World Health Forum

HEALTH CARE — WHO PAYS?

Selected articles from World Health Forum

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World Health Forum

A quarterly record of ideas, arguments, and experiences contributed by health professionals the world over. Individual issues, which may feature as many as 30 communications, are edited to reflect the latest and best thinking about public health policy and practice around the world. Priority is given to practical information that can bring the processes of health thinking and planning closer to real conditions in the field. Published since 1980, the Forum is now firmly established as a leading source of advice and stimulation.

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# Health care — who pays?

Reprinted from *World Health Forum*

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Health care — who pays?

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Foreword

Ten years ago the World Health Assembly launched a new initiative for worldwide health development, popularly known as Health for All by the Year 2000. To reach that target a new approach to health and health care is required, in order to ensure a more equitable distribution of health resources and to lessen the gap between the health "haves" and "have-nots". At the outset, the need was recognized to rationalize the use of existing resources and to generate and mobilize additional ones.

Improving people’s health is both a sound economic investment and a highly justified ethical goal. It can be achieved even with financial limitations, provided that clearly defined lines of action are pursued with determination by communities and all levels of government. To make progress towards the attainment of health for all, certain critical issues regarding the financing of health plans and the best deployment of resources have to be clarified.

This selection of articles from World Health Forum presents a number of views and experiences concerned with financial support to national health-for-all strategies. The articles illustrate the points to be considered as well as the difficulties in finding solutions and making appropriate decisions. They indicate that the collective commitment of all concerned is required in order to expand economic support for achieving greater equity in health. Individuals, families, communities, the private sector, and nongovernmental organizations in addition to governments must all be fully involved. Economic partnership in health has to be reinforced and applied to meet the challenge of health for all. The task is huge, but the potential rewards for humanity are even greater.

H. Mahler, M.D.
Director-General
Introduction

This collection of articles from World Health Forum, 1980–86, reflects the growing concern with economic and financial aspects of health care. Rising costs, combined with limited government budgets for health, have compelled policy-makers to focus on resource issues. Progress towards health for all will depend, in most countries, on the generation of new sources of financing, on some reallocation of existing resources, and on an increase in cost-consciousness at all levels.

The perspective common to all these articles is the recognition of scarcity of funds and resources, and the consequent need to make careful choices in order to avoid waste. A number of analytical tools, of which cost-benefit analysis and cost-effectiveness analysis are perhaps the best known in the health field, have been developed so that choices can be made in a consistent and explicit fashion. These methods do not make the choices. Policy-makers, managers, providers and users of health care must make the choices on the basis of several factors including economic considerations. This approach to decision-making promotes realistic housekeeping since health economics is not simply a set of tools, or a collection of jargon, or even a language: it is a way of coping rationally with scarcity—of making the best use of scarce resources.

The articles are grouped into three broad themes. First, articles dealing with the perspective and principles of economics as applied to health and health care; second, those concerned with financing and cost control issues; and last, those presenting empirical analysis based on a variety of country experiences. A brief introductory comment precedes each section. The articles are diverse in subject matter, country focus, and in length, and should not be taken as representative of the balance of concerns in health economics more generally. Health economics is predominantly an empirical activity. There is little treatment in these contributions of budget management, the determinants of demand for health care, resource allocation mechanisms, manpower mix, and health status measurement in relation to economics.

Nevertheless, this selection of articles illustrates that many alternative ways of achieving health for all exist; although documentation and analysis of the economics of health for all are still in infancy, well-conceived primary health care strategies can satisfy both the requirements of economic efficiency and the needs for greater social equity.
Part 1: Economic perspectives and principles

The impact of medical decision-making on health sector costs is a theme common to each of the four articles in this section. Abel-Smith’s article on cost-effectiveness offers several examples of cost pressures resulting from health care providers’ control over resources, and the author makes a strong argument for greater cost awareness by both consumers and providers. Beeson’s “Point of View” is essentially similar, making the argument that economic principles have a place in the medical curriculum.

Brunet-Jailly challenges complacency about the linkages between health spending and health status, arguing that expansion of medical services will, on existing evidence, only benefit physicians and the medical industry—a point echoed in Beeson’s note. The importance to economists, as well as to epidemiologists, of establishing firmer measures of the effects of health care on health status is made clear.

The condensed book by Abel-Smith & Leiserson offers a synoptic account of the role of health in the process of economic development and provides an illustrative example of health sector expenditure analysis and its role in planning. It also identifies the major alternative mechanisms for financing health services and introduces cost-benefit and cost-effectiveness analysis as means of identifying economically rational policies.

Perhaps the message that is most apparent from these readings is that economic decisions are most commonly made in the health sector by clinicians, who frequently have little knowledge of their cost consequences and little incentive to avoid expensive diagnostic and therapeutic options. In such circumstances, and with health service users in a weak position to assess their needs for care, waste is inevitable.

Articles in Parts 2 and 3 outline strategies to control and improve the situation.
Health Economics

Brian Abel-Smith

Improving cost-effectiveness in health care

The rising cost of health care, without commensurate improvement in the health of those served, is a major concern in many countries. A report from a meeting held in Finland suggests some practical ways of obtaining more effective care at a more reasonable cost.

Social security institutions, faced with rising costs, an erosion of their financial bases because of unemployment, and an apparent lack of improvement in the health status of populations commensurate with the increased expenditures, are attempting to find practical solutions to their fiscal crises. In September 1982, the International Social Security Association organized a meeting of experts in Turku, Finland, at the invitation of the Social Insurance Institution of Finland, to consider these problems. Present were researchers and social security administrators from 17 countries, together with representatives of WHO, OECD, and the European Centre for Social Welfare Training and Research. What emerged from the meeting was an analysis of the sources of economic inefficiency in health care and some pragmatic suggestions for change.

Sources of Inefficiency

Economic efficiency in health care can be defined as the provision of necessary care of good quality at minimum cost. Thus, the immediate aim is to move towards a more economical balance of services and to eliminate ineffective, excessive, and unnecessary medical procedures.

Both demand and supply play a part in generating extra costs in health care.

Consumer demands that generate fees are not likely to be resisted. But patients themselves are not always sensitive to the cost of their treatment, particularly if they are not paying at the time of care or if the cost of their medical insurance can be set against taxes. These factors contribute to the excessive and unbalanced supply of services that is a major cause of increased costs and inefficiency.

Economic inefficiency in the supply of health care can take several forms. One is the excessive use of hospital beds intended for the care of acute illness when quality care could be provided elsewhere at a lower cost. Because patients are needed to justify jobs and budgets, hospitals tend to try to keep their beds filled. Payment per day of care adds to pressure to admit patients unnecessarily and to extend length of stay, the latter partly because the cost of providing care normally decreases during the latter part of a hospital stay. Moreover, the higher the occupancy rate, the greater is the funding for new medical equipment, which
enhances the hospital's prestige. Nursing homes, lower-cost hospital units under the control of general practitioners, hostels and other residences, and day hospitals and day nurseries may prove to be cheaper alternatives to hospitalization—though not, of course, for every type of patient.

Excessive and unnecessary medical procedures also constitute a form of economic inefficiency: doctor-initiated repeated visits, the excessive prescribing of drugs, the prescribing of costly drugs when less expensive equivalents are available, the excessive use of laboratory and X-ray services, and unnecessary surgery. Here, the incentives and pressures operating on care-providers are important considerations. Doctors are more likely to provide excessive services when they are paid according to the procedures they carry out than when they are on a salary or paid on a capitation basis. Also, when they have purchased equipment they have a clear financial interest in seeing that it is used, as the capital cost of such equipment has to be repaid out of fees for services. In authorizing expenditure on health care—often under the sales pressure of manufacturers—doctors do not always act simply as prudent purchasers on their patient's behalf. By putting their own interests first, they can cause distortion of demand.

When local health facilities are provided with more equipment and specialized facilities than are necessary to meet demand, medical equipment can itself be a source of inefficiency. Manpower, too, presents problems—for instance, when highly trained professionals such as doctors and dentists are used for tasks that could be handled by less qualified personnel, such as nurses and dental assistants.

Finally, the provision of curative services when earlier preventive action might have been cheaper is also a form of economic inefficiency.

The Planning of Services

The logical way to increase efficiency is to plan for a correct balance of types of available service and trained manpower necessary to meet medical needs, geographically distributed on a rational and equitable basis. In many countries this could mean a reduction in hospital beds for acute care and limitations on the supply of doctors. What is acceptable in one country, however, may be unthinkable in another. Thus, for many countries the practical problem is not how to produce a blueprint for wholesale reform but how to find politically realistic ways of moving towards greater economic efficiency.

Recent OECD figures (for Belgium, Canada, Finland, France, the Federal Republic of Germany, India, Israel, the United Kingdom, and the USA) show that studied pragmatism has produced a marked deceleration in the growth of health costs in relation to gross national product. Many factors could be involved in this deceleration: a relative decline in the incomes of doctors and health service employees, reforms in fee structures, a decrease in the ratio of hospital beds to population, greater use of day hospitals and community care of the mentally ill and (in some countries) the elderly, greater use of nurses in primary health care, a decrease in capital construction and thus in depreciation costs, restrictions on pharmaceutical prices and sales promotion activities, pharmacist substitution policies, and deliberate planning to promote chosen priorities and greater efficiency.

Restriction of Rights

These factors do not apply to all countries, as situations and obstacles to reform vary. It is possible, however, to generalize about the latter and to consider the ways they have been dealt with in gradual approaches to reform. Broadly speaking, these obstacles consist in the rights traditionally exercised by students, practitioners, and consumers of health care—rights that have come to be modified, qualified, or limited in the face of economic stagnation or decline.

More and more countries have come to appreciate that a growing excess of medical manpower is a critical cause of economic inefficiency, as it limits interest in delegating tasks to less-qualified personnel and leads to an excess of medical procedures. Quotas are being established for medical school places and postgraduate training, and existing quotas are being cut, thus curtailing the range of subjects available for study.
Health care—who pays?

The right of professionals to choose where to practise has led to a surplus of doctors in the most attractive places. Some countries have closed off particular areas to new entrants; others have gone no farther than controlling posts in hospitals.

Some countries have introduced controls on the purchase of heavy equipment, and many have regulations that prevent new hospitals from being built or older ones from being enlarged except in accordance with a central or regional plan.

Professional freedom has been further curtailed by a general trend to hold down medical fees. This, of course, incurs the risk that doctors will start charging patients more than the fees laid down, particularly in systems in which the patient is reimbursed for payments for health care. In Quebec, Canada, “overbilling” by doctors is penalized by excluding those guilty of the practice from participation in health insurance arrangements.

Pricing of Medical Procedures

It is recognized that a scale of payments according to relative values of different medical acts influences the number and type of acts performed. In some countries (e.g., Canada), scales of values have been left for the profession to determine. In others, social security agencies have achieved changes in relative values, paying more, for example, for medical consultations and less for diagnostic tests. In Belgium successive cuts in payments for pathology tests have sharply reduced their rate of increase.

Clinical freedom and medical secrecy are further obstacles to reform: they limit access to information on resources used in treatment and on diagnoses that would enable insurers to evaluate doctors’ performance. A number of computerized monitoring systems attempt to judge the provision of care in terms of what was “medically required” or of norms related to diagnosis. Where medical secrecy prevents insurers from knowing the diagnosis, the ratios of different procedures can be examined and major deviations from the average questioned, though it is recognized that judging against the average suffers from the limitation that the average itself may be excessive.

Encouraging Cost Awareness

Some countries are trying to make doctors aware of more economical prescription practices, informing them of the differences in the cost of equivalent or near-equivalent drugs that can be substituted for more expensive ones they may be using. In some provinces of Canada and most states in the USA, pharmacists are empowered to substitute cheaper “equivalents” unless the doctor has specifically forbidden substitution on the prescription.

Consumer rights also play a role in economies in health services. Where patients have freedom of choice with regard to physicians, hospitals, and insurers, rational planning becomes difficult. The common practice of making specialist care accessible only on referral from another doctor has the potential of reducing the costs of health care.

There is widespread interest in the possibility of making consumers more aware of the costs of health care. Cost-sharing can induce the consumer to require the provider to be cost-conscious, but it does not work when patients have private insurance to cover their share of the costs. Moreover, in some circumstances cost-sharing can have perverse effects. For instance, if out-of-hospital services are subject to cost-sharing and inpatient services are not, an incentive is created to use the more expensive hospital services; or if patients are made to pay for taxis to convey them to hospitals for consultations, this may lead to increased use of the much more costly ambulance service, as happened in the Netherlands.

A number of countries are deliberately planning to promote chosen priorities and greater efficiency—Finland, India, Israel, and the United Kingdom among them. Unlike the other countries represented at the meeting in Turku, the USA has had very limited success in containing health care costs and promoting efficiency; its current approach seems to be through market mechanisms as a possible means of achieving what other countries appear to be able to achieve by regulation and negotiation.
An economist looks at health strategy

We can no longer accept that the health system operates efficiently. First, there is nothing to ensure that the available resources are put to the best possible use, and the medical profession ought to be concentrating on defining criteria for the allocation of resources by evaluating the various diagnostic and treatment techniques and the various ways of organizing the health services. Second, the idea has frequently been advanced that an improvement in the health status of the population contributes to economic development by encouraging productive activity, but studies by economists have cast considerable doubt on that notion.

No effective health system can be built on a number of separate and uncoordinated specialist activities that are bound to compete with each other for limited national resources. However well intentioned the people are who want to help solve the health problems in their own field, any system built up from such initiatives can only be a monster unadapted to its environment.

The evidence has to be faced. Maximum expansion of the supply of medical services will largely benefit only the physicians and the medical industry.

So far, the medical profession has been unable to provide any reliable measurement of changes in health status as a result of increased medical activity. Some may claim the disappearance of certain diseases or the increase in life expectancy at birth or the reduction in mortality rates, and certainly they are indicative of a trend. But to link this trend to the increase in medical activity is quite another matter, for there is evidence to show that certain diseases began to decline before medical knowledge was sufficiently advanced to deal with them and that a rise in the standard of living may produce an effect on health status independent of any medical activity. Indeed, recent experience in the developed countries shows that an increase in medical activity produces no corresponding increase in productive activity.

It is not the place of an economist to define a public health strategy. But the picture of society provided by economic analysis suggests that an effective strategy can be defined only if we question the principles on which physicians have tended to base their professional strategy and replace them by something more fundamental. Studies are now being made on the efficacy of different systems of health care (e.g., health centres compared with village health workers) and on the comparison of the results obtained from purely medical activities and those from nutrition and hygiene projects. Such analyses of technical efficacy can then serve as a basis for the analysis of economic efficiency. Because each activity has a cost that can be estimated at any given moment, it is possible to ascertain which of them is the least expensive for achieving a given result, or, alternatively, which activity can produce the best result with the resources available. Analyses of this kind will reveal a soundly based range of choices.

The formulation of indicators of health status, the development of criteria and techniques for evaluating health activities, and the measurement of the relationships between health status and economic activity are all strictly necessary before a real strategy for health care can be planned. Experience shows that such studies are feasible, and the criticism of the basis of medical strategy has proved that they are needed. Nevertheless, such research is very rare. Could this be due, in part at least, to the fact that physicians are so preoccupied with protecting their position that they will not cooperate in collecting information that may call into question the practices and structures of the medical profession?
Paul Beeson

Doctors must learn economics

The economic aspects of modern medical service deserve a better-defined place in formal medical education. Our system of providing medical care was designed by doctors and is characterized by customs that suit the interests of doctors. The time to cause young members of the profession to think objectively about that system is before they move into the ranks of high-income earners. Unless we arouse some concern about it during the early phases of medical training, we run the risk of turning out doctors who will conduct themselves like members of a self-serving guild.

Doctors, by their own professional fees and especially by their decisions about hospital admission, diagnosis, and therapy, generate at least three-fourths of the total health bill of the nation. Essentially, then, we have about 400,000 solo operators making the decisions that use up a huge amount of money. For personal convenience and benefit, doctors are prone to lobby for wasteful facilities, requiring extra manpower and equipment — too many hospital beds, too many institutions equipped for open-heart surgery, etc. No one can be precise about it, but we do carry out diagnostic procedures that are not needed, we do make too much use of intensive-care facilities, and we do perform some surgery for less-than-crystal-clear indications. Partly stemming from such practices, health care costs now amount to nearly one-tenth of the gross national product in the USA, exceeding $240 billion at the beginning of this decade (1). Thus, the American health care system is, in itself, a factor in the world economy.

In a subtle way our system of third-party reimbursement, in which a patient does not pay directly for the treatment he receives, contributes to extravagance, because there is no insistent reason for doctors or patients to worry about costs. This system of payment pervades all aspects of the national economy; indeed, the "fringe" health insurance benefits in labor contracts add to the cost of most of the things we buy. Thus, the figures given, say, for the health expenditure of an "average family of four" may not really convey the true cost, which is to some extent concealed in such other categories as clothing and transport.

A.S. Relman has directed attention to what he terms "the new medical-industrial complex" (2). He refers to the trend whereby many kinds of medical service are beginning to be provided as commercial enterprises on a profit-making basis. This includes such innovations as corporations that operate private hospitals and nursing homes, businesses that contract for chronic dialysis, commercial diagnostic laboratories, and organizations that provide emergency services for hospitals. He emphasizes the responsibility of the physicians who deal with this kind of big business, because physicians act then as advisers and purchasing agents for their patients. Obviously, there are troubling ethical problems here that have been little discussed. While there is nothing basically wrong with the idea that some aspects of health care should be operated on a business-like basis, the medical profession will not merit trust unless it can be seen to avoid conflicts of interest. Relman suggests that doctors should not invest in companies that render medical service and certainly should not operate such companies themselves.

Aside from things that are part of the doctor's daily work, other economic matters could usefully be explored in medical school. I have already mentioned that our third-party reimbursement systems conceal cost outlay, to both doctors and patients. Another undesirable feature is their tendency to reward performance of procedures and admission of patients to hospitals while failing to compensate adequately for medical service given on an ambulatory basis. Politicians and economists are going to insist that we give more thought to cost effectiveness and technology assessment. Therefore, our medical students should gain

Professor Beeson is Emeritus Professor of Medicine at the University of Washington, Seattle, Washington. This article is taken from his paper "Priorities in medical education", published in Perspectives in biology and medicine, 25: 673 (1982).
working acquaintance with the principles and techniques of such evaluations.

In matters of the kind I have been mentioning, some of the best resources for teaching may be in departments of public health and community medicine or in the school of public health. Unfortunately, with the competition for space in the curriculum, experts in these fields may be under-used, and their teaching may be relegated to the elective category rather than being a compulsory part of medical education.


Planning the finances of the health sector: a manual for developing countries


"This manual presents guidelines for the financial analysis of the health sector on both the revenue and the expenditure sides. It guides planners and others in the health and health-related fields through the stages of design, execution of data collection and organization, evaluation and integration of the analysis into the formal planning process. It will doubtless become a part of the standard health planner's toolkit in less developed countries, because its conciseness lends itself to easy reference when the need to address specific problems arises...

"Studies of sector finance too often merely present a mass of tables, with no interpretation of the implications of the research for the country's health plan. With this book at their disposal, it is hoped that health planners will be encouraged to take that extra critical step....

"Given the need for ever-increasing efficiency in the use of ever-dwindling funds for health care interventions, such a helpful volume as this one is very welcome."


"The book is full of useful advice and, if financial planners in developing countries can fill out the suggested financial framework with relevant data, they will provide decision-makers with some valuable information for making some very difficult choices."


"Anyone seriously interested in health issues in developing countries should read it."

- Finance & development, June 1984, p. 52.
Condensed book

B. Abel-Smith ¹ and A. Leiserson ²

Making the most of scarce resources*

"Spending more on health services does not necessarily buy better health." This is the lesson that the authors seek to drive home by an examination of the close interrelation between socioeconomic factors and health and by analysing the choices open to developing countries in allocating scarce resources. They strongly advocate a unified approach to meeting basic needs, suggest how a national health policy should be planned, and discuss different ways of financing the health service.

At the Twenty-ninth World Health Assembly, the Director-General of WHO was requested to ensure that the Organization take an active part "in supporting national planning of rural development aimed at the relief of poverty and the improvement of the quality of life".

This book has been written primarily for senior health administrators and teachers of health personnel in developing countries. It has two aims: first, to show what health administrators can do, with others, to reorient national planning in the direction cited by the World Health Assembly; second, to point out some of the implications for the planning and administration of health services.

The Inequity of Past Development

Over the last 25-30 years, gross world production has roughly trebled, while the world's population has increased by barely two-thirds. But the rich countries of the world have become relatively richer and the poor countries relatively poorer. The relative poverty of the developing countries is indicated by the share of world output available to their populations:

In 1972 the industrial market economy countries, with only 17% of the world population, accounted for 67% of total world output (using ordinary exchange rates to calculate national totals on a common basis). At the other extreme, 26% of the world's population lived in countries whose total output accounted for under 3% of the world total.

If exchange rates give a distorted picture of the real value of national production, then the correct figures would probably not be so extreme.*

Apart from the occasional radio, bicycle, and poorly staffed primary school, life in the rural areas of many developing countries continues much as it did centuries ago. Unemployment, underemployment, malnutrition, bad housing, an unhealthy environment, and lack of minimum education persist on an enormous scale after 30 years in which planning for development has been increasingly accepted. The expectation of life in developing countries has lengthened considerably, but there is little other evidence that the basic needs of the poor are met to a greater extent now than 30 years ago.

Past development policies were devised with good intentions, but emphasis was put on economic growth without careful examination of who would benefit from it. It was assumed that the beneficial effects of growth would spread throughout the economy. This has tended not to happen or to happen very slowly. Consequently, a new thrust in development planning today aims at meeting basic needs directly. These include minimum requirements for food, shelter, and clothing, for household equipment and furniture, and for essential services.

*This is a condensation of Poverty, development, and health policy, published by the World Health Organization in the Public Health Papers series as No. 69 (1978). All who are attracted by the authors' ideas are urged to read the full exposition. The book is available through the usual channels for WHO publications.


² Formerly of the Division of Strengthening of Health Services, World Health Organization, Geneva, Switzerland.


such as safe drinking-water, sanitation, public transport, health services, and educational and cultural facilities. A policy aimed at meeting such basic needs implies the participation of the people who will be affected in making the necessary decisions.

The aim of health policy is to improve health, not just to provide health services. Priority should be given to health improvement of those with the lowest health status as part of a unified plan to improve the quality of life.

In the provision of health services, each country will want to consider means of achieving more evenness or equity in their provision. But how does one define equity?

One possible definition of equity might be spending the same amount on health services per individual in every part of the country. But health services of a given standard cost more for dispersed rural populations, partly because of travel expenses and difficulties.

A second possible definition would be to provide the same standard of services everywhere, even if this cost more per head in rural than urban areas. Moving toward this definition of equity and using it as a basis for services would lead to a heavy concentration of such services for the poor.

If the second definition of equity were accepted as the basis for planning health services, the implications for manpower training and construction programmes would be drastic, because of the logistics of bringing services to dispersed populations whose facilities for travel are limited. Normally, it would mean that basic health services would need to be available within no more than an hour's walk of anyone's home.

The health administrator can help create a climate of opinion favouring a move toward greater equity. But the meaning given to equity is inescapably a matter for political decision at the highest level.

Health and Development

Development planners have in the past attached little importance to health services. If they considered them at all, they tended to judge them by whether they led to a per capita increase in production. However, most health services in developing countries do not bring about any lasting improvement in health status, and even in developed countries differences in health standards cannot be explained by the amount invested in services such as doctors and hospitals.

By the 1940s, Sweden had achieved much lower mortality rates than nearly all its European neighbours, although the country had substantially fewer doctors per thousand population than many other European nations. In the Netherlands maternal mortality rates were low even when a vast majority of births took place at home.

However, the United States, which spends more on health services per head at current exchange rates than any other country of the world, had poor mortality rates in 1968–69 compared with those of other developed countries.

Most of the effort and expenditure of ministries of health in developing and developed countries has been on providing curative services, mainly to the urban population. In many countries only 10% to 20% of the rural population have reasonable access to health services. It is not surprising, therefore, that health services provided in many developing countries have not been very successful in improving health. The most skilled curative services may make only a temporary impact on health if the basic causes of ill health are not remedied at their source.

Public health measures, especially antimalaria campaigns, have been blamed for population explosions. Population growth has been seen as harmful because it added to the labour supply before jobs to absorb it were created. It has increased the proportion of young persons dependent on adults, reducing the amount of money families could save, or spend to improve their production. It has created pressure on governments to spend more on services such as education.

What actually occurred, and led to a remarkable increase in life expectancy, was the combined result of public health measures with economic development. In the developed countries the incidence of the main killing infectious diseases declined, and rapid population growth started, before effective means of intervention for the diseases were available.

The promotion of family-planning programmes with strong government support can assist in hurrying the decline in fertility. However, the key problem in family planning is not the logistics of making facilities and devices available, but the lack of desire of people to reduce their fertility. Confidence that their children will survive can convert them to family planning; but economic security, the spread of modern goods and services, education, and wide social and cultural change, particularly in the roles of and attitudes towards women, are also of great importance. There is also evidence suggesting that countries with low inequality in the dis-

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The contribution health services can make to national development should not be judged by short-term effects on output but by long-term effects on the quality of life. If, for example, the survival rates of fetus and child in the developing countries were raised to those of more developed countries, the same future adult population could be produced with a much lower use of resources; or a much healthier labour force could be produced with the same resources, leaving women with the time and energy to make a wider contribution to the economic and social well-being of their families.

Social and economic planning should be seen as complementary, not competitive. Instead of the health administrator trying to persuade economic planners to release resources to the health services, he should make his own contribution to the planning of economic development, just as the economist should make his special contribution to the planning of health services.

Economic Growth and National Planning

If land, capital, and manpower are used for one purpose, they are not available for another. This idea of opportunity lost lies at the heart of economic thinking. In socio-economic planning, choices have to be made among alternative uses of resources. For example, what use of resources would do most for the poor? More health services? More education? More support for agriculture?

The concept of investment applies to people—to human capital. The cost of education is more than the expense of schools and teachers. During full-time education the economy loses because trainee and trainee are making no current contribution. Assume that medical education costs $10,000 a year per student.

To calculate the economic cost, the value of the contribution the student might have made to the economy that year must be added. If this is $2000, the yearly education cost becomes $12,000. Thus, a five-year medical-school cost becomes $60,000.

Is the doctor's contribution to the health service worth not only the higher salary he will be paid but $60,000 spread over his working life plus, for example, 10% interest on the investment?

The same student might have been given two years' training as a medical auxiliary at $2000 a year, plus again the $2000 a year that he might otherwise have contributed if he were working.

The total cost of training the auxiliary is thus $4000 a year for two years, or $8000, plus 10% interest, to be spread over his working life. Does the greater contribution of the doctor justify the higher training cost plus the higher salary?

