

Control of health care costs in social security systems

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INTRODUCTION

A Workshop on the Control of Health Care Costs in Social Security Systems was convened in Vienna, from 25 to 28 May 1980, by the WHO Regional Office for Europe in cooperation with the Government of Austria and the Central Association of Austrian Social Security Funds. The meeting was attended by 27 temporary advisers from 14 countries, and included one from the International Social Security Association and one from the International Labour Office.

Dr R. Brooks was elected Chairman and Dr S.R. Engleman Rapporteur.

The meeting was opened by Dr A. Krassnigg, Director-General of Public Health, Austrian Ministry of Health and Environmental Protection, who stressed the importance of an economic approach in the health sector.

Dr H. Zöllner, WHO Regional Officer for Health Economics, reviewed the background to the meeting, which he placed within the context of WHO's objective of health for all by the year 2000. Valuable work had already been done on cost containment, for example regarding cost sharing, but less attention had been paid to the problems to be considered by the Workshop, namely restrictions on resources and services, quality standards, budgetary and financial incentives and controls, and feedback of information to providers and consumers.

REVIEW OF COST-CONTAINMENT MEASURES

Specific strategies to contain costs must be derived from an appreciation of the particular factors that influence costs. The great complexity of health care systems, however, requires that both individual causes and the corresponding cost-containment strategies need to be considered within a sufficiently broad framework so that all the ramifications and responses to such strategies can be anticipated as much as possible. For the purposes of the meeting, the causes of rising costs were grouped under four broad headings.

1. Increases in resources and services generate their own demand.
2. Pressures for continuous improvement in quality (which are sometimes simply pressures to adopt the latest technology) generate rising unit costs.
3. Many health care systems are characterized by a lack of any effective form of budgetary control and/or have either counterproductive or no incentives for providers to control costs.
4. A lack of cost consciousness amongst both providers and consumers. This is exacerbated by demographic trends towards aging, for example, and by epidemiological trends, especially towards chronic degenerative disease. The health care sector also tends to be seen in isolation from other sectors of society that contribute to ill health by their activities, e.g., by causing pollution, unemployment, etc., and there is a tendency for the health services to be used as a dumping ground for social problems that originate outside the health care sector.

In the light of this classification of causes, cost-containment problems were considered under the following four headings:

- (a) restrictions on resources and services;
- (b) quality standards;
- (c) budgetary and financial incentives and controls; and
- (d) feedback of information to providers and consumers.

Restrictions on resources and services

Approaches to cost containment in health care by different countries will, to a considerable extent, reflect the nature of the organization and financing of the health care system. The United Kingdom, for example, with its National Health Service (NHS), may be described as having a centralized welfare system. This permits strict control by the Government of the resources to be made available to the hospital and community sectors of the Service. Since 1976, expenditure by these sectors of the NHS has been subject to a "cash limit". In Hungary, where what might be described as a state planning system exists, cost increases (in real terms) are set by the Ministry of Health following negotiations with the medical institutes and the doctors' association. In Greece, strict control over hospital budgets also exists, under a form of state planning. As will be evident from what follows, none of the other countries represented at the meeting had health care systems that permitted quite this degree of control over the global resources devoted to the health care system, or to major sectors of it.

In Canada, national health insurance is provided by the ten provinces, roughly half the costs being borne by the Federal Government in what may

be called a local welfare system. In 1977, in an attempt to contain costs, the Federal Government limited the rate of growth of its contribution to that of the gross national product, and required the provinces to pay any additional costs. (The province of Quebec has also taken cost-containment measures, including a 2.5% reduction in the global rate of increase of hospital costs.) Another country with a system of the local welfare type is Sweden, where the county councils raise most of their own revenue for health care and are relatively autonomous. In 1978, rising health care costs led to a voluntary agreement between the Swedish Government and the Association of County Councils to limit the expansion of health services, in volume terms, to 3.3%.

The health care system of the Federal Republic of Germany may be described as a liberal, negotiated system. A large number of health insurance funds cover about 90% of the population. The funds are quasi-public institutions controlled by representatives of the insured and of the employers. The funds, together with the physicians, administer the ambulatory sector, while the *Länder* plan and administer the hospitals. As capital investment is subsidized by taxes, control over the application of high technology is possible. In another liberal, negotiated system, that of the Netherlands, technology can also be controlled, for similar reasons.

Austria can likewise be categorized as having a negotiated liberal system, where implicit cash limits are set in the hospital sector in that it is possible for hospitals to exceed their budgets but then be compensated by the owners (usually a public authority). In recognition of the fact that the level of consumption of doctors' services is the level offered, the number of doctors contracted to the social security funds is limited. A surplus of doctors, however, has led to an increase in the number of practitioners under contract. The only other quantity control measure is that resulting from the setting of prices in the system of fees for items of service.

The liberal but centralized French health care system has experienced a considerable range of cost-containment measures. In the hospital sector, for example, significant control over the volume of inputs has been exercised. In 1972, a "hospitalization map" was introduced which described both what existed and what was desirable as regards such factors as bed/population ratios, distribution of expensive capital equipment, etc. By 1979 the major goals had been achieved and the Ministry of Health began to restrict hospital investment and development. Planning of the system now includes, for example, the closing of beds or departments where excess capacity exists. Acute beds have also been reclassified as long-stay beds. In addition, consistent with the general approach of controlling inputs, entry to medical schools is controlled.

Finally, the approach adopted by the Health Maintenance Organizations in the United States should be mentioned. These offer a comprehensive range of medical services to their enrollees on a prepaid basis. Only a very small fraction of the population is covered by these programmes, however.

Quality standards

Experience with explicit quality standards was found to be relatively limited amongst the countries represented at the meeting, except as regards pharmaceuticals where, in most countries, some degree of control over their use exists. The most extensive attempt at introducing quality standards reported was in the United States through the intermediary of the Professional Standards Review Organizations (PSROs). While restricted to Medicare, Medicaid, and maternal and child health programmes, 205 PSROs are currently functioning in 50 states. In addition to the quality objective, it is also hoped that the PSROs will stimulate cost consciousness. PSROs are composed entirely of physicians who are required by law to "apply professionally developed norms of care, diagnosis and treatment . . . as principal points of evaluation and review."

In Austria, all contracts with doctors include a clause indicating that treatment should be within the normal limits, which are based on overall practice. Doctors can be questioned about their treatments, e.g., about the number of X-ray examinations performed. In the Netherlands, an attempt is being made to implement a medical audit that will link effectiveness with quality. Currently the information is limited merely to process-oriented measures — safety, hygiene, numbers of nurses on duty during the night, etc. Israel is in the early stages of developing quality control. Its programme is planned to include hospital review of process and outcome, similar reviews of clinic outpatient services, including medical records, by doctors from the Health Insurance Fund, and reviews of doctors' prescription patterns, not limited simply to quantity.

In France, quality control systems exist only in the large hospitals, where they are also used as instruments of cost containment. The systems are under the control of the medical profession. Research is currently in progress in France to measure a number of parameters, such as medical efficacy, the risk associated with certain procedures, availability and access, and patients' comfort. There is no overall system of quality control in the United Kingdom, but systems do exist in certain narrow areas. One example is the confidential enquiry into maternal deaths that has been carried out over the past 15 years, in which each death has been reviewed by a group of consultants. A more recent enquiry of a similar type, though less ambitious in its detailed analysis, is that into perinatal mortality. Experiments are also currently under way in the United Kingdom on the provision of budgets for hospital clinicians. Though motivated primarily by cost concerns, an evaluation of the quality of care is a necessary component of such experiments. Finally, as regards the United Kingdom, participants felt that the system of attempting to allocate resources to regions on the basis of the health needs of their populations should also be seen as a quality control measure.

