at meetings of the political assembly, and ending with such minimal participation as simply being informed before decisions are made.

Participation can be based on law, agreements, negotiation, praxis or unilateral provisions such as regulations about the delegation of authority.

The 1966 interview study

In the mid 1960's real staff participation in budgetary activities was not very common. The joint management and employee committees which had been established in the county councils according to a central agreement in 1945 were not very active in terms of the number of meetings held. Their task was to operate as an information center or forum for consultation. An enquiry organized by the Association of Swedish County Councils in 1965 showed that only 19 of 196 of these committees held at least four meetings each year as the agreement required. The committees were most active in the larger hospitals.

In the 1966 interview study I did not ask any specific question about the joint management and employee committees or about staff participation in the budgetary process. Nevertheless, the subject came up several times. Many respondents - both senior physicians and administrators - were skeptical in their attitude towards the committees' activities: the committees were used for petty matters that really ought to be dealt with in other ways. A more positive view was that the committees acted as safety valves.

Developments during the 1970's

During the first seven years of the 1970's there was more activity in the joint management and employee committees. In many places joint consultation councils were formed in the departments and wards to act as agencies for information. Sometimes special sub-committees were also established for budget business and these came under the joint committees as well. Safety committees, too, were given the right to speak on budgetary issues.

Since 1973 experiments have been started in several county councils whereby the personnel organizations have their own representatives on committees and boards with the right to attend and speak but not to table recommendations or vote.

In 1977 the Co-determination Act became law. It stipulates that decisions on any major changes must be preceded by negotiations between the trade unions and management. The idea is not to give those who work in public agencies more influence than others over decisions about goals, orientation, the scope and the quality of operations. Political democracy is not, on principle, to be encroached upon. The employer's preferential right of interpretation remains only on wage questions. If the demands and interpretations of the wage-earner organizations are not accepted, negotiations must take place within 10 days. It is intended that the Act should be complemented by a co-determination agreement. Pending this, application of the act is still a little uncertain. But it is quite clear that the budget is one of the areas where negotiations according to the act are relevant.

In the 1977 telephone interviews the questions of staff participation in the budgetary process was discussed with county council managers or other top central officials. It was felt all along the line that the forms for participation are unwieldy and time-consuming. "It is easy to get agreement if every demand for resources is met with a "yes", but that isn't possible", was how one respondent put it. At the same time it was emphasized that the trade union representatives who had taken part in negotiations has shown great flexibility and insight into the questions discussed. The chief advantage of this increase in employee influence was said to lie in the fact that decisions are now more securely anchored in the organization.

Goals of the budget system and the level of participation

In the following pages we will examine possible relations between the level of participation in the budgetary process and the goals of the budget system as described in Chapter 4.

Instrument for priority-setting and the level of participation

Co-determination means that employees participate more fully and that their influence increases. At the same time other influences lose some of their force. Can this apply to the influence of the politicians? Do the mechanisms for integration that have been created in our society mean that the democratic ideal is being transformed into something more like corporativism?

The Co-determination Act was designed in the first place for private industry which to some extent has different decision processes and conditions from those prevailing in municipalities, county councils and the state. The risk that

political democracy may be in some degree undermined by an increase in employee influence has been pointed out: it may be more difficult for politicians to represent the interests of the electorate when their freedom of action, directly or indirectly, is curtailed. They may feel hampered; they may feel that the issues they can decide are only of minor interest. Could it become more difficult to recruit people to fill political posts? The trade unions will need more delegates, and it may well become increasingly difficult to act simultaneously as a trade union and a political appointee.

A number of subgoals are connected with the budget system's role as an instrument for realizing the intentions of the allocation-granting authorities, and which also touch upon the level of participation. For instance, there is the wish that decisions should not take too long, that there should not be too many tiresom formalities, that decisions should remain valid for a reasonable term, and that changes decided on should be feasible.

People have found that under co-determination, decisions cannot be made as quickly as before. Convening meetings, reading minutes, adjournments, tabling and revision - all these take time. How important, then, is the demand for speed? Is speed in decision-making given more importance in more hierarchic organizations? Quick decisions are not always wise decisions. Co-determination does not exclude the possibility that negotiations should take place under simpler forms. If agreement is not reached, the employer has the right to come to decision on his own, although with certain limitations.

In county councils and municipalities all kinds of factors - the free access to public records, the claims of equality and legal security together with auditing requirements, legal regulations and inspection by the parliamentary ombudsman - impose the necessity for a formal decision procedure. Does an increase in employee participation mean that the decision process will be further formalized? When decisions are increasingly exposed to question, there is a growing tendency to build on general principles. This encourages centralization and formalization.

A public agency has to work with more or less developed long-range plans. Is there a risk that greater employee participation may reduce the range? The short-term of trade union mandates might work in that direction. But an awareness of the risks may help to limit it.

Change is in the focus of interest in the context of co-determination. Does this mean that repetitive decisions are good simply because they do not change? Is there a risk that things will become more static? Will the changes that do take place satisfy employee interests at the expense of other stakeholders? Conflicts between the wishes of the staff and the patients, for example, are sometimes obvious. But the

tendency to expect differences of interest should not be carried too far. It is wrong to believe that the staff and its representatives are only concerned for their own interests.

The budget process passes through a variety of organizational and political bodies. Who is to negotiate about what? In the parliamentary debate on the Co-determination Act the member submitting the bill said that employees should not negotiate with the highest political organ, in this case the county council. It was intended that the participation of the personnel organizations should operate at an earlier stage when the issue was being prepared for political decision - specifically at the level where the basis for the politicians' decisions was being finally formulated.

Problems can arise when decisions evolve in stages, and budgets - where recommendations, comments and decisions on sub-issues do evolve successively - come into this category. It was stated in the bill that a negotiation procedure with its main emphasis on local negotiations is not altogether easy to fit into such a system.