In some developing countries there are unemployed graduates, unemployed secondary school leavers, and unemployed primary school leavers. But in other developing countries there is a desperate shortage of persons who have completed secondary education or are equipped for higher education in any field. If a high proportion of the few who are equipped for higher education are accepted for medical training, they are not available for training as scientists, engineers, or senior civil servants. Higher education needs to be planned to meet the manpower needs of the entire development plan.

The examination of options for the use of scarce resources is part of planning. In developing countries resources likely to be particularly scarce are finance for investment, highly educated personnel, and foreign exchange. Also, taxable capacity is limited.

Each country's plan must take careful account of those resources that are especially scarce. But the choice of particular options is not value free. Some forms of investment save labour and thus generate unemployment, at least in the short term, unless there are other jobs for the displaced workers. Another form of investment, an irrigation project, may create work as it becomes profitable to cultivate land more intensively. An investment such as a hospital creates employment, but there are high running costs when the hospital has been completed, and these may have to be partly or wholly financed out of taxation.

The growth of industries paying high wages may result in the growth of cities surrounded by shanty towns. Some regions may prosper at the expense of the rural areas. Greater output may be achieved at the price of greater unemployment and greater mal-distribution of income.

Decisions on what type of employment is desirable and on how quickly it can be allowed to proceed are political. Political choices are also needed in determining the level and type of taxation and the distribution of public expenditure. Thus the planning secretariat must work under close political direction at a high level. The secretariat produces the options and the ministers choose among them. The secretariat is usually attached either to the ministry of finance or to the prime minister's office. A separate ministry of planning seldom carries the political weight to select options that will receive support from the government as a whole. A planning unit is also needed in each ministry to work with the central secretariat.

Planning National Health Policy

The main causes of ill health are to be found in social poverty, in a failure to meet basic human needs. Thus, health services can deal directly with only a limited range of problems impinging on health.

A health plan will be unlikely to help meet basic needs unless critical decisions are taken about such factors as the kind of growth that is built into the plan, the sectors of production in which growth should take place, and the amount of employment to be generated by economic growth.

The technology that will be used, in both industry and agriculture, will be important and a major factor in determining the number of job opportunities and thus the character of consumption demand. There are hard questions to be asked and answered: How much production can be done by labour-intensive methods without overall loss of efficiency? The foods produced in the agricultural sector can have a major effect on nutritional standards. If emphasis is on cash export crops, how can food be obtained to improve the diet at home? Can it be imported and distributed to those who need it and if so, at what price? How will it be possible to ensure production and distribution of other goods to meet basic needs of the low-income population? How is it possible to make sure they are in a position to buy what is produced?

Answers to these questions will vary from country to country, depending on the local situation and on the political acceptability of the changes proposed.

In many developing countries special programmes are needed for the small farmer—to help him use improved technology and strengthen his competitive position. Land reform and, in some countries, changes in tenure systems are often indispensable first steps. General programmes of rural credit and rural cooperation tend to help the large-scale farmer disproportionately.

Educational programmes need to reinforce the process of development. Radical changes may need to be made in curricula and methods of instruction to make them more relevant to development and, especially, to new technologies. Education is a continuous process, and in adults it is necessary to repair the gaps in the education they received in the past.

Many of the people who are poor today had parents who were poor. They cultivate the same land their parents cultivated; they are subject to the same tenure system and the same risks of variable rainfall and natural disaster. They have essentially the same poor health and scarcely greater educational opportunities. There is great potential in education programmes geared to the real needs of the community, including those of the adult population.

Education can support health policy. People, both children and adults, can be taught the causes of the main diseases, why clean water is important, why human refuse must be buried and not allowed to contaminate water supplies, and the importance of personal hygiene. The elements of nutrition can be taught to girls at school and women in adult education courses: how to maximize the nutritional value of local food supplies, what foods to grow around the house and how to cook them so as to retain the greatest possible nutritional value.

In addition, instruction can be given on the importance of breast-feeding, the care of infants, how to recognize common diseases, the use of simple household remedies, and the elements of first aid. Education can press home the advantages of birth spacing and the use of family-planning supplies where such teaching is culturally acceptable.

A strong political commitment to economic and social reform is essential to push development toward meeting the needs of the poor, and strong community organization may be needed to bring it about. The discussion of health can be a useful starting point for involving the community in planning its own development. Parents not only want their children to survive: they want them to develop to their maximum mental and physical capacity. Thus, a discussion of why some children die and others have stunted development can be an effective starting point, rooted in the deeply felt needs of the community.

What is the role of the health administrator in all this? In the past he has been involved in planning mainly as an advocate for spending on health services. He has rarely made a substantial contribution to a nation's total development plan. Yet the kind of development a country selects may be more important to the health of the population than health services themselves.

The health administrator has a vital role to play in explaining the possible effects on health of various development plan proposals.

He can explain that a development plan must provide an increased standard of living for the poor because such a standard is important to their health. The health administrator will be concerned about any impact a proposed plan might have on the price of essentials bought by the poor.

Plans for agricultural irrigation will interest the health administrator because of their potential for food production, partly because of their potential for improving water supplies, but also because of their risks (contamination, malaria, schistosomiasis), which can be overcome by careful design. The health administrator will be alert to proposed changes in the population of cattle, poultry, and
other animals, in view of the need to protect man from diseases carried by animals.

Planning should move from the bottom up, not from the top down. Local communities should thus be the first to be involved in the planning process. Diagnosis of what is wrong and what is needed is a first step. The health administrator can help identify the changes that are of special importance for health. He will understand that if the country provides primary health services for the entire population, personnel of those services would be in contact with the local community. They could help survey social conditions, monitor the effect of earlier plans from a health point of view, identify any deterioration in conditions for various sections of the population, and provide early warning of impending crises.

The Analysis of Health Service Expenditure

Estimates of total expenditure on health services are essential for health policy planning, and need to be broken down by type of resource, source of finance, and the kind of service in each geographic area. Rough calculations to show the general pattern of distribution of expenditure on health services, to produce unit costs, are sufficient. It is not necessary to have sophisticated budget surveys or elaborate questionnaires to find the gross incomes of private practitioners or indigenous practitioners. A considerable margin of estimate error would not change the general picture.

The following example for an imaginary country, Rupania, is not untypical of Africa or Asia. The population of the country is 10 million, and its currency is the rupar. Gross national product is 2000 million rupars, and the total expenditure on health services is 100 million rupars.

To simplify the example, it is assumed there are only two methods of financing health services. First, government provides a service at no charge, which is financed by general taxation. Second, there is a private sector in which those who can afford it purchase services from private practitioners (Western trained and indigenous) and from private hospitals, and purchase drugs from both pharmacies and traditional herbal markets. There is no voluntary or compulsory health insurance and no financing by charity or foreign aid.

More is spent in the private sector than in the government sector, mainly on doctors, dentists, indigenous practitioners, drugs, and herbal remedies. In the government sector about a tenth of the budget is devoted to building a second teaching hospital, which will take seven years to complete. About a fifth of the government budget goes for salaries for doctors and dentists, and almost an eighth, for transport.

Of the total government expenditure of 47 million rupars, nearly three-quarters goes to hospitals. Only 7.5 million rupars are spent on health centres, dispensaries, preventive campaigns, and environmental health.

<table>
<thead>
<tr>
<th>Breakdown by type of resource and method of financing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type of resource</td>
</tr>
<tr>
<td>Government sector</td>
</tr>
<tr>
<td>-------------------</td>
</tr>
<tr>
<td>Capital expenditure</td>
</tr>
<tr>
<td>Teaching hospital</td>
</tr>
<tr>
<td>Health centre</td>
</tr>
<tr>
<td>Current expenditure</td>
</tr>
<tr>
<td>Payments to personnel (gross for private sector)</td>
</tr>
<tr>
<td>Doctors and dentists</td>
</tr>
<tr>
<td>Nurses</td>
</tr>
<tr>
<td>Auxiliary health workers</td>
</tr>
<tr>
<td>Indigenous practitioners</td>
</tr>
<tr>
<td>Others</td>
</tr>
<tr>
<td>Transport</td>
</tr>
<tr>
<td>Pharmaceuticals, herbal medicines, surgical and medical supplies</td>
</tr>
<tr>
<td>Other goods</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

Although it is not possible in practice to cost each preventive activity separately, it is important to do so with every such activity that can be separately identified. When the same staff are engaged in both preventive and curative work, estimates are needed as to how staff actually spend their time—not on how they are expected to spend their time.

In developing countries it is useful to isolate a particular element in the cost of providing services, namely, the cost of support activities (continuing education for field staff, local administration, and supervision). This support cost can be high where the services are provided to a dispersed population by auxiliaries or voluntary workers with limited training. Continuing education, local administra-
tion, and supervision need to be provided by more highly trained and better-paid staff. These people have to travel widely to do their work. In countries with poor roads the cost per vehicle-mile can be high. There are costs of maintaining petrol supplies in remote areas. Yet, unless there are frequent on-the-spot visits for continuing education, supervision, and leadership, poor service is likely to be provided.

The table that follows shows government field service costs as distributed among preventive, curative, and support services.

### Breakdown of running costs of government field services into curative, preventive, and support services

<table>
<thead>
<tr>
<th></th>
<th>Curative</th>
<th>Preventive</th>
<th>Supportive</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regional and</td>
<td>16.0</td>
<td>0.5</td>
<td>2.5</td>
<td>19.0</td>
</tr>
<tr>
<td>teaching hospitals</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>District hospitals</td>
<td>11.5</td>
<td>0.5</td>
<td>2.5</td>
<td>14.5</td>
</tr>
<tr>
<td>Health centres</td>
<td>4.0</td>
<td>0.5</td>
<td>0.5</td>
<td>5.0</td>
</tr>
<tr>
<td>Dispensaries</td>
<td>0.9</td>
<td>0.1</td>
<td>0.1</td>
<td>1.0</td>
</tr>
<tr>
<td>Environmental health</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>and preventive</td>
<td>0.5</td>
<td>1.0</td>
<td>1.0</td>
<td>2.5</td>
</tr>
<tr>
<td>campaigns</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>32.4</td>
<td>2.1</td>
<td>2.5</td>
<td>37</td>
</tr>
</tbody>
</table>

Excluding the cost of administration, teaching, and research.

In Rupanian health services only a tenth of the money spent on dispensaries and health centres went to identifiable preventive work. Staffs in these units were intended to divide their time about equally between preventive and curative activities. In practice, they have been so pressed with demands for curative attention that preventive activities have been neglected. Calculations of this kind enable the health administrator to see the situation as it is, not as it was supposed to be.

Only 10% of the people of Rupania live in urban areas. Regional and teaching hospitals are supposed to receive referrals, but in practice 95% of their patients come from urban areas, as do 95% of the patients of the district hospitals. Health centres and dispensaries, on the other hand, are used by the rural population. The table below shows running costs in urban and rural areas.

It is seen that about three-quarters of the health service expenditure goes to the urban 10% of the population, leaving only a quarter of the expenditure for the rural areas where 90% of the people live. The expenditure per head, out of taxes, was 33 times greater in the urban than the rural area.

A further and more detailed analysis of government health expenditure examined hospital use, consultations, vehicle-miles, numbers of students, duration of courses, and drop-out rate for health personnel, to show unit costs.

### Economic perspectives and principles

#### Breakdown of running costs of health services by urban and rural areas

<table>
<thead>
<tr>
<th></th>
<th>Urban</th>
<th>Rural</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Government services</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teaching, regional, and district hospitals</td>
<td>28.5</td>
<td>1.5</td>
<td>30</td>
</tr>
<tr>
<td>Health centres</td>
<td>5.0</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>Dispensaries</td>
<td>1.0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Environmental health and preventive campaigns</td>
<td>0.5</td>
<td>0.5</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>32.4</td>
<td>2.1</td>
<td>37</td>
</tr>
</tbody>
</table>

Excluding the cost of administration, teaching, and research.

#### Unit costs

<table>
<thead>
<tr>
<th></th>
<th>Rupars</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost per inpatient-week in hospital</td>
<td>120</td>
</tr>
<tr>
<td>Cost per consultation with a doctor</td>
<td>4</td>
</tr>
<tr>
<td>Cost per visit with a medical auxiliary</td>
<td>0.5</td>
</tr>
<tr>
<td>Cost per visit with an indigenous practitioner</td>
<td>0.5</td>
</tr>
<tr>
<td>Cost per immunization</td>
<td>0.1</td>
</tr>
<tr>
<td>Cost per vehicle-mile allowing for amortization, running costs, and repairs</td>
<td>4</td>
</tr>
<tr>
<td>Cost of training a doctor for 5 years</td>
<td>80,000</td>
</tr>
<tr>
<td>Cost of training a nurse for 3 years</td>
<td>5,000</td>
</tr>
<tr>
<td>Cost of training a medical auxiliary for 2 years</td>
<td>3,000</td>
</tr>
<tr>
<td>Cost of training a rural medical aid or field worker for 6 months</td>
<td>1,000</td>
</tr>
</tbody>
</table>

Unit costs are necessary for considering the financial feasibility of operations in health planning. Unless unit costs can be reduced, certain options can be ruled out as impractical. For example, in Rupania it would cost 200 million rupars to provide five consultations per annum with a doctor for the whole population. That alone is 10% of the gross national product; and the cost of drugs, diagnostic equipment, and other supplies would probably add another 10%.

To provide five consultations per annum with a medical auxiliary would cost only 25 million rupars, or only 1.25% of the gross national product, to which cost of supplies and support would have to be added.

To provide 10 occupied hospital beds per 1000 of the population would require a total of 100,000 occupied beds at 120 rupars per week. That would amount to 624 million rupars a year, or 31% of the whole country's gross national product.

Calculation of unit costs helps the health administrator to analyse different parts of the budget and how they are being spent. It shows him differences and leads him to examine, for example, how far, if at all, it is justifiable for the urban population to
receive a more sophisticated level of service than the rural population.

The Financing of Health Services

The different methods of financing health services can be classified as follows:

**Indirect Financing**
2. Compulsory insurance, any government subsidies being counted under 1, above.
3. Voluntary insurance, any government subsidies being counted under 1, above.
4. Employment insurance, contributions being counted in 2 and 3, above.
5. Charity raised inside the country, any government subsidies being counted in 1, above.
6. Foreign aid.

**Direct Financing**
1. Payments by recipients for services, excluding insurance payments to 2 and 3, above, but including payments for services to 1, 2, 3, or 4, above.

Methods of financing are relevant to health policy. First, it is important to see how much different groups of the population are ultimately paying toward the cost of health services and how this compares with the value of the services they receive. Second, the method of financing care can influence what is provided and to whom.

Even the provision of a free and universal health service financed from taxation does not necessarily result in services' being available to the rural poor. Where health services are concentrated in urban areas, the rural poor may not be able to get to them even if they are free.

Clearly, greater equality can be achieved by providing more services in rural than in urban areas. But reducing urban services by eliminating regional or district hospital beds or reducing staff would meet stiff opposition from both users and staff and would be politically contentious. It would also waste part of the investment made in building hospitals and in training their staffs. It may be less difficult politically to initiate a steady increase in charges for services in urban hospitals. This would ultimately reduce demand, which might, in turn, make a reduction in the number of beds acceptable.

Although patients should first apply to primary care services, some will go directly to secondary services, thinking that they are better. Such self-referred patients can be discouraged by high charges. Patients referred to doctors by primary care auxiliaries can be exempted from charges, whereas those who bypass primary care can be made to pay.

The main difficulty with charging is that it is hard to find a way in which those who are very poor can still obtain services. The administrative costs of sophisticated means-test systems can be high.

When compulsory health insurance is started, it usually covers only a part of the total population, generally those in regular employment in urban areas. Although this may seem at least a good beginning, whatever the drawbacks, partial insurance coverage can cause serious distortions in the satisfaction of health priorities.

Those regularly employed may not be satisfied with government health services in their urban area. But these services are usually already far more costly per head than those in rural areas. If partial coverage by compulsory health insurance leads to still more expensive urban services, it may become impossible to provide service at comparable cost in rural areas for generations. Concentration of health insurance in the better-off part of the population tends to shift resources in the opposite direction from a move toward equity. If insurance concentrated in urban areas leads to increased costs of goods produced there (since it indirectly adds to labour cost), the rural population may be forced to pay part of the cost of the more expensive health services in the cities, through the higher prices of goods.

Voluntary insurance offers a way of developing local services under the control of and with the participation of the community, provided premiums are low enough for the majority of the population to pay and the services are geared to the income collected from the premiums. Rural people have long been accustomed to paying for traditional practitioners, midwives, and medicines. Voluntary insurance can also be encouraged by government subsidies.

Whether health services are paid for by voluntary or compulsory health insurance, the private sector can become so extensive that it frustrates the attempts of government to establish and enforce priorities in the use of health resources. Potential earnings in the private sector, especially when there are shortages of qualified health personnel, may determine the level of pay government will have to meet.

The fundamental problem is inequality of income and wealth in the population. Inevitably, those who are rich want to buy more health services and more sophisticated health services. The poor usually aspire to what they observe the rich using, even if the rich are using services that are overso-
phisticated, unnecessary, and incapable of producing fundamental solutions to health problems. Gross inequality of income and wealth is in itself irreconcilable with the equitable distribution of health resources.

Cost-Benefit-Effectiveness Analysis

Cost-benefit analysis is an aid to systematic thought about what to do. An attempt is made to assess the benefits of different programmes and to compare those benefits with the cost of obtaining them.

Cost-effectiveness analysis is an aid to deciding how to achieve a given level of performance at minimum cost, or how to obtain the maximum performance from a given budget.

If the objective is broadly defined—for example, to improve health—cost effectiveness can become almost interchangeable with cost benefit (assuming that health improvements can be measured), except that those who do cost-benefit studies emphasize expressing benefits in money terms whenever possible. In the present discussion, cost-effectiveness is confined to narrower objectives such as reducing the incidence of a particular disease by a stated amount, in terms of achieving a stated percentage of acceptors of family planning, or ensuring that a desired portion of the population is immunized.

Cost-effectiveness analyses are much easier than cost-benefit analyses because the aim is clear.

Cost-effectiveness analyses are not just for research, but for practical application by the health administrator in using his health resources at the local level. What is required is creative thinking to develop ways of solving problems. What is the most cost-effective way of controlling cholera? What would it cost to cut incidence by "x" per cent, (1) by regular vaccination, (2) by vaccination when an epidemic is expected to start, and (3) by some programme of rural sanitation?

What is the cheapest way of getting 10 000 acceptors of family-planning programmes? By providing a clinic? By subsidizing supplies in retail shops? By providing subsidized supplies in slot machines? By recruiting volunteers to call from door to door, perhaps allowing them a small commission on the supplies they sell?

Hospital care, throughout the world, is an expensive way of treating patients. It is thus important to find effective ways of treating patients without sending them to hospital. An example of such a way is oral fluid treatment of diarrhoea, which is cheap and is effective if given early. Many beds in hospitals and sanitoria are still occupied by tuberculosis patients who could receive ambulatory treatment having the same therapeutic effect at much lower cost.

In 1968, nearly a half million hospital inpatients from 37 developing countries were officially registered as malnourished. The cost of their care was estimated at 340 million dollars. What would be the most cost-effective way of preventing this malnutrition?

Vaccination has proven an effective preventive against many diseases. An estimated 80 million children are born each year in the developing countries, and the majority of them are not immunized. It is important to examine all ways in which such immunization could be provided, to consider the costs, and to examine the possible contribution of research. Some logical possibilities are:

1. producing equally effective vaccines at lower cost;
2. developing vaccines that might give greater or longer protection in relation to their cost;
3. using smaller dosages and more effective delivery routes;
4. changing containers to reduce wastage in spilling;
5. developing improved storage systems to prevent or reduce deterioration from failure to maintain low temperature;
6. using oral rather than parenteral vaccines, when available, to save staff time;
7. giving more than one immunization vaccines, when available, to save staff time;
8. developing faster-acting vaccines;
9. better planning of schedules to cut transport costs;
10. using volunteers rather than paid staff;
11. improving publicity to attract more people into centres at lower cost per person.

Nothing on the list is new. The problem is to apply what is known—and this at present is imperfectly done—and to develop new and less expensive techniques.

Low-Cost Services

In developing countries the only health services that can be expected to reach the entire population

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are those that are of low cost. Low-cost services can be effective, and achieving low cost is as important for secondary as it is for primary care services.

The largest element of cost in health services is staff. The least expensive way of providing service is for the people to provide it for themselves, where possible. Furthermore, helping people to find solutions to their own problems is often more effective than providing services to solve those problems for them, if the community has the necessary resources at its disposal.

It is a formidable task to work with a community to change customs, beliefs, and behaviour handed down for generations. But this is what much of development is about.

Teachers in health education can be chosen in each village. They do not need to be paid, but they do need training and support.

The most effective health education works through discussion and setting an example. In discussion it can be seen that health problems are a part of the wider problems of the community. Thus health education can be part of the job of community development personnel, of schoolteachers, agricultural extension workers, and many others. Health education can be promoted by politicians and religious leaders and can form part of mass literacy campaigns. Involving the community in finding ways of improving health care does not take costly staff or equipment, but it does take political commitment and community participation.

One or more persons from each village can be selected for practical training to give simple health care on a part-time basis, paid or unpaid. Such village workers, given necessary supplies, can make sure the local population is immunized, be on the lookout for environmental health hazards, and report outbreaks of serious infectious diseases. They can be trained to realize when assistance should be asked of professional staff. Such schemes are being tried in a number of countries, but may not be acceptable in every culture. 12, 13

Women in developing countries have for centuries had their babies delivered with the aid of traditional midwives, and small payments have usually been made for this service. In improving health care, it is usually better, when resources are limited, to give the midwife additional training than to replace her with trained personnel paid out of the health services budget. Given additional instruction, the midwife can also serve in the field of family planning.

Traditional medical practitioners are still widely consulted in many developing countries. An important contribution can be made by training such practitioners to abandon practices that do not promote health and to use scientific medicine. A limited number of drugs may be provided to such practitioners by the organized service, but there are dangers that the area of traditional medicine may be excessively promoted for political reasons.

It is clear that where there are few physicians in relation to population, many health needs will be unmet unless doctors delegate part of their responsibility to other staff. Delegation does not undermine the professional role: it enhances it. Delegation is a matter of economics in that auxiliaries can be trained at much lower cost than higher grades of professional staff. There is a strong case for ensuring that every high professional grade should be matched by a corresponding auxiliary grade. In rural areas, delegated responsibilities will have to be undertaken by multipurpose trained workers. If they are recruited from the villages where they will work, they will know the local culture and communicate better with the local community.

The sort of choices that may face a country planning its supply of manpower for primary care may be illustrated in the following example from the imaginary country Rupania. It is assumed that after allowing for costs of central administration, the annual amount of money for primary health care services for a population of 100,000 is 300,000 rupars. Out of this, 100,000 rupars are needed for supplies, transport, and other expenses, leaving 200,000 rupars for staff costs. Possible staffing options under these circumstances are shown in the following table.

<table>
<thead>
<tr>
<th>Grade</th>
<th>Annual cost per staff member (rupars)</th>
<th>Possible numbers in post</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. University training for 5 years</td>
<td>20,000</td>
<td>Option A</td>
</tr>
<tr>
<td>II. Secondary school plus 2 years' training</td>
<td>8,000</td>
<td>Option B</td>
</tr>
<tr>
<td>III. Primary school plus 6 months' training</td>
<td>2,000</td>
<td>Option C</td>
</tr>
</tbody>
</table>

In the first option, Option A, there are ten staff members, all university trained, or one for every 10,000 people. But one university-trained staff member cannot hope to make much contact with 10,000 persons.
In Option B, use is made of grade II and grade III staff members, but still only one of each for every 10,000 population.

In Option C, however, there is one grade III staff member per 2,000 population. One grade II staff member is available under this option to support every five grade III staff. Only Option C, or some variant of it, provides a reasonable prospect of ready access to primary care services for the whole population. Whether this prospect can be realized depends to some extent on the dispersal of the population to be served.

Preparation of staffing options along these lines is the key to the planning of local health services. Staffing decisions will determine the extent to which health workers can be specialized, the precise functions they should perform, and thus the training programmes needed. The content of training programmes will depend on the priorities of the health plan and on how much a student with a basic education can be expected to learn and put into practice. The amount a student can learn may determine for practical purposes the boundary between primary and secondary health care within the organization of services. From the staffing patterns will also flow decisions on what buildings, supplies, and other forms of support are needed.

In developing countries, where the bulk of the population is in rural areas, inpatient care must be provided very selectively if it is not to absorb an excessive share of the budget. It must be confined to those with a high probability of deriving a clear and lasting benefit from it.

Many developing countries have followed the example of more developed countries and have concentrated a high proportion of their health service expenditure on large urban hospitals, many of them teaching hospitals, equipped to provide tertiary care with advanced technology. Often these hospitals have been established before smaller district hospitals. As transport is not normally developed, these large institutions, intended to be regional hospitals, are mainly used to provide secondary care to the urban population. They are often used for patients who do not need them: the chronically disabled, children with malnutrition, and those with minor illnesses who could be treated in a much simpler hospital or at home. In some countries, outpatient departments of regional hospitals are even used for primary care.

Such hospital services as can be afforded for the rural population need to be small units, each serving several villages. In addition, mobile secondary health care service units can be established to visit villages, weekly or less often. Some simple surgical procedures that cannot be done by primary health workers can be performed on a day basis, if adequate postoperative nursing can be provided. Where resources are very limited, the maximum amount of health services must be provided without incurring the costs of inpatient care.

The typical hospital in the more developed countries consists of many floors and is equipped with elevators, batteries of electrical equipment, piped oxygen, and sophisticated supply and communication systems. Such hospitals are, in part, a response to the different relative prices of a richer society, and were often built without adequate examination of the merits of less expensive alternatives.

The economic background in developing countries is very different. Labour costs are low, and there is substantial unemployment. The price of land—even urban land—may also be low. A building built low to the ground will use more land than a high building, but this does not matter if the land is cheap. The need for staff to walk from one end of the hospital to another or to transport supplies does not matter if labour is cheap and bicycles are available. Ramps may seem to be a laborious facility for moving supplies and patients, but they do not break down and need almost no maintenance. A low building can be built by traditional methods using local labour and local materials.

Complex mechanical equipment usually has to be imported at a considerable cost in foreign exchange, and skilled personnel for maintenance and repair are generally in short supply and are needed to work in the manufacturing sector. Often there is not enough mechanical equipment of a particular kind in the country to justify the establishment of special maintenance firms. Thus, mechanical equipment in hospitals in developing countries is often out of order, awaiting repair and often the import of spare parts.

Equipment may be subject to frequent and dangerous stoppages if it is electrical and the local power supply is unreliable. A hospital built to operate with many lifts can be virtually paralysed if most of the lifts will not work, and emergency staircases are not usually designed for transporting supplies, let alone patients on trolleys.