The Federal Republic of Germany has an extensive economic monitoring system, administered jointly by the health insurance funds and by professional

organizations, that keeps all physicians in ambulatory care under review and produces highly detailed information on the procedures performed by individual physicians. The data are then compared with those for their peer group in the same region, and physicians whose costs or numbers of procedures are well above average are screened out for review by a joint committee, which may penalize them if they are thought to have been wasteful. The Federal Republic of Germany also has a system for reviewing the correctness of laboratory results. Laboratories whose results fall outside an acceptable range are denied subsidies. Finally, Sweden has a medical responsibility committee attached to the National Board of Health and Welfare. This committee has disciplinary powers, but they are rarely used.

Budgetary and financial incentives and controls

Budgetary and financial incentives and controls can be aimed at the volume and/or price of health care. An example of an approach designed to directly influence the volume of services is that adopted by the Kupat Holim Health Insurance Fund in Israel; this provides comprehensive health care for its insured population, which includes 77% of the total population of the country. The Fund owns, builds, and operates health care facilities, employing physicians, nurses, paramedical, administrative, and teaching and research staff as full-time salaried employees. The Fund's facilities are organized on a regional basis, a specified number of bed-days being allocated to each region on the basis of the size and age structure of its population. The Regional Medical Director, in turn, negotiates with the hospitals in the region as to their allocation of bed-days. He is also responsible for ensuring the provision of community services, which influences, in part, the nature of the hospital services he wishes to be provided in the region. In allocating bed-days to hospitals through a process of negotiations, the Regional Medical Director pays particular attention to the costliness of hospitals as compared with the national average. If desired changes in a given hospital, either in the pattern of services provided or their cost, are not agreed, the Regional Medical Director may allocate patients to another hospital. This system therefore provides a degree of direct control over volume, indirectly affects costs, and permits the community and hospital sectors to be planned simultaneously.

Other cost-containment measures adopted by the Fund include limits on inputs, both capital and labour. Pharmaceutical cost containment has taken several forms. Budgets for districts are determined by population size and the percentage of population over age 45. In hospitals, beds are classified as low-, medium- or high-cost, and hospital pharmaceutical budgets reflect the number of beds in each category (regardless of bed occupancy levels). In addition, health education programmes have been developed for the public, and training programmes for doctors in drug prescribing have

been introduced. The Fund has also closed beds and opened day beds. Finally, its planning system has emphasized the development of the primary care sector.

In the liberal negotiated health care system of the Netherlands, the Government has, until recently, played only a small role in cost-containment efforts through the use of budgetary and financial incentives and controls, but legislation introduced in 1980 has created a new central office to fix health care fees, especially of hospitals, general practitioners, and specialists. (Specialists are paid on a fee-for-item-of-service basis and general practitioners on a per capita basis.) The nature of the per diem payment system for hospitals gives them an incentive to maximize bed-days. The social security funds are concerned to direct their efforts towards controlling volume. Cost containment in the Netherlands has traditionally been output-oriented, but is now becoming input-oriented. Technology is controlled and attempts are being made to limit other inputs, such as paramedical staff. Consideration is also being given to promoting outpatient treatment and improving facilities for general practitioners. A Health Care Planning Act was passed in 1981 that requires the drafting of regional plans and may promote regional budgeting. An experiment recently begun in three hospitals and negotiated with both sickness funds and private insurers will provide hospitals with budgets over a three-year period, based on previous volume levels and inflation expectations. If higher inflation rates are experienced, budgets will be increased. A monitoring system has been set up to ensure that hospitals do not "dump" high-cost patients on other hospitals.

In the Federal Republic of Germany, in the mid 1970s, a brief period of voluntary cost containment was followed in 1977 by the enactment by the Federal Government of a Health Insurance Cost Containment Act. The main provisions included the establishment of a national institution for "concerted action of the health care system", which includes all interest groups, the fixing of the total remunerations of nonhospital physicians and dentists in advance, with compulsory arbitration if necessary, and the negotiation of total expenditure on medication. In addition to attempts to control the incomes of nonhospital physicians, new methods of cost containment are being tested that view the physician, not only in terms of his direct costs, but also as the initiator of decisions that influence costs in other sectors of the system. Under an experimental scheme in progress in Bavaria, a set of economic incentives for physicians has been written into a contract between various sickness funds and the Bavarian association of nonhospital doctors. The incentives are designed to influence the behaviour of physicians in such a way as to reduce both the rate of referral to hospitals and expenditure on pharmaceuticals and physiotherapy, and limit the number of sickness certificates and/or days of sickness benefit. A crucial feature of the contract, however, is that individual physicians do not have a *direct* incentive to behave in the desired way. Rather, the incentive scheme is based on the performance of physicians

throughout Bavaria. The individual physician benefits only if the performance of his colleagues as a whole attains the objectives sought. The only direct pressure on the physician to alter his behaviour is therefore that of "moral suasion".

In the hospital sector, which is planned and administered by the *Länder* and quite distinct from the ambulatory sector, cost pressures have led to legislative proposals from the Federal Government in 1981, which include the following:

- (a) a reduction in the number of surplus beds (currently 50 000) by the offer of subsidies for reallocating them to other purposes, such as long-term care;
- (b) better coordination and cooperation between hospitals in the use of expensive equipment;
- (c) negotiations on the per diem between hospitals and health insurance funds, the *Länder* acting as arbitrators, if necessary;
- (d) the economic monitoring of hospital performance jointly by health insurance funds and hospitals;
- (e) the adjustment of the per diem according to type of case (optional);
- (f) negotiations between health insurance funds and hospitals at the federal level on recommendations for personnel/bed ratios; and
- (g) the restriction of outpatient facilities at hospitals.

It should be noted that this proposed legislation includes measures aimed at both volume and price control, as well as utilization. Finally, it should be noted that the fee-for-item-of-service method of payment prevalent in the Federal Republic of Germany has, on occasion, been used to stimulate or reduce activity in particular sectors by setting relative fees accordingly.

Austria is another country that can be classified as having a liberal, negotiated system. The various health insurance funds contract directly with the providers of services, i.e. doctors, hospitals, the pharmaceutical industry, etc. Until 1977, each hospital calculated its own running costs and the per diem paid by the health insurance funds varied from hospital to hospital. In general, however, the per diem did not cover all the costs, the remainder (often as much as 50%) being paid out of public funds by the hospital owners, i.e. the Federal Government, the governments of the *Länder*, and communities. Under these arrangements, there is no incentive to keep patients in hospital for excessive lengths of time, since the hospitals' running costs are fully guaranteed and excessive costs could arouse public hostility. Reclassification of acute beds to long-stay beds has also taken place. Since 1977, however, the hospitals are only entitled to increase the per diem by a

percentage equivalent to the increase in the revenue of the health insurance funds during the previous year.

In France, until 1979, hospitals had financial freedom as far as their operating expenses were concerned and were reimbursed on a per diem basis by the Ministry of Health. In that year, however, a global budget was introduced. Total annual operating expenses were allowed to increase only at the same rate as the gross national product (GNP). In addition, recruitment of staff by hospitals became subject to regulation, with a 1% growth rate permitted in 1979, and zero growth in 1980. (This may be compared with an average annual growth rate of 6% per annum during the period 1970-1978.) Moreover, hospitals are now required to consider new investments in terms of their potential costs, i.e. to establish budget forecasts showing the additional costs entailed by their projects.