The approved principle is that negotiations should be incorporated as one stage in the normal preparation of business. But in the case of budgets an original recommendation can change substantially at any stage in the preparation process right up to the final deliberations in the county council. Should new negotiations be initiated every time there is a change in the budget recommendation? There may be budget committees and working groups, with or without staff representation, engaged in the work. When, then, should the demand for negotiations be considered to have been fulfilled? The answer will have to depend on the agreements that are reached.

Some business affects the activities of several commitees. The same sort of problems may be taken up for negotiation in different parts of the county council. Unless there is some coordination, similar business may be handled differently and lead to different results. But coordination calls for centralization, and this can hardly have been the intention or the wish of the legislators.

The marked frontier line between management, which is expected to protect efficiency, and unions, which are expected to protect work conditions for employees, might create artificial conflicts. Ultimately, the risk that the patient may suffer must not be overlooked.

Influence on action and the level of participation

In a society whose values have been changing as ours have, it is becoming increasingly difficult to equate "participation" with "keeping informed". The opportunity to have a say on different matters is important to people's self-esteem.

That employee participation in decision-making has a positive effect on behavior is a classical tenet of the social psychologists (Coch & French, 1958; French, Israel & Ås, 1960; Likert, 1961; Becker & Green, 1962; Argyris, 1964). It has been assumed that the chance to influence conditions at work makes people more active and energetic and generally improves their job morale. The results of some studies, however, have raised the question as to whether employee influence is a necessary condition of high job motivation. According to a study of budget control, many employees at intermediate levels were highly motivated to work well, although they exercised no influence on the budgetary process (Hofstede, 1967). Nor did they seem particularly keen to increase their influence. The investigator commented that people who have never taken part in setting financial norms are apparently far from desirous of doing so. But once they have started, it seems to have a marked effect on their motivation to stick to the budget. As regards technical norms, on the other hand, the same study showed that those employed at intermediate levels apparently felt that they should be allowed to have a say (Hofstede, 1967).

In large hospitals, as in large workplaces in general, there may be quite big distances between any individual employee and a particular decision-maker. This can give rise to feelings of alienation and powerlessness. Also, the budget can mean very different things to people in different work roles and at different levels. The hospital attendant may be thinking about a curtain round the telephone in the ward. The nurse may be hoping that a new position will be granted to relieve work schedules. The consultant is perhaps hoping for a new rectoscope, and the senior physician for a trauma center.

Co-determination calls for knowledge. It is often emphasized that the employer should provide the necessary training so people are acquainted with the decision channels and the organization in general. It is understandable that organization members may react negatively to changes and decision processes that they do not understand. But the training of trade union representatives, for example, may have another side to it: it is felt that people may being educated out of their natural loyalties.

Even today's specialization can act as an obstacle to co-determination. In a system with a low level of specialization it may be possible to exploit the general knowledge that collects during one person's working life. Opportunities for individual initiative by non-specialists are more limited in a speciality-based system. The demands to take an increased responsibility can also be hampered.

The Co-determination Act means more influence for the trade unions, but not for the individual employee at his workplace. The calls of continuity, consistency and responsibility lie behind this. In some cases it can mean that

the trade unions act in opposition to their members; the union representative may proclaim views which are not in line with those of the work team or the individual member. One condition for successful co-determination is the presence of responsible trade union representatives who see the whole picture and exert a unifying influence, and another is that conflicts within and between different trade unions should not be too marked. Otherwise, any internal union problem may be reflected in the organization as a whole.

The trade unions do not usually exert their influence by presenting the employer with a set line of union action based on some fundamental principles. Sometimes, however, such a fundamental principle can be deduced from the union's general stance.

Administrative control and the level of participation

It should be possible to exercise administrative control equally well, whether or not there has been employee participation in the budgetary process. Generally speaking, however, it must be more difficult to demand fragmented responsibility than responsibility that is concentrated to a single person or group. Even if the formal powers of decision are vested in decision units, for example, the natural thing will be to demand responsibility from management if the budget is exceeded.

The likelihood of important new aspects emerging as a result of co-determination continues up to a certain limit. After that it is less likely that anything new will emerge. At the same time a certain amount of cost is involved. To strike the "optimal" balance remains an urgent task for practical reasons and as a matter of principle. What is meant by "optimal", however, is a question of values, attitudes and ideology.

TIME HORIZON OF THE BUDGET

By time horizon is meant the length of time for which allocations are intended to last. Theoretically we can imagine a sliding scale from very short budget periods to relatively long ones.

In the following pages we will discuss two essentially different alternatives, the single-year budget and the multi-year budget.

Single-year budgets

The 1977 Local Government Act prescribes, as its predecessor did, that the budget should be determined each year.

Multi-year budgets

The multi-year version may be a rolling budget, which involves revision every year, or non-rolling, which means that a new budget is drawn up at intervals of several years. Such budgets may cover two years or more, but for practical reasons two to five years probably represents the limit.

The 1966 interview study

In the mid 1960's long-range plans were not particularly common in the county councils. Of the approximately 30 000 pages constituting the county councils' printed documents and official records for 1966, only about 300, or 1 per cent, consisted of economic plans for two years or more. And two county councils alone answered for nearly half of these.

In 1967, 17 of the then 25 county councils had drawn up plans for future developments in public health and medical care. The information they contain varies very much. Some of them include not only projects, but also estimates of investment and operating costs for several years to come. Others are very much more modest in both scope and contents. At that time plans referring to two or more years appear to have provided guidance chiefly as regards investments. In the 1966 study I asked what would be the major advantages and disadvantages of planning for two or more years at a time. The reader should remember that long-range planning was a relatively new idea at the time. It is therefore quite understandable that some respondents took a rather narrow view of the meaning of my question.