Village dispensaries and other simple buildings can often be built by the local community as part of an action programme. The use of voluntary labour recruited locally encourages community interest in planned health services and paves the way for participation later in activities promoted from within the completed building.

Purchasing supplies on the basis of the lowest tender can often turn out to be expensive in the long run. What is bought may not be suitable for the conditions of use. Keys to effective purchasing are careful specification of product for appropriateness, effectiveness, and acceptability, the evaluation of goods in actual use, and ultimately bulk purchasing or contracting.
Because of difficulties in repairing equipment, items purchased should be reliable, durable, and simple to operate. Consideration must be given to local climate, especially to excessive heat and humidity. Staff should be trained to do their own simple repairs. This is especially important if they work in remote areas. Spare parts need to be readily available, and it is consequently a great advantage if equipment is standardized throughout the country. Otherwise, equipment is likely to be out of service for long periods while replacement parts or supplies are awaited.

Kerosene refrigerators, for example, need regular supplies of wicks and fuel. The use of microscopes creates needs for slides, cedar oil, and stains. Supplies and equipment should be appropriate to the conditions in which they will be used. For example, vehicles for use in rural areas must be equipped to stand rough handling and bad road conditions, but it is wasteful to devote such vehicles to essentially urban work. In some circumstances, hired commercial vehicles may cost less than government transport.

The general principle is to buy locally wherever possible to save on imports. Like other sectors of the economy, the health services sector can encourage the growth of local industry. The first local purchases may be more expensive than imports, and the finish on equipment may be poor. But price can be reduced and quality improved in time.

Imported pharmaceuticals are a major expense for health services. Their cost is often so great that not enough can be bought and supplies run out. Considerable skill is needed to buy wisely in a world market where there are enormous commercial pressures. Similar products can be found at widely varying prices, and the market abounds with products that are ineffective or unsafe.

A list of locally necessary pharmaceuticals should be compiled. Tenders for items on the lot should be examined to make sure the items are suitable for conditions in which they will be used. Developing countries can save imports by developing local processing, which in turn can lead to local manufacture. An intermediate step may be to arrange for local licensing or contract manufacture with a foreign firm that will supply raw materials and supervise local fabrication.

All over the world, health service staffs, even at the highest professional grades, are taught little about health services economics and often know little about the costs of the equipment and supplies they use. Doctors tend to seek what is new without regard to cost. They are also under considerable sales pressure from manufacturing firms. Cost-consciousness is not just for central administrators and planners, but should be taught to all working in health care. If no service costs more than is absolutely necessary, then more people can have health services. The price that is paid for high-cost technology for a few is no technology at all for the many.


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**Economic aspects of communicable diseases**


Illness is expensive, and health administrators are increasingly having to compete for scarce financial resources with other sectors of the economy. Despite the difficulty of assessing the benefits of good health in financial terms, this report shows that there are a number of relevant criteria that can be measured. For example, looking at the components of the infection cycle, the Working Group demonstrates how it is possible to choose the optimal method or group of methods for prevention, care and cure.

This publication is of fundamental importance to health policy-makers, health administrators, politicians and everyone concerned not only in finding the most efficient way of fighting communicable diseases in Europe but also in understanding how to make the most efficient use of scarce financial resources in the health sector as a whole.
Part 2: Issues in the financing of health services

The five articles in this section are concerned with the mobilization of financial resources for health. They contain substantial differences of emphasis and opinion.

Financing issues can be reduced to one central question: who pays? This gives rise to a multiplicity of secondary but important considerations of the effects of particular financing arrangements on the accessibility, availability, utilization, quality, and content of public and private health systems.

Tarimo reviews the priority of health as reflected in its command of national resources—as a percentage of gross national product. He also illustrates how, within a given budget, radically different health care delivery technologies are possible; the level and mix of health spending may therefore be distinguished as objects of policy analysis. Howard's article, which deals extensively with external assistance for health, nevertheless makes the point clearly that "the resources of the developing countries themselves constitute by far the major global resource for progress in health". Given this, the lack of long-run cost projections to allow modelling of possible scenarios for Health-for-All implementation is conspicuous.

De Ferranti, endorsing Howard's view, examines the prospects for mobilizing additional domestic resources through carefully selective fees, and through risk-sharing or insurance mechanisms. Clarity of purpose in the design of such measures is seen as crucial.

The Wolfsburg seminar report reviews a range of cost control, as distinct from financial mobilization, measures, taking as the starting point concern over the level of expenditure on health. Where Tarimo used the level of expenditure as a litmus test of commitment, this report takes public concern about the level of the health bill as indicative of the need to identify control mechanisms. Price competition, decentralized budget control, firmer regulation and insurance co-payment approaches are considered. Finally, health insurance arrangements as a basis for relieving financial pressure on overcommitted central governments are discussed from several viewpoints in the Round Table presented by Abel-Smith.

Can it be generally argued that cost containment is an imperative, any more than that more resources are needed? And how do potential improvements in the management of existing resources compare with financing changes as a means of improving the health system? A concern with cost-effectiveness, examining how well health systems deploy whatever they currently spend, rather than with levels of expenditure per se is surely more appropriate. Both issues deserve fuller consideration.
Good intentions are not enough

The percentage of the gross national product devoted to health in Africa is still low. Health has nevertheless improved, and the primary health care movement has caught on, but more attention must be paid to resources and management if good intentions are not to remain on paper.

What is happening in Africa now, six years after the Alma-Ata Conference? Most of the countries are signatories to charters for primary health care development, but is this apparent commitment actually reflected in national plans and programmes?

One question of fundamental importance has recurred constantly since Alma-Ata. Should the aim be to achieve overall socio-economic development as the foundation for health or is primary health care possible independently of such development? One answer is that to combat disease and its associated suffering can have a powerful moral effect and that health can be an entry point to development, even though there are few examples where this has happened. Another question is whether politicians can be persuaded to give preference to health as opposed to other sectors, though some would regard the question as naive.

Mobilizing Resources for Primary Health Care

Are countries providing adequate resources for health? The Alma-Ata Conference and the global strategy for health for all called on them to ensure that a reasonable proportion of the gross national product and of national government budgets is allocated to the health sector. In fact, the percentage of GNP devoted to health in Africa is low, less than 2% in half the countries, and the smaller the GNP the lower the percentage spent on health. Only Mozambique seems to spend more than 10% of the total government budget on health. While there has been an increase in the health budget of many countries by about 5% per year, inflation has been about 25%, and so the situation has actually deteriorated.

While community resources have been mobilized through contributions and donated labour, there is no evidence of any comparable allocation of government resources to support such community effort. What can be done? Countries that are spending only a tiny proportion of their resources on health need to take steps to rectify the situation, while those that already spend a reasonable proportion on health need to find ways of using those funds more efficiently and equitably.

The greater part of health care expenditure currently goes to the higher levels of the system, i.e., to the urban and specialized hospitals. If the primary health care principle of equity in health care is accepted, health planners must begin by taking stock of available resources, and then ask how they can be used to provide essential care to everyone.

Because the reallocation of resources is so difficult to achieve, it has been called the litmus test of political commitment to primary health care. It may be reflected in budgetary increases, in changes in staffing patterns or in special provisions for primary health care, e.g.,

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supplies. But it is usually difficult to measure, as few countries have an accounting system that shows how money is actually spent within the health care sector. In fact, the setting up of such an accounting system is an indication of political commitment to reallocating resources to primary health care and the first step towards doing so. Although many countries are emphasizing the provision of small health units, such as dispensaries, clinics and health centres staffed by auxiliaries, and are giving priority to underserved areas, few have managed to move far along this road.

The Decision-Making Mechanism

The important political decisions that have to be made require a high-level mechanism in government through which the issues of greater equity in health care, community participation, and intersectoral action can be debated, appropriate advice given, and decisions taken. This mechanism might take the form of a Cabinet committee or a more broadly based national health council, in which representatives from a range of political, social, and economic organizations participate with government ministers or senior civil servants. National health councils now exist in 22 countries in Africa, but there is little information on how they function or on how effective they are. Such information would be invaluable to others in their attempts to find better ways of coordinating intersectoral action.

One problem that national health councils are known to have experienced is a lack of adequate technical support. Issues must be well researched and policy options presented; so it is important for the Ministry of Health to bring together the individuals and institutes working in health development and research. Such a group, referred to in the health for all strategies as a national health development network, besides providing technical support to the national health council, should also plan programmes for the reorientation of health workers and carry out appropriate health systems research. Some decision-makers see the national health development network as threatening their authority while others regard it as their own supporting mechanism.

How effective are such networks? It seems that, as in the case of national health councils, much remains to be done. Plans and proposals for primary health care continue to pour into countries in the absence of any evidence that any national group really directs the process. A great deal of international guidance is offered that has nothing to do with the realities in individual countries. Responses to such guidance remain diplomatic and polite, but the guidance itself is often ignored. The establishment of national health councils and national health development networks can strengthen ministries of health, but it is important to review the existing structures within the ministry itself to ensure that they do not stand in the way of implementing primary health care. How relevant, for example, is the traditional division between preventive and curative activities in the ministries of health? Is the call for primary health care heard at a sufficiently high level in such ministries?

What Kind of Health Infrastructure?

Some sceptics maintain that, in view of the scattered nature of the population in rural Africa, the large distances between health units, the scarcity and high cost of transport, and the short time available for the achievement of the goal of health for all, we should forget about health systems where facilities exist for referral from the primary health care level to higher levels. We should instead concentrate on helping communities to select, train, and maintain their community health workers and that is all.

Others claim that it is too costly and difficult to develop an overall infrastructure capable of delivering the primary health care package
Health care—who pays?

Table 1. Health manpower "mixes" at similar annual costs

<table>
<thead>
<tr>
<th>Type of manpower</th>
<th>Manpower &quot;mixes&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A</td>
</tr>
<tr>
<td>Doctors</td>
<td>1000</td>
</tr>
<tr>
<td>Nurses (midwives), medical assistants</td>
<td>1000</td>
</tr>
<tr>
<td>Community health workers</td>
<td>–</td>
</tr>
</tbody>
</table>

outlined at Alma-Ata. We should therefore select three or four key programmes from which the maximum return can be obtained in terms of reduction in mortality and morbidity, and then attack the corresponding diseases. But if it is already too costly to establish a single overall infrastructure, how shall we be able to afford separate infrastructures for each of these three or four programmes? Or, if a single infrastructure is proposed for three or four programmes, does it really differ significantly from the overall infrastructure capable of delivering the eight components of primary health care?

What Kind of Health Manpower?

Few countries have decided on the numbers and types of health manpower required. Such a decision should be based on the need to use available resources to provide coverage to all. For example, the annual costs of the four "mixes" of health manpower shown in Table 1 are about the same. Some countries in Africa may have (or be producing) more doctors than they can afford, and their needs might be better served by changing the "mix" of their health staff to include a larger proportion of less highly trained personnel.

Lack of motivation, currently a serious problem, shows itself in several ways, ranging from indifference to deliberate slowness in working. It is often wrongly attributed to lack of managerial ability, and when management experts are called in to organize courses there is little lasting effect. Lack of motivation is more often due to lack of incentives, hence the importance of involving all professional groups in the planning and implementation of primary health care. Few countries, however, have organized extensive orientation programmes in primary health care for their health workers and professional groups.

Community health workers are extensively used. A study (1) of the criteria for selecting them, the available training and learning materials, the training of teachers, continuing education, supervision, remuneration, referral, and logistic support was carried out in 17 countries, including 5 in Africa: Benin, Botswana, Ethiopia, Liberia, and the Sudan. The term "community health worker" covers a wide variety of personnel, e.g., aid-post orderlies, "barefoot doctors", and auxiliary health workers, with training ranging from a few weeks to several years. This made comparison difficult, but the need for such workers to be selected by the community, and preferably to come from the community itself and to reside in it, was clearly demonstrated. There is considerable variation in the training programmes for community health workers owing to the differences in the tasks to be performed by such workers and the size of the population to be served. To be really effective, the population for which a community health worker is responsible should be small—no more than 10–20 families. A health worker dealing with many more people is really a health service official.

Many countries that have trained large numbers of community health workers have learnt the hard way the importance of establishing

To be really effective, the population for which a community health worker is responsible should be small—no more than 10–20 families.

health centres and first-level hospitals to support primary health care. Where such support has not been available, community health workers' programmes have just withered away.

Remuneration remains a thorny issue. In 11 of the 17 countries involved in the study, com-
Community health workers received a government salary, but in one of them the fee-for-service system was used. Various mechanisms for the payment of primary health workers were in operation in different countries—payment by the production brigade of which they are members (China), assistance through farmers' associations (Ethiopia), an honorarium from the government (India), and free medical care from other health services (Thailand). The experience of these and other countries indicates that, where community health workers have to spend several hours a day on health work, it is important to ensure that they are adequately remunerated. How else can they live?

**Essential Drugs and Traditional Medicine**

In addition to the difficulties resulting from the enormous distances between health units and the cost of transport and petrol, shortages of drugs seriously affect the overall health effort in Africa. Typically, a country may be able to afford only a 3–6 months' supply of drugs under present conditions.

The first step in dealing with this problem is to establish a national list of essential drugs, so as to ensure that the really indispensable drugs are available to the majority of the population, rather than a wider selection for the small proportion of people covered by hospital services. Many countries in Africa have yet to take even this step.

With the rapid expansion and acceptance of Western medicine, many health professionals feel that traditional medicine is on the decline and is not worthy of serious attention, but it is part of African culture and most of the population in Africa, both rural and urban, use and will continue to use the services of traditional practitioners. This is a reality that must be reckoned with and increasingly reflected in national policies. Whether traditional medicine and Western medicine can be integrated is another question.

**The Role of External Agencies**

At Alma-Ata a call was made to the more prosperous countries to increase their support for primary health care in the developing countries. Unfortunately, some donors have interpreted this to mean that they should be involved only in peripheral activities and not at the referral levels. This goes against a fundamental principle of primary health care, namely that local initiatives and self-reliance must be promoted and external support channelled to areas where local initiatives are not enough, e.g., the construction of appropriate referral hospitals and the provision of essential supplies. The term "appropriate" is emphasized because some countries donate large, luxurious hospitals that are totally inappropriate to local needs and the maintenance costs of which absorb a major part of the national health budget, effectively blocking any improvement in general health services.

The aim in primary health care must be an appropriate mix of health units and a proper balance between the various types. A number of external agencies seem to be more interested in providing funds for planning, research, monitoring, and evaluation than for implementation. There are, in fact, several projects in Africa with ample resources for monitoring and nothing to monitor!

**Achievements and Problems**

Apart from Mauritius and the north African countries, the global malaria eradication campaign introduced in the 1950s has had very little effect in Africa, where malaria remains the single most important disease, and the situation has not improved in the last 30 years. Recently, many countries have introduced large-scale programmes for chloroquine prophylaxis and treatment through primary health
Innovative approaches in maternal and child health include using the attractions of curative medicine to bring mothers and children to clinics and then to ensure that no-one leaves without coming into contact with the appropriate immunization, family planning, and antenatal care services.

In about 50% of countries, immunization is being provided together with maternal and child health or general health services, and this percentage is increasing. Although still far from complete, coverage has been steadily improving in recent years. Recent estimates (1981–83) by the Expanded Programme on Immunization for the countries in the African Region of WHO give the following figures for the coverage of children in the first year of life: BCG 24%, DPT 14%, polio 12%, and measles 16%.

In addition, 6% of pregnant women were immunized against tetanus. Maintaining the "cold chain" remains the biggest problem, and a number of countries report continuing measles outbreaks despite vaccination.

If we are to reach all children by the year 1990, the integration of immunization with maternal and child health care would seem the most practical approach.

All countries stress the importance of health education but this is more in the nature of lip-service because health education programmes receive little support and have to operate with inadequate techniques and small budgets, seldom amounting to more than 0.5% of the entire health budget.

Is Health Improving in Africa?

Over the period 1960–81, all countries in Africa have experienced significant reductions in infant and child mortality and consequent increases in life expectancy at birth (see Table 2), but the infant mortality rate is still very high and exceeds 200 in some countries.
Data for use in monitoring and evaluation are usually inadequate. Those that are available (often abundantly) are only marginally relevant while more useful data are lacking.

The improvement of health information systems was the subject of the technical discussions at the WHO Regional Committee for Africa in 1980. Few countries, however, have developed an effective system, and even where information is being regularly collected its processing, analysis, interpretation, and dissemination often involve long delays so that timely action is prevented.

Overall, health is improving in Africa, at least as measured by the health indices mentioned above, but this is part of a long-term trend and is very far from uniform, either between one country and another or within a particular country. If infant and child mortality rates are already high at national level, it can be imagined how frighteningly high they must be among the poorer sections of the community. It is among these groups—the slum dwellers and those living in the rural areas—that primary health care should have its greatest impact, and it is important that a proper baseline be established and documented so that the effect of the measures introduced may be assessed.

* * *

The primary health care movement has caught on in Africa. There is widespread understanding of the concept and a general commitment to its implementation. Mechanisms to plan the needed changes in health systems and to monitor their implementation have been set up in many countries. Nevertheless, considerable difficulties are being experienced in establishing the primary health care infrastructure, due mainly to management and logistical problems, and particularly to shortages of drugs, transport, and essential equipment.

There is, moreover, little evidence of the reallocation of health resources in favour of underserved populations, of an increase in the share of the national budget allocated to health, or of large-scale efforts to overcome management problems.

Without attention to these key elements—budgetary reallocations, an increase in resources, and better management—the good intentions so often expressed of providing primary health care to all will come to nothing.

REFERENCE

Lee M. Howard

What are the financial resources for "Health 2000"?

The "overriding priority" given by the World Health Assembly in May 1979 to the target of attaining health for all by the year 2000 placed before WHO the greatest challenge in its history. Never before had Member States concurred in an organizational initiative of such magnitude, the success of which would depend on technical strategies not yet fully determined, on the mobilization of financial and professional resources not yet firmly committed, and on systems of bilateral and multilateral coordination not yet operational. The estimation of available financial resources is one of the first issues to be considered if the expectations generated are to be realized in as short a period as two decades.

Since the improvement of health in a population requires developments in more than one socioeconomic sector, the aim must be to assess the total domestic and external resources for all sectors and to identify, where feasible, the resources allocated for purposes that support health improvement. Within the health sphere it is important to estimate the size of resources in both the public and the private sectors. Unfortunately, other than the aggregated economic data provided by the United Nations system and by the Organization for Economic Cooperation and Development (OECD), current data on national health budgets and the flow of donor health funds are difficult to obtain. Without a better understanding of the total resource base, estimations of the available support for efforts towards Health for All must remain conjectural.

While reliable data are seldom obtainable, it is possible to discern initial trends and problems from the data in the table, which is adapted from the 1978 review of the work of the OECD Development Assistance Committee (DAC).

Resources in the Developing Countries

From the OECD grouping of 107 low- and lower-middle-income countries, the table includes only the poorest 68, i.e., countries with per capita incomes below $700. If China is excluded, the remaining 67 countries represent over three-quarters of the population of developing countries with per capita incomes below $1000, and are those with the largest number of "absolute poor" (OECD/DAC definition). Although these countries have reported per capita public sector health expenditures varying between $0.58 and $27.00 for the low-income group and between $0.67 and $12.00 for the lower-middle-income group, data from both groups and from China suggest that allocations of national funds for the public sector of health do not exceed 1% of the gross national product (GNP). Total estimated allocations in these countries, excluding China, are $1.7 billion for a population of 1330 million (low-income group) and $1.1 billion for a population of 244 million (lower-middle-income group). What we do not know is the magnitude of health expenditures in the private sector. Studies by WHO and others have suggested a ratio of about 1:4 for public/private...
Estimated public- and private-sector health expenditures for selected groups of developing countries in relation to GNP and per capita income classification (1976 figures, except for China)

<table>
<thead>
<tr>
<th></th>
<th>Low income</th>
<th>China (1978 estimates)</th>
<th>Lower-middle income</th>
<th>Upper-middle income</th>
<th>Higher income</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of countries</td>
<td>39</td>
<td>1</td>
<td>28</td>
<td>28</td>
<td>17</td>
</tr>
<tr>
<td>Average annual per capita income (US$)</td>
<td>&lt;300</td>
<td>400</td>
<td>300-</td>
<td>1 000-</td>
<td>2 500-</td>
</tr>
<tr>
<td>Population in 1976 (millions)</td>
<td>1 330</td>
<td>930</td>
<td>700</td>
<td>378</td>
<td>79</td>
</tr>
<tr>
<td>GNP in 1976 ($ billion)</td>
<td>220</td>
<td>372</td>
<td>170.6</td>
<td>480</td>
<td>270</td>
</tr>
<tr>
<td>Average per capita health expenditure ($)</td>
<td>1.2</td>
<td>3.1</td>
<td>4.5</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>% GNP allocated for health: public sector</td>
<td>0.77</td>
<td>0.78</td>
<td>0.64</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Total health expenditure: public sector ($ billion)</td>
<td>1.7</td>
<td>2.9</td>
<td>1.1</td>
<td>4.8</td>
<td>2.7</td>
</tr>
<tr>
<td>Total estimated private health expenditure ($ billion)</td>
<td>6.8</td>
<td>—</td>
<td>4.4</td>
<td>19.2</td>
<td>10.8</td>
</tr>
<tr>
<td>Total estimated public + private health expenditure ($ billion)</td>
<td>8.5</td>
<td>—</td>
<td>5.5</td>
<td>24.0</td>
<td>13.5</td>
</tr>
<tr>
<td>Estimated &quot;absolute poor&quot; (%)</td>
<td>45</td>
<td>—</td>
<td>15</td>
<td>8</td>
<td>5</td>
</tr>
</tbody>
</table>

a DAC/OECD classification adapted to include 68 low- and lower-middle-income countries for which health expenditure data were available.


It is all too easy to agree on objectives when there is no agreement on how the bill is to be paid!

Assuming this to be a reasonable approximation, what is the actual total availability of health resources in the poorest developing countries? Based on the 1:4 ratio, would the total availability of resources in these countries (excluding China) reach an order of $8.5 billion for the low-income group and $5.5 billion for the lower-middle-income group, a combined total of $14 billion? Assuming the higher- and upper-middle-income countries spend no more than 1% of their GNP on the public sector of health, i.e., $7.5 billion, which on the 1:4 ratio would mean an estimated $30 billion spent in the private sector, the total health expenditures by these countries would add up to $37.5 billion, as shown in the table. How far is it beyond the capacity of these 67 poorest countries (excluding China), with a combined GNP of the order of $190 billion, to increase the total current public health sector investments above $2.8 billion? Would an increase from 1% of GNP to 2% of GNP in the allocations for health expenditure be considered politically and economically feasible for these poorest countries?

The resource base of the poorest countries may be small in relation to need. However, the combined private- and public-sector expenditure of the order of $14 billion, if confirmed, cannot be matched readily by present or foreseeable levels of external health resources, which are currently estimated to be of the order of $3 billion. The resources of the developing countries themselves constitute by far the major global resource for progress in health. The necessity for planning essentially within the bounds of national limitations, using the available external resources only as a supplementary and for filling in

Health care—who pays?

unavoidable resource gaps, may require that Member States re-examine whether their national financial allocations for health are appropriate to their commitment to the target of health for all by the year 2000.

External Resources

With reference to the developing countries, the term "external resources" implies all external public- and private-sector resources—such as from developed and developing countries, multilateral banks and organizations, and externally sponsored voluntary and nongovernmental organizations. The number and diversity of actual and potential external sources for health assistance may be characterized in the following way.

(1) Donor countries with official bilateral (country-to-country) programmes which may include occasional contributions to multilateral institutions for joint multilateral programmes.

The 18 donor members of the Development Assistance Committee of OECD are: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Federal Republic of Germany, Italy, Japan, Netherlands, New Zealand, Norway, Sweden, Switzerland, United Kingdom, United States of America and the Commission of European Economic Communities.

The eight donor nations in Eastern Europe are: Bulgaria, Czechoslovakia, German Democratic Republic, Hungary, Poland, Romania, USSR and Yugoslavia.

Other European countries with donor activities include Ireland and Luxembourg.

The 13 countries of the Organization of Petroleum Exporting Countries (OPEC) are: Algeria, Iran, Iraq, Kuwait, the Libyan Arab Jamahiriya, Nigeria, Qatar, Saudi Arabia, United Arab Emirates, Venezuela, Ecuador, Gabon and Indonesia. An additional four oil-exporting countries offer a potential donor source: Bahrain, Brunei, Oman, and Trinidad and Tobago.

Developing countries providing direct assistance through technical cooperation among developing countries (TCDC) or other means; e.g., China, Cuba, India and the Democratic People's Republic of Korea.

Contributors to the WHO Voluntary Fund for Health Promotion.

(2) Multilateral organizations, including the United Nations system.


The European Development Fund of the European Economic Community: Belgium, Denmark, Federal Republic of Germany, France, Ireland, Italy, Luxembourg, Netherlands and United Kingdom.

The OPEC Special Fund (OSF); Arab Fund for Economic and Social Development (AFESD); Arab Fund for Technical Assistance to African and Arab countries; and the Islamic Development Bank.

(3) Nongovernmental and voluntary organizations, including foundations.

Estimates of contributions to health are of the order of $400-500 million annually out of a total reported private voluntary agency disbursement of $1488 million (in 1977). Global coverage in developing countries, extensive international sponsorship and long experience characterize this valuable collective resource. Some countries, e.g., the Federal Republic of Germany and the Netherlands, channel a significant proportion of their official concessional assistance through voluntary agencies.

(4) Private-sector trade.

International trade in pharmaceutical and medical supplies is not normally viewed as a "donor" source. In the context of identifying external concessional resources, official development aid is provided in the form of grants as well as low-cost long-term loans and other concessional assistance. To the extent that the private sector is prepared to offer concessional terms, such as the recent proposal by the pharmaceutical industry to supply essential drugs at low cost and to offer technical training facilities, the resources of this sector in drug research, manufacture and distribution should be identified.

Aggregate data on official and nonconcessional flows from major donors are available.

through the OECD and, for multilateral organizations, through the United Nations system. Systematic information on nongovernmental programmes is more difficult to obtain. There is not at present a global system or source which provides public, private, and voluntary health statistics from all donor countries and international organizations on such basic points as the number and distribution of countries being assisted, types of health assistance provided to each country, approximate funding, and official policies and attitudes towards the provision of assistance.

Total concessional and nonconcessional receipts by developing countries from all donor sources for all sectors reached $63.9 billion in 1977 and $78.39 billion in 1978. Large as these totals appear, they represent less than 6% of the estimated annual GNP of 152 DAC-classified developing countries. Two-thirds of these receipts ($44.39 billion) represent nonconcessional flows such as loans at conventional interest rates. Concessional assistance (official development aid), from which support for health, agriculture and education is usually derived, totalled $19.54 billion in 1977 and $22.47 billion in 1978—i.e., about 5% of the total GNP of the 107 poorest countries. Although three-quarters of this assistance is actually received by the 50 poorest countries, the flows are quantitatively marginal to the needs, though qualitatively they may be of critical importance. In view of the above facts, it is highly desirable to identify more positively all the available external assistance to help achieve the objective of health for all by the year 2000.