As regards ambulatory care, the social security schemes deal with fees and consumption. A national system of annual negotiated contracts ("conventions") was inaugurated in the 1970s. Three conventions were signed in 1971, 1975 and 1980, which provided for a system of "profiles" of the procedures performed by each physician (number of visits and medical articles prescribed) and fixed the procedure for setting the annual standard fee for ordinary medical services. In 1980, the most recent convention set a standard for the annual increase in total expenditure for ambulatory services that was limited to the rate of increase in GNP.

Unit prices for medical articles, and especially pharmaceuticals, are subject to centralized price control. Two experiments have been started as a part of further efforts to contain costs. These include a departmental budget with built-in financial incentives and the development of costing of individual components of hospital care.

Of the countries with liberal systems of health care, Switzerland is at the opposite end of the spectrum from France, with some 700 health insurance funds in the country. Only about 20% of the funds for medical care come from the social security system, the remainder coming from private insurance and patient cost sharing. The prevalence of cost sharing and the variations in coverage provided may be seen as the main cost-containment approach in Switzerland.

The Irish health care system may perhaps best be described as a national health service superimposed on a private system. Hospitals receive negotiated lump-sum budgets. About 75% of inpatients are in the public system, and 25% in the private. Specialists are paid on a fee-for-item-of-service basis for private patients and usually on a patient-day basis for public patients. There is general agreement that the latter system is inefficient and attempts have been made over the past five years to negotiate a new system. Under the current system, each doctor controls a given number of hospital beds and hence controls admissions, lengths of stay, etc.

The Canadian Province of Quebec has instituted a series of financial controls and objectives. One of these consisted in providing hospital administrators

with an attainable objective that would reduce their expenditures. A second round of measures was aimed at correcting inequities in existing budgets arising from the fact that they were based on historical costs. A sophisticated statistical technique was used to group hospitals into those with excess resources and those with shortfalls, and to redistribute resources between them. In order to induce hospitals with surpluses not to spend their entire approved budgets in the future, incentives were devised, relating to both productivity and volume. Finally, in Quebec, expansion in the hospital sector has been partially decentralized to the Regional Councils. A formal planning system that deals with requests from the Regional Councils exists at ministerial level. Various indices are utilized in relation to broad programmes, e.g., preventive, long-term, etc., in making decisions between competing requests.

Canada also has experience of reclassifying acute beds as long-term beds. Also, where feasible, and where patients have to travel long distances, patients have been accommodated in hostels and treated as outpatients. Emphasis has also been placed on developing the primary care system as a substitute for the hospital sector, with cost containment as a major objective.

In the decentralized welfare system of Sweden, there are few explicit controls on total hospital costs, since any deficits are covered by the county councils. Moreover, an incentive to underspend exists because hospitals and health centres are permitted to retain a fraction of budgetary savings and to apply these funds for the purchase of equipment.

In the Greek state planning system, a very different budgetary approach is utilized. The State gives detailed budgets (which in recent years have been very tight) to the counties, which then give extremely detailed line item budgets to the hospitals. The counties cannot transfer resources from one line to another and neither can the hospitals. This provides an incentive for spending all the resources allocated to a given line item. If bottlenecks develop, it is possible to obtain supplementary payments, but only with great difficulty and associated embarrassment. Patients have been charged for ancillary services. With the introduction of a per diem payment system, utilization of ancillary services has decreased.

As noted earlier, global control is exercised in the United Kingdom over all hospital and community expenditure. As regards financial incentives, cost-containment efforts include permitting health authorities to carry over 1% of their revenue to the following year, thereby reducing the pressure on such authorities to spend all their income by the end of the year even if there is no compelling reason to do so. The United Kingdom also permits the switching of capital and revenue funds to a limited degree, thereby increasing the flexibility available to health authorities. Efforts are also being made to develop a specialty costing system for hospitals, with the primary objective of improving financial planning and management in the hospital sector. In addition, the development of specialty costing is permitting experiments on the provision

of agreed budgets for clinicians (who are salaried), including incentives to them to remain within such budgets.

The United Kingdom also has a formal planning system that includes the development by the various regions of strategic plans, which are then considered by the Department of Health and Social Security. A programme budget format is being developed as a planning tool that will permit planning and analysis of both the hospital and community sectors in a comprehensive fashion. Finally, the numbers of students entering medical schools are strictly controlled.

Feedback of information to providers and consumers

Information feedback was another area that was found to be relatively poorly developed. Although, as is shown below, a number of countries are making efforts in this area, as with quality control, feedback to providers and consumers is generally a peripheral part of the health care sector. It is, however, likely to grow in importance. Many countries reported some feedback in the form of health education programmes and in the area of pharmaceuticals. For purposes of brevity, only a few of these are noted below, though others will be referred to subsequently.

In the United Kingdom, a detailed information system for hospital activity analysis has been developed to provide information to clinicians for use in comparing their performance in various fields with that of their peers. The major effort has been with regard to drugs, those physicians with abnormal prescribing habits having their attention drawn to that fact. Information on drug prices is supplied to physicians by means of various publications, including the British National Formulary, which gives advice both on prices and effectiveness, and is circulated free of charge. The *Drugs and Therapeutics Bulletin*, also circulated free of charge, provides information on the comparative effectiveness of groups of drugs. There are also local committees that consider cost-effectiveness and prescribing habits. The major feedback to consumers in the United Kingdom is through the network of Community Health Councils in England and Wales and the Local Health Councils in Scotland, which have been set up to represent consumer interests in the National Health Service. They have certain rights of access to health authority information and the right to be consulted on planning, possible changes in the use of existing facilities, and closures. A "health ombudsman" exists, but his jurisdiction is limited to matters lying outside the sphere of clinical judgement.

Israel is experimenting with arranging for feedback on the effectiveness of prevention to providers. Similar information is also being supplied to consumers. This feedback is heavily dependent upon a good medical records system. As regards costs, the cost of a hospital day was made widely known to the public. Methods of identifying causes of consumer dissatisfaction include an open telephone line to the responsible managers. In addition,

surveys are undertaken to evaluate consumer satisfaction with different patterns of health care.

Finland routinely provides its doctors with details of their drug prescribing costs, and information on other treatment costs is also provided. Each hospital has a priced list of recommended drugs. High-cost treatments have to be approved by a specialist and in some cases can only be provided in specified locations. As regards consumers, major health education projects have been undertaken.

In the Federal Republic of Germany, the experiment in progress in Bavaria necessarily ensures very considerable feedback to providers. In addition, recent federal legislation requires every physician to be supplied regularly with information on the number of prescriptions he has issued and the number of patients he has referred to a specialist. As regards consumers, a trial scheme is taking place in which increased feedback is being provided to them. This is part of a general policy of increasing overall feedback to patients.

France has experimented with educating patients about their own diseases. There is also a tendency for paediatricians to visit homes rather than see patients in their surgeries, so that they can educate mothers on home hazards and therapies. France has also experimented with sending bills to patients so as to educate them about the costs of their treatments. As part of a programme of making cost feedback more relevant to doctors, education in health economics is included in the medical curriculum, although relatively little time is devoted to it.

Finally, it should be noted that, where private care exists, or where significant cost sharing exists, consumers generally receive feedback on costs.

ASSESSMENT OF COST-CONTAINMENT POLICIES

In the survey just given, approaches to cost containment in the various countries represented at the meeting were described. While it was useful to describe existing policies by dividing them into four distinct groups, for purposes of reviewing the outcomes of these policies it is more appropriate to bring them together, at least partially. The performance of the more economically oriented policies will therefore be reviewed jointly, i.e. policies aimed at restricting supply through restricting resources and services, and through budgetary and financial incentives and controls, will be considered together, followed by an analysis of feedback and quality control. Finally, the question of the most appropriate type of evaluation of cost-containment policies and the difficulties of achieving this will be briefly discussed.