Among the advantages were mentioned better opportunities for coordination between hospital and primary care, better staff planning, more opportunity for giving ambitions free play and for increasing goal-awareness. Economic advantages were also mentioned: greater cost-awareness, more stability, the moderation of exaggerated demands, easier financing and a more stable taxation policy.

Among the difficulties were mentioned uncertain wage and cost developments, technical and medical innovations, the difficulty of surveying the recruitment situation, and the uncertainty of tax revenues. Some people also mentioned the difficulty of foreseeing government decisions and central directives from the Association of Swedish County Councils which affect the county councils' situation. Organizational changes were also seen as an obstacle.

This question was put: "What do you think of the following statement: The budget system should furnish more opportunity than it does at present for long-range planning?" The alternative answers were: Very much agree, agree up to a point, do not agree. The answers reported as a percentage can be seen in Table 5:20.

Table 5:20. Should the budget system furnish more opportunity than it does at present for long-range planning?

	Very much agree	Agree up to a point	Do not agree	No answer or other answer
County councils				
Senior physicians (30 people)	43	17	37	3
Hospital administrators (27 people)	67	15	19	0
County council managers (26 people)	65	12	23	0
Executive committee chairmen (25 people)	56	28	16	0
Major metropolitan areas and the state				
Senior physicians (15 people)	33	27	27	13
Hospital administrators (12 people)	25	33	42	0
Top executive officers (8 people)	63	12	25	0
Top politicians (10 people)	60	20	20	0

We can see that the hospital administrators in the county councils chose to answer, "very much agree" more often than the others; they were followed closely by the county council managers. If we combine the two positive alternatives, "very much agree" and "agree up to a point", we can see that the executive committee chairmen were the most positive (84 per cent), followed closely by the hospital administrators in the county councils (82 per cent), and the county council managers (77 per cent). The executive committee chairmen and the county council managers from the county councils which have done very little in the way of multi-year planning were more negative to the statement than their colleagues elsewhere.

The senior physicians were the group in the county councils who were least positive to the statement. They chose the alternative "do not agree" almost as much as "very much agree" (37 against 43 per cent). In the answers from outside the county councils it was respondents in central positions, i.e. top executive officers and top politicians who were much more positive in their attitude to long-range planning than those at the local level - i.e. the senior physicians and hospital administrators.

There is a strikingly big difference between the hospital administrators inside and outside the county councils. The latter were much more negative to the statement. To some extent there is a similar difference between the senior physicians inside and outside the county councils. What can this depend on? Had experience of long-range planning hitherto in the large metropolitan areas been rather unfavorable? Were the possibilities considered less favorable because of the rapid expansion in these areas? Were people satisfied with the present planning? Was it significant that several teaching hospitals with highly developed research belonged to the group outside the county councils? Three psychiatric hospitals are also included in this group, which may have affected the outcome.

More review in multi-year budgets?

If budgets are designed for longer periods, are earlier allocations more likely to receive critical re-examination? To discover my respondents' views on this I asked them: "If budgets are designed to last two or more years rather than one year, what effect will this have on the willingness to re-examine earlier allocations? The alternative answers were: Greater willingness, unchanged, less willingness. The answers distributed as a percentage can be seen in Table 5:21.

In the answers the alternative "greater willingness" clearly predominates over "less willingness". Only the hospital administrators outside the county councils have chosen "less willingness" as often as "great willingness". Outside the county councils, however, the alternative "unchanged" preponderates. More senior physicians in the county councils and county council managers have chosen the alternative "greater willingness" than "unchanged". Several of those who chose the alternative "greater willingness", explained their attitude by saying that they would be more careful. One of those who chose the alternative "less willingness" declared that a single-year budget means more frequent auditing, which can in turn mean more frequent review. A comment made by several respondents was that other factors besides the term of the budget have more effect on the propensity to re-examine earlier allocations.

Table 5:21. Willingness to re-examine earlier allocations in budgets designed to last two or more years

	Greater willingness	Unchanged	Less willingness	No answer or other answer
County councils				
Senior physicians (30 people)	60	30	3	6
Hospital administrators (27 people)	37	56	3	3
County council managers (26 people)	50	46	4	0
Executive committee chairmen (25 people)	44	56	0	0
Major metropolitan areas and the state				
Senior physicians (15 people)	33	47	13	7
Hospital administrators (12 people)	17	50	17	17
Top executive officers (8 people)	25	50	0	25
Top politicians (10 people)	20	50	0	30

I asked the executive committee chairmen some further questions to discover more about their attitude to the longer time perspective. Twenty-four of the 25 answered the questions. One question was as follows: "What do you think of the following statement: Long-range planning in the shape of a multi-year budget is more advantageous than long-range planning which is not expressed in this way?" Six of the 24 agreed in full, two agreed up to a point and 16 did not agree at all. Thus the answers demonstrate some skepticism about tying down long-range planning in a multi-year budget.

They were also asked whether long-range planning embracing all the county council's activities was better than planning that covered certain fields only. Twenty entirely agreed, one agreed up to a point, and three did not agree at all.

Should such long-range planning cover both new building and the acquisition of equipment as well as current operations? Twenty-one of the 24 agreed that it should, while three had some reservations about operational costs.

One conclusion to be drawn from the 1966 study is that long-range planning for medical care should be preceded by comprehensive information and training if it is to be able to have any influence on developments.