The 18 OECD/DAC donors, contributing about half of all concessional assistance for all sectors ($10 billion), allocate approximately 10% of their assistance to the health sector and about four times that amount to defined development sectors such as agriculture, education, trade, industry, and public administration. The DAC contribution for health in 1978 reached $1008 million, a figure that excludes significant additional amounts for technical advisory assistance. To this bilateral total for international health activities and support, the World Bank and the regional international banks add approximately $600 million. In addition, health activities are carried out by the following organizations to the amounts indicated: Pan American Health Organization, $45 million; the International Agency for Research on Cancer, $6.5 million; WHO Voluntary Fund for Health Promotion, $31 million, the United Nations Development Programme, $14.2 million; United Nations Environment Programme, $1.2 million; and the United Nations Children’s Fund, $86.3 million. WHO’s regular budget is currently $170 million a year. Private and voluntary contributions are estimated to be of the order of $300 million. To these estimates, which total around $2.5 billion, one must add the specific health sectoral contributions of OPEC, Eastern European countries, and the donor contributions of developing countries themselves, as well as components such as water supply and sanitation which often appear in sectors other than health. Unfortunately, data on these contributions are not readily available.

With present reporting systems, an accurate total of external resources cannot be obtained since reporting is incomplete and certain multilateral contributions may be counted twice. Assuming that the total annual concessional assistance for health may be as high as $3 billion, it is of interest to note that this is approximately equal to the estimated public sector allocations for health ($2.8 billion) by the 67 poorest countries (excluding China) and less than a quarter of the total estimated (public-plus-private) expenditures on health by those countries ($14 billion). Unless the proportion of resources from developed to developing countries undergoes a major change within the next decade, those who are planning health for all by the year 2000 will be confronted with the following important issues.

— How far can this goal be achieved with the resources now produced and allocated by the developing countries themselves?
— Given the marginal contribution of external resources to the total needs, what is the most effective way to apply these resources?

— How best can WHO, with only a very small fraction of the total global health resources (about 2%), help to rationalize and mobilize external resources over the next two decades?

— By what international mechanism is it possible rapidly to engage the cooperation and support of sectors other than health, which are prerequisites to health improvement?

**Resources: What are the Requirements?**

In the absence of quantitatively defined targets, the resource requirements will vary with the goals and current state of development of each government. Many countries project plans for several years ahead, but few have estimated the health sector’s requirements for the remaining two decades of this century.

If the “health for all” target means the establishment in each country of a nationally affordable system to meet the most essential health needs in an equitable way, the resource requirements would, by definition, approximate the national resource availability. The need for external resources within the next 20 years would not be as critical as the size of currently available national resources and the efficiency with which they were distributed. The size of the sector would reflect national political and economic priorities.

If the “health for all” effort were not rigidly time-bound and aimed instead at an improvement of health levels in parallel with multisectoral development, the resource requirements for health would need to be adjusted to the rate of growth of socioeconomic development as a whole.

For countries that consider the target to be a national medical care system, the resource requirements could well exceed the practical availability of both internal and external resources.

For the purposes of long-term cost projection, therefore, the intent of governments is a determining factor. The World Health Assembly has encouraged Member States to submit, by May 1981, national plans which may indicate the magnitude of the global requirements.

Considering first of all the idea that resource requirements should at least be sufficient to provide a socially equitable and affordable system of essential services, we may note the preliminary cost estimates of experimental primary health care models, which suggest that an additional $1–2 per person per year above the current $1–3 now allocated in the public sector for health might permit a minimal system for the poorest countries. The additional cost for the 1.6 billion population in the poorest 67 countries (excluding China) would therefore be $1.6–3.2 billion per year. Current public expenditure for health in these same 67 countries is now estimated to be at least $2.8 billion. Public-plus-private expenditure is estimated to be of the order of $14 billion. In relation to current availability, to what degree are external resources essential? At the minimum level, is the issue one of intragovernmental sectoral priorities and political commitments rather than one of the availability of financial resources? Even if this were the case, of course, there would still be a need for support in the technical design, training, management, and evaluation of such a system.

Let us now consider the second possible meaning of “health for all”—namely that a country should progressively accelerate its level of health improvement in balance with other development sectors and with the available internal and external resources. In this case it becomes difficult to estimate the continuously changing resource requirements over the two-decade span. The process of costing, adjusted to the rates of socioeconomic growth, is not unreasonable, but the time frame becomes arbitrary. Social equity at a minimum level of health will change in the course of time to social equity at progressively higher levels of health. The year 2000 then becomes not so much a “target” as a milestone en route to the year 3000!

This second meaning, nevertheless, offers a reasonable approach for the coming two decades, even though it does not lend itself readily to long-term quantitative estimation of
resource needs. The principal issues of the North-South Dialogue, the New International Economic Order, and the New International Development Strategy relate to conditions that permit development as a whole, not just progress in the health sector. These conditions, together with the economic and social priorities, and the rate of overall development, determine the resource availability within which each country must make its own sectoral choices. In practice, the development policies of individual countries at the planning commission level, together with current donor agency policies for country assistance, will largely determine the potential availability of resources for health. If primary health care components such as water supply, maternal and child health, malaria control, or family planning are to be globally implemented, the estimated financial requirements will be closely related to the rates of developmental growth and to the decisions of national leaders on how the resources are to be allocated.

The practical question in relation to resource requirements for the "health for all" effort is not necessarily that of estimating average per capita costs over the next two decades. Rather, it concerns the adequate training and preparation of health managers to enable them to match the estimates with the continuously changing configuration of economic growth and social commitment.

What is the Outlook?

It would be easy to dismiss resource forecasting out of hand because of unpredictability over the next 20 years in fiscal, social, and political matters. It would not be responsible, however, to make projections on the success of an international initiative such as that of health for all by the year 2000 without regard to the availability of resources. Indeed, it is all too easy to agree on objectives when there is no agreement on how the bill is to be paid!

If the achievement of health for all is based upon the Alma-Ata concepts of primary health care and if solutions are adapted to the current availability of resources, the principal requirement is for innovations in the effective use of existing resources. There is a need for minimum additional resources to permit the testing and assessment of innovations and to fill scarce resource gaps, but less need for large subventions to the public sector budget. Any extra support to the public sector budget for health in a developing country should be seen only as a temporary and progressively decreasing process, which would allow a reasonable and steady development of the health sector until the country is capable of continuing on its own.

If, on the other hand, the guiding principle is the "attainment... of a level of health that will permit... a socially and economically productive life", the objective becomes a continuously moving target linked to the varying developmental aspirations of each nation. In this connexion it is of interest that the Development Assistance Committee of OECD notes that 60% of developing countries have shown an annual per capita income growth of about 1.5% over the past 15 years. This trend is predicted to continue except where new resources such as oil are developed or where the terms of trade and productivity significantly improve. The World Bank foresees that, by the end of the century, vast amounts of absolute poverty will remain, largely in Africa and Asia, because the advance of agricultural growth rates through a large range of crops is slow and difficult.

Other countries, the "middle-income countries", will make more rapid progress. In 40% of developing countries, including Brazil, China (Province of Taiwan), the OPEC countries, the Republic of Korea, Thailand, and Tunisia, the rates of growth have doubled over the past 15 years to an annual 4.3%. However, few would predict that growth rates are again going to double or triple by the end of the century.

Donor assistance (both concessional and nonconcessional) to all sectors has grown from $8 billion in 1960 to $78 billion in 1978. The rate of growth of official development aid is about 7% per year. Total assistance in 1978 was equivalent to only 6% of the GNP

of developing countries. It is obviously feasible for the donors to expand beyond the current level of their contributions, which averages 0.17% of the GNP of the donor countries. Nevertheless, there is no sign that the annual growth of official development aid will significantly increase over current rates.

While the current trends for general development funding might be assumed to continue to the end of the century, the outlook for the allocation of health funds within this general funding is less certain. At present about 10% of donor concessional flows go to the health sector. With no specific policy or principle to restrict the percentage allocated to health, the potential for increasing that percentage and influencing the technical content of programmes will depend on the justification of the health sector's needs by personnel within the cooperating governments and the bilateral and multilateral organizations.

It is not unthinkable that the estimated current official development aid flow of $3 billion for health in 1978 could be increased by an additional 10% per year under current donor guidelines. Consultative visits to European and Pacific donor countries in early 1980 made it evident that the potential for further health allocations has by no means been fully explored. The potential for increase does not include all donors, some of whom are fully committed at present and are candid about their limits. Others are willing to help further, subject to dialogue with an international organization such as WHO to negotiate new agreements.

A very important element in the outlook on resources is the future size of health sector allocations by the developing countries themselves. As noted earlier, current public sector allocations within those countries are estimated to be $2.8 billion for the 67 poorest countries, excluding China, which is expected to allocate about $2.9 billion. Private sector health inputs in these countries, excluding China, are estimated at $11.2 billion. Total public and private resource availability is of the order of $14 billion. Considering the low priority commonly accorded to the traditional health sector in developing countries, there are, in countries where there is progress in health development, good prospects for increased allocations that are proportionately greater than the rate of economic growth. Not all developing countries are poor in resources in absolute terms. There is considerable room for an increase in health sector allocations, even at the anticipated 1.5% annual average growth rate. Support for training that will improve the planning capability of health managers in developing countries could lead to more convincing justification of the claims of the health sector compared with other development sectors, and this could have a major impact on the prospects of improving future resources.

Important as the above may be for resource development, it would be erroneous to suggest that such an increase will produce measurable per capita benefits for the world's poor. The outlook for economic growth for the world as a whole over the next 20 years is not bright. Energy crises, increasing balance of payments deficits, external debts, food shortages, and continuing high rates of population growth will adversely influence the prospects for increased resources.

With regard to family planning, it is generally acknowledged that current efforts will not have a global impact until well after the turn of the century. While it must remain a high priority for health, as well as for its general demographic effects, family planning is not expected to yield major economic changes in the next ten years.

* * *

There is little room for optimism about the outlook for major increases in health resources within the next two decades. The principal resources are within the developing countries themselves. The strategies for health for all by the year 2000 must necessarily fit within those constraints. The relatively marginal potential increases from donors will need to be used with the greatest care to provide knowledge, training, and preparation to meet the rigorous planning requirements at the country level. To create expectations beyond the wisdom of self-reliance and self-sufficiency would be to render a real disservice to the efforts, goodwill, and sincerity that underly Health for All by the Year 2000.
What should the governments of developing countries do to cope with the present crisis in the financing of health services? Current policies have failed to mobilize enough financial, human, and other resources to meet existing or anticipated needs. A sense of urgency has begun to emerge in recent years as the extent and severity of the problems have been better recognized. With respect to the health-for-all goals, there is now a greater appreciation of the size of the resource gap, estimated by one source at US$ 50 billion annually for the developing world as a whole (1). This figure is more than 14 times the current total amount of external assistance for health (2).

Current policies also have other, more fundamental shortcomings relating to efficiency and equity issues. Heavy reliance on taxation to finance health services often adversely affects the efficient allocation and use of resources, especially when taxes are distortional or costly to collect. If, as often happens, inefficiency is accompanied by disparities in the distribution of services, equity is also diminished. Furthermore, present policies have not usually been designed with much consideration of the incentives they create or reinforce, or of their impact on the behaviour of service providers, users, and government agencies.

Would alternative approaches lead to something better? Answering that question is seldom easy, since many alternatives would be improvements in certain respects but not in others. The options available to governments are generally thought to include mobilizing additional resources (a) from outside the health sector or (b) from inside the sector through increased cost recovery from users. Another option is to alter the organizational make-up of health care delivery.

**Mobilizing Additional Resources from Outside the Health Sector**

There can be little hope that funds from outside the health sector will do more than rise slowly in the next 5–10 years. In some countries a period of no increase or even of real decrease (after adjusting for inflation) may occur. This is not to say that pressing for larger outlays is a mistake; but if ardent promotional efforts are allowed to suppress hard thinking about more realistic options there may well be little to cheer about in the year 2000.

Aid from developed countries and international institutions is limited. The total amount of aid in 1979 has been estimated at $ 3.5 billion (1). There is little likelihood that it has risen much since then and even less chance
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that it will soon reach the $7–30 billion that some say would be needed to attain the health-for-all goals. In the early 1980s, external aid for all sectors has fluctuated between approximately 3% and 13% above the 1979 level, but health’s proportion has not increased and may even have fallen.

Prospects for increases in domestic public spending on health appear equally unpromising.

Over the last decade, real public expenditure per capita on health exhibited a rising trend in some 34 of 47 countries studied, a falling trend in about 8, and a fluctuating or constant pattern in the remainder. Among low income and upper middle income countries, the number with a rising trend was double that with a falling trend. In the lower and upper middle income groups, gainers led losers by 4 to 1. Over the same period, health’s share of total public expenditure fell in 25 countries and rose in 14. In the low income group, falling trends dominated (11 of 14), as they did also in the upper middle income group (7 of 11); but they were in the minority (7 of 22) in the lower middle income group, which had 12 countries with rising trends. Unfortunately, the path of private spending over time cannot yet be similarly documented.

Present financing policies have not usually been designed with much consideration of the incentives they create or reinforce.

The evidence suggests that government spending on health services in developing countries has been increasing in real per capita terms in many places but not universally and drifting downward as a percentage of total public expenditure, though again not uniformly.

Overall, current trends do not appear even remotely likely to lead to substantial global increases in health spending by the governments of developing countries. For many countries, the key question about government outlays for health in the years ahead will not be whether new plateaus can be reached but whether old ones can be maintained.

A related question often raised is: how has health, a social sector, fared in comparison with other sectors in recent years, particularly during periods of economic downturn? Data analysed by Hicks (3) show, contrary to common perceptions, that the social sectors, and health in particular, have experienced smaller declines in their budget allocations than other sectors during recent periods when public expenditure in total has fallen in real terms. On the other hand, during periods of rising public expenditure, health and other social sectors have done less well than sectors such as agriculture and industry.

There are enormous differences in health expenditure per capita between the poorest and richest countries: in 1980, public health expenditure per capita ranged from below $2 to over $600. The share of GNP spent on health rises as income level increases, although this relationship is weaker among developing countries than it is among industrial nations. There is also a positive but weak correlation between income level and health’s share of total government expenditure.

A large proportion of spending on health is private; in some countries—e.g., Burkina Faso, Haiti, and the Philippines—private spending is more than double public spending. Household spending on health as a proportion of household income tends to be between 1% and 5% in most countries.

Mobilizing Additional Resources Within the Health Sector

The bleak outlook for funding from outside the health sector has lent added urgency to the exploration of options for mobilizing additional resources within it. In essence, this means considering whether households should pay for services, and if so, what form such payments should take. The only other potential sources within the sector are providers and financial intermediaries, and their need to cover costs with fees, donations, or subsidies casts them more in the role of conduit.
Household payments can be classified either as user charges or as coverage charges. The former include any type of payment that is directly related to use and varies with the amount of use—e.g., fees for services and prices for medicines, either of which can be in cash or kind. Coverage charges do not depend on the amount of use and serve essentially to ensure the household’s eligibility to receive treatment from participating providers when needed, usually at reduced or zero charge. Familiar examples include insurance premiums, membership assessments by cooperatives, and deductions from pay for employer-sponsored health plans. Whereas user charges fall exclusively on the ill, coverage charges are made on all participants to subsidize the cost of treating the ill. Coverage charges thus are closely bound up with risk sharing.

User charges

User charges are viewed with disfavour in many countries. Until very recently there was a trend towards reducing or eliminating them in public facilities, and some governments have reaffirmed that a free health service should be a basic right for all their citizens. Nevertheless, user charges are still widespread in the developing world. Most private spending on health is through user charges, and private expenditure accounts for a large fraction of total health expenditure—larger, often, than in the developed countries. Furthermore, public services, despite rhetoric to the contrary, do have charges in many instances, although the revenue usually represents a small proportion of total expenditure.

As countries assess possible policies on user charges, their planners should be aware of three points. The first is that different strategies will often be appropriate for different types of service. Health services are extremely heterogeneous with respect to the arguments for and against user charges. For instance, services like environmental intervention (e.g., removing vegetation from stagnant waterways to control schistosomiasis) have very little in common, in terms of attributes relating to user charges, with services like out-patient consultations, drug sales, or elective cosmetic surgery. To lump together these diverse activities when user charges are discussed can be misleading.

Second, there is a difference between (a) user charges that are nominal amounts intended principally to deter unnecessary utilization of services by households and that are not expected to generate large revenues and (b) user charges that are more substantial, reflecting additional objectives (e.g., greater cost recovery and/or marginal cost pricing). Many of the charges made at public facilities are of the nominal sort.

Third, while discussions of user charges tend to focus chiefly on public facilities because governments have less control over private providers, it should be remembered that substantial fees exist already in the private sector, accounting for a significant portion of total health expenditure. Policies on charges for public services should be designed with an awareness of the opportunities that households have on the private side and of how they react to them.

Bearing these points in mind and taking distinct types of service one at a time, planners will normally need to ask themselves several key questions before reaching decisions about charges. Although the choice made will understandably vary markedly from one set of circumstances to another, some services will frequently be suitable for expanded application of user charges, while others will be candidates for exemption from charges. An illustrative classification of services is presented in the table.

For the services in Group I, user charges will typically be impracticable or socially undesirable. These Group I services are provided predominantly or exclusively by the public sector, and exempting them from charges will not result in any incompatibility with private sector charging practices.
Suitability of health services for user charges

Group I (least suitable)

- Disease control programmes, including
  - vector control (e.g., spraying against malaria mosquitoes)
  - population prophylaxis (e.g., mobile teams that immunize or deparasitize whole villages)
  - environmental intervention (e.g., removing vegetation from stagnant waterways to control schistosomiasis)

- Sanitation
  - human waste disposal
  - general sewerage
  - inspection (e.g., of food purveyors and processors)

- Education and promotion on health and hygiene
  - through institutions (e.g., schools)
  - through media (e.g., radio, posters)

- Control of pests and zoonotic diseases
  - in domesticated animals
  - all other

- Monitoring (e.g., for outbreaks of communicable diseases)

Group II

- Maternal and child health out-patient services (mostly preventive care for well patients)
- Family planning
- Preventive aspects of village health services
- Rural water supply

Group III (most suitable)

- General out-patient services (mostly consultations for ill patients)
- In-patient services
  - general (bed and nursing)
  - special services (deliveries, surgery, etc.)

- Curative aspects of village health services
- Drug sales to individuals (excluding medicines used as an integral part of other services mentioned above)
- Urban water supply

Group II services are more borderline. For several of them, prevailing opinion tends to oppose charges strongly. Yet fees are possible and already exist in many private facilities. Whether they are desirable or not depends on the situation. In general, countries should strengthen their policies with respect to Group III services first, before cautiously considering charges for Group II.

Group III services account for the largest share of total health expenditure, amounting to 50–80% in many countries. User charges are prevalent among private providers and at some public facilities. In general, greater use of well-designed fees at public units would be beneficial. For out-patient services, a minimum first step would be a nominal charge for a first consultation on a given illness episode, with no extra cost, irrespective of the follow-up care needed.

This nominal fee might be determined in relation to the daily agricultural wage, the aim being to promote the more efficient use of resources, e.g., where too little is currently spent on essential and cost-effective activities because valuable staff and supplies are overburdened with treating minor cases. Concerns about whether households would be able and willing to pay an access fee may have been exaggerated, given the accumulating evidence that they are not easily dissuaded by price from seeking essential medical care (4–6). Also, households in many countries are reported to spend much more on traditional practitioners than they would have to on modern providers.

In addition, there will be some circumstances where a higher than nominal access fee will be appropriate, bearing some relationship to the long-term marginal cost. This does not mean that the access fee has to equal the long-term marginal cost (usually there will be good reasons why it should be lower) or that elaborate calculations of cost functions are necessary. Rather, planners should at least think about the cost and develop some rough idea of what the long-term marginal cost of providing the services might be; and if they adopt lower fees they should be clear about their reasons.

Deciding what to do for in-patient services is more difficult. Since they are provided in response to referral by doctors and are seldom initiated by the patients themselves, it can be argued that in-patient fees might deter patients from complying with the recommendations of those best equipped to know what services are needed. Also, if fees benefit providers personally there is an incentive to prescribe more treatment than is justified. Patients cannot themselves easily determine what is best. For these and other reasons, policies involving itemized charges for diverse kinds of in-patient services should often be avoided. However, the issue of overprescription by providers is not always a serious concern, either because the
gain is insignificant (e.g., if fees are low or revenue does not return to individuals) or because the providers adhere to high professional standards. In such circumstances there may be merit in applying a simple fee for accommodation and nursing on a daily basis, with one charge for general wards and higher amounts for smaller wards, and possibly a few other basic fees (e.g., for drugs, laboratory work, and/or surgery).

Purists will object that even these fees would be ill-advised, in view of the referral nature of in-patient care. However, providers seeking to do what is best for their patients may not always do what is best for society. To serve the patient’s interest most efficiently, the Hippocratic oath enjoins providers to continue administering care as long as there is some net benefit to the patient. Yet this goal may be excessive from society’s standpoint, since it can lead to providing services that cost more than they yield in benefits (i.e., the marginal social benefit is less than the marginal social cost, implying that greater overall welfare could be achieved by using the same resources for other purposes). Fees, while not a flawless means of signalling resource scarcity to both providers and users, can none the less discourage some excesses.

However, before tampering with in-patient charges generally, consideration should be given to certain additional options. One is a bypass fee, which would be imposed, for example, on people going to hospital without stopping first at the local health post. Whether this sort of fee can be enforced effectively over a long period in developing countries has yet to be adequately tested. Another possibility, applied now in a few African countries, is to charge for the accommodation in the guest quarters at hospitals, where relatives come and stay with patients.

Coverage charges and risk sharing

Payments to obtain and keep coverage are the principal means of cost recovery for risk-sharing arrangements of diverse forms, including formal insurance, prepaid plans, cooperatives, community-based schemes, and health maintenance organizations. In some cases, coverage may guarantee eligibility to receive treatment at reduced or zero additional cost to the household. In other instances, it may mean that any fees incurred will be paid in whole or in part by someone else (e.g., by a third-party insurer or a cooperative).

Because coverage charges do not vary with the number of services received, they, like taxes but unlike user charges, contain no disincentive to households to curb over-utilization of health facilities. However, unlike taxes, some forms of coverage charge are voluntary, in the sense that the household can elect to cancel its coverage and spend its health outlays in some other way. Where this possibility exists, there is an incentive to providers and risk-sharing schemes to be responsive to household preferences regarding the type, quality, and cost of care offered. This feature diminishes as the household’s degree of freedom lessens. For example, where suppliers are few or employers provide only one coverage option the stimulus to efficiency may be modest. In the case of mandatory social security contributions, coverage charges become indistinguishable from taxes.

Risk sharing is attracting growing interest from both governments and donors as a possible alternative to having to choose between substantial increases in user charges on the one hand and continued gross underfunding of services on the other. In part, this interest derives from a sense that risk-sharing arrangements...
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an entire participant population, can raise substantial revenue. Furthermore, there is a widespread willingness to pay something for protection against being unable at some future time to obtain or pay for health care, even when the probability of this occurring is small.

Against these hopeful perceptions, however, must be set the reality that existing schemes have numerous shortcomings. Social insurance, employer health plans, cooperatives, and community-based systems have had mixed results.

Moves towards greater use of risk-sharing devices should be entered into only after careful planning, since mistakes are easily made and the price of ill-conceived ventures can be high. Serious consideration should be given to using a combination of coverage charges and user charges, rather than coverage charges alone, in risk-sharing schemes. The user charges would be set high enough to serve as a modest disincentive to over-utilization. They would thus foster efficiency on the demand side, compensating for the inability of coverage charges to do so; yet, unlike some other forms of user charges, they would be small enough not to raise major equity concerns. At the same time the coverage charges would accomplish the major part of the cost recovery. Any new initiatives in the risk-sharing field that do not involve a combination of coverage charges and user charges, or that would lead to diminishing or eliminating user charges, should be avoided. The combination of both types of charge should be introduced into existing schemes wherever possible. The introduction of new user-charge policies consistent with the points discussed above should not be delayed while new strategies are worked out for risk-sharing options. The development of risk-sharing devices will often be a long time in the planning stages and even longer in start-up.

Progress on user charges can be of considerable value in the interim period and can provide a good foundation for subsequent transitions to greater risk sharing.

Altering the Organizational Make-up of the Health Sector

Even with vigorous efforts to mobilize additional resources both inside and outside the health sector, many countries will still be faced with severe financing problems. Sound reforms in user-charge policies might raise the amount of revenue that public health facilities obtain from charges to as much as 25% of their costs. Higher levels within the next 5–10 years are extremely unlikely, given the hesitations that some governments may have or the resistance they may encounter. Other measures—in risk-sharing, restructuring of public subsidies, revamping of resource allocations, and additional areas—may help in some degree, but how rapidly remains uncertain.

Governments should re-examine the organization of their health sector by asking in effect (a) what sorts of public, private, and quasi-public providers and financing intermediaries there should be, (b) what roles they should have, and (c) what relationships should exist among them.

Deciding how much should be done by government in administering services directly and how much should be left to private entities is a key issue, to be resolved on the basis of efficient resource use. Certain special constraints reflecting national goals would also have to be met, particularly relating to equity (e.g., many countries would probably insist that all segments of their population should eventually have access to primary health care).

Whether private entities are more or less efficient than public facilities is a hotly contested issue. Most evidence is too anecdotal for general conclusions to be drawn, but it seems clear that, at least for some services and in some countries, government may not be the most efficient provider. A related consideration is that reducing the public role in service delivery diminishes requirements for scarce public funds. It must be stressed, however, that this may or may not increase efficiency for a country overall. Much would depend on the
service provision characteristics of both public and private sectors. As with user charges, different types of health service may call for different handling with respect to public, private, and quasi-public responsibilities. For each service, two preliminary questions must be considered before the most efficient approach is sought. First, can and would private providers deliver the service widely and on a long-term basis? Second, if they did, would the terms on which it was offered meet whatever special constraints were deemed societally important?

In delving into these questions, an assessment must be made of the extent to which market mechanisms would be able to lead to socially optimal amounts and allocations of expenditure.

For certain services there is little doubt that public agencies need to be the leading providers. Most of the Group I services in the table fall in this category. For other services (particularly those in Group III), the arguments in favour of a strong public role are not very compelling. A reduction or less rapid expansion of the government share in direct administration of Group III services may therefore be appropriate in some situations, if indicated on efficiency grounds. A first step would be to allow or foster further development of private or quasi-public institutions while restraining additional growth in public facilities. Devolution of control and private ownership could be considered later. Such a shift in responsibilities should be gradual to avoid dislocation, and may require a large public role initially. Also, although government authorities would be reducing their participation in the direct administration of services, they would often need to retain or even increase their activity in planning, monitoring, and regulation.