Restrictions on resources and services, and budgetary and financial incentives and controls

Participants unanimously agreed that increases in resources and services generate their own demand. Thus those countries and health care systems whose organization and methods of financing permitted them to exercise global or near global control of resources and services were relatively advantageously placed as regards cost containment. The centralized welfare and state planning systems possessed the greatest powers in this regard, and their cost-containment record generally was judged to be superior to that of most other countries. To differing degrees, the countries concerned also possessed the ability to evaluate and plan their health care systems in a comprehensive fashion. This, likewise, conferred (at least potentially) great advantages on these systems in their cost-containment efforts. (As will be seen below, the inability to plan comprehensively is perhaps the greatest obstacle that many countries face in their varied efforts at cost containment.)

Powerful and demonstrably effective financial control systems such as the cash limits system of the United Kingdom were, however, viewed as two-edged swords. The system was not designed as a financial planning system for the National Health Service, but was a by-product of a process of general planning and control of public expenditure. Prior to the introduction of this system, planning was done on a volume basis, with the consequent ability to rationally plan the development of the system. Under the current system, cash limits on expenditure are established by the Government and include a built-in allowance for inflation. If, as has recently been the case, inflation exceeds the Government's estimate, volume is squeezed. It is then often impossible to maintain planning priorities, as the necessary savings cannot be properly planned for, and often have to be achieved on an *ad hoc* basis. Thus the enormous advantages that can accrue to this system by virtue of its ability to plan comprehensively can be, and are, seriously negated by the cash limits system. Expenditure is effectively controlled, but at the price of undermining the planning system.

Direct control over resource allocation is sometimes accompanied by other practices that could have adverse effects on efficiency. Thus the strict line item budgets given to Greek hospitals were found sometimes to generate bottlenecks that could be overcome only with great difficulty. In addition, this type of budgeting provides an incentive to spend all of the balance on each line item, regardless of the need for the expenditure. Budgetary practices in the United Kingdom that allow for greater flexibility, e.g., by permitting the carrying over of a small percentage of funds to the following year, or the switching of capital and revenue funds to a limited degree, were seen as positive incentives to cost containment.

One illustration of the potential power to limit costs in an insurance-based system was provided by the Kupat Holim Health Insurance Fund of Israel.

While at one end of the spectrum of insurance-based systems because of its extensive coverage of the total population and its ownership of health care facilities, its relatively comprehensive approach to cost containment previously described in detail has brought it a considerable degree of success. Since the introduction in 1976 of the hospital plan for allocating bed-days, the number of acute hospital days has decreased by 20%, a decrease significantly greater than that achieved during the same period by other hospitals in Israel. The overall effect of the mix of cost-containment policies used has been to decrease the cost for the population served. It was concluded that the favourable outcome of this approach to cost containment reflected the emphasis placed on comprehensive planning and analysis, the particular attention paid by planners to the primary sector, and the ability to simultaneously influence both inputs and costs.

Another atypical insurance approach is that of the prepaid insurance plans found in the United States, which can be described as utilizing a global budgeting approach, but not of the cash limits type. The available evidence suggests that these plans have been effective both in reducing volume and lowering costs. However, the populations that they serve are not entirely typical of the total population and their coverage is not always as extensive as that offered by health insurance funds elsewhere.

While decentralized welfare systems, such as that of Sweden, are to some extent limited in their ability to exercise effective global cost control because of the dominant role played by the counties in financing health services, they do not face some of the problems that beset the health insurance funds of other countries. An examination of Swedish cost-containment policies, however, illustrates quite vividly the fact that the ability to contain costs is affected by many of the same factors that influence cost containment in insurance-based and other types of health care system. Swedish experience will therefore be considered in some detail because of the lessons that it teaches, and similar or common phenomena in other systems will then be noted.

Swedish cost-containment policy has a number of strands running through it. These include central rationing of building funds, albeit indirectly; a well-developed planning and budgeting system at county level, which in recent years has been aimed at improving the primary and community sectors at the expense of the acute sector (this was expected to have the effect of reducing costs); and, more recently, an agreement between the Swedish Government and the Association of County Councils to limit volume increases to 3.3%. The effect of the rationing of building funds, as planned, was to benefit the primary and community sectors greatly. The effect on the acute sector was, however, very severe. The pressures arising from the squeeze on that sector, coupled with the trend towards decentralization, have effectively ended the rationing system and resulted in a rise in the share of investment of the acute hospitals from 10% to 30-35%. The lesson drawn by participants was that great care had to be used in the application of cost-containment measures

in order to ensure that they are not so stringently applied as to generate powerful counter-pressures.

The planned shift in emphasis from the acute hospital sector to the primary sector, with the hoped for reduction in costs, has been far slower than planned. Primary care is lagging behind planned development while the acute hospitals are ahead of, or have reached their targets. Several reasons were put forward to explain this. The power structure and decision-making process were seen to have favoured well-established activities. The acute hospitals spend the bulk of health service resources and dominate education and research. They also have easy access to decision-making bodies, such as county councils. Finally, factors totally external to the health service led to higher than planned for costs in the health care system, and since most costs are borne by the hospital sector, expenditure by that sector grew relatively rapidly. The external factors include legislation and collective bargaining agreements providing for shorter working hours for parents of small children, entitlement to study leave, longer vacations, and improved conditions for working out of office hours. The combined effects of these changes in working conditions led to the need for a larger number of employees to perform the same amount of work. Most of these additional employees were needed in acute hospitals.

The voluntary agreement between the county councils and the Government to restrict volume increases to 3.3% has not been successful either, volume growth recently being at a rate of 5%. Again, however, the source of this volume increase can be found outside the health service sector. County councils give very high priority to the creation of employment. Although they are committed to the voluntary agreement, the perceived need to reduce unemployment has outweighed the need for cost containment.

Among the insurance-based systems, with their varied approaches to containing volume and prices in health care systems, the centralized French system has permitted inputs to the hospital sector, including technology, to be effectively controlled. The long-term effect on volume and hence costs should therefore be favourable. At the same time, the impact of wages on hospital costs is, and will remain, very important. As this lies outside the control of hospitals, the importance of being able to control inputs is very great. The current squeeze on recruitment of staff by hospitals is very severe. Controlling inputs is not a sufficient strategy for cost containment, however, and changes have also taken place in the payment systems to hospitals. Until 1979, hospitals were paid an inclusive per diem at rates set by the Government, which were increased annually. Hospitals apparently adjusted to the new levels of fees, however, by increasing the number of bed-days. Since 1979, a strict global budget constraint has been introduced by the Government. The combination of a tight squeeze on both employment and budgets has apparently placed too great a strain on the hospitals, and a new system will now need to be devised. Again the importance of the prudent use of effective cost-containment policies was stressed by participants.

Insurance-based systems in other countries have also introduced controls over the introduction of new technology. One aspect of the French approach that was strongly endorsed by participants, and one that is absent in most insurance-based systems, was the requirement that the future cost consequences of a given new technology should be evaluated.

Controls over technology in other countries have been of very varying effectiveness. Of particular interest is the fact that external factors have been shown to be an important determinant of the effectiveness of such controls.