Developments since 1966

Since 1966 interest in long-range planning has increased. There are many reasons for this. Stimulating international literature has helped to make the subject respectable (Kahn & Wiener, 1967; Daedalus, 1967). The desire for a better overview of educational needs, investments and operational costs led the National Swedish Board of Health and Welfare to launch a system of rolling forecasts (known as RUPRO) starting in 1967. In 1971 the Association of Swedish County Councils also began to collect information from the county councils regarding long-range planning. Since 1974 the two have coordinated their data collection (L-KELP). For a period of five years information is requested about the estimated number of different categories of services, current operational costs, investment costs, and performance - including such things as number of ambulatory visits, number of beds, average length of stay, and number of admissions to hospitals. L-KELP which largely has been produced as a managerial, not politically anchored product in the county council has proved to have limited forecasting value. It has been over-optimistic as regards the expansion of primary medical care and the rate of closure of acute hospital beds. On the whole, the material has been a kind of extrapolation for five years of current trends or hoped-for developments.

Since 1972 programs for the apportionment of physicians have been worked out on the initiative of the National Swedish Board of Health and Welfare. Another important feature is the Board's published principles for public health and medical care, "HS 80", Health Care for the 1980's, the first provisional edition of which appeared in 1973. The Board has also designed plans as an approved basis for certain medical specialities. There is cooperation of long-range planning not only between the National Swedish Board of Health and Welfare and the Associations of Swedish County Councils, but also with the Swedish Planning and Rationalization Institute (Spri) and the Swedish Association of Local Authorities, among other things about the care of the elderly.

By 1978 all the county councils had designed 10-year medical care and development plans, in some cases for the third time. The quality of these plans has improved over the years. Because of the way in which they are conceived, they generally tend towards something like special pleading for

particular specialities or areas of operations with a tendency to conserve things as they are. In most cases there does not seem to have been any great effort to adjust particular demands in light of the needs of the system as a whole.

In the 1977 telephone interviews with county council managers or other top central officials, I found that the majority definitely regarded long-range plans as a positive development. But some of them also mentioned that it was difficult to get the politicians to take even a very general 5-year plan quite seriously. If new projects arise, nobody suggests that other parts of the program should be scrapped so that the limits of the framework plan are preserved. There were also skeptical voices about the apparent exactitude of the plans: "It gets to be like a religion. It's dangerous to have a long-range budget that is not followed."

Only during the last few years have the top hospital administrators and department heads been engaged in 5-year planning, and even now this does not apply everywhere. In some cases the department heads have been asked to write 5-year operational plans. Here, too, an expansionist tone is obvious all along the line.

Goals of the budget system and the budget's time horizon

In the following pages I will discuss some assumptions about relations between the goals of the budget system as described in Chapter 4 and the time horizon of the budget.

Instrument for priority-setting and the budget's time horizon

Is there any relation between the politicians' opportunities for exerting influence and the term of the budget? During a short budget period, such as one year, it is not generally possible to make any major changes. The opportunity for exercising influence, and the feeling that it is possible, probably increases with the length of the budget's term. From the strategic point of view, multi-year planning is of more use to the politicians than single-year planning. And rolling planning, for two years or more, has the further advantage that current changes in personnel supply, training, medicine, techniques and so on can be included in the revised versions. This helps to keep the system flexible and ready for action. But we cannot perhaps adduce the same arguments in support of multi-year budgeting because of the commitments this can involve: tomorrow's decisions must as far as possible be made by tomorrow's decision-makers.

Influence on action and the budget's time horizon

Does multi-year budgeting alter the opportunities for influencing action compared with single-year budgeting? Applications with a longer term in view will promote some planning

for the future, whereas requests for one year only naturally concentrate on the topical problems of the day. The longer horizon could perhaps encourage people to seek new solutions to the problems of medical care. At the same time the system is dependent on reliable forecasting. Information about plans in other parts of the public health and medical care system and the welfare system much also be available. The possibilities are limited because uncertainty increases with time.

If an application which is in itself well founded is not accepted one year, the applicant may at least feel some satisfaction in knowing that it has been placed in a long-term context. And excessive expansionist visions may perhaps be kept within bounds when cost developments can be seen in a long perspective.

If an applicant is economically minded and optimistic, he may believe that he can manage with smaller resources than in fact he can. This sort of thing will make long-range applications unrealistic. Five-year plans often show a kink every third year (Wildavsky, 1975a) - something that the higher organs can exploit.

Can the multi-year budget counteract the propensity to spend the full allocations during the budget period, regardless of the urgency of the expenditures? In a formal multi-year budget the changeover from one period to the next occurs more rarely. At the same time, though, the element of uncertainty is greater.

It is very important that staff who are affected by long-range plans also participate in their preparation. In this way the future element in today's planning can be better understood; isolated groups especially responsible for long-range planning may in some cases not have much contact with real operational problems (Blum, 1974; Ekman, 1971).

Administrative control and the budget's time horizon

Do multi-year budgets alter the opportunities for administrative control compared with single-year budgets? Wildavsky points out that if control of expenditure is desired, a multi-year budget makes it necessary to estimate expenditures far into the future. "The old tactic of the camel's nose - beginning with small expenditures while hiding larger ones later on - is rendered more difficult" (Wildavsky, 1978, p. 3-4). Administrative control, however, need not necessarily refer to the same period as the budget. Under a single-year budget, for instance, administrative control can be exercised at various times such as every quarter, every six months, or every year. Thus, the time horizon of the budget does not determine the time that elapses between implementation and control. There is probably no difference in this respect between single-year and multi-year budgets. But the time horizon of the budget does affect the time that lapses be-

tween the settling and implementing of the budget. The longer the term of the budget, the longer also the average lapse of time in this respect. Consequently, under a multi-year budget administrative control will be concerned with allocations based on figures that are older than they would be under a single-year budget. Deviations may therefore also be greater. Moreover, there can be more administrative work involved in control under budgets extending over a longer period.