Other services (such as those in Group II) are somewhere in the middle with respect to public/private arguments. For pragmatic reasons, it may frequently be advisable not to alter existing policies for them until more clear-cut options relating to Group III have been dealt with.

Naturally, any changes must be made with due consideration for the existing institutional setting. For example, in situations where services from more than one group are provided jointly (e.g., health centres that offer both general out-patient care, from Group III, and immunizations, from Group II), trade-offs must be made in selecting the best overall organizational structure.

* * *

Other opportunities should also be explored for mitigating financing problems. Firstly, an attempt should be made to use the resources already available within the health sector more efficiently. Secondly, the application of public subsidies might be altered to increase incentives—e.g., by changing the emphasis given to (a) the funding of government facilities through budgetary channels, (b) the partial supporting of nongovernmental facilities, and (c) the reduction of the cost of services through public interventions affecting the price of inputs such as drugs and medical staff. Thirdly, attention might be given to reorienting activities in other sectors that have an impact on need for health care (e.g., increasing investment in water supply).

REFERENCES
Sharing the costs of health care

Conclusions of an international seminar¹ held at Wolfsberg, Switzerland, March 1979

The system of organizing and financing the health service exercises a major influence on the measures that can be taken to control the costs of health care. What will work in one country may not work to anyone’s satisfaction in another.

The social value of using resources on health care cannot be assessed without careful consideration of the objectives of the health care system. The explicit objective is to improve health—to reduce morbidity, postpone mortality, and give people a higher quality of life. The routes to achieve this can be preventing ill health, curing it when it has occurred, and enabling those whose conditions cannot be cured with existing knowledge to live as full lives as possible, despite their disabilities. People attach great importance to health once ill health has struck them. This is not disproved by the fact that many people take actions which they know places their health at risk—by, for example, smoking cigarettes, consuming alcohol in excess, driving motor vehicles after having consumed too much alcohol, and failing to use seat belts in cars or crash helmets when driving motorcycles. Although people take risks with their health, it is still true that health is regarded as of very great importance once the more basic needs are met as they are for most of the population in the more affluent industrialized societies. Studies show that people attach very great importance indeed to greater life expectancy. Hence it can be argued that more rather than less should be spent on health care services. This argument, however, does not take account of the fact that there are in practice technical limits to the extent to which health improvements can be provided with existing knowledge however much is spent.

Two findings stand out from a careful analysis of trends over the past few decades. First, the vast expansion of spending on health care has not brought commensurate returns in improved health, as judged by changes in standardized mortality rates. Secondly, in countries which have increased spending on health care much less than other countries (e.g., the United Kingdom) mortality rates have improved at similar rates and are in some respects better than those in countries such as France or the USA which have vastly increased health care spending.

This argument can however be challenged. Improved mortality rates are a grossly inadequate measure of what societies expect to obtain from increased health care spending. By analogy, it could be argued that developed industrialized societies are spending for too much on cars and that new cost containment measures should be devised to apply in this field in addition to present taxation of motoring. Judged by the objective of transporting persons and luggage safely and rapidly from one place to another, most current automobiles are grossly inefficient. They are generally too large, not as safe as they could be, and consume much more of the world’s limited petrol than is needed to do the job efficiently, and in the process, they impose pollution on other people. We tend to accept the present situation as right because existing vehicles appear to satisfy the needs of consumers, firms, and governments which buy

¹ The full report of the seminar, prepared by Professor Brian Abel-Smith, Rapporteur, has been published by the National Center for Health Services Research, 3700 East-West Highway, Hyattsville, MD 20782, USA, as one of its Research Proceedings Series: Sharing health care costs. Hyattsville, US Department of Health, Education, and Welfare, 1980, DHEW publication No. (PHS) 79-3256.
them. Presumably users are applying other criteria than the narrow efficiency criteria defined above. They are concerned about space inside vehicles, comfort, accessories, the status conferred by the particular vehicle used, and many other considerations. On this analogy, simple judgments cannot be made about the value of health care spending. It is not just an investment to obtain better health, there is a considerable element of consumption. People want reassurance, comfort, and care when they are ill, and they may be prepared to see anything spent which might help them (especially if it is other people's money!). Action taken, even action with only remote prospects of improving their health may give satisfaction by showing that others are concerned about them. It confers status to the "sick role."

But against this, it is argued that the analogy with automobiles is false because those buying cars (consumers, firms and governments) know precisely what they are spending on the vehicle, on the petrol, oil, and maintenance. They still know the costs if the vehicle is bought on hire purchase. What is different about health care is that so much is paid indirectly by employers in insurance premiums, by governments in subsidies, direct expenditure and tax concessions, all of which reduce the cost of the premium paid by the employee, which is generally deducted before net income from work is paid. All of this certainly reduces the cost at the point of consumption often to (or nearly to) zero. The case for cost-sharing is to make health care more in line with the purchase of motor cars.

But this is precisely what cannot be done. Cars are bought by consumers out of their regular income and savings. The special characteristics of health care spending are that serious illness destroys earning capacity, and even when the illness starts, neither the consumer nor even his physician is generally able to predict what needs to be spent over what period of time. While consumers can plan the purchase of a car, they cannot plan their expenditure on health care as they cannot know in advance when they will be ill, how often they will be ill, how serious the illness will be, how long it will last, or what "needs" to be spent. What consumers would be prepared to spend after their future earning capacity has been placed at risk is a grossly inadequate indication of what they would be prepared to spend if they had perfect knowledge in advance of what would happen to their health in the future and could plan their whole lifetime allocation of resources accordingly. Moreover, some people become seriously ill before they are old enough to start earning. Somehow judgments have to be made about the consumption aspects of health care spending since the criteria of what people are prepared to spend is simply not available in the same way as it is for cars. This is precisely why both private insurance and social security were introduced in the first place—for the more healthy to share the risks and pay for the more sick. This is the essence of the principle of risk-pooling or 'solidarity.'

The vast expansion of spending on health care has not brought commensurate returns in improved health.

But there is a further argument based on current unmet "needs." Too much should not be made of the proposition that we are getting zero marginal product from extra spending on health care. Even where the immediate money barrier has been virtually eliminated, the poorer and less educated who have worse than average health seek health care much less than their objectively measured health status would require. They also under-use important preventive services, such as immunization, antenatal and postnatal services. Money barriers are therefore not the only barriers to the use of health services. People consider the costs of time off from work and the costs of waiting, and in addition there are cultural and psychological barriers to the use of services even when money barriers are removed. The reintroduction of money barriers would make the position worse.

Secondly, it is only in the more acute services that the case can be made that we are approaching zero marginal value from the use of extra resources. Few countries can say that
the standards of care provided for long-stay patients—particularly elderly patients—are satisfactory. There is a whole new drive in Europe towards what is called "the humanization of hospitals" aimed particularly at long-stay hospitals. Nor can many countries claim that their care of the mentally handicapped or of long-term mentally ill patients is satisfactory—either in hospitals or in the community. Similarly, care is often inadequate for drug addicts, alcoholics, and attempted suicides. There are many fields where there is overwhelming evidence that much more needs to be spent to attain socially acceptable standards of care. The problem consists to a considerable extent of an imbalance of priorities. It can be argued that this is only likely to be put right in terms of practical politics if more is spent, because of provider resistance to cutting expenditure in areas which have come to be more favoured.

If the real concerns are about efficiency and justice, percentage of GNP are grossly inadequate criteria for making judgments. The real problem is to examine alternative ways of achieving particular objectives so as to find less costly ways of achieving the same results. Research, and even more important, a willingness of the health care system to respond to the findings of research, could lead to a reduction of resources used in doing what is now done and needs to be done and release resources for what is now done inadequately. But it is not necessarily the case that fewer total resources would be needed. It is just as possible that more resources would be required.

Without denying the force of all these arguments, there are two facts that cannot be ignored. First, where health care costs fall in the public sector either through taxation or through compulsory health insurance contributions, politicians are under very strong pressure to contain costs. The recent experience of lower rates of growth in national economies or of no growth has accentuated this problem of tax resistance. People feel that too high a proportion of their incomes is being taken away in compulsory levies. They want a higher proportion of their original incomes to spend themselves. It is therefore natural for politicians to look very closely at areas of public spending that have been rising faster than GNP. For example, in both the Federal Republic of Germany and the Netherlands, politicians have set themselves the explicit aim of seeing that health care spending that is publicly financed does not rise in the future faster than the GNP. The problem of public sector financing is real in the sense that politicians inevitably respond to the public's objections to what is seen as excessive taxation. They sense the limit to what people, most of whom are reasonably healthy, are prepared to pay to help those who are not—particularly if there is evidence that some of the spending is unnecessary.

Secondly, and parallel to the tax resistance problem in the public sector, is premium resistance problems in the private sector. Those associated with the private insurance industry point out that the public has now become highly critical of rising insurance premiums. At the very least the public expects premiums not to rise faster than their incomes after tax. Because of this after-tax criterion, the two problems are interrelated.

Whatever force there might be in the more academic arguments on both sides of the question, public attitudes to paying cannot be ignored. This is the overwhelming thrust behind pressure to contain health care costs.

**Strategies of Cost Containment**

**Budget limits**

An important distinction can be made within European systems of financing health services between those that are mainly government financed and those that are on an insurance basis. Services may be mainly under the control of local government, as in Denmark or Sweden, or mainly under the control of central government as in Ireland or the United Kingdom. A service-based system of financing involves budget limits that cannot normally be exceeded. Thus governmental authorities are able to limit the rise in expenditure on health services mainly by limiting budget allocations, assuming that they have the political will to do so. Such control seems in practice to be easier
to apply tightly when the money comes wholly from central government. When local government is financing services there is room for argument and divided responsibility between central and local government because of the grants coming from the former. Central government can cut grants to local government with the intention of restraining the growth in expenditure, but local authorities can, if they wish, replace a drop in central funding by increasing the taxes they levy.

Nevertheless, experience shows that budget limits can be effectively applied. In 1976, the Irish government kept the budgets of Regional Health Boards to the level of 1975 in real terms. In the United Kingdom, the target rate of growth of the current expenditure of health authorities on hospital and community services was reduced to less than half in real terms for the period 1975-76 to 1979-80—a rate of growth lower than the expected growth of the gross national product. A somewhat higher rate of growth was later permitted for the year 1978-79. Similarly, capital expenditure was reduced in the United Kingdom by about 20% in 1976-7 compared with 1973-4. It was also cut in Ireland between 1973 and 1976.

In countries where capital expenditure is grant-aided by government (as in the Federal Republic of Germany), or partly by government and health insurance funds (as in France), these grants can be and have been cut. In the Netherlands, the value of licences for new buildings in 1975 was less than half the value of licences granted in 1976 in real terms. In France capital expenditure is largely being restricted to the replacement and upgrading of old buildings.

Regulation in insurance financed systems

In the case of health insurance systems, short-term action to control costs is normally by regulation. In some countries the regulation is imposed by government, in other countries regulation requires the assent and cooperation of those being regulated. Where hospitals are paid on a daily rate basis, action has been aimed in a number of countries at limiting the rate of growth of daily payments to hospitals. Such steps have been taken in recent years in Belgium, the Federal Republic of Germany, France, and the Netherlands. There has, moreover, been discussion of alternative ways of paying hospitals, and some experiments are being undertaken in France. The system of daily payment is widely regarded as unsatisfactory because of the incentive for hospitals to retain patients longer than necessary.

In the USA, hospitals are not paid on a negotiated per day basis or on a prospective budget basis but largely on the basis of what they spend, after the fact. In the period 1971-74 comprehensive cost controls were applied to hospitals as part of the economic stabilization program. The goal was to halve the inflation rate in hospital costs by regulating how much they could adjust their revenue. Hospitals had to refund overcharges if they broke the limits or request exemption from the regulations.

The 2½ years of the program showed an increase in costs of 8.9% compared with 14-15% before the program. Hospital workers bore the brunt of this control. Within a year of the ending of the control, hospital costs rose by 14-20%—more than 2½ times the increase in the consumer price index. Hospitals have recently been given a 9.7% voluntary target for increases in total spending compared with the hospital industry’s goal of 11.6%. Legislation to impose mandatory cost containment did not pass in Congress.

In the case of physicians paid on a fee-for-service basis, limits have been agreed in the Federal Republic of Germany on the growth of total fees. These agreements have been effective. In 1977, the cost of payments to doctors rose 4.3% less than the growth of GNP and in 1978 in line with the GNP. Moreover, changes in relative fee structures are being negotiated to discourage the excessive use of diagnostic services. Such changes have also been suggested in Switzerland to increase the remuneration for services provided directly by the doctor and to reduce the share of remuneration for services provided by others. In France, about 96% of physicians contracting with health insurance have agreed to charge at rates established by social security. These rates are reviewed annually. Since
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1970, price control has led to a smaller growth in the purchasing power of physicians (+1.7% per year from 1970 to 1976), as compared to the population as a whole (+4.2%).

In the case of prescribed pharmaceuticals the following measures have been used to contain the growth in costs in the nine countries of the European Community:

(1) fixing of prices or limiting of profits of pharmaceutical companies in all countries in the Community except the Federal Republic of Germany and the Netherlands;

How to control the cost of health care

Conclusions of the Wolfsberg seminar

There are essentially four possible ways of controlling the cost of health care paid for by public funds or health insurance contributions.

- The first would be to try and introduce price competition between agencies providing health insurance. How far this option would really succeed in keeping down costs in the long run has yet to be established on a national basis, and the bureaucratic costs of “policing” the system should not be underestimated. There would, moreover, be considerable problems in introducing such a system to cover a whole nation. Paradoxically, it would seem easier to transform monopoly public service systems into a competitive system than health insurance systems of financing which pay providers on a fee-for-service basis and hospitals on a daily charge basis. This is because budget financing and capitation or salaried payment of physicians are already well established in such systems of financing and organizing health services.

- The second is to establish local budgets for health services which cannot be exceeded. The control of the budget can be in the hands of representatives of consumers selected by political election or appointment and who act in close consultation with representatives of providers. This is the underlying logic of the British or Italian national health services or the Swedish or Danish systems of providing health services. By delegation and decentralization of control, detailed bureaucratic regulations can be kept to a minimum, but the administrative cost of securing effective participation in decision-making should not be underestimated.

- The third is to apply really effective regulation of providers so that costs are contained. That regulation can be effective is shown, for example, by the experience of France, but it is operated there within a context of considerable cost-sharing. The bureaucratic costs of effective regulation are likely to be high. Whether the German system of cost control by agreement under the concerted action program provides an effective long-term way of restraining costs has yet to be seen.

- The fourth is to apply cost-sharing to the extent necessary to keep health insurance premiums within desired limits. To a considerable extent, costs are likely not to be reduced but shifted back to the direct payment of consumers. The administrative cost will vary according to the system of insurance. What is very doubtful is whether this provides a permanent solution. While insurance premiums may fall temporarily when each further dose of cost-sharing is applied, premiums are likely soon afterwards to resume their upward trend. If it is unacceptable to apply cost-sharing to care in the hospital (other than a modest daily charge), this sector is likely to go on and on increasing in cost under open-ended insurance. Indeed, it is this sector of care which has in most countries been causing the greatest problems in recent decades.
limiting of sales promotion activity by reducing what will be allowed as a cost when profits or prices are calculated (Belgium, France, Italy, and the United Kingdom) or limiting the extent to which samples can be sent to doctors (all countries in the Community except Ireland and Italy);

(3) regulation of retail margins in all countries in the Community except the Netherlands, where margins are controlled by the pharmacists' profession;

(4) restriction of the opening of pharmacies (e.g., Belgium, Denmark, France, Italy, and Luxembourg);

(5) drawing up of lists or formularies specifying the pharmaceuticals that may be prescribed (e.g., Belgium, Denmark, Italy) or that are recommended to be prescribed under health insurance (e.g., France, the Federal Republic of Germany, and the Netherlands);

(6) specification of the quantities that may or should be prescribed in a particular prescription (e.g., Denmark, France, Ireland, Italy, and the Netherlands);

(7) circulation of information to doctors to encourage economical prescribing (e.g., comparative prices of similar products as in the United Kingdom and the Netherlands or in the Federal Republic of Germany and Ireland, where it is proposed that efficacy will also be taken into account);

(8) examination of the prescriptions written by doctors under health insurance, in all countries in the Community except Belgium;

(9) arranging for visits to be made to doctors whose prescribing appears to be excessive (Ireland and the United Kingdom).

Changing the organization and financing

It is widely believed that measures to substitute a budget-financed service for a health insurance system could never be applied in any country because of the political opposition. It is also widely believed that it is politically impossible to change the system of paying doctors. The experience of Italy shows that both these assumptions are untrue. Italy is in the process of moving over from a largely fee-for-service basis of paying general practitioners to a capitation basis. Specialists practicing in public health centres are paid on a part-time or whole-time salaried basis. It is also moving over from an insurance-based system of financing to a budget-based national health service. Under the new system, money will be collected centrally from taxation and health insurance contributions and then channeled to regions and on to the local health units, which will provide the main hospitals and community health services.

Other more gradual changes in the organization of services are being made in other European countries to encourage continuity of medical responsibility for patients seen by specialists in the community and later admitted to a hospital. In the Federal Republic of Germany, encouragement is being given to the development of outpatient activities for doctors working in hospitals and inpatient activities for doctors who work outside hospitals. The thrust of policy in France is also to establish further outpatient departments at public hospitals. In many countries measures are being taken to encourage care in the community as an alternative to general hospital care and to encourage prevention.

Regulating supply

Many European countries are planning for an overall reduction in the number of general hospital beds per thousand of population. This is also being planned in the USA. Ten years ago, out of nine countries of the European Economic Community, only France and the United Kingdom had hospital plans; now all nine countries have such plans. In the period 1970–77, about 26 hospitals have been closed or transferred to other uses in Denmark. In England 134 hospitals have been closed over a period of three years.

In Ireland, Denmark, and the Netherlands, reduced quotas have been established for the entry of students to medical education.

In the USA, many regulations have been introduced mainly to protect the funds paid
out in public programs. They include utilization review; professional standards review organizations to monitor hospital care; hospital routine per diem cost limits under public programs; maximum allowance cost limits for drug purchasing and requirements for “certificate of need” approval for building new facilities and the purchase of major new equipment; comprehensive technology assessment for determining the appropriateness of new and existing medical technologies.

The Role of Cost-Sharing

When health insurance was proposed in France, after the First World War, the medical profession stood out against the principle of direct payment by a third party and insisted that the patient should pay the doctor directly. From the start, only part of health care costs were reimbursed, the patient being left to pay a proportion of the cost—the “ticket modérateur.” This “ticket modérateur” could, however, be paid by public assistance in the case of the poor. Similar systems were introduced in Belgium and Luxembourg. Italy followed the precedents of Austria, Denmark, Germany, and the United Kingdom by operating direct payment of the provider without any charge falling on the patient. These historical origins are still influential in explaining the position today, although a number of changes have been introduced over the years.

Direct payment systems

In Denmark the patient pays 25–50% of the cost of pharmaceutical products but otherwise care is free for those (the majority) who have chosen to register with a particular general practitioner for at least a year.

In Germany patients now are required to pay one mark for pharmaceutical products, to pay for spectacles (children and veterans are exempt), part of the cost of appliances, of transport, and 20% of the cost of dentures.

In Ireland about 39% of the population defined by low income receive wholly free care. Those in a higher band of income receive free hospital care except for payments to consultants and are refunded only part of the cost of pharmaceuticals.

In Italy all benefits supplied under health insurance are free.

In the Netherlands those covered receive free care with some exceptions: for example, 60% of the cost of dentures has to be paid by the beneficiary and a daily payment has to be made towards the cost of nursing home care after one year of stay. Dental care is free to children under four. A treatment certificate for 6 months of dental care can be bought at a low price. Recent proposals to make patients pay up to a maximum of 100 florins a year for primary care and for single persons to pay 10 florins a day for general hospital care (because of “home savings”) did not secure the approval of parliament.

In countries which have increased spending on health care much less than other countries (e.g., the United Kingdom) mortality rates have improved at similar rates and are in some respects better than those in countries such as France or the United States, which have vastly increased health care spending.

In the United Kingdom all health care under the National Health Service was originally free. But charges for dentures, spectacles, and pharmaceuticals were introduced in 1951 and 1952. The present charges are still restricted to dentistry and the ophthalmic service, where patients pay about a quarter of the cost and a flat rate charge of 45 pence for pharmaceuticals. There is a complex system of exemptions for children, the aged, those with low incomes and other categories from certain charges.

Reimbursement systems

In Belgium patients generally pay 25% of the tariffs for outside hospital care (plus any excess charges above these tariffs). Pensioners, orphans, widows and invalids with low incomes can generally be exempt from these payments. There are lump sum charges for pharmaceutical products (25 francs for drugs made up by the pharmacist and 60 francs for
specialties), with some exemptions. Hospital care is free as the 25% "ticket modérateur" is paid by the state for the first 40 days of treatment. A charge of 50 francs per day is made from the 41st to the 89th day. From the 90th day charges are higher. The charges are for "hotel costs." The full cost of dentures has to be paid by those under the age of 50.

In France the patient has to pay the following main charges: 25% of the cost of medical services provided outside hospital, 20% of the medical service costs of practitioners and of tests in public and private institutions, 20% of the rate for short-term hospital care (up to 30 days) in public and private institutions, but maternity care and major surgical care are free. In the case of pharmaceuticals, the patient pays 60% of the cost of "comfort" medicine (e.g., laxatives), 30% of the cost of most other pharmaceuticals, but only 10% of the cost of particularly expensive or irreplaceable medicines. There is a complex list of exemptions from these charges (e.g., old age pensioners, those who have suffered serious industrial accidents, those with certain diseases, and those receiving supplementary allowances).

Cost-sharing after receiving care

This brief résumé of the use of cost-sharing in a number of countries in Europe enables some generalizations to be made about what services tend to be selected for payment.

(1) Dental and ophthalmic care, if covered by health insurance, are frequently subject to cost-sharing, presumably because this type of need does not normally lead to absence from work and the need for dentures and spectacles is within limits postponable. The patient can save up to pay for them.

(2) Hospital care tends to be excluded presumably because the cost is high and it involves absence from work in the case of earners. It is moreover a serious need for care as indicated by the physician's decision to admit the patient to the hospital. When the patient is required to pay, the daily payment is presented in Belgium as payment for hotel facilities provided by the hospital and not for the treatment. Similarly, the proposal for a daily charge in the Netherlands, which was not approved by parliament, was presented in terms of the "home savings" caused by being in hospital.

(3) Pharmaceuticals are often subject to charges presumably because not all those taking pharmaceuticals are absent from work or prevented from continuing their normal activity. Moreover, it can be argued that a charge may make the physician think twice before imposing the charge on the patient.

(4) Most countries make no charge for the initial contact with the physician so as not to discourage early access to medical care when the patient believes it to be necessary. This principle is observed in all the direct payment systems listed above (with the exception of those who are on low income in Ireland or those who do not choose to register with one general practitioner in Denmark). This principle is also observed for wage earners in Luxembourg but not in Belgium, France, or Switzerland.

(5) Many countries have special arrangements to exclude the poor from charges and also children and pensioners.

(6) Maternity care tends to be given special exemption from charges presumably because of the importance of contacting the health service early in pregnancy and because childbirth requires women to be absent from work.

The Case for Cost-Sharing

Revenue raising. Here the objective may be no more than to raise revenue in a way that is least politically sensitive. As there is a problem of tax resistance and premium resistance, making the user of health services pay part of the cost may be less politically resisted than any other alternative.

Asserting priorities. By making a charge for services of lower priority, scarce resources are released to provide services of higher priority. For example, in the United Kingdom when charges were introduced for dentures it was argued that more of the time of dentists would be devoted to the conservation of natural teeth, which was judged more important. This
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did in fact occur. If charges for pharmaceuticals lead those with minor illnesses to treat themselves with over-the-counter medicines, more physician time is released to treat the more seriously ill.

As mentioned above, charges for hospital care tend to be presented in terms of charges for "hotel services" or "home savings." It is argued that it is cheaper for the patient if he is treated in a hospital rather than outside because he gets free food, laundry, fuel, etc., which he would have to pay for if he were sick at home. Thus the patient prefers to be treated in a hospital and the doctor is aware of this. It may also be more convenient for the doctor to treat a patient in the hospital where he can visit at times of his own choosing and more easily terminate the consultation.

**Combating the "moral hazard."** The assumption is that free services are likely to be unnecessarily used. Some people will use services when they are not ill (e.g., to obtain a certificate of sickness to take time off work and receive cash benefits) or for such trivial health needs that the use of a doctor's time is not warranted.

**Conveying price signals to the patient and physician.** Here the objective is primarily to use the patient as a way of communicating to the physician. If the patient has to pay part of the cost and the physician knows this, it is argued that the physician will become more cost-conscious. This may happen because he thinks patients will decide not to go to physicians who become known locally as unnecessarily costly users of resources. Or it may be that the physician will want to present himself to the patient as being concerned about the patient's pocket as well as about the patient's health which he has no need to do if no payment falls on the patient. It is accepted that the bulk of the use of resources is not the physician's own time (which he can ration himself) but what the physician authorizes for the patient (pharmaceuticals, diagnostic tests, treatment by medical auxiliaries, hospital care, etc.).

**The Case against Cost-Sharing**

Nothing should be done to discourage people from early access to professional services. As mentioned earlier, the poorer and the less educated tend to under-use services. Attempts to exempt the poor from cost-sharing are never wholly successful and in so far as they are successful they tend to carry some stigma. The principle of solidarity avoids this. The reduction in use from those who ought to be using health services more than at present is too damaging to justify any correction of abuse or moral hazard among others. Even charges for pharmaceuticals may make some people hesitate to go to the physician through fear that they will not be able to afford the pharmaceuticals he will prescribe.

The real problem is to examine alternative ways of achieving particular objectives so as to find less costly ways of achieving the same results.

In the developed countries there is generally no longer a problem of scarcity of health care resources to justify prices being used to direct resources towards health needs of higher priority.

The argument about home savings from hospital care is greatly overstated. Account needs to be taken of:

- the cost of travel for relatives visiting the hospital;
- the cost of gifts to the hospital patient;
- purchases made of new bedclothes and toiletries by the patient (what has been called "the trousseau effect"); and
- costs that fall on the family when the mother is admitted (e.g., child care costs, home help costs and the extra cost of inefficient catering by the father in the form of meals out and convenience foods, or the cost of catering for a relative who comes to stay and take temporary charge of the household).