In the not entirely dissimilar health care systems of the Federal Republic of Germany and the Netherlands, the State can exert considerable control over technology because, as noted earlier, in both countries public money is used to subsidize investment. Yet technology control in the Federal Republic of Germany has proved to be relatively ineffective in recent years, as compared with that in the Netherlands. There has been strong public pressure in the Federal Republic of Germany for the large-scale adoption and utilization of new technology, and this pressure has been so strong as to effectively negate State attempts at control. In the Netherlands, such pressures have been absent.

Further striking evidence of the influence of public opinion is revealed by an examination of the health care cost experience in the Federal Republic of Germany in the 1970s. In the period 1970-1974, national health expenditure in the country increased from 6.4% to 9.4% of GNP. Amongst the varied causes of this increase were the growing expectations of the population and the extension of benefits provided by health insurance funds in competition with each other, increases in the per diem paid to hospitals sanctioned by the *Länder*, and uncontrolled increases in health care resources of all types. The cost explosion and the resulting public outcry and politicization of the issue led the suppliers of health care to exercise voluntary self-restraint. Physicians limited the rate of increase of their remuneration and only small increases in per diem took place. Within a year, the growth rate of total health care expenditure was reduced from a figure well above that of growth of GNP to one below it.

The public furore over rising health care costs could not, however, be expected to provide a long-term cost-containment solution and, therefore, in spite of the short-term success of voluntary measures, the Health Care Cost Containment Act previously mentioned was passed in 1977. Coupled with the continued great public awareness of the issue and the fears of the providers that even stricter laws would be introduced, health care costs were again well controlled, but only until 1980. Several reasons have been suggested to explain why the measures then became less effective. Public interest in the issue has lessened considerably, and this has contributed to an easing in controls by the *Länder* on increases in the per diem for hospitals. Physicians in turn felt less compulsion to restrain the rate of increase in their income, and the health insurance funds lacked the public support necessary to strengthen their negotiating position. Equally important, however, was the general absence in the

cost-containment policy of measures aimed at the supply side. With staff costs rising due to external factors, this lack of control over inputs was particularly significant. This weakness is recognized explicitly in the new legislative proposals previously described.

The importance of planning in general and the need to integrate the hospital and the primary care sectors was repeatedly stressed by participants. The difficulties faced by insurance funds in several countries in bringing this about because of the structure of the existing systems was recognized. The importance of giving incentives to providers to behave in an efficient manner was also recognized. The Bavarian experiment, described earlier, in which group incentives are provided for primary care physicians in order to encourage, among other things, fewer hospital referrals and lower drug expenditure may be seen as an imaginative step towards achieving these twin objectives of integrating primary and hospital care and giving incentives for increased efficiency to providers. Although it cannot in any way be described as a comprehensive attempt at planning the hospital and ambulatory sectors, it explicitly recognizes the fact that piecemeal approaches to cost containment are likely to be ineffective. While the early results of the experiment were promising, more recent results are somewhat less favourable. It is probably still too early to make any judgement on this experiment.

The difficult question as to the forms of budgetary and financing systems that would best contain both price or cost and volume in hospitals was discussed at length by participants, particular attention being given to the motivation of doctors and hospital administrators. Under the Austrian system, for example, hospitals appear to have no explicit incentives to control costs. The social security funds pay a per diem to the hospitals that only covers a proportion of the amount fixed by the governments of the *Länder* and the hospital owners make up the difference. However, as the latter are generally public bodies, when public expenditure is under pressure, that pressure will also be felt by the hospitals. Moreover, this type of financing arrangement is one which provides no incentive for hospitals to maximize their bed-days because the difference between the income from the social security funds and their expenditure will be made up by the owners.

Under the Swedish system, once given a budget, a hospital would seem to have relatively little inducement to keep to it, since the county council will cover any overspending. Yet overspending is reported to be relatively rare. The explanation for this is apparently that it results in very considerable embarrassment for the hospital administrator and this is sufficient to provide very strong motivation for keeping within the agreed budget. Another interesting experience as regards administrators was reported from Quebec, as a result of the new resource allocation process described earlier, in which resources were switched from relatively well-provided hospitals to those less well provided for. This exercise created two classes of administrators, with those in the well-provided hospitals wishing to join the other

group. Again, the importance of anticipating the consequences of very strong measures is illustrated.

Where hospitals keep the payments made by patients, it would be expected that, during low occupancy periods, there would be an incentive for hospitals to increase length of stay. This situation was described as occurring in Greece. Similarly, it would be expected that hospitals paid on a straight-forward per diem basis would have relatively long lengths of stay. Yet it was reported that Switzerland, which has this payment system, has one of the lowest lengths of stay in Europe. While no explanation of this apparent anomaly was accepted by all participants, it was suggested that the low length of stay figures might have resulted from a large number of very short stays. In Ireland, where doctors are paid on a per diem basis for public patients and on a fee-for-item-of-service basis for private patients, a very low length of stay was also reported. One hypothesis was that the differential payment system provided incentives to doctors to limit the length of stay of public patients in order to free beds for private patients.

Finally, participants agreed that the practice of negotiating budgets for hospitals on the basis of past activity provided incentives to maximize or increase the level of hospital activity. It was noted that even salaried doctors have an interest in keeping beds full in order to generate activity that will result in an increased budget in the following year, as the level of staff support and other support services for the doctor will depend on the size of the total budget.

Many participants felt that existing approaches to cost containment paid too little attention to providing incentives, within both the hospital and the primary care sectors, for providers to utilize existing resources more efficiently. The experiments being conducted on clinical budgeting and incentive budgets in France and the United Kingdom were seen to be extremely valuable and, if found to be successful, were thought likely to be applicable to many other health care systems.

Several countries reported on measures to both plan and control the supply of manpower to the health sector. In a sector of the economy that is heavily labour intensive and in which supply creates its own demand, the necessity for such measures was strongly supported by participants. It was noted, however, that the international movement of medical manpower can easily frustrate planning of the crucial medical input.

An input-oriented policy successfully utilized by many of the health care systems under consideration and not subject to frustration by external influences is that of the reclassification of beds from acute to long-stay, with an associated reduction in intensity of care. Several countries reported considerable savings from such an exercise, which is one that is widely applicable.

As the emphasis of the meeting was on general policy measures for cost containment rather than on the impact of existing institutional arrangements, there was only limited discussion on the relative advantages of alternative mechanisms for remunerating physicians, e.g., fee-for-item-of-service, salary,

or capitation. Nevertheless, there was some discussion on the question of whether the interests of cost containment and optimum patient service were better served where the physician's income was directly related to the volume of care delivery, e.g., as in fee-for-item-of-service systems, or where it was not, as in salaried or capitation fee systems. It was argued that removal of the link between the physician's income and the number of medical procedures performed potentially enabled a fairer view to be taken of the relative benefits of treating patient groups (providing physicians were well motivated) than fee-for-item-of-service systems, where pressure was placed on physicians to maximize attention to individual patients to the detriment of cost containment objectives overall. It was also argued that total removal of the link between the physician's income and care delivery relieved patients of the concern that doctors' actions might be influenced by the effects on their income. It was recognized, however, that motivating efficient behaviour by providers in salaried systems is sometimes difficult. Likewise, it was argued that the fee-for-item-of-service system encouraged both doctors and patients to be concerned with costs and that the system can provide an opportunity for planners to set relative fees in such a way as to provide incentives for encouraging particular types of care, e.g., hospital or community. Caution was necessary here since, unless the fees were carefully set, there might be an incentive for providers to keep patients in inappropriate care locations. Also, in the absence of planning, the fee-for-item-of-service system can result in an inappropriate pattern of care. There was no general agreement on the most appropriate method of remunerating providers, and it was suggested that different health care system structures might require different payment mechanisms.