PERIODIZATION OF THE BUDGET

By periodization of the budget is meant the setting of periodic cut-offs or accounting periods. The alternatives to be discussed here are the *cash budget* and the *cost budget*.

Cash budgets

In the cash budget those disbursements which are expected to occur during the budget period are included as sacrifices. There is then no periodization of sacrifices in relation to use during a certain period.

The cash budget has been used traditionally in the public administration. This means, for example, that pension costs are not charged to the period during which they are earned and during which the administration has used the services of the staff concerned; instead, costs are charged to the periods during which disbursement takes place. The purchase of real estate, building conversions, building extensions, and the purchase of equipment are charged in basically the same way to the period during which they are paid for.

Cost budgets

In the cost budget an expenditure is included as a sacrifice in the budget period during which utilization is expected to occur. Whether or not the sacrifice has caused a disbursement during the period is of no interest in this type of budget.

During the last 10 years there has been a changeover to cost budgets, following recommendations from the Association of Swedish County Councils (the L-plan).

Periodization raises a number of issues. The first involves selection: which factors are to be regarded as sacrifices. In private industry, for example, it may be a question of remuneration to the company owner; or in a county council the problem might be to decide whether or not a state subsidy should be deducted from the hospital's building costs. And in both private companies and the public administration there is the question of whether or not interest on equity invested in real estate and equipment should be included, and if so how high the rate of interest should be.

A second issue concerns evaluation: deciding the size of the amounts to be included in the budget. One possibility is to start from historically determined values taken from invoices, accepted tenders or other expense dockets. The historical value can be expressed either as a nominal value in which case one monetary unit is assumed to have the same value at different times, or as a real value which allows for changes in money value. Sometimes, in private industry, for example, the scarcity value or alternative cost is used. The method can be applied in the costing. Evaluation problems can arise both if the disbursements have already been made at the time of the evaluation, and if undertakings for the future are expected to lead to disbursements, as in the case of earned pensions. The absolute size of the disbursements is then unknown and has to be estimated on a basis of probabilities.

A third issue concerns distribution, a problem that has both a time and a space dimension. First, the time aspect: how great a part of resources, particularly buildings and equipment, should be regarded as having been utilized during the relevant term. What depreciations should be charged? To answer this question, it is necessary to determine the expected economic length of the particular asset's life, and the proportion of this that falls within the relevant term (which need not be proportional to the whole economic life of the resource). As to the space aspect: it may be possible to allocate certain expenditures to a single unit (ward, department), but others are chargeable to several units at the same time, and this is where problems of distribution often arise. Logical causal distribution may not be possible, or it may be that allocating the expenditure would cost more than the value of the information obtained. Thus, we find joint costs, i.e. costs that are common to several wards, departments, programs or undertakings. The distribution of a department's special costs takes no account of its share of, let us say, the costs of the central personnel department. It has to be decided how far the distribution of administrative costs and similar joint costs should appropriately go. A possible criterion is the economic one: the cost of distributing expenditures should be in reasonable proportion to the value that the information thus gained will have in subsequent decision-making. Thus, the design of a budget varies as regards the exactness with which it reflects actual utilization.

Goals of the budget system and periodization

In the following pages we will discuss some possible relations between the two alternative approaches to budget periodization and the goals of the budget system.

What connection might there be between the budget as an instrument for priority-setting by the politicians and different ways of periodizing the budget? Let us first look a

little more closely at what these different methods really mean. Let us suppose that a county council has to choose between buying X-ray equipment that costs a million kronor and has an estimated economic life of ten years, or of buying equipment costing 750 000 kronor with an estimated economic life of five years. In both cases it is assumed that disbursement in the first year will amount to 500 000 kronor. In a cash budget for the year in question it will look as if the same resources have been used, regardless of which alternative is chosen. A cost budget for the same period will make the differences in the alternatives clear. In practice, these differences will presumably have been reported in some other form together with the budget. Thus, comments on the budget fulfil an important role.

A cash budget must be supplemented by period analyses so that profitability in different periods can be compared later. Such analyses must include wage payments and even the handing out of fringe benefits earned during the year. In calculating the profitability of purchasing a machine that is expected to save a certain amount of labor, the result will be misleading if machine costs are compared with only a year's disbursements, excluding fringe benefits to the displaced personnel as pensions to be paid later. Such incomplete information regarding price relations may mean that technical equipment is not used to the extent that would be profitable.

A cost budget must be supplemented by cash flow analyses. Conditions may also be attached to this kind of budget, such that disbursements during a particular period should be kept within fixed limits. If we want to compare the profitability of different alternatives, periodization is essential. However, such information can be obtained from cost analyses. From the financing point of view, the cash budget is more important than the cost budget.

A cost budget is more likely than a cash budget to inspire applications based on profitability estimates. A disadvantage of the cash budget is that, because of the way it is constructed, it may encourage the use of men rather than machines, even where the use of the latter would be economically justified. It may be easier for an applicant to throw a smokescreen over the real costs of a suggestion if he only has to mention the disbursements he estimates for the immediate budget period. Naturally, though, more detailed cost estimates can always be asked for.

The cash budget has certain advantages when it comes to financial control. But the cost budget favors administrative control. A budget that focuses on actual utilization (i.e. a cost rather than a cash budget) allows for comparisons that are more relevant to operations as a whole. If we want to use the budget to check whether or not certain investments have actually been utilized, then the cost budget provides a better tool than the cash budget.

SUMMARY

This chapter includes a means-end analysis in which 12 budgetary aspects are related to the goals of the budget system. Attitudes from interviews and enquiries are also presented. Some developments in Swedish health care budgeting from 1966 to 1978 are discussed. Among the more marked changes we find an increased emphasis on long-range planning and staff participation in budgeting. Experiments are taking place regarding framework budgets as alternatives to traditional detailed budgets. Problems are observed especially regarding incentives to economic management, revaluation of ongoing activities, and tactical elements in the budgeting.