An alternative way of allowing for home savings is by reducing pensions and sickness cash benefits after a period of stay in the hospital. This method is applied in the United Kingdom.
Arguments about moral hazard fail to take proper account of all the other costs of using health services (travel costs, time, and psychological costs).

Co-payments do not stop cost inflation. All they might do is to create a temporary check before the advance of costs continues.

It is wrong to punish the patient for the lack of price consciousness of the physician. Moreover, physicians do not and normally cannot quote costs in advance. Nor can patients who are worried about their health or their child's health be expected to negotiate charges or shop around. Any financial incentives should operate directly on the physician. Alternatively, regulation and administrative action should be used to correct excessive or unwarranted use of resources. If anyone should be punished it should be the physician if he authorizes what is not needed (for example, by fines paid out of his remuneration). Politicians seek to introduce cost-sharing because they lack the courage to challenge the power of well-paid and prestigious professional groups when they are acting irresponsibly.

The administrative cost is seldom fully calculated and compared with the savings. Many health-care systems do not at present have to maintain detailed records. In such cases cost-sharing would make it necessary to maintain them and the administrative cost would not justify the savings. The more complex the system of exemptions to avoid penalizing children, the poor, and others, the greater the administrative costs become. Nor can the problem be resolved by relating charges to income as health insurance agencies do not normally have records of the insured person's current income. In some countries there would be strong resistance to collecting the charges. In the Netherlands, for example, neither doctors nor hospitals—nor indeed the insurance companies—want to bear the administrative cost and suffer the criticisms of patients from the collection of charges.

Cost-Control by Consumer Choice and Competition

An alternative way of controlling costs could be through encouragement of competitive health insurance. Under present health insurance there is no effective price competition, as social security funds act as oligopolies. Moreover, fee-for-service payments reward physicians for providing more and more costly services, and hospitals are rewarded with more revenue for generating more costs. This is the basic incentive system under existing oligopolistic insurance. The aim of introducing competition would be to change the incentives, so that insurers and physicians working in each competitive health insurance agency would find it profitable to try and provide better value for money.

One way of achieving this would be to give each consumer a voucher which could be used only for health insurance. The value of vouchers would vary by age and sex according to average risk.

Each year, each consumer would have the opportunity to choose a health insurance plan. The plans would be in competition with each other and would offer different patterns of care at different prices. All insurance plans would be required to accept anyone who chose to join the plan without discrimination. The premium for each plan would reflect the costs of providing the services. Each plan would have to offer defined comprehensive benefits and full protection against the costs of catastrophic illness. These and other rules would be designed to ensure fair competition. Thus any plan which was able to offer what consumers regarded as a service of adequate quality at a lower price would attract consumers. The competitive system would reward plans which provided better care at lower costs.

The physicians in each community would divide themselves into competing economic groups. The key to generating competitive pricing would be the involvement of the physicians working for each plan in the search for ways of giving better value for money. There would be room for the physicians working in each plan to receive extra remuneration out of the savings made by providing better value for money for patients. Plans may pay the physicians working for them by salary or capitation, plus bonuses. A plan would become uncompetitive if its physicians provided unnecessary services—particularly admissions to
the hospital. Such plans would be driven out of business by the competition.

Experience with prepaid group practices in the USA shows that costs can be cut substantially if doctors are given the incentive to do so. For example, hospital bed usage has been halved. But the model would not depend on any one way of providing services. For example, physicians working in a plan could work from their own offices and be paid on a fee-for-service basis but agree to control costs. Alternatively, general practitioners could be at the entry point of the system and decide what was and what was not necessary for the patient. They would approve all bills.

In practice, each plan would be working on a budget basis. The premiums they attracted from consumers each year would constitute the annual budget for each plan. The task would be to provide adequate care for all members out of this budget and if possible achieve a surplus for distribution. A substantial surplus in one year would indicate that premiums could be safely lowered in the following year to attract more members at the next annual stage of selection of plans by consumers.

The following criticisms can be made of the consequences and feasibility of the system.

(1) The whole working of the system depends on the ability of consumers to select plans from information provided about them and to judge whether or not they are getting an adequate service. While the selection of a plan might well be within the competence of better educated consumers, it would be difficult for the less educated ones. They might simply opt for the cheapest plan. Indeed, some consumers might not exercise any choice at all. How would the problem be solved for those who did not select a plan and thus would be left without coverage?

(2) The consumer would know that it was profitable to the physician responsible for his care to deny him drugs, radiographs, pathological tests, and to persuade him that admission to the hospital was unnecessary. Would not this be damaging to the doctor/patient relationship? The fact that existing health maintenance organizations and pre-paid group practice plans retain the confidence of their users does not guarantee that the situation would not be different if competition became really fierce. Would competition lead to the provision of services by some plans which were grossly inadequate by any professional standard? The key problem of health care is that while the patient can judge the politeness and apparent concern of the physician, he has no real competence to judge whether he really needs particular services, what services might or might not be helpful to him, or even whether he has been denied essential services. Patients who become disabled may be grateful to their physician for saving their lives without knowing that their disability could have been prevented by better diagnosis and more services.

(3) Would advertising be allowed and what effect would this have? If some plans were advertised as offering everything you could possibly want from any physician or hospital you chose, how many people would be persuaded to opt for costly and wasteful plans?

(4) While competition would be practicable in highly populated areas, there could not be effective choice in less populated areas.

(5) Could competition secure that professionals were willing to practice in unattractive areas? Might it not make the geographical maldistribution of services worse?

(6) How could it be possible to secure the transition to competition, when most physicians and most hospitals would be likely to be opposed to the threat of competition to their security?

(7) Would it really be practicable to prevent plans from skimming off the best risks?
Round Table

Brian Abel-Smith

Funding health for all — is insurance the answer?

Health insurance offers a means of obtaining a substantial part of the funds for urban health services from employers and employees, so that taxes can be released for preventive and promotive action and for primary health care where coverage is now inadequate or absent.

In those developing countries where the cost of plans for health for all has been roughly calculated, the key problem that has emerged is how to pay the bill. There is a reluctance to cut down on existing facilities, such as urban hospitals, in order to finance primary health care for whole rural populations. As a result, plans for health for all are seen as additions to existing programmes rather than as a redistribution of health resources. Where is the necessary money to come from?

The world economic situation has changed for the worse since the health-for-all objectives were launched in 1977. The drastic rise in oil prices in 1979 cut rates of economic growth and forced many developing countries into painful policies of adjustment. Currencies had to be devalued, and this raised still further the cost of oil imports. On top of all this, many of these countries were burdened with debts that had been incurred when economic prospects seemed much brighter. Interest payments and capital repayments have become formidable proportions of government budgets, and other government expenditure has had to be cut to make room for these obligations. Quite a number of developing countries have felt it necessary to spend more rather than less on defence. Finally, many countries in Africa have suffered year after year of drought, which has decimated agricultural production and brought large sections of their population up to and beyond the brink of famine.

Though there are now some signs of economic recovery, the world is no longer the place viewed so optimistically in 1977. Complete evidence of what has been happening to health expenditure is not available, but some countries have been
spending less in this area than in 1977. Some health budgets have been heavily cut in real terms, although not all developing countries have been affected in this way. Oil producers have until recently done well, and a number of countries in south-east Asia and the Far East continue to prosper, having experienced only a somewhat reduced but still relatively high rate of growth.

Back in 1977, there were hopes that the North (i.e., the major developed countries) would be willing to pay more to help the

Existing resources

The message has got home to developing countries that they are largely on their own. There will be no foreign fairy godmothers. Health-for-all programmes will have to be paid for almost entirely by countries’ own resources. One possible way forward is to make people pay, or pay more, for using urban health services—at least those people who can afford to do so. Money collected in this way can be used to develop primary health care for rural people who lack any sort of organized services within reasonable distance. The promise of free health services makes good political rhetoric, but has a hollow ring when it leads to a substantial subsidy for urban populations who are, on average, considerably better off than rural populations, among which the poorest communities get no health services at all. They have to wait for a tomorrow that never seems to come, simply because the money cannot be found to give free health services to everyone.

But making sick people pay for a substantial part of the cost of the health services they use is far from being an ideal solution. It involves making the sick pay for their own treatment rather than making healthy people contribute to the care of those who are sick. Taxation falls more heavily on the well than the sick and is therefore a good way to obtain funds for health services. Why is it therefore so difficult to persuade ministries of finance to find the extra money to support health-for-all programmes?

The options

It may be true that ministries of finance tend to underestimate the contribution that health can make to development. The key gain may only be won after many years—a new generation capable of achieving greater
physical and mental development compared with the stunted growth and the burden of long-term disability found today. But the value of health is so hard to quantify. Ministries of finance like to deal in figures. The potential gain from an irrigation scheme or any other improvement in the economic infrastructure is much more easily presented quantitatively. Moreover, when an economic project proves successful the health contribution towards it can easily be overlooked.

Though ministries of finance undervalue health developments, the fact must be faced that taxation cannot be increased without limit in the developing countries. There are formidable administrative difficulties in expanding the yield of income tax, and additional taxes therefore tend to be levied on goods. Where luxuries are already severely taxed, extra taxes on goods tend to fall disproportionately on poorer people. They can, moreover, be damaging to export prospects and thus hinder development. Taxing the poor most heavily to pay for health for all may be better than making the sick pay for the sick, but it is hardly in line with health-for-all policies which identify poverty as a major cause of ill health. It would be perverse to advocate making the poor still poorer by taxation, even though the consequences are difficult to see except under close analysis.

In this context, health insurance emerges as a potentially better option. The essence of insurance is the sharing of risks. It is a mechanism designed so that those fortunate enough to be healthy pay for those who are sick, with a clear understanding that should those well now fall sick later on, their costs will in turn be covered. Insurance can be seen as a formalization of the mutual support system to be found in villages throughout the world, based on the notion that “I will help you in your current need because this places a clear obligation on you to give me help, should I need it”. Helping others builds up a capital of obligation, and in the village situation social control ensures that obligations are honoured. In the modern insurance model, careful calculation of risk against premium ensures that money is available to meet future obligations.

**Health insurance**

* A long history

Among the industrialized countries, health insurance dates from the time when they were themselves still developing. It can be traced back to the medieval guilds or clubs of craftsmen that existed hundreds of years ago. Voluntary health insurance has been promoted in different countries by employers, doctors, trade unions, and local groups of working men with a diversity of occupations. Inability to earn because of sickness was recognized as a risk that could be shared. The doctor was needed to certify sickness and aid recovery. In dangerous occupations such as mining, it was recognized at an early stage that it was better to pay in advance for the treatment of accidents by a system of contributions than to wait until injury had destroyed earning capacity.
The background against which voluntary health insurance developed in Europe well over a century ago was, however, very different from that of developing countries today. Doctors had much less training and were generally in plentiful supply. Herbal medicine was practised and bleeding, cupping, and applying the leech were common treatments. The hospital was a place for care rather than cure, and often a place to die. The age of expensive high technology medicine was still to come. In so far as there were public health services, provided by charity or government, they were poor and stigmatizing. Insurance gave poor people access to the same services as were used by the better-off. The cost of this low technology medicine was easily covered by regular contributions, which were within the means of at least the more skilled workers.

The first compulsory insurance scheme was introduced in Germany in 1883, and many other European countries followed this example sooner or later. Employers were forced to pay, as well as employees. Some schemes covered only the doctor and the drugs he prescribed, others included the hospital. Some paid the doctor on a capitation basis (i.e., he was given a fixed sum for being available to treat a member throughout the year, whether he was called upon to treat or not). Other schemes paid the doctor per case or per visit, and still others reimbursed the patient for part of the doctor's bill. In some countries, funds developed on an occupational basis, in others they did so on a geographical basis. The funds were sometimes controlled by the workers, sometimes by employers and employees jointly, and sometimes by a special body set up by government.

Compulsory health insurance was then adopted in Latin America, where there was virtually no tradition of voluntary health insurance, at a time when the hospital was beginning to be regarded as an important component of the health care system and when medical education was moving, under American influence, towards science, surgery and specialization. Some of the new social security organizations built their own lavish hospitals to demonstrate that nothing but the best was good enough for the worker. Doctors generally received a part-time salary for health insurance work. They thus came to have several different sources of income among which social security work was not necessarily seen as the most important. Nevertheless, health insurance soon became costly in relation to the earnings of the worker.

The final stage of development in Europe came after the Second World War, when more and more countries made available to their whole resident populations the same services as had been developed to provide for the insured and their dependants. In many countries, insurance contributions paid by employees and employers were retained as a source of income for financing the services, although tax funds were used in addition.

Developing countries

Developing countries currently attempting to provide free services for their whole populations are trying to jump two stages of the European transition—voluntary and compulsory insurance. They are unable to
provide universal health services by taxation. European countries which now provide the same services for all waited until their tax base was strong enough to sustain them, or continued to rely in part on the revenue from insurance contributions. This suggests that insurance contributions may be the crucial source of additional finance needed by many developing countries if they are to achieve health for all. There has been a revival of interest in the insurance approach during the past decade. Indonesia, the Republic of Korea, the Philippines, and Singapore have started different schemes, and there are plans for others in Syria, Thailand, and Zimbabwe.

Why is the insurance approach not more actively sought by ministries of health if it promises to bring in substantial extra funds for the health sector? The first and most obvious reason is that responsibility for working conditions, and thus for any prospective developments in social security, usually rests with ministries of labour, not ministries of health. Nevertheless, ministers of labour could be pressed to act by ministers of health, or the issue could be raised in the wider forum of agencies responsible for national planning. Perhaps it is feared that ministers of labour are bound to exercise control over any health insurance scheme that might emerge, and consequently that substantial power over future development of the health sector would be transferred elsewhere. Indeed, this is precisely what has happened in many countries of Latin America. In terms of wealth, health insurance has become by far the larger part of the health sector, often leaving ministries of health as starved poor relations, even though they may be expected to provide much wider services and look after the larger section of the population. Not only may they be underfinanced but they may also be unable to attract good staff to work for them, particularly in rural areas.

Health insurance has added so much to the rewards of urban curative practice that ministries of health may be outbid for almost every category of staff.

It is not surprising that ministers of health do not push for health insurance if they see it as a monster which is bound to destroy them. Thus they may muster all the arguments against it: health insurance is bound to be socially divisive; the only people who can be covered are those in regular employment; initially it may only be possible to cover those working for the larger employers; people are not going to pay contributions unless these lead to much better services; better services for employees would be socially divisive and a distortion of health priorities; more benefits would be given to those who already have the advantage of being in the modern sector of regular employment; men would be favoured yet the major health effort should be devoted to mothers and children; still more money would go into urban areas, where regular employees are primarily concentrated, yet the vital need is to get health resources into rural areas; and funding would inevitably go to curative services in the main, yet the priority need is for prevention and promotion.

On top of all this it may be argued that health insurance is bound to become an administrative nightmare open to all sorts of graft, abuse and corruption. Why waste money on issuing and regularly updating documents of entitlement to health

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Health-for-all programmes will have to be paid for almost entirely by countries’ own resources.
insurance? Why not spend the money instead on improving services for everyone? Why create a mechanism which, as experience has shown, stimulates cost escalation and provides money for technology emulation. Even the richest countries of the world are now finding that they cannot afford health insurance. Money given to ministries of health is much better spent with a proper balance of priorities. Moreover, costs are kept rigidly under control. But the fact remains that, in many countries, the extra money needed for health for all is unlikely to be obtained solely by taxation.

Health insurance has got a bad name with many health administrators, by no means always undeservedly. In a number of countries it has grossly distorted health priorities by favouring urban populations at the expense of rural ones, by encouraging curative medicine to the detriment of prevention, and by absurd waste and duplication of advanced technology. It has encouraged unnecessary treatment and the medicalization of social problems. It has become so expensive in some Latin American countries that it would cost well over 10% of the gross domestic product to extend the same standard of service to the whole population. Furthermore, the service does not always give satisfaction to those who use it. Long queues to see a doctor, followed by further long queues to get the drugs he prescribes, are to be found in some ambulatory treatment centres run by social security departments in Latin America, just as they are in the outpatient departments of government hospitals. This is essentially because doctors arrive late and leave early. Many health insurance programmes seem to be run for the convenience of doctors rather than patients. In some countries medical trade unions have outshone all others in the restrictive practices they have imposed on their employers.

Lessons

While health insurance has undoubtedly become an obstacle to the achievement of health-for-all objectives in some countries, it does not follow that health insurance should be avoided at all costs. Lessons can be learnt from unfortunate experiences, just as they can from favourable ones. It is easy to forget that there are countries where health insurance had none of the unfavourable effects mentioned above. This was true in Denmark, Norway, and the United Kingdom before they moved over to universal services. None of these countries had the acute cost escalation confronting France, the Federal Republic of Germany, and the United States of America. India has slowly built up a scheme, covering more than 20 million people, with problems nothing like those facing so many social security schemes in Latin America.

Health ministries

The first lesson to be learnt is that if health insurance is to make a positive rather than a negative contribution to national health objectives, ministries of health must retain control, or at least a veto, in respect of any use by health insurance schemes of national health resources. Departments of labour must not be allowed to sponsor predators who enter the market and bribe trained health manpower to leave the ministry of health's services. The most damaging scenario is where a whole host of different competing autonomous agencies is established, each controlled by employers and employees, which can levy whatever contributions they like, build separate facilities, and compete for trained staff at rates of pay substantially higher than those the ministry of health can offer. Importance attaches not only to the level of remuneration offered, but also to the
method of payment. Experience shows that paying doctors on a fee-for-service basis and hospitals per day of care is bound to lead to cost escalation. No developing country can afford it. If health insurance schemes are to use resources from the private sector, the form of contract must be such as to keep costs strictly under control. Contracts need to be carefully examined by ministries of health before they are offered. The objective of these ministries must be to see that the development of health insurance interferes in no respect with established health priorities and, where possible, helps to realize them.

**Existing programmes**

Administratively, health insurance is most readily established by building on any existing social security programme. Many developing countries have schemes of workmen’s compensation that are usually financed by employers. Alternatively, or in addition, there may be provident funds to which employees are required to contribute. Where contributions are already being collected from employers or employees or both, the level of contributions can be increased by an additional levy for health insurance. The only new administrative requirement is to issue documents of entitlement for insured persons and their dependents. Such documents will generally need to be reissued each year to adjust for change in the composition of the work-force and to ensure that they are not given to persons working for an employer who has failed to pay the contributions due.

**Insurance contributions and taxation**

Where charges are made for health services, a scheme may do no more than exempt insured persons and their dependants from them. But the level of contribution may be set so as to bring in an income which not only covers free services and the greater utilization of services that is likely to be generated, but also transfers to the scheme part of the original cost of services for those who are participating. The justification for this is that people with regular employment are on average in a better economic position than those without it. If regular employees and their employers pay for a considerable part, if not all, of the services they use, money collected in taxation can be released to strengthen services where they are still underdeveloped, e.g., in rural areas.

**Providing the service**

Other advantages which might be given to insured persons and their dependants include special sessions for curative treatment at primary health care centres outside working hours, with reduced waiting, and the right to be seen by appointment at specified times. The patients concerned would attend the same centres for preventive services as the rest of the population, so as to ensure the use of these services by the whole catchment area of each centre. There could be an alternative option of seeing doctors in their private consulting rooms. Doctors might be paid a capitation fee for each person covered by the scheme who registered with them; on this basis being insured would confer the right to choose a doctor. This would have the vital advantage that the doctor who failed to give a courteous and convenient service would lose patients, and the capitation payments that accompanied them, to rival doctors. But safeguards would be needed in this last case to prevent insurance practice becoming so attractive that doctors left the government service. The right to take insured patients might be allowed only to doctors employed at least part-time by the
government. The amount of insurance practice a doctor was allowed to have might depend on how long he or she had served in a rural area: the longer the service, the greater the maximum number of insured patients. But once again the level of contributions would be deliberately set to cover substantially more than the cost of providing special privileges for insured people and their dependants.

**Equity**

Some may argue that the arrangements suggested above are socially divisive. In fact they are, but only to a modest extent. People who contribute expect to get something for their money. But these measures deliberately stop short of the extreme divisiveness of wholly separate clinics, health centres, and hospitals that can only be used with insurance cover, running parallel to an inferior set of services for the uninsured.

Duplicated services are much more socially divisive than what is proposed here, and can be wasteful if the duplication extends to specialized facilities. Moreover, if firm control is not exercised over a separate service for insured patients, the cost can rise year by year as more and more sophisticated medicine is introduced, until the scheme runs a deficit which may be quite inequitably met by the government. This is particularly likely to happen when the payment of doctors is on a fee-for-service basis. The end result may be a service which is far too costly per head to extend to the rest of the population.

**National realities**

The particular advantages granted to those covered by insurance will inevitably vary from country to country, according to whether there are charges for health services, whether government doctors are allowed private practice, whether the problem of recruitment of doctors to government services is acute, whether patients are screened by nurses or paramedics, and so on. Introducing health insurance is essentially a problem of political salesmanship. It would, for example, be quite logical to introduce charges for health services with the deliberate intention that those covered by insurance should be exempt from them. Such a move might be accompanied by the introduction of free medical cards which the poor could apply for after a means test. Schemes of this kind operate in the Republic of Korea, Thailand, and elsewhere. But the essential aim is to bring in a new source of revenue to supplement taxation. As pointed out earlier, health insurance contributions levied as a proportion of earnings are much fairer than many other taxes imposed in developing countries.

What are the economic arguments which a ministry of finance would be likely to use against the introduction of health insurance? It will be said that employers’ contributions will increase labour costs, add to inflation, raise the price of exports, and worsen the balance of payments. But the crucial consideration is whether and to what extent they will raise labour costs. It is generally the case in developing countries that the largest employers are already spending

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It is not realistic to expect the rural population to pay the whole cost of its health services in insurance contributions.
money on the health care of their employees. In some countries they are required by law to do so. Some employers finance clinics for their own employees. Others provide reimbursement for medical services purchased in the private sector, up to a money limit per employee. Such employers will be in a position to make savings on existing expenditures and to set them against any new contributions they would be required to pay. It may be wise to collect data on employers' health expenditure so as to be able to argue this point cogently.

Health insurance can bring in a steadily rising income in support of the health sector as a country develops. The first step may be to cover the largest employers, including government organizations and other public bodies. Gradually, coverage can be extended to medium and small employers, and the process may advance hand in hand with the extension of wider schemes of social security. In this connection it is worth remembering that, as a country develops, the proportion of employed persons increases.

It might be possible to bring in independent farmers by a levy on produce imposed through their agricultural cooperatives.

Alternatively, coverage of the self-employed might be voluntary, with contributions made on a flat-rate basis. It is not, however, realistic to expect the rural population to pay the whole cost of its health services in insurance contributions. Part of the cost must, inevitably, be met by taxation. Health cards giving exemption from charges in government health services might be sold in small shops, the retailers being entitled to buy them at a discount so that they made a profit on each card sold. Alternatively, village volunteers might be encouraged to sell cards in addition to carrying out other activities.

Many developing countries have already made use of the insurance mechanism for financing health services, sometimes with unfortunate effects as far as equity is concerned. Other countries have decided against it, possibly because of a shortage of doctors. This constraint, however, is likely to ease over the coming years, because the scope for the emigration of doctors has greatly reduced. Not only have openings in Europe and North America become severely restricted, but the oil-rich countries of the Middle East are steadily replacing foreign doctors with nationals from their own medical schools.

Health costs and financing


"It is most welcome to see an issue of a WHO journal devoted to concerns of economics and finance.... Questions range from what is the cost of health for all to assessment of alternative mechanisms for financing health and health-related services and consideration of their consequences for efficiency and equity.

"The volume provides comprehensive coverage of many costing and financing issues, including some country-specific studies."

In discussing the problem of funding health for all, within a severely restricted reference frame, Professor Abel-Smith provides a vivid example of how it is possible to obscure some of the basic requirements of the strategy for attaining health for all through primary health care, e.g., social control over health services, community involvement, self-reliance, intersectoral action for health, subordination of technology to the felt needs of the people, optimization of health service systems, and the integration of promotive, preventive, curative and rehabilitative activities.

In the context of primary health care, health service development can be seen as deriving from sociocultural, political, technological and managerial processes. Funding for health for all is secondary to the dynamics of these complex processes.

According to the philosophy of primary health care, the people themselves should own their health services. The question of funding is therefore a question of budgeting and making financial adjustments. In India, for example, even before the Alma-Ata Declaration, the Government proclaimed that the people’s health must be in their own hands (1). Of course, given the prevailing modes of production, structure of society, and distribution of political power, such declarations sound very unreal. The right to health of most of the people is taken away from them by the privileged classes and their supporters from foreign countries. For the deprived people, regaining their right to health is thus essentially a political struggle.

By discussing the question of funding in isolation from basic political, social, epidemiological and health systems issues, the author has ended up by viewing the problems of attaining health for all from the wrong end of a telescope. Naturally, he is disappointed when he does not find any “fairy godmothers” from affluent countries to dole out funds for the poor. Under such conditions, he rightly considers that the poorest communities “have to wait for a tomorrow that never seems to come”.

Having adopted a position that is obviously Eurocentric, apolitical and ahistorical, in sheer desperation he snatches at the straw of health insurance. He fondly hopes that by building a health insurance scheme in which “regular employees and their employers pay for a considerable part, if not all, of the services they use, money collected in taxation can be released to strengthen services where they are still underdeveloped, e.g., in rural areas”. For this he visualizes “special sessions for curative treatment at primary health care centres outside working hours”.

Sliding down the slippery slope, the author considers the rivalry between ministries of health and labour for their share of the medical care service empire, and meditates on how the gods in the ministry of finance can be propitiated so that more money can be obtained for medical care. People and
their democratic aspirations seem to occupy the lowest position in his scheme of things. His approach is patently an above-down one. He thus comes perilously close to the group from the North advocating selective primary health care!

Also, naturally, the European experience becomes his model—medieval guilds, voluntary and then compulsory health insurance programmes, culminating, after the Second World War, in national health services of various sorts. However, he disregards the bloody struggle of the working class for basic rights in Europe, and fails to point out that the decimation of the economies of developing countries through colonial exploitation and the continuing imposition of grossly unfair terms of trade have made it possible for the affluent countries to enjoy their present level of health services. He mentions cost escalation in France, the Federal Republic of Germany, Latin America, and the United States, and the positive cases of Denmark, Norway, and the United Kingdom, but there is no political, social or epidemiological analysis. The same blind spots lead him to admire the schemes in Indonesia, the Republic of Korea, the Philippines, and Singapore. His approving reference to the Indian scheme “covering more than 20 million people” (out of 750 million) exposes yet another set of limitations: he omits to mention that the two major schemes—the Central Government Health Scheme (2) and the Employees’ State Insurance Scheme (3)—concern only curative medicine, are highly subsidized by the state, and are run at a very low level of efficiency (4). Thus, instead of becoming a source of funds for health-for-all programmes, these schemes play the malignant role of swallowing substantial quantities of the very limited funds and technical manpower that could otherwise have been deployed for extending primary health care to the deprived and dispossessed. Nor does the author refer to instances of failure of privately run but state subsidized community-based health insurance efforts in India, e.g., the projects of voluntary organizations in Tamil Nadu (5) and Kerala (6). Thus, the experiences in India should have dissuaded him from

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In addition to being a demanding social and political task, health service development in the Third World is a major technological challenge.
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harbouring any hopes of launching insurance schemes to fund health services that could cover entire populations in developing countries.