Feedback of information to providers and consumers

The relative lack of experience in this sphere in most health care systems led to a wide-ranging discussion of the value of feedback and the most appropriate forms that it might take. With regard to feedback to consumers, it was suggested that there was a need for greater attention to be paid to conventional preventive-oriented health education, and illustrations from several countries of the success of health education campaigns in areas such as dental hygiene, exercise, breastfeeding and smoking were cited. It was argued, however, that far more research was required into the efficacy of various preventive programmes. Screening programmes were discussed, and the need to undertake cost-effectiveness analyses of proposed screening programmes and their associated health education campaigns was stressed. The experience of Sweden, where dental screening of children in conjunction with dental and hygiene education had been found to be cost-effective, was cited as an example of the complementarity that can exist between education and screening.

Strong support was voiced for providing feedback on effectiveness to consumers, particularly in relation to prevention. The projects undertaken by

Israel and Finland, in which feedback on effectiveness was provided to consumers, were commended.

Great emphasis was placed on providing consumers with the knowledge that would permit them to make use of health services more effectively and, in many cases, more efficiently. For example, patients needed to learn that the objective of a medical consultation was not a prescription for a pharmaceutical product. Patients also needed to learn, in systems where choice existed, that the general practitioner was usually the most appropriate first point of contact. Self-referral to a specialist could, too often, lead to the choice of the wrong one. Also, in some countries, patients had to be educated to use primary care facilities, rather than hospital emergency services. This would be likely to lead both to better and less costly care.

While a few countries had made an effort to identify and respond to consumer dissatisfaction, such practices did not appear to be widespread. An example of a successful attempt in this area was that of the Kupat Holim fund of Israel, where surveys of consumer satisfaction with different care packages have been carried out. One result of this was the introduction of a special payment to doctors for home visits, which they had been unwilling to undertake but which rated highly with consumers. The outcome was an increased number of home visits.

The approach adopted in the United Kingdom of setting up Community Health Councils as protectors of consumer interests was described as having had mixed success. Each such Council in England was related to a district with a population ranging from about 150 000 to 200 000 people on average. Councils had sometimes been able to influence the distribution of new capital developments, the change of use of facilities, and closures, and were seen as a useful irritant to the National Health Service bureaucracy.

There was a lengthy discussion about the advantages and disadvantages of cost feedback to consumers. Many participants felt that provision of cost information on an individual basis was not desirable. Two possible adverse reactions by consumers were described. In the first case, the individual could feel guilty because he or she was costing society so much. This appeared to be the outcome of a French experiment in which bills were sent to consumers. A second response could be the determination to maximize the value received for contributions, at least up to the level of the contribution if not beyond. This seemed to be the outcome in Austria of the cost-sharing experience of a number of social security funds. It was believed that the information disseminated through cost sharing led consumers to demand more costly treatments. Rather than promote cost containment, the Austrian approach seemed to lead to increased costs. The other side of the argument was that provision of cost information to consumers, as was done routinely in some systems, could have a positive effect by enabling consumers to check for mistakes in billing. It was, however, questioned whether consumers would have any incentive to do so in the absence of significant cost sharing. Finally, there was the Israeli

approach which, while wishing to make consumers aware of health costs, did so on a societal rather than an individual basis. The hospital bed-day cost was widely publicized, and it was argued that it had entered the consciousness of the educated public. This could then have an influence on the cost consciousness of providers.

As stated earlier, the most extensive form of feedback to providers concerns drugs. In some countries, information pertaining to prescribing habits is made available to all medical practitioners, but in others only to those who are deemed to prescribe excessively. One interesting question that arose was whether telling "low" prescribers about their prescribing habits would lead to the risk of their increasing their prescribing rates. Various measures undertaken to educate doctors as to the cost of drugs were reported from many countries. Such education was deemed by participants to be highly important in cost containment.

With a few exceptions, such as Finland where the costs of expensive treatments are made known to providers, the latter are not given adequate or even any cost information as regards the procedures they carry out, apart from the cost of drugs. As doctors initiate most of the decisions that result in the consumption of health care resources, it was agreed that feedback of cost information to them offered great scope for cost containment. To enable doctors to appreciate the importance of conserving scarce resources, it was recommended that courses providing a basic grounding in health economics should be made available to them, and they should be encouraged by their employers to attend such courses. Medical students should also be given an understanding of health economics. It was recognized that health economists and health economics are sometimes regarded with suspicion by doctors, who fear interference with their clinical autonomy. It was believed that barriers between the two groups could best be broken down by encouraging greater contacts between them. Both economists and doctors could benefit from gaining an appreciation of the approach, as well as the language, of the other side.

Feedback to providers as regards effectiveness in areas other than drugs is extremely limited. A major reason for this is the absence of any scientific evidence as to the efficacy and cost-effectiveness of many medical and surgical treatments. Participants agreed that very high priority should be accorded to research into efficacy and cost-effectiveness because of the enormous potential scope of the benefits that could accrue from far greater efforts in this area. The difficulties of doing this in many areas of medicine, however, were recognized.

Another suggestion made regarding feedback to providers was that doctors should be required to be relicensed periodically, and that this should be conditional on some form of continuing education.

The final question is that of feedback to hospital managers, administrators and planners. Hospital activity data, such as those collected in the

United Kingdom, have proved to be a valuable tool in the planning and management of the hospital sector. Improved information systems are, however, needed. Many existing systems were seen to have been designed for accounting and auditing purposes. New systems, focusing on patients and specialties, are currently being developed in several countries and should eventually permit a far more rational basis for planning. The primary sector has generally been neglected, however, and the necessary cooperation and coordination between the two sectors to promote effective cost containment will be inhibited until both sectors have adequate information systems. Such systems by themselves, however, will not contribute to cost containment, and participants pointed to the need to design them so that they meet the needs of providers and planners and are used by them, rather than suffer the fate of many existing information systems, which are ignored, or used to only a very limited degree.

The ability of hospital administrators and managers to make the best use of the information available to them was questioned. It was argued that improved training programmes were necessary for these groups to provide them with the specialized knowledge and skills that their roles required. While some countries had formal training programmes and even special schools for hospital administrators and managers, others provided little or no education and training for them.

The health sector is, of course, not isolated from the rest of society and health itself will reflect societal influences. Improved information and feedback systems are needed to link the health sector and the industrial sector, which is the source of such harmful effects to health as, for example, pollution.

Quality standards

Discussion of the relationship between quality of care and cost containment ranged over many of the topics previously considered and helped to put them in a broader perspective. The precise nature of the relationship between quality of care and cost containment was necessarily seen to be complex because of the multidimensional character of that relationship. This was evident from the different aspects of quality in health care, namely medical efficacy, medical risk, unrestricted and equal access to care, comfort (short waiting lists, avoidance of unnecessary pain, ability to resume work quickly), and value for money (opportunity cost). Different weightings would be applied to these different aspects, in the light of the problem under consideration.

The need for some form of standards to ensure adequate quality was seen by all participants as essential. Two types of standards were thought to be necessary, of which the first were those designed to protect patients from over-eagerness to economize. Included under this heading would also be standards to ensure that patients were treated in the most appropriate care location. Cost-containment policies that encouraged shifts from one health care sector to another had to be designed to ensure that choice of location was not

influenced by cost or other considerations to the detriment of the health of the patients. The second type of standards were those required to protect patients and society against medically unnecessary use of health care services. Effective standards of this type would both increase quality while simultaneously acting as a cost-containment measure.