6 CONCLUSIONS

The expansion of medical care is a noticeable feature of the Swedish economy. Expenditures are chiefly determined in the budgets of the county councils, the decisions being made by the county council politicians. In this decision process various aspects of the setting in which the medical care system operates have to be taken into account. Some of the more important of these are: the basic political control exercised in different ways by the state authorities and their various agencies; economic conditions; methods of funding; the level of specialization in the medical care system as a whole; the level of technological development; and the staff structure - in terms of education for instance - prevailing in the medical care system of the country.

The action variables in the political decision-making which are analyzed in this study are linked to the structure of the budget system. In Chapter 5 twelve budgetary aspects and some alternative ways of designing budgets were examined. The aptness of the alternatives was then evaluated in light of various goal variables which had been analyzed in some detail in Chapter 4. In evaluating these relationships a number of intervening factors have to be allowed for. To me it seems particularly important to get some idea of the attitudes and expectations of the people in leading roles. The special needs of the medical care situation and the size of the resources available are major intervening factors. (See Table 6:1.)

MOTIVATION STRUCTURE

A question of considerable importance in medical care budgeting - and one which was reflected in several rather rueful comments in the 1966 and 1977 interviews - concerns the motivation to economize. Ethical values are important in a field such as medical care where the work concerns health, the relief of suffering, life and death. We must remember this when we note the comparative ease with which supplementary grants have been obtained to cover unplanned or underestimated

Table 6:1. Central factors in the study

Underlying factors	Action variables	Intervening factors	Goal variables
Environmental factors: - degree of political control - methods of funding - degree of specialization - technological level - staff structure Components in the medical care system: - political - consumers - employees - administration	Budgetary aspects and alternatives	Attitudes and expectations of the actors Demands of the situation Size of available resources	Opportunities for realizing the goals of the budget system: - as an instrument for realizing the intentions of the politicians - as an instrument for influencing action - as an instrument of administrative control

costs. Few of the actors concerned are likely to see a direct connection between the size of the county council tax and their own behavior in the medical care field. The general feeling is probably that some other unit, to whom one feels no loyalty, will get what you save. And the effects of such saving campaigns as have been launched seem to be rather short-lived. What appears to be increasingly important in this connection is *dialogue*; computer lists cannot replace conversation as a vehicle of influence and understanding.

The actual return on an application for funds is often meager nowadays in relation to the proposals made. Thus, a great deal of work may have been done for what seems like very little benefit. Many people are involved in applying, scrutinizing, evaluating, revising, formulating, cutting down and altering. Sometimes it is all done in great haste; the annual application routine easily becomes a last-minute rush. It is therefore a matter of some urgency to find ways of simplifying the budgetary process, of reducing unrealistic expectations and of encouraging more thinking in terms of general frameworks.

TIME STRUCTURE

There seems good reason to examine the possibility of longer-range budgets than those covering the usual 12 months. Few fundamental changes can be effected in such a short time. But longer time horizons bring their own special problems. These can be satisfied by allotting special reserves by acquiring sufficient knowledge of development trends, or by allowing adequate opportunities for changing course. Nevertheless, we must appreciate that it is difficult for politicians to decide on some major tax increase, perhaps five years ahead. The 3-year mandate, which replaced the 4-year mandate in Sweden in 1971, does not encourage long-range planning. Simultaneous elections for the parliament and the local authorities also leave little scope for discussing, for example, medical care policy in the county council.

ORGANIZATION AND ADMINISTRATIVE DESIGN

The traditional way of obtaining a grant for medical care activities is by applying to the budget. Events in the last ten years suggest that other paths are growing in importance at the expense of traditional budget applications. Political resolutions, trade union attitudes, government commissions, and long-range medical care plans - all these seem to be having a growing impact on expenditure decisions.

The hierarchy of safety committees, safety officers, union representatives, and staff representatives on committees and boards, which has grown up alongside the formal organization, also affects the budgeting. Traditional "boss" roles are being played down, a trend which developments in the organization of working life - the Co-determination Act for example - serve to reinforce. This may appear to reduce the importance of leadership, but in fact the necessity for maintaining an overall view in the budgetary process is as great as it ever was. Moreover, the trade union organizations need a strong opposite number, representing the employer, during negotiations on the budget.

SUGGESTIONS FOR FURTHER RESEARCH

1. Any further study of medical care budgeting should include one group whose attitudes and actions have become increasingly important: I refer to the trade union representatives who, since the Swedish Co-determination Act of 1977, have emerged as a key factor in budgeting activities. However, pending the co-determination agreements, the forms for their contribution have not yet assumed a final shape.

2. The possibility of replacing the department head's formal written application to a greater extent by oral communication is worth studying. Some moves in this direction have already been made. Further experiments should be encouraged and results systematically reported.

3. The use of framework budgets on a broader basis than in the example reported in Chapter 5 could well be tried. Greater freedom of action can probably be combined with decision-making on certain questions in groups representing all the interested parties, when this seems to be a legal possibility. Such experiments could also give some indication of the extent to which administrative jobs, which today are dealt with more centrally, could be handled in the hospital departments.

4. There is very little reporting of performance results in the medical care field today. Attempts to get an overall picture of the way patients look upon the medical care they receive, for instance, are rare. Injuries such as infections, thigh fractures and complications of other kinds that arise during hospital stay are not reported. A study of this question could fill in some of the gaps in the picture and open the way to improvements.

5. Nor do we have more than a fragmentary idea of how much the patient considers medical care to be worth. Remarkably little information is provided about the cost of different expedients, drugs, hospitalization episodes or ambulatory visits. In a society where many people are growing increasingly weary of taxation, it may be important to give the general public a clear idea of what the different kinds of care are costing.