Political leaders like Gandhi and Mao, who carried out intense and protracted struggles against colonial exploitation and social injustice, realized the need for moving away from the Eurocentric approach to the promotion of health and health services in their countries. Their struggles taught them that there could be different approaches to health service development, based on self-reliance, and they pursued them in their social and political actions. They were not against science and technology; but they insisted that science and technology should be harnessed to serve people, rather than serving commercial, social and political vested interests. The Alma-Ata Declaration can be considered to be the crystallization of this affirmation. Thus, in addition to being a demanding social and political task, health service development in the Third World is a major technological challenge. It would be
Health care—who pays?

It would be wrong to expect individual states to shoulder the entire burden of achieving health for all, which would, as a result, become little more than another of the resounding slogans often enunciated but rarely acted upon in the poor countries. This is a matter for the international community as a whole, which has the potential for realizing health for all through the solidarity and cooperation of all countries, rich and poor, developed and developing, North and South.

The goal, however, is unattainable under the present world economic system, distorted by exploitation, monopoly practices, and customs barriers—what we have come to call neocolonialism or masked colonialism. Unless the prevailing economic conditions are put right by the international community, the chances of achieving health for all will remain very slim.

Professor Abel-Smith cites a number of objections to the idea of health insurance in some countries. I should like to add a political objection, which is especially relevant where the national constitution provides that the state shall be responsible for providing health care for its citizens, implying that burdening the citizen with any charge, even a health insurance contribution, would be out of the question.

When the Egyptian government introduced health insurance in the early 1960s, it did so on the assumption that this would improve the free services of its the health units, and hoped that health insurance would cover all
state employees within three years. The experiment was successful within one restricted area, the governorate of Alexandria, but a lack of funds with which to pay the government’s contributions made it impossible to adopt health insurance in other governorates. Subsequently there was a tendency to adopt the direct health service approach through a special insurance agency with all requisites, e.g., hospitals and doctors, but again the shortage of funds was a formidable stumbling block.

It became clear from a survey launched in Egypt in 1978 that the average cost of health services provided to individuals was met to the extent of 60% from the patients’ own pockets, while the state contributed 40%. Free health services proved to be very inferior both quantitatively and qualitatively. Not more than 20% of the population, consisting of urban employees but not their dependants, had access to health insurance. All this encouraged private practice to expand and its charges to soar and become intolerable not only to the poor but even to the better-off. It eventually became clear that the only way out was to introduce a new version of health insurance, allowing participation of the private sector and the cooperatives, instead of relying exclusively on the model introduced by the government.

In Kuwait, there is a move to let citizens share in the costs of a state health insurance system aimed at achieving the greatest possible degree of economy. Generally speaking, it is vital for health insurance in any country to be able to meet all individual and community needs in the health field, including preventive as well as curative care. Provision should be made for first aid, family planning, child care, hospitalization, and health education, among other things. Whether such an ideal can be attained depends, of course, on whether adequate resources are available. A scale of priorities must be worked out before proceeding. One of the indispensable components in the insurance system is that due emphasis must be laid on the importance of the family doctor’s role and on the patient’s right to choose his or her consultant, wherever this is feasible.

Participation of the private sector in the health insurance system would allow the public to benefit from its considerable resources and would compel private practitioners to compete with each other, again in the patient’s interest. Fees paid to doctors should be proportionate to the quality of service provided, so as to give a further incentive for the greatest possible effort in the interest of patients. I agree with Professor Abel-Smith that remuneration should be subject to the approval of ministries of health when contracts are being drawn up with private medical institutions. Professional unions should also participate in negotiations on maximum and minimum remuneration.

The process of organization and administration involved in applying a health insurance system is very important and requires a high degree of coordination and simplification of procedures, especially in collecting contributions in order to guarantee a steady flow of funds and thus ensure smooth functioning. Health insurance services should form part of a comprehensive health plan having specific aims and being governed by indices related to the levels of health services and health conditions. Resources and services should be distributed as equitably as possible, so that all participants, including those in remote areas, get their fair share.

A health insurance institution should have an independent budget in order to be able to use contributions to improve services and
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absorb new participants, for otherwise part of its revenue could be claimed by the state, as happened in Egypt. It is incumbent upon the institution to earn the support of the general public on the basis of efficient services, improved information and health education, and personal attention to participants' complaints and problems. If financially possible, training courses should be organized on a permanent basis for health personnel in the insurance system, so as to raise their efficiency and acquaint them with all that is new in medicine and public health, and thus further help them to win the confidence of their patients.

With a view to discouraging excessive prescribing of drugs, such as often happens during an initial period of health insurance, it is essential to bring dispensing under strict control, although not to the extent that legitimate requirements cannot be met. In Egypt, the health insurance institution has succeeded in rationalizing the use of drugs by:

— raising the consciousness of both physicians and patients;
— drawing up a list of drugs that can be dispensed to cover all medicinal needs;
— using special packages to distinguish health insurance drugs from all others, thus preventing them from finding their way to private pharmacies.

These measures have cut drug costs by 22%. In addition, a cost ceiling was laid down, and any expenditure above it had to be met by the consumer from his own pocket; the result was a 32% cut in spending.

In conclusion, health insurance is a way of realizing social justice because it is based on solidarity and cooperation between the well and the ill, the rich and the poor, and employers and employees. We call for an international health convention whereby the signatory nations would contribute in proportion to their financial capabilities. In this way it would be possible to establish a system of mutual responsibility for health care on the world scale.

Beatrice Majnoni d'Intignano
— Health for all at a price all can afford

The industrialized countries provide us with three examples of health systems: in the United Kingdom the national system, financed by compulsory contributions and taxation, sets a limit to global expense and to the amount of care, and offers the best quality for cost in care for all. In the United States the liberal system, financed by private insurance, offers a free choice of coverage and physicians and a high quality of care to those who can afford it, but is somewhat inequitable and costly. In the countries of mainland Europe the work-related system, financed by compulsory health insurance, involves a fruitful combination of quality, freedom, equity and reasonable cost. The per capita cost of the British system is one-third of that of the United States and half that of mainland Europe. Each of these

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systems has notable drawbacks and all afford useful examples from which developing countries might learn.

Work-related health insurance schemes have been possible in European social democratic countries because:
— employers were able to pay contributions (in a context of slow growth and chronic imbalance on foreign trade, however, businesses cannot meet these costs any more);
— the working population was large in comparison to the inactive population.

Such schemes have led to anomalies which Europe is finding it very difficult to remove. As corporatism develops, wage-earners, self-employed people, town-dwellers, and rural groups contribute or benefit disproportionately.

These schemes tend to become powerful bureaucratic monopolies. It is not always clear whether they are at the service of the patients, the providers of care, or their own employees. They make for irresponsible conduct by the medical profession and the people who are insured. The average price paid by contributors is not the lowest possible for the quality of care provided. There is too much high technology and too little prevention and basic care. Such schemes, a luxury of rich countries, can waste money supporting more hospitals and doctors than are necessary.

On what basis should the funds for health care be collected? In fairness, all forms of income should finance health, which means that a considerable amount of tax revenue should be used. Where the work force is affected by poor health, bringing about absenteeism and low productivity, value-added tax can make up for social security contributions, as long as it is earmarked for health. If the added value is known, this is a better method of funding than are contributions from employers on a payroll basis, which increase the cost of labour in relation to capital and, in the long term, limit the creation of jobs and reduce the number of contributors.

Should insurance be relied upon rather than solidarity? Before the age of 40, the probability of a person needing medical attention is very low. After 50, it becomes very high. In a young population, insurance can finance essential needs: the many healthy people assist the few sick. When a population ages, as is happening in the developing countries, it is necessary to provide powerful structures of solidarity so that the young help the old. Furthermore, with economic development, the job structure changes: work-related health

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greater than now: individual contributions and benefits seemed to be linked, and checking on the system seemed to present no major problems. When health insurance becomes general, however, contributions begin to resemble taxation, but they are imposed by a bureaucracy without political sanction, and there is no longer anyone to monitor the relationship between cost and quality, which deteriorates at every level. The authorities then seek to limit expenditure and the care provided. Health insurance, which should be designed as a temporary measure, tends to develop into a national system, as is happening in France.
insurance schemes can suffer from imbalance between the number of contributors and the number of beneficiaries. The very existence of these schemes can be threatened if financial solidarity between them is not organized and accepted; wage-earners, for example, will one day be called upon to help farmers, whose numbers are decreasing.

Bearing in mind the experience of Europe, should we still, as Professor Abel-Smith suggests, advise developing countries to set up insurance schemes? Yes, we should. But perhaps we could advocate a new course,

Financial responsibility should be given to providers of care by asking them to give all care at an inclusive charge.

avoiding the snags encountered by European countries. Everybody should be free to choose his or her system of social protection, be it of the state, health insurance, or employer. In this way the population will gradually learn to choose the system offering health care at the lowest price. Regrettably, this kind of choice was not offered in Europe. In the United States the choice is presented very harshly, and there is an appalling waste of resources. This freedom should lead the poorest people to buy health vouchers rather than opt for free care.

Financial responsibility should be given to providers of care by asking them to give all care at an inclusive charge. This would steer the medical profession towards more prevention and basic care, and discourage requests for high-technology equipment.

These principles should allow the establishment of new kinds of health insurance systems. Professor Abel-Smith is right in advising ministries of health to keep organizational control of them. They could help basic centres to survive by paying them for the number of patients cared for and their average state of health rather than for the number of procedures or doctors involved.

The idea of relying on health insurance in the early stages of development is a good one, but something other than the current European systems will have to be set up if health for all is to be attained at a price that all can afford.

James Midgley

—The advocacy of social assurance is questionable

Social insurance in the developing nations has expanded remarkably during recent decades. Before the Second World War, it was largely confined to certain countries of Latin America. After the war, however, it became a popular way of providing income support, health care, and other social services, and a great variety of insurance-funded provisions, ranging from family allowances in francophone Africa to health care in India, were established. The expansion of social insurance has continued as the governments of many developing countries have replaced employer liability schemes and provident funds with insurance schemes. Zschock (1) found that 48 of 90 developing countries were using insurance to provide medical services.

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But the expansion of social insurance in the developing countries has not been an unqualified success. Problems of administration, finance, coverage and equity have been encountered.

Administrative problems not only include inefficiency and maladministration but also reflect the particular socioeconomic circumstances of many developing countries which make it difficult to assess incomes, collect contributions, and pay benefits. In addition, the administrative fragmentation of social insurance schemes, especially in Latin America, has led to a chaotic situation in which a plethora of social insurance agencies caters for different groups of workers.

Problems of funding have become acute. Inflation has eroded the value of benefits, creating serious hardships for many people. Present economic conditions limit the capacity of governments to provide additional funds to alleviate financial difficulties.

But probably the most serious problems are those of coverage and equity. Many studies have shown that only small proportions of the populations of Third World countries are covered by social insurance. In Africa, social insurance schemes often have less than 50,000 members in populations of several millions (2). Even in Latin America, where social insurance is better developed than anywhere else in the Third World, only a minority of the population is protected (3). Limited coverage of this kind has created an exclusive system of provision in which the better-off workers in regular wage employment, the military, the civil servants, and the white-collar employees are covered by social insurance, whereas the mass of the population engaged in peasant agriculture and urban self-employment has no protection. This pattern makes worse the inequalities existing in developing countries. Because the tax systems of many of these countries are highly regressive, government subsidies for social insurance schemes produce a net transfer of resources from the poorest people to the better-off (4). These and other problems of social insurance in developing countries are now well documented and there is a greater awareness of the need for what the International Social Security Association calls "alternative forms of social protection" in the Third World.

Professor Abel-Smith’s advocacy of social insurance as a means of funding health services in developing countries may therefore be regarded as somewhat anachronistic, especially since he recognizes many of the associated problems. He is particularly concerned about the creation of a two-tier health service in which social insurance institutes provide high standards of medical care to the minority of the population in the modern sector of the economy while poorly funded ministries of health provide inadequate services to the impoverished majority. He is also aware of the problems of administrative inefficiency, wastage, and abuse associated with insurance-funded health care programmes. But he is confident that these problems can be overcome and that insurance contributions can be levied on those in paid employment, so as to release tax revenues to fund health care for the majority. However, a number of difficulties are raised by this proposition.

Firstly, while Professor Abel-Smith argues that funding through insurance is an alternative to funding by taxation, it is widely accepted that insurance contributions are just another form of taxation—namely, payroll taxes. If there are difficulties in raising revenue for health care through conventional forms of taxation, they are not likely to be eased by imposing payroll taxes.
Both employers and employees resist increases in insurance contributions, and their resistance is likely to harden once it is realized that the increases are intended to subsidize health care for the uninsured. And innovative funding policies offer a far better prospect of meeting health-for-all requirements in the developing nations than does the replication of conventional social insurance approaches.

both employers and employees in developing countries are politically well placed to oppose such increases.

A second difficulty is the assumption that the minority paying insurance contributions would be content to use the same health services as the poor. Even if they were given special privileges, as Professor Abel-Smith suggests, members of insurance organizations would probably demand and receive their own exclusive facilities. The exclusivity of the insurance approach is amply demonstrated in developing countries with schemes of this kind. Attempts in Brazil, Mexico, and other countries to extend the services provided by insurance agencies to the rest of the population have not been notably successful.

The problems of providing health for all are indeed formidable and there is an urgent need for new approaches that will deal with the problems of health care funding in the Third World. The advocacy of social insurance as an alternative method of financing health services in developing countries is questionable. What is needed instead is innovative policy-making. New funding policies are required which will deal with the particular problems impeding the expansion of health care to the mass of the population. There may well be a place for conventional social insurance approaches, particularly in the newly industrializing countries with high levels of paid employment. But in impoverished agrarian countries with a small modern economic sector, the introduction of social insurance is unlikely to bring much in the way of tangible benefits to ordinary people.

Although Professor Abel-Smith touches on alternative forms of health care funding, he does not explore their potential in any detail. He argues that Third World countries that rely on tax-funded health services are jumping two stages in the evolution of health care (as experienced by the industrial nations), namely voluntary and compulsory insurance. Although it is debatable whether there is any natural evolutionary progression in the development of health care, the idea of voluntary insurance is an important one. State-supported insurance cooperatives of peasant farmers and self-employed artisans and traders could mobilize resources for health care and provide services to many who are at present excluded from modern social insurance schemes. This is a potentially useful form of funding which is still very underdeveloped in the Third World. Indeed, Professor Abel-Smith’s evolutionary model would suggest that voluntary insurance of this type should precede the compulsory type of provision he is currently advocating.

Another potentially useful form of innovative policy referred to briefly by Professor Abel-Smith is that of levying revenues on crops specifically to fund health programmes for rural people. This approach has been used in Greece for many years but there has been little empirical research into its effectiveness (5), and few assessments
have been made of its potential value in the Third World. Professor Abel-Smith also refers to social assistance as being potentially useful, and recently there has been some discussion about its role as an alternative form of social protection in developing countries (6). His proposal for prepaid health care through the purchase of vouchers from village traders is also interesting, and requires more detailed examination. Although these innovative funding policies require systematic evaluation, they offer a far better prospect of meeting health-for-all requirements in the developing nations than does the replication of conventional social insurance approaches that have already been investigated and found wanting.


Guido Miranda Gutiérrez

— Ministries of health and social insurance agencies must work in harmony

The accelerated production of wealth brought about by industrialization initially caused a greater emphasis on economic than on social development. In recent decades, however, a better understanding of social phenomena has encouraged a search for balance, and social security programmes in many countries have sought some degree of justice in the distribution of wealth and income.

In parallel with economic development, life-styles and concepts of health and illness have been profoundly transformed. As the factors that produced illness were discovered, it became possible to adopt preventive measures. The realization that good health depended on a whole range of economic and other conditions made it possible to work towards people’s well-being in the broadest sense. Health stopped being simply regarded as the absence of illness.

Unfortunately, in the developing countries, resources of the kinds needed for health development are very scarce. In some areas, the current situation is worse than that of several decades ago. And, ominously, people’s expectations are often far higher than is warranted by the real possibilities of satisfying them.

Many developing countries export agricultural produce to markets where competition is very severe; their economic structure is outmoded and their poor are heavily burdened by excessive indirect taxes. Consequently, the prospects for a redistribution of wealth are not good, and significant improvements in the health-generating factors of nutrition, housing, clothing, drinking-water supplies, electricity, and sanitation seem remote. Low-density rural populations lack the main structural elements necessary for development, and face the continuing threat of illness before health promotion can come to the fore. Any progress that is achieved results from short-term measures, yet advances in health and education need sustained action.

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Most of the social insurance institutions established in Latin America some 50 years ago still only provide coverage for salaried employees; family benefits are minimal, health care facilities carry high maintenance costs, there is a trend towards the use of highly complex technology, and organization is bureaucratic and ponderous. Thus there is an inbuilt resistance to progress in this field. The developing countries are suffering from inflation, reduced export prices, increased import prices, and a hard currency deficit leading to progressive indebtedness. The future is uncertain because of the magnitude of the problem and the sluggishness of the recovery mechanisms. In facing this economic deterioration, many of these countries have concentrated on maintaining whatever standards have been reached, rather than attempting improvement. Consequently, there has been a notable decrease in investment in social development that might have given rise to health gains, and in programmes for health care and the prevention of illness per se.

The extent to which health care is financed for members of a scheme will depend on the degree of horizontal and vertical development of the social security system. National budgets, which mainly obtain their revenue from taxes, can largely be allocated to health ministries, freeing them from the expense of treating illness. New hope arises when health ministries and social insurance agencies begin to work in harmony, thus getting away from the duplication of services. Health care programmes should be part of a national policy on public expenditure, training, and the optimal use of resources. The scarcity of resources in the health sector makes it essential to take firm action for the establishment of national health care systems based on ministries of health, social insurance, and the community.

Ministries of health should be responsible for nutrition programmes, curative care,
environmental health, and health education. The aim should be to develop all these spheres of activity, and to give particular emphasis to coordination with other agencies or ministries. For their part, social insurance agencies should seek to establish new, simplified, low-cost services appropriate for primary health care. This process is, as a rule, particularly favoured in rural areas, where the people lack services and are eager to participate in solving their problems. Pressure from high-technology urban centres must be resisted. Clear statements of national policy on the health sector can greatly improve the prospects of progress.

In the past, the groups to which services were delivered had little or no scope for expressing themselves. Let us not forget that social insurance institutions in many Latin-American countries were born of political expediency; in very few countries were they a direct outcome of working-class struggle; in many they are a privilege of minority sectors. Their expansion today must take place with active community participation. Communities frequently surprise the onlooker by their dynamism, their great ability for learning, and their readiness to cooperate, especially in primary health care programmes. To a certain extent it is the first time their direct help has been requested, and leaders in this field are quick to appear; the cost of their training is small and their actions are quickly accepted because the people concerned are familiar with the communities in which they work.

Circumstances require that the social security institutions, if they are to meet community needs, should increase their direct and indirect revenues, decrease their operational costs, and implement new modes of health care covering all citizens.

Gerd Muhr

— The state must assume the responsibility of providing equal care for all

Professor Abel-Smith's arguments may be interpreted as a plea for supporting the health sector in developing countries by means of social insurance. In any such undertaking it is important to avoid certain structural errors which, in many countries with insurance-financed health care, have already led to escalating costs, social imbalance, false priorities, and the encouragement of curative as opposed to preventive medicine. Experience in the Federal Republic of Germany, where social insurance finances most health expenditure, largely confirms Abel-Smith's remarks about these distortions.

I should like to give a brief description of the situation in the Federal Republic of Germany and then outline the kind of structural reform which, in the view of the country's trade union federation, needs to be made if the distortions are to be corrected.

In the Federal Republic of Germany we have witnessed a marked growth in expenditure by health insurance funds, especially since the early 1970s. Expenditure has risen from about US$ 7000 million in 1970 to about $ 37 000 million in 1985. As a result the rates of contribution were raised from 8.2% in 1970 to about 12% in 1985. Almost all experts are agreed that this trend will continue unless the cost-increasing structures are altered. There is broad agreement that the present proportion of the national product spent on health care is sufficient to maintain standards, including

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the introduction of new advances in medicine, if the appropriate structural changes are made.

Besides the cost expansion, some other shortcomings and problems can be observed:
— over-supply in some areas and under-supply in others;
— a tendency towards an excessive use of technology, especially in diagnosis;
— an emphasis on curative medicine;
— undue concentration on somatic illnesses;
— neglect of prevention and psychosocial problems.

It certainly cannot be maintained that these distortions are directly linked with the insurance principle. The blame has to be placed instead on specific organizational aspects of the service and financing structures. In this connection, the following points should be noted.

• Responsibility for health care in the Federal Republic of Germany is extremely fragmented, not only within the state-organized services but also within the health insurance sector and among the providers of services.

• The structure of health insurance follows no unified principle: geographically-based, occupation-based and company-based insurance funds exist side by side, with the result that they compete for members. This is often an obstacle to cooperation on essential health policy issues.

• The relationships between health insurance funds and providers of services are particularly important. The major responsibility for providing outpatient care lies with the physicians or their professional bodies. Consequently, health care has a monopolistic structure, in which private medical practitioners occupy a key position. The resulting divisions between the various areas of medical care and between the health and social services tend to hinder integration.

• The system of fees for individual services pushes up costs—as Abel-Smith stresses—and requires a structure of service facilities that makes little sense nowadays from the medical viewpoint: “machine medicine” has been unduly expanded to the detriment of physicians’ consultations and house calls.

These examples should make it clear that distortions are produced by policy factors relating to organizational structure, regardless of the form of funding. However, it should be mentioned here that, in the Federal Republic of Germany, the health insurance funds themselves can fix the rate of contribution, which must cover expenditure. Resources are distributed in response to the persuasiveness of the providers of services, not in accordance with priorities governed by standards and policies. The situation has led to a constant expansion of the portion of health expenditure financed from insurance premiums, whereas the portion financed from taxation has dwindled. Thus Abel-Smith’s analysis is again borne out.
As a result of these distortions, discussion of health policy in the Federal Republic of Germany has concentrated increasingly in recent years on alternative structural options. Economists have suggested radical market reconstruction, but their ideas are not politically practicable and in any case would blatantly infringe the principle of equality. The following are what the country's trade unions consider should be the guiding principles for reform; they largely accord with Abel-Smith's suggestions.

— There is a need to create overall responsibility for health policy at the state, regional and local levels, whereby common objectives and priorities are made binding upon all concerned.

— Budgeting should become a major instrument for achieving these priorities, and is a prerequisite for the integration of medical and social services.

— Fees for individual services and the payment of hospitals per day of care should be replaced by flat-rate systems and payment for groups of services on the basis of diagnosis.

— Relations between health insurance funds and providers of services should be so arranged as to create a balance of power.

— The fragmentation of services—especially the separation of the health and social services—should be counterbalanced by integrated forms of health care. This ultimately means that regional organization should come to the fore, with the active participation of the general public.

— Mixed funding systems need to be introduced to pay for services and therapies with simultaneous medical and social inputs, e.g., psychiatric care, nursing care, and integrated rehabilitation. The various financing sources should contribute according to the activities concerned.

It is our belief that such adjustments to structural policy will make it possible to remove most of the distortions in our health service system.

It cannot be denied that the financing of health care by insurance allowed the medical services infrastructure to be built up very quickly and medical advances to be rapidly introduced into everyday practice. However, certain structural policies have led to substantial errors in the allocation of resources, as a result of which health services sometimes do not correspond to actual needs. This was possible because the country's gross national product increased at relatively high rates over a long period of time. In view of the change in economic conditions, it is unrealistic to expect this process to continue: even the richer developed countries will no longer be able to afford to squander their resources in this way (although they will no doubt continue to squander them on armaments on a grand scale).

This applies still more to developing countries, which should try to avoid repeating our structural errors, since these would have even more unfavourable effects than in the developed countries, particularly as regards equality of access to health care; for example, the importation of
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high-technology medicine would be available to only a small number of privileged people.

We therefore consider it extremely important that the state should assume responsibility for health care, setting itself the objective of equal care for all in accordance with the World Health Organization’s concept of primary health care.

Beside this central consideration, the form of financing—taxation or insurance—seems of secondary importance. But it has to be admitted that Abel-Smith’s concept of a form of mixed financing that takes into account the prevailing policies on structure is very convincing, even if the danger that inequalities will develop cannot be ruled out. Ultimately, the choice of a financing system will be governed partly by the criteria of profitability and fair distribution of the tax burden.

A system financed by health insurance has an advantage over one financed by taxation in that it does not have to compete with other items of state expenditure. Whether funding from health insurance contributions is fairer than funding from general taxes depends on the specific design of the tax system. As a general rule, the tax burden on the lower income groups rises in proportion with the share of taxation that is levied on consumption, unless taxes on consumer goods are graduated, for example, by imposing higher rates of tax on luxury goods.

The use of social insurance to finance health care offers good prospects for development if the state assumes the responsibility of providing equal care for all and if policy instruments are directed towards this objective.

Milton I. Roemer

—Social insurance has great political acceptability

Professor Abel-Smith has presented very well and concisely the many reasons for using social insurance to increase the financing of health services in developing countries. Of the 85 countries that now use this strategy for medical care coverage of varying proportions of their populations, about half are in the developing category. The general trend in these countries has been towards a gradual extension of both the population insured and the services provided.

His essay is wise in stating, and then rebutting, the various arguments against health insurance—mainly its limitation to regularly employed industrial and commercial workers who, along with their employers, can make periodic contributions, something unfeasible for rural families. Included are the arguments about reducing equity and aggravating the advantages already enjoyed by city-dwellers. But I would add still another rebuttal to those presented.

About ten years ago I studied the health sectors in 12 Latin-American countries, focusing in each on the strength of the ministry of health and the social security programme. I tried to find out whether strong social security health programmes, as indicated by the percentage population coverage and per capita expenditure, were associated with relatively weak ministries of health, as indicated by per capita

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expenditure and the percentage of the total government budget going to health, and vice versa. Such relationships seemed likely if ministries of health were right in regarding social security programmes as troublesome rivals. However, among the 12 countries, those with the largest social security programmes also had the strongest ministry of health programmes, while those with the smallest social security programmes had the weakest ministries of health.

From these findings, it can be inferred that making contributions from wages and payrolls into a social security fund captured money that would otherwise have been paid to private doctors, pharmacies, and other elements of the urban private sector. There was no effect whatever on tax appropriations for ministries of health, which, in fact, as Professor Abel-Smith notes, were thus able to give more attention than would otherwise have been possible to rural people lacking social security coverage.