The major problem in setting and enforcing standards is that the expertise of doctors themselves is required for the purpose, and they tend to show little enthusiasm for such work. They have a community of interests that, with only limited exceptions, acts to deter them from evaluating the work of their peers. A major exception to this generalization has been the setting up of the PSROs to monitor quality in the United States. They have had only very limited success, however, because the criteria for "good quality care" have been set so liberally. The special circumstances of the United States as regards medical litigation, however, means that few conclusions directly relevant to European health care systems can be drawn from this experience, though some lessons can undoubtedly be learned.

It was agreed that the only effective way of ensuring quality was by some form of external review of doctors. The development of a new career of medical reviewer, with high status and pay attached to it, was suggested. An appropriate career structure would be required and the independent practice of medicine would be precluded.

There was also agreement that the standards set during the professional education of doctors were highly important as these determined both the training costs and long-term professional attitudes of clinicians. These were entirely under the control of the professional bodies themselves. There was a need for the cost-containment objective to be included within the objectives set by these bodies, and they should not retain a monopoly of control over standards. On a closely related point, it was agreed that doctors (and society as a whole) needed to be persuaded that procedures that generated enormous expenditure and could be used by only a very small number of patients represented low-quality, rather than high-quality, medicine.

The need for the equity aspect of quality to be considered was also agreed. The approach to resource allocation adopted in the United Kingdom, whereby funds are made available to regions on the basis of a formula having as its objective the matching of resources to the health needs of the populations of the regions, was highly commended. While it is recognized that the formula itself is imperfect, efforts are being made to improve it and the commitment to equity that it represents was agreed to be laudable.

The role of the patient in ensuring adequate standards of quality was one that had not been sufficiently appreciated in most countries. It was accepted that patients generally are ignorant of medicine and are likely to emphasize symptomatic relief at the expense of therapy and care. On the other hand, patients do have a first-hand knowledge of their own conditions and should not be excluded from quality review. Moreover, the misplaced emphasis of

patients is, in turn, largely a function of the failure to provide information to them. On balance, it was felt that the public needed to be informed about medical care to a far greater extent and that medicine was greatly in need of demystification. One example of the potential benefits of such an approach was reported in a study carried out in France. This concerned diabetic patients, and it showed that those patients educated about their disease were associated with lower long-term expenditures than a comparable control group.

Apart from the general lack of standards for quality control, the other major factor inhibiting progress in quality is the lack of information on the efficacy of treatments. With the exception of the pharmaceutical sector, studies on the efficacy of procedures were relatively limited. Nevertheless, a number of countries have developed, or are attempting to develop, norms or standards relating to inputs and processes, some of the latter having been referred to earlier. The difficulty, of course, is that the relationship between inputs and outcomes is not always known. In the Netherlands, for example, an attempt is being made to implement a medical audit that will link effectiveness with quality. At the moment the information is limited to process. Some participants questioned whether that was really quality control.

With regard to the nature of the relationship between quality standards and cost containment, all participants agreed with the general proposition that good or the "best" care does not mean the most expensive or the most technological. In numerous instances, quite the reverse will be true. Also, ensuring quality of care may, as has been seen above, mean that fewer procedures are carried out, with a resulting saving in health care resources. Some preventive measures may also increase quality while decreasing costs. There was thus no doubt that increasing quality can lead to cost containment. Some participants suggested, however, that it was possible to go further so as to generalize the relationship and to argue that quality improvement was necessarily associated with cost containment. This view, put forward by some medical participants, was vigorously disputed by others, and primarily by economists. The ensuing debate appeared to have educational value for both groups, particularly as the language used by the respective groups became better understood.

Those who argued that higher quality might entail higher costs noted that one of the ways of improving quality, namely by reducing risk, was frequently in conflict with cost containment. The safety aspects of equipment and buildings was cited as an example; additional expenditure on them might increase quality but would increase, rather than contain, costs. As it would presumably be impossible to reduce risks to zero, it would also be possible to spend more money on additional staff, the latest equipment, or in fact anything that could reduce risks. Quality improvement, narrowly defined, might result, but the likelihood would not be cost savings, but cost increases.

The economists' argument also took into account the concept of opportunity costs, i.e. the possibility that some alternative beneficial use might have been made of the additional resources devoted to a given attempt at quality

improvement. Experience in the United States with the PSROs was cited as an example. As long as a physician was seen to be using procedures that made a positive contribution to health, of whatever magnitude, quality was deemed to be acceptable, and increased costs could be associated with those procedures. The cost of the improvement might have been very high. If society as a whole would have preferred to reallocate these resources, and perhaps achieve far greater quality gains elsewhere, it was precluded from doing so.

Further contributions from the medical participants helped to resolve the conflict. The model that they appeared to be implicitly using was one where a choice of procedures of varying cost existed for a given patient. Use of the relatively less costly procedure would carry with it a relatively higher risk of complications than that of the more costly procedure. Conversely, use of the relatively more costly procedure would result, not only in a higher quality of care, but also in a lower likelihood of complications and of the need for additional medical care. As such additional medical care would be costly, the use of the more costly procedure, since it was associated with the likelihood of a higher quality outcome, was therefore consistent with cost containment. In the terminology of economics, the medical point of view was based on the underlying assumption that the results of a cost-benefit analysis would indicate that (in the long term) the higher quality solution yielded lower total costs.

The role of reduction of risk in questions of quality was not confined to the potential conflict with cost containment; there might also be a conflict with humanitarian considerations. An example given was the situation where a home confinement was desired, even though the risks were known to be slightly greater than if delivery was at a hospital. Quality was seen as not necessarily requiring that the lowest risk location was always preferable. Risk had to be balanced against all the other considerations that led individual women to prefer home confinement, and which, in their view, yielded the highest quality. Again, of course, the risk itself was very much a function of policies, plans, and decisions regarding resource allocation. The best long-term solution to such conflicts might be the expenditure of funds and the planning of a service for the purpose of reducing these risks. While many factors apart from expenditure will influence the degree of risk in such cases, examples such as the Netherlands, with its high home confinement rate, nevertheless exist that demonstrate that risks can be very significantly reduced.

Finally, quality, explicitly including cost considerations, was discussed in relation to care locations. Care in the community, where possible, was often seen as being of higher quality than that in the hospital sector and, in addition, was less expensive. It was argued, however, that quality and cost were sometimes too narrowly defined. In particular, costs incurred by family members were too often ignored. Where care in the home was

recommended, the costs borne by the carer, usually a woman, were often not taken into account. All costs, both inside and outside the health care system, needed to be included when decisions concerning quality, or any other aspect of health care, were being considered.

EVALUATION OF COST-CONTAINMENT MEASURES

The foregoing provides only the barest elements of an evaluation of the policies and measures adopted by a considerable number of countries in attempts to contain their rising expenditures on health care. A more complete evaluation would be difficult, if not impossible, in a report of this kind. Indeed, a thorough-going evaluation of international experience of cost containment would be extremely difficult under any circumstances. The differences in the structure of health care systems, and in policies and measures, which may work well in one environment and poorly in another, all mitigate against a simple approach to evaluation. Moreover, a coherent methodology is lacking that would provide adequate guidance in developing acceptable criteria and yardsticks against which progress towards various objectives could be measured. The existence of multiple, and often competing, objectives further complicates and makes more difficult any meaningful and useful evaluation.

Certain lessons have, however, been learned that can assist in improving evaluation. Above all, evaluation needs to be comprehensive. All sectors of the health care system must be included, and the perspectives of both providers and consumers must be taken into account. Cost containment must be viewed in its broadest sense and include not only health care systems, but also the various factors that influence health and health care that arise outside such systems. These must include not only external economic influences and public opinion, but also such environmental influences as pollution.