6. In Swedish medical care the hospitals dominate. When politicians try to shift the focus of the system, putting more emphasis on primary care, it could be important to examine how the budget system can be used to encourage such a shift. Is it practicable to give the primary care sector budgetary responsibility for the medical care of people in a prescribed geographical area, regardless of whether this care is provided inside or outside the hospital? Relevant experiments could illustrate the possibilities and the limitations of such a system.

FINAL COMMENT

It is only too easy to imagine that more medical care is the same as better health. However, this equation does not always quite work out (Fuchs, 1974; Lalonde, 1974; Wildavsky, 1975b; Rhodes, 1977). It has been assumed that the medical care system of today with all its physicians and other medical practioners and institutions affects very few of the most common indications of health - perhaps not more than 5 per cent. The remaining 95 per cent are, in this case, determined

by factors over which the medical care system has no real influence: such things as individual life style (e.g. drinking and smoking habits, exercise and anxiety), social conditions (e.g. income), eating habits, and physiological heredity. Perhaps medical care, which of course is often vital, does less as a whole than it is expected to do and less than it declares itself able to. Medical care not only cures; it also creates a need for further medical care. A shift is developing in our concept of health. More and more symptoms are being incorporated into it, including trivialities. No one knows how much medical care should cost if no economic limits are drawn up. In our public medical care system these limits are determined by political-economic decisions in the budget. The further development of the budget system in the medical care sector is therefore an urgent matter.

APPENDIX 1

QUESTIONS 1966

The 1966 interviews included the following questions:

Question a

Age

Question b (to chairmen of the county council executive committees)

Full-time or non-full-time chairman

Question c (to chairmen of the county council executive committees)

Number of years as chairman

Question d

Expectations regarding the future share of the national income devoted to medical care

Which of the following four statements agrees best with your own view?

1. Provision for in-patient care should be adjusted so that the care provided is the best possible within the limits of the total medical care appropriations. This need not necessarily imply that the share of the national income devoted to medical care could not be reduced.

2. Provision for in-patient care should be adjusted so that the care provided is the best possible within the limits of the total medical care appropriations. The share of the national income devoted to medical care should be maintained at approximately the present level.

3. Provision for in-patient care should be adjusted so that the care provided is the best possible within the limits of the total medical care appropriation. Increases in the total appropriation to medical care compared to the present situation, estimated as a percentage of the national income, are strongly motivated.
4. Provision for in-patient care should be adjusted so that the care provided is the best possible. Cost should not be given too much consideration.

Question e (to chairmen of the county council executive committees)

Influence

When the budget is being decided, how much influence have you as the chairman of the county council executive committee on the following areas?

- Size of tax
- Size of capital funds
- Utilization of capital funds
- Size of loans
- Size of hospital staff
- Other expenses for running hospital expenses
- Quality of medical care
- New constructions
- Rebuilding
- Acquisition of technical equipment
- Computer equipment
- Supplies

Make your assessment along this scale

1	2	3	4	5	6	7
No influence						Very great influence

Question f

Ranking of goals for the budget system

How do you rank the following goals for the hospital's budget system?

- As an instrument for priority-setting by the politicians
- As a basis for administrative control
- As an instrument for influencing behavior in the hospital
- As a base for price-setting

Question g

Desirability of better opportunities for the politicians to set priorities

What do you think of the following statement: The budget system should provide the politicians with more opportunity than at present to decide where the utility of an increase in appropriations is greatest?

- Very much agree
- Agree up to a point
- Do not agree

Question h

Desirability of more information about the hospital for the politicians

What do you think of the following statement: The politicians should be provided with more information about what happens in the hospital than is at present the case?

- Very much agree
- Agree up to a point
- Do not agree

Question j

Desirability of more cost information for the physicians

What do you think of the following statement: Physicians should be given more information by the administration than is at present the case, for instance about the cost of different activities?

- Very much agree
- Agree up to a point
- Do not agree

Question k

Desirability of a better basis for control

What do you think of the following statement: The budget system should provide the hospital administration with a better basis for control than it does at present?

- Very much agree
- Agree up to a point
- Do not agree

Question l

Satisfaction with the present budget system

Are you satisfied with the present formal design of the budget for the hospital? Note that the question does not refer to actual sums of money involved.

- Entirely satisfied
- Satisfied on the whole
- Not altogether satisfied
- Not at all satisfied

Question m

Ranking of different budget specifications

Rank these four decision bases according to how appropriate you consider them to be.

Example 1 (cost classification budget)
Example 2 (cost center budget)
Example 3 (program budget)
Example 4 (performance budget)

(The examples are reproduced in Chapter 5.) Motivate your choice.

Question n

Restrictions on hospital management

What do you think of the following statement: The powers of hospital management to make decisions about the use of funds are strictly limited today?

- Absolutely correct
- Not altogether correct
- Incorrect

Question o

Restrictions on department management

What do you think of the following statement: The powers of the departmental heads to make decisions about the use of funds are strictly limited today?

- Absolutely correct
- Not altogether correct
- Incorrect

Question p

Desirability of framework budgets

What do you think of the following statement: The budget system ought to provide decision-makers in the hospital with more freedom than they have at present to dispose of sums of money, within certain bounds, for whatever purpose they consider most suitable.

- Very much agree
- Agree up to a point
- Do not agree

Question q (addressed to hospital administrators and senior physicians)

Areas where greater economic freedom of action is considered desirable

Can you suggest any areas where you feel it would be advantageous for you to make independent decisions within a certain given framework, where at present permission is required about how funds should be used?

Question r

Renumeration system

Give your views on the physicians' remuneration system. Do you consider there should be a greater element of incentive in the remuneration system than there is at present?

Question s

Reduction of a surplus

If an allocation for the current year is not fully utilized, is it likely to be reduced in a later budget allocation?

Question t

Cutting down budget requests

It is often said that budget applications are generally subjected to reductions, and that applicants adjust their requests accordingly. What is your own experience of this?

Question u (addressed to hospital administrators and senior physicians)

Advance applications

Do you put in for a grant when you assume that it will not be approved in the current budget recommendations?

Question v

Advantages of applying in advance

In your view does it alter the chance of an allocation being approved that it has been previously refused?

- Chances increase
- Chances are not affected
- Chances decrease

Question x

Reviewing earlier grants

Give your reaction to the following statement: Only changes in relation to previous allocations are subjected to critical review in the budgetary work.

- Absolutely correct
- Correct up to a point
- Hardly correct at all
- Incorrect

Question y

Automatic renewal

If an allocation for the current programs is fully used one year, is it then likely that it will not be reduced in a subsequent budget?

Question z (addressed to politicians)

Desire for longer-range planning

What do you think of the following statements:

a) The budget system should furnish more opportunity than it does at present for long-range planning.

- Very much agree
- Agree up to a point
- Do not agree

b) Long-range planning in the shape of a multi-year budget is more advantageous than long-range planning not expressed in this way.

- Entirely agree
- Agree up to a point
- Do not agree

c) Long-range planning that embraces all the activities of the county council is more advantageous than long-range planning embracing only certain of these fields.

- Entirely agree
- Agree up to a point
- Do not agree

d) Long-range planning that embraces current operations as well as new building and the acquisition of equipment is more advantageous than long-range planning that only embraces new buildings and the acquisition of equipment.

- Entirely agree
- Agree up to a point
- Do not agree

e) What major advantages do you consider a multi-year budget would have apart from those mentioned?

f) What major disadvantages do you consider that a multi-year budget would have?

APPENDIX 2

QUESTION AREAS 1977

In the 1977 telephone interviews with county council managers or other top central officials, the following areas were covered.

1. Administrative structure

   a) Present administrative structure for medical care

   b) Tendencies to change in the administrative structure

   c) Experiences - opinions regarding the bloc organization

2. The political organization

   a) Present structure

   b) Tendencies to change the organization

3. Budgeting

   a) Development trends and current development work in medical care budgeting

   b) The different steps in the budgetary process

   c) Incidence of the right to deviate locally from a given budget specification without permission from the relevant authority within given cost limits (framework budget)

   d) Incentive to economic management

   e) Period flexibility - possibility of using surplus funds the following year

   f) The problem of tactics: the propensity to allow for reductions in amounts requested, tendencies in the incidence of tactical "games" in budgeting

g) Praxis regarding the review of earlier allocations, as against the scrutinizing of new applications

h) Employee participation in budgeting

j) Long-range planning in budgeting

APPENDIX 3

QUESTIONS IN THE 1978 ENQUIRY

In the 1978 enquiry, addressed to the administrators of regional and central hospitals (or equivalent), the following questions were put:

1. Is the budget recommendation for the hospital, on which the county council politicians are to give their opinion, divided among different departments (or equivalent)?

   - Yes
   - No

If "no"

2. Is an internal budget used which is divided among different departments (or equivalent)?

   - Yes
   - No

3. Are reports sent several times a year to department heads with information about costs within the relevant area of operations?

   - Yes
   - No

If "yes"

4 How often are these reports issued?

   - Monthly
   - Quarterly
   - Other

5. Is the budget compared with costs in these reports?

   - Yes
   - No

6. When were these cost reports, divided among departments, introduced?

   - Before 1967
   - 1968-1970
   - After 1970

7. Is any form of performance specified in these reports?

   - Yes
   - No

8. Is any other kind of cost information issued to the department heads?

   - Yes
   - No

If "yes"

9 What forms?

   .....

10. As a hospital administrator are you satisfied with the present accounting?

   - Yes
   - No

If "no"

11. What changes would you like to introduce?

   .....

12. In your opinion has the degree of centralization as regards economic decisions increased or decreased in medical care in the last ten years?

   - There has been increasing centralization
   - There has been decreasing centralization

Other comments:

.....

APPENDIX 4

QUESTIONS IN THE 1978 STOCKHOLM ENQUIRY

In the 1978 enquiry, addressed to senior physicians and district physicians in the Stockholm county council, the following questions were put:

1. Medical specialty (to senior physicians)

2. Age

3. Which of the following statements agrees best with your own view?

   a) Medical care should reduce its share of the national income during the next decade

   b) Medical care should maintain the same share as now of the national income during the next decade

   c) Medical care should increase its share of the national income somewhat during the next decade

   d) Medical care should increase its share of the national income considerably during the next decade

4. How do you think health care costs are most likely to develop as a result of political decisions?

   a) Smaller than now

   b) The same as now

   c) Some increase

   d) Considerable increase

5. What development do you consider desirable within your own medical field?

   a) Smaller resources than now

   b) The same as now

   c) Some increase

   d) Considerable increase

6. What do you think of the following statement: The budget system ought to provide decision-makers with more freedom than they have at present to dispose of sums of money within certain bounds for whatever purpose they consider most suitable

   - Very much agree
   - Agree up to a point
   - Do not agree

Comments:

.....

7. Should the physician be totally responsible for the unit, or only medically responsible?

8. What content should be given to the concept of administrative responsibility?

	Very important	Important up to a point	Unimportant
a) Loyalty toward the ratified budget			
b) External loyalty toward personnel			
c) Loyalty toward the needs of the patient			
d) Loyalty toward long-range health care plans			

9. What stimulates you in your work as head of a department?

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