Certain analytical techniques favoured by economists, such as cost-effectiveness analysis and cost-benefit analysis, have demonstrated their ability to improve the evaluation process. They should undoubtedly form part of the methodology used in comprehensive evaluation. Nevertheless, the skills of a variety of disciplines will be necessary in the development of a methodology appropriate to tackle the diverse issues that surround cost containment. An interdisciplinary approach would seem to be a prerequisite for developing such a methodology.

Finally, and critically important, any attempt at evaluation will need to be systematic. *Ad hoc* approaches hold out little promise of making major contributions to our knowledge.

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

The need to develop coherent cost-containment policies for health care has paralleled the growth in health care costs in developed countries characterized by widely differing health care structures. These differing structures have not prevented such countries from sharing much the same experience of ever-increasing health care costs. Earlier efforts at identifying the major causal factors have indicated the critical role played by the growth of the health services themselves. As these grew, so did the demands made on them. The central role of the providers themselves, and particularly of doctors, was also seen as crucial in the upward spiral of costs. Thus the vital role played by both explicit and implicit incentives to physicians was seen as providing one of the mechanisms for containing health care costs. The identification of those key causal factors, as well as of others, has led to experimentation in a large number of countries with policies and measures aimed at cost containment.

In reviewing these measures, a broad approach to cost containment was adopted in which it is not seen as an ultimate goal, but is evaluated in a context that explicitly includes quality.

The usefulness or effectiveness of policies designed to limit resources and services initially appeared to depend almost entirely on the structure of the system, with insurance-based systems as a group being in a relatively weak position and the welfare type of system, such as that of the United Kingdom, being relatively powerful. Closer examination, however, revealed considerable differences in the insurance-based systems, some important factors common to both types of system, and questions as to the nature of the criteria that should be used in judging the effectiveness of cost-containment policies.

The powerful impact of external influences on health care systems was evident. The French policy of exercising control over inputs, while successful, was seriously frustrated by increases in labour costs over which the health sector had no control. The attempt by the Federal Republic of Germany to control the critical technology input was negated by the effect of public opinion. In Sweden, agreements between the Government and the county councils to contain volume growth failed because of the importance attached to employment by the public. On the positive side, fear that public opinion would lead to legislation led providers in the Federal Republic of Germany to voluntarily restrain cost increases, albeit temporarily.

Powerful tools of cost containment on a global or near global basis, such as the cash limits system of the United Kingdom, were found wanting in other respects, e.g., in their interference with the effective planning of health services and their impact on services when used too restrictively. Less powerful, but nevertheless effective, tools for controlling supply included input controls,

such as those exercised in France, and the reclassification of beds from acute to long-stay with the associated reduction in intensity of care, a measure used in several countries.

The use of budgetary and financial incentives and controls was found to be both widespread and of a highly diverse nature. The most important general conclusion to arise from the discussions on this subject was the overwhelming importance of the need to evaluate and plan the health care system in a comprehensive fashion. This includes anticipating, for the system as a whole, the consequences of introducing cost-containment measures. Numerous examples were given of problems arising from a lack of appropriate planning, all of which added unnecessary costs to the system or affected the quality of care. Thus in some systems there is very little coordination between the primary and the hospital sector. This can lead both to unnecessary duplication of effort and waste of resources as well as to inadequate follow-up treatment. It would seem that the danger exists that incentives given to the primary sector to encourage primary care rather than hospital care can also lead to patients remaining too long in the primary sector if the incentives to the primary physician are too great. Equally important to proper planning is the need to ensure that measures to contain costs are not pursued with such excessive zeal that the health care system functions inefficiently as a result of undue pressure and the absence of the necessary degree of flexibility.

Health care systems were found to be generally characterized by a lack of appropriate feedback to consumers. Improvements in feedback in health education and prevention were seen to be partly dependent upon improved research into the efficacy of various preventive programmes. The greatest deficiency regarding feedback to consumers, however, was the general absence of efforts to communicate to the consumer precisely what health services could or could not do. In particular, the limitations of modern technology and pharmaceuticals needed to be effectively communicated to the general public. The public also needed to learn more about the benefits of primary care and self-help. Providers could also benefit from feedback, particularly as regards the cost and effectiveness of the procedures they carry out. Medical students and physicians could profit from a basic understanding of health economics. Finally, administrators and managers could profit from improved feedback and improved information systems designed for planning and management purposes.

The concept of quality in health care systems was seen to be multidimensional and included the following five aspects: (1) medical efficacy; (2) medical risk; (3) unrestricted and equal access; (4) comfort; and (5) value for money. Better quality and the need for cost containment are not necessarily in conflict with one another. If improved quality means a reduction in unnecessary procedures, waste, etc., and the choice of more appropriate technology at appropriate levels of care, the need for services in the long run will be reduced.

Amongst the many suggestions for improving quality were the following:

- (a) appropriate standards should be set to protect patients from undesirable effects of cost-saving efforts, and to ensure that they do not receive unnecessary treatment;
- (b) patients should play a greater role in the decision-making process regarding possible entry to the health care system and/or treatment; this will necessitate the provision of more information to patients and probably education as well;
- (c) those who set standards should not do so irrespective of the costs that might be entailed; and
- (d) professional groups should not be both judge and jury.

Recommendations

Recommendations are listed under three headings, of which the first, general policies, includes those specifically pertaining to cost-containment goals, within the broad context of cost containment as discussed at the meeting. The other recommendations, under the headings of education and research, respectively, are broader in character but were agreed by all participants to be necessary to the achievement of long-term success in cost containment without detriment to the health of the people.

General policies

1. Integrated health care systems with appropriate coordination and cooperation between the primary and the hospital sectors should be promoted.
2. The further development and improvement of cost-containment policies should, in all countries, proceed from as comprehensive an approach as possible, in preference to the pursuit of piecemeal solutions.
3. The health care system should be reoriented in favour of primary health care. This will be facilitated by more comprehensive evaluation, planning and budgeting within a framework of appropriate incentives.
4. Cash limits, and indeed all other cost-containment measures, should be evaluated, not simply in terms of expenditure savings to the health care system, but also in terms of their impact on waiting lists, the quality of care and the costs borne by patients and families themselves.
5. The search for cost containment should go beyond the health care system and take into account other factors, such as environmental pollution and self-imposed risks.

6. There should be better control over the numbers and distribution of persons enrolled in education and training programmes for health professionals.

Education

7. Governments and social security organizations should seek to educate the public as to what modern health care can and cannot do. The limitations of the purely technological approach to medicine should be explained.

8. Employers of health care professionals, i.e. social security funds, governments and institutions, should provide such personnel with a basic grounding in health economics.

9. Medical students should be given an appreciation of health economics.

10. Greater contacts between health economists and doctors should be encouraged so that each group can be better educated in the perspectives and language of the other.

11. WHO should assist in developing appropriate learning materials for the above-mentioned purposes at national level.

Research

12. In research on health care costs, the emphasis should not continue to be placed on the causes of rising costs but should be directed towards the development and evaluation of cost-containment policies.

13. Greater emphasis should be placed on research into the efficacy and cost-effectiveness of medical care and health technology.

14. Research should be carried out on:

(a) the assessment of technology by means of a broad systems approach;

(b) the consequences of different methods of paying providers and hospitals; and

(c) policies for distributing health manpower between specialties, levels of care and geographical areas.

15. The role of public attitudes in influencing cost containment should be more fully explored.

16. Cross-national research should be pursued, and relevant international organizations, such as the Council of Europe, ILO, ISSA and WHO, should play a prominent role in its promotion and coordination.

Annex

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