In contrast to the situation in Western Europe and North America, social insurance in most developing countries does not support payment to private providers—with all the extravagances this generates. With two principal exceptions in Asia (the Republic of Korea and the Philippines), insurance income typically finances organized health care delivery by salaried personnel in polyclinics and hospitals. A given expenditure supports service far more efficiently this way than by the perverse commercialized patterns of private practice. Furthermore, a nation's overall resources for health care (hospitals, polyclinics and health centres) are enhanced.

Fund-raising by the insurance device does not mean that the services financed must be provided through a subsystem entirely separate from the ministry of health. Professor Abel-Smith wisely points out the value of integration in the delivery of all health services. This has been demonstrated in Burma, Egypt, India, and Tunisia, where the health services for social security beneficiaries are managed largely by the ministries of health. Even more supportive is the mechanism used in Brazil, Italy, New Zealand, and Nicaragua, where a substantial share of ministry of health costs have been met by social security funding.

In developing countries, social insurance cannot be expected to cover a high percentage of the population at the outset.

Nor can agricultural workers and peasants, with low and unstable wages, be expected to make regular contributions to an insurance fund; yet these are the majority of the work-force in developing economies. Health insurance coverage in such countries must start by covering the small proportion, perhaps only 5-10%, of the population in industry, commerce, government service, or mining, where wages are steady and contributions can be collected regularly from workers and employers. In time, as industrial development proceeds, coverage can expand; in several Latin-American countries over 50% of the population, counting dependants, is now covered.

Social insurance is essentially a tax earmarked for the provision of old-age pensions, unemployment benefits, health services, or other specific items. Its enormous growth throughout the world is
due largely to its great political acceptability, in contrast to financing health care through general revenues that also have to meet other highly visible purposes, such as defence, road-building, education and agriculture. An earmarked health insurance fund does not have to compete with these other governmental programmes, and it is also protected from invasion by their financial claims. The insurance device means self-help and self-reliance; the people are paying for their own health care. But they are doing it in advance of sickness, on a group basis.

In time, after health insurance has demonstrated its value for all to see, the political dynamics often lead to a second stage. As has been shown in Sweden, the United Kingdom, and elsewhere, health insurance can pave the way for a national health service, financed largely from general revenues, and covering everyone.

In order to evaluate the pros and cons of health insurance, answers to the following questions are necessary.

— Are the negative aspects of health care in the countries where insurance exists due exclusively to the functioning of the insurance mechanisms?

— Can alternative mechanisms prevent such negative effects?

Seeking answers to these questions could be based on a comparison of experiences in countries with different financing systems. Ideally, in order to obtain the best possible analysis, health systems similar in every respect except for the presence or absence of insurance should be compared. Unfortunately, the complexity of social reality and health care systems makes this impossible, and a comparative analysis cannot, therefore, provide definitive answers.

The strongest objections raised against insurance, as summarized by Abel-Smith, are the following:

— it encourages curative medicine;
— it is detrimental to prevention;
— it contributes to the medicalization of social problems.

Other negative aspects concern the favouring of urban populations and the necessity of queueing to see doctors who tend to arrive late and leave early. The evidence from many countries indicates that such problems are closely bound up with insurance systems. However, it has to be said that curative medicine has been favoured by general trends in the philosophy of medical sciences rather than by the establishment of particular financial solutions. Insurance is also said to have an adverse effect on health management in general, but in my view it is bureaucracy.
that brings about this state of affairs, rather than health insurance itself. In Poland, shortcomings of the health service similar to those attributed to insurance in other countries may be caused by quite different managerial and social factors.

Any assessment of the likely outcome of an insurance scheme in a given country must take account of the level of health service development and of health policy priorities. Where coverage is small and there are charges for health services, the immediate advantages of insurance are obvious: it helps to increase coverage and releases the insured from the risk of having to pay fees. But it is worth considering the advantages of insurance in countries with a high or full coverage as well as unpaid access to health services. Before this can be tackled, however, a certain prerequisite would have to be met. Abel-Smith assumes that the term “health insurance” is unequivocal and that its advantages and disadvantages can therefore be determined with precision. Unfortunately, the term takes on different meanings in different contexts. It often happens that a citizen entitled to health services is called “the insured” and that a tax is called “the premium”, and one may gain the impression that a system is based on the concept of insurance even where this is not so. Thus in the Polish national health service, where the notion of “insured” is regarded as a key one, being “insured” entitles a person to free health care. The citizen who is not “insured” has no access to free health services, cannot buy prescribed medicines at a reduced price, and has no right to many welfare services. Less than 1% of the population remains in this category. Nevertheless, it cannot be concluded that the true insurance approach has been adopted in the Polish health service.

In theory a health insurance system should have the following characteristics:

- no equal and universal access to health services;
- premium differentiation;
- differentiation of services, those received depending on the contributions paid.

The most striking point here seems to be the rejection of equity as a preponderant value of health care organization. This is a drastic departure from official strategy on health for all, in which equity is treated as the main goal. In theories of health management based on socialist ethics or welfare state ethics, equity is usually favoured over efficiency. However, the development of health care based on the rule of equity can be harmful to the principle itself. A lack of resources makes the realization of equity impossible, and formal barriers to access, now abolished, are replaced by a physical inability to meet the demand. At this point the insurance option may be tempting, not only because it enables additional funds to be obtained, but also because a specific change in attitudes becomes possible. The health insurance option, as understood here, makes it possible to restore an awareness of connections between participation by individuals and groups in health care financing on the one hand, and services rendered on the other.

In many contemporary health systems, with both budgetary and insurance financing, there is no longer any awareness of such
Health care—who pays?

links. Where health care has come to be regarded as a right, guaranteed by the state, the utilization of health care facilities has exploded, even in countries with no explosion of health care costs. In Poland, for example, the mean numbers of contacts that urban dwellers had with the health services in 1960 and 1984 were 7.5 and 11.1 respectively. A reversal of the trend cannot be achieved unless psychological change occurs, in particular the development of a sense of personal responsibility in health matters. The introduction of an insurance scheme might well help to bring this about.

If insurance is to be effective both economically and socially, the people have to accept an increase in their contribution towards financing health services. An element of choice can be present even if compulsory insurance is adopted; in this case, premium differentiation has to be matched by service differentiation. A homogeneous scheme gives no scope for satisfaction on the part of people wishing to pay extra for better care. Where general coverage and free access to health services are already established, insurance could bring about improvements in services. These could include: a free choice of doctor; home visits instead of outpatient services, particularly for babies; and treatment of emergency cases by family doctors, instead of by unknown specialists.

There is a long list of possible solutions. Even more important, they can be adjusted to the preferences expressed by the insured people. The introduction of health insurance may not be contrary to the principle of equity in health care but only to the excessive uniformity that suits bureaucrats.

**Professor Abel-Smith replies**

I am sorry to have caused Professor Banerji so much annoyance by not repeating so much of the common ground that exists between us and by not writing an article on a different subject. We are, however, clearly in agreement that many of today’s insurance schemes have perpetuated or created unacceptable privilege. Moreover, I was very careful not to say which, if any, of the schemes I mentioned met all my criteria. Neither of us would want to see an insurance scheme launched which could never cover the entire population. But I see no objection to people in regular employment paying specific contributions for much the same services as those used by people not in this position, thanks to funds derived from taxation.

I looked in vain to find Professor Banerji’s solution to the problem that I was writing about. I cannot agree that funding is “secondary” and “a question of budgeting and making financial adjustments” once people control their health services. Surely he is not expecting poor communities to pull themselves up entirely by their own bootstraps. Tax money could be channelled to these communities if the better-off were made to pay for their health services by insurance, and this would surely help the poor to build better services and to do so...
more quickly; this is bound to be a
top-down process. And it seems to me that
support from the finance ministries will be
necessary, no matter who ends up in control
after “the long, grinding political struggle”.
Moreover, I dared to suggest that such
support might even be won now, as the
year 2000 is not that far ahead.

Professor Midgley restates all that has gone
wrong with health insurance in so many
countries and reminds us that the
contributions financing it are just another
form of taxation. But in many developing
countries it is a tax which is not yet used or
not used to its full potential. My concern is
that ministries of health should bid for this
extra revenue before it is claimed for other
purposes, and use it, as Dr Miranda
Gutiérrez suggests, for “new, simplified,
low-cost services appropriate for primary
health care”. These would, of course,
include preventive services, as Dr Gomaa
rightly stresses.

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**Health insurance: enemy or ally?**

What application does the
discussion in the Round Table have
for your country? Does insurance
help or hinder the achievement of
health for all? Could it be used or
adapted to this end?

Some ideas to start you thinking
are to be found on the following
page.
Health care—who pays?

Health insurance: some considerations

If your country already has health insurance

— Does it include prevention?
— Is it built on primary health care principles?
— Does it promote equity or create privilege?
— What say has the Ministry of Health about its resources and how it uses them?
— What would it cost to give the uninsured the same services as the insured?
— How could health insurance be adapted to conform better to health-for-all objectives?

If your country has no health insurance

— Whom could it cover? (What proportion of the population is made up of people in regular employment and their dependants?)
— Is there a social security scheme on which it could be built (e.g., occupational injury, provident fund)?
— What could the insured be offered for their contributions without undermining health-for-all goals?

Health care can also be financed by:

• obtaining more tax revenue, possibly as earmarked taxes;
• attracting more external cooperation;
• requiring employers to provide defined services;
• introducing or raising charges for government services;
• encouraging fund-raising by nongovernmental organizations;
• stimulating community financing and voluntary health insurance;
• economizing through more efficient use of resources;
• reorienting priorities within existing services or selecting less costly methods of service delivery.

Financial master plan

It is important that a financial master plan exist in every country, giving estimates of funds obtainable from public, private and foreign sources. If your country does not already have such a plan, you may wish to consider:

— distributing to key officials and training institutions the WHO manual on this subject;*
— holding seminars to promote awareness among senior staff of the importance of financial planning;
— organizing a national workshop on financial planning for health;
— including an element of financial planning in courses on health management and health planning;
— undertaking a study on health financing and health expenditure in your district or country;
— contacting institutions that can provide basic training for the health sector's financial planners, providing fellowships for such training, and developing a training programme;
— reviewing the financial implications of your daily work — where do your financial resources come from, do you spend them wisely, and are additional resources available locally?

Part 3: Empirical evidence on the economics of Health for All

These six articles show at what an early stage the assessment of Health-for-All costs and their determinants remains. Grosse & Plessas review the costs and coverage of seven primary health care programmes. The larger-scale programmes were found to have lower per capita investment and operating costs than the demonstration projects.

The Kasongo project team, reporting on a project of intermediate size, provide evidence of a low-cost system in which local financing (based on a flat fee per episode of treatment) is responsible for almost half the operating costs of health centres. By separating the fixed and variable components of project cost, informed estimates can be made of the costs of expanding coverage.

Stinson’s review of experience in over one hundred community financing initiatives contains many lessons: “the choice generally reflects national budgetary constraints, not the communities’ willingness and ability to pay. Community financing would be more viable if planners started by studying demand.” Unrealistic expectations and frustrated plans result. The partial role of the community and the parallel needs to reallocate current resources and explore all other financing possibilities are emphasized.

Jajoo et al. produce what Stinson called for—a case study. Underutilization by the needy, underpayment by the more prosperous, and the need both to decentralize access to village health workers and to refer complex cases were all experienced in this project in Maharashtra (India). The establishment of an insurance scheme took several years, owing to doubts and suspicion, but it now finances 84% of the very low village health workers’ costs. A second case study by Jancloes et al. details partial self-financing by a carefully designed selective fee system. The respective roles of government and the local community in administering the project are also described.

The final contribution provides empirical material in relation to the question of cost increases, discussed in the preceding section. Switzerland’s health care costs, in particular those of its hospital services, rose rapidly between 1966 and 1982. The percentage share of health in gross national product more than doubled from 1960 to 1980, and the country’s health system incentives are said to be “cost-generating, not cost-saving”. Policy options to increase the competitiveness of the health care industry are suggested. In the discussion that follows, budget limits and closer regulation of health costs in other industrialized countries are shown to have been effective. These achievements may be significant for the poorest countries if they allow the release of resources for use in well-planned primary health care actions.
Robert N. Grosse & Demetrius J. Plessas

Counting the cost of primary health care

A study of seven primary health projects in different countries has established that large-scale programs offer primary health services more cheaply than demonstration projects do. Health sector planners should re-examine their strategies for the expansion of primary health care in the light of this finding.

In recent years there has been a growing realization that it is impracticable to try to extend modern health services to the bulk of the people in developing countries through a physician- and hospital-based system of the urban type. Moreover, the kinds of health services needed by low-income rural populations rarely involve high technology. Thus, many countries, following the Alma-Ata Conference and other initiatives of the World Health Organization, have decided to adopt an approach to rural health that is largely based on auxiliary medical workers living in, and supported by, the community. There are considerable variations in the way this approach, usually known as primary health care, is applied and implemented in different countries.

There is disagreement between the proponents of a comprehensive approach to primary care and those who consider that such an approach is too expensive but that programs for the control of specific diseases, such as tuberculosis, schistosomiasis, and malaria, could be handled with available technology at low cost and would have a considerable impact on mortality and disability. Another disputed issue is whether large-scale programs offering primary care are superior to demonstration projects from the standpoints of cost and coverage. At the moment, donor countries, bilateral assistance programs, and international development agencies appear to favor "integrated" approaches to primary care, opting more often for demonstration projects rather than large-scale programs linked with local ministries of health. This article examines costs and coverage in three large-scale and four demonstration programs.

Lack of interest in cost analysis characterizes the whole range of health activities, but it is particularly pronounced in the case of primary health care, probably because of the diversity of the activities involved. Shortcomings include poorly defined concepts of cost, the use of services irrelevant to the community's needs, the performance of costly studies and surveys that are not essential to the actual task of providing primary health services, and the continuous absorption of technical assistance costs—particularly in demonstration projects—by activities that are often reproducible from one country to another.

The Field Projects

The field projects studied were three large-scale programs in Afghanistan, the Dominican Republic, and the United Republic of Tanzania, and four demonstration projects—namely, the Montero project in Bolivia, the Cali project in Colombia (known as PRIMOPS), the Danfa
project in Ghana, and the Narangwal project in India. Studies were carried out on site in Bolivia, the United Republic of Tanzania, and the Dominican Republic, but for the other four programs we used data provided by the organizations responsible for them.\textsuperscript{1}

The projects examined varied markedly. The large-scale programs were older, run by ministries of health, and provided primary health services through decentralized rural dispensaries and health centers using a wide variety of health workers living in, and supported by, their communities. They have achieved a mass coverage ranging from a "high" of 80% of the population in the United Republic of Tanzania to a "low" of less than 10% in Afghanistan.

In the United Republic of Tanzania, health care was delivered mainly through rural dispensaries and health centers, the major services provided being maternal and child care, first aid, health education, environmental health services, initial treatment of serious illness, and referral to health centers. A variety of primary health workers were employed, ranging from village medical workers and health auxiliaries to rural medical aids and medical assistants.

In the Dominican Republic, too, extensive use was made of local health workers, but services were confined to communities in rural areas with extremely limited access to other types of health service. This had an impact both on coverage and on investment and operating costs. Services were primarily aimed at women and children and initial treatment and referral activities were minimal.

The program in Afghanistan, which is supported by UNICEF, has emphasized the dispensing of drugs by village health workers, and the provision of maternal and child health services by trained birth attendants (dais). The somewhat narrow range of primary health services was compensated for by an active training program for both village health workers and dais, which extended coverage to large numbers of people in remote rural populations in a relatively short time.

The demonstration projects were quite small by comparison, with a population coverage ranging from 11 000 to 22 000. With one exception, they were designed by American universities, which also took part in studies and experiments that added to total costs without extending coverage, although this does not appear to have been part of the original plan.

\textbf{Lack of interest in cost analysis characterizes the whole range of health activities, but it is particularly pronounced in the case of primary health care.}

All four projects were subsidized to a considerable degree by the US Agency for International Development and offered a wider range of primary health services than did the large-scale programs.

The Danfa project in Ghana, the second oldest project in this group, was located in one of the country's 60 rural health centers. The area was selected in 1970 as the site for an innovative, cost-effective health care system that might serve as a model for the other health centers. However, it was burdened with a number of atypical operations that added to costs without improving coverage. These included family planning studies, special epidemiological surveys, community laboratories for Ghanaian physicians, and other related research. There were three satellite units, providing health education, family planning services, and immunizations respectively.

The Narangwal project in India was intended to study upward referral to a hospital from six sites in the locality. It provided basic health services but had no outreach to the community and covered only a limited population.

The project in Bolivia had no university connection, suggesting that it included no experiments or innovations. It relied on promoters to bring basic services to the community (mainly

\textsuperscript{1} These are the Johns Hopkins University for the Narangwal project in India, Tulane University for the Cali project in Colombia, the University of California at Los Angeles for the Danfa project in Ghana, and Management Sciences for Health for the program in Afghanistan.
in the form of drug supplies), but had considerable difficulty in keeping its staff and resupplying the promoters with drugs. It operated without drugs during 1978–79 and came to an end shortly afterwards.

The project in Cali, Colombia, was an urban one. It trained health workers to make regular house visits and had health posts for women and children outpatients. It used existing buildings and the equipment of other health centers—which kept costs low—and reached between 80% and 90% of its target population.

**Measurement of Costs and Coverage**

For operational convenience, costs were classified into investment costs and operating costs.

- **Investment costs** include the one-off outlays required to establish a fully operational program. They primarily depend on the program's size, the combination of services, the manner of providing them, and production capacity. They cover:
  - research and development;
  - facilities and major equipment;
  - initial inventories of supplies and drugs; and
  - initial training of manpower.

- **Operating costs** are the recurrent outlays required to operate and maintain the program's levels of service. They cover:
  - staff salaries, allowances, and other benefits;
  - replacement and maintenance of equipment and facilities;
  - replacement training;
  - drugs, supplies, biologicals, etc.; and
  - fuel, utilities, etc.

Since our aim as regards demonstration projects was to determine costs relating to the innovative or experimental health services provided, we examined utilization levels before and after the introduction of each new type of service. This was particularly relevant in the case of the Narangwal and Cali projects, which existed prior to the introduction of the demonstration component. The consideration of investment costs required special care since, in many externally funded projects, investment costs are not kept separate from operating costs but are merged in the total costs.

In estimating population coverage, we concentrated on accessibility, that is, the number of people who could reach and use the services. Where trained health workers were stationed in villages, we assumed that the population was covered. Where health centers had responsibility for a number of rural villages (or rural residents who did not live in organized communities), rough estimates of population density and distances from health centers were made. As the distances lengthened, increasingly lower percentages of the population were estimated to be covered, the estimates being based on previous surveys of relationships between distance and utilization in developing countries. Discussions with project managers were also helpful in estimating coverage.

**The Findings**

The table summarizes the findings for all seven sites. Per capita costs, as a percentage of per capita gross national product (GNP) evidently vary significantly. The large-scale programs are substantially less costly.

The two largest programs, those in Afghanistan and the United Republic of Tanzania, have per capita annual operating costs of one US dollar or less, which is from 0.3% to 0.6% of the per capita GNP. Investment costs are also low, particularly in Tanzania, where they reflect the program's age and high utilization rate. In the Afghan project, the rate is about one visit per capita per year, lower than those of both the others, probably because of the program's relatively short existence and reliance on extensive staff training rather than on expansion. Moreover, it was addressed to a population in which women are less likely than men to visit a health center or consult village health workers. The Tanzanian program on the other hand is older and more intensively used, reflecting the country's long commitment to rural health services.

The other large program, which covers 651,000 women and children in the Dominican Republic, has higher operating and investment costs in dollars, but they are well under
1% of the per capita GNP. This program serves fairly inaccessible populations—which explains the high costs—through a strong outreach component using trained workers. Predictably, it also has the highest manpower costs of all.

Primary health services are provided at substantially higher cost in the demonstration projects than in the large-scale programs. Operating costs range between $6 and $15 while investment costs range from a “high” of $32.80 for Ghana to a “low” of $5–6 for Narangwal. Naturally, compared with those for large-scale programs, costs as a percentage of per capita GNP are 3–10 times higher in the demonstration projects for countries with similar per capita incomes, suggesting that primary health care in these countries is less affordable than in those with large-scale programs.

All four demonstration projects were structurally similar in that certain innovations were conducted and improved coverage was not part of their goal. They varied in terms of visits per capita, Cali and Narangwal having higher rates than the other two sites or any of the larger programs. In the case of Cali greater accessibility was the major reason, while in Narangwal the high rate is explained by the intensive referral activities that were, after all, the major function of the project.

Most of the variations in costs can be explained by coverage and program ownership. Programs incorporated into the mainstream of local health administrations (which helps to explain the large coverage) are more cost-effective than innovative experiments, which may not be suitable as prototypes for the delivery of primary health care. High costs alone may preclude their final adoption—in particular high recurrent costs, which discourage the expansion of health services in rural areas. Thus, all four of the demonstration projects studied have ceased operations and probably none was finally adopted by a host country.

High investment costs, on the other hand, are related to the length of operations, i.e., the longer a program is in operation the less are its total costs dominated by investment costs. A case in point is that of Afghanistan, where the investment costs form a high percentage of the total costs. Other key variables are the ratio of external funds to investment costs—almost

### Primary health care projects: population coverage and costs

<table>
<thead>
<tr>
<th>Country and project</th>
<th>Population covered (thousands)</th>
<th>Visits per capita (thousands)</th>
<th>Annual operating costs ($/ capita)</th>
<th>Investment costs ($/ capita)</th>
<th>Visits per year</th>
<th>Annual operating costs ($/ year)</th>
<th>Investment costs ($/ year)</th>
<th>Operating costs as a percentage of GNP per capita</th>
</tr>
</thead>
<tbody>
<tr>
<td>Afghanistan</td>
<td>1555</td>
<td>1029</td>
<td>676 000</td>
<td>786 000</td>
<td>0.9-1.0</td>
<td>0.6</td>
<td>0.7</td>
<td>0.3</td>
</tr>
<tr>
<td>Dominican Republic</td>
<td>651</td>
<td>2735</td>
<td>726 000</td>
<td>1 220 000</td>
<td>4.2</td>
<td>2.7</td>
<td>1.9</td>
<td>0.4</td>
</tr>
<tr>
<td>Tanzania</td>
<td>12 000</td>
<td>66 000</td>
<td>11 800 000</td>
<td>2 676 000</td>
<td>5.5</td>
<td>1.0</td>
<td>0.22</td>
<td>0.6</td>
</tr>
<tr>
<td>Bolivia, Montero</td>
<td>11</td>
<td>17</td>
<td>167 000</td>
<td>218 000</td>
<td>1.6</td>
<td>15.4</td>
<td>19.8</td>
<td>3.9</td>
</tr>
<tr>
<td>Colombia, Cali</td>
<td>22</td>
<td>137</td>
<td>217 000</td>
<td>NA</td>
<td>6.2</td>
<td>9.8</td>
<td>NA</td>
<td>1.6</td>
</tr>
<tr>
<td>Ghana, Danfa</td>
<td>15</td>
<td>29b</td>
<td>170 000</td>
<td>655 000</td>
<td>1.5</td>
<td>8.5</td>
<td>32.8</td>
<td>1.5</td>
</tr>
<tr>
<td>Area I</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>India, Narangwal</td>
<td>11</td>
<td>37b</td>
<td>62 000b</td>
<td>62 000b</td>
<td>7.2b</td>
<td>6.1</td>
<td>5.4-6.0b</td>
<td>3.4-4.1c</td>
</tr>
</tbody>
</table>

a Applicable only to visits to basic health centers and visits from village health workers. Visits from the 430 days not available.

b Applicable to about half of the services offered by the project.

c Estimated range.

NA = not applicable.
Health care—who pays?

identical for all seven sites—and the combination of services offered. Coverage is not necessarily related, however, to the range of services offered but rather to whether the services are “consumable”, e.g., immunization, maternal and child health services, and counseling on family planning, or “not consumable”, e.g., surveys and studies.

In the long run, demonstration projects may not be incompatible with high coverage and low, affordable costs provided they lead to reproducible prototypes, but more research is needed to ascertain the ultimate place of “low-cost”, “integrated”, primary health care projects in the developing countries. The degree of representativeness of the sites selected for the four demonstration projects studied may be questionable in itself; although, with the possible exception of the Montero project, they were all considered in professional circles as examples of moderately successful projects.

It may also be worth investigating whether the success of demonstration projects is related to their performance or to the fact that they create fledgling bureaucracies outside the immediate control of the ministries of health, which leads to their collapse once donor resources run out.

Another issue of some importance to the planning of primary health services is the role of cost analysis. In the current context of increasingly scarce resources, cost analysis is essential to this type of programming as decision-makers are increasingly concerned with rising costs and future financial ability to extend coverage to various population groups. If health planners are to deal with these questions, they must understand not only the possible effectiveness of programs in terms of outreach capacity, impact on death and disability, and so on, but also the probable costs involved, including the incremental costs for the development, installation, and operation of new facilities over a period of time.

ACKNOWLEDGEMENT

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Introducing an integrated managerial process for national health development


As countries work towards their common goal of Health for All, they are becoming increasingly aware of the usefulness of modern management techniques in improving their health services. This publication explains the management process through its stages of monitoring, evaluation, assessment, forecasting, and development and implementation of a strategy. It helps health managers to perfect the techniques of applying these functions in the correct sequence, as only then can the management process be considered “integrated”.

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Primary Health Care

Kasongo Project Team

Primary health care for less than a dollar a year

Cost analysis of health centres in Zaire shows that primary health care can be provided for less than US$ 1 a year per person and that activities could even be extended without overstepping this mark.

The Kasongo administrative zone in the Kivu Province of Zaire covers nearly 15 000 km² of forest and savannah. According to the 1980 census the zone has a population of 195 000, of whom 30 000 live in the capital. The rest live in a town of 15 000 inhabitants, 10 villages of 2000–5000 inhabitants, and many smaller communities. An earlier article in World Health Forum describes the primary health care project started in 1972 by a team of Belgian and Zairian medical personnel (1).

The official health service of every zone in Zaire receives an annual budget provided from general tax revenues by the central government. In Kasongo, after subtraction of the cost of the general hospital and of the manpower required for its functioning, the remaining budget was insufficient for the financing of the network of health centres. It was possible to appoint one auxiliary nurse per 10 000 inhabitants but there was no budget for other team members. Vaccines, tuberculostatics, antileprosy drugs, and a few other products could be supplied, but not drugs for the most common ailments. The salary of the supervisor and the cost of a car, transport, and simple technical equipment were paid for partly by the government and partly by foreign aid. No budget was available for the building and furniture. Complementary, self-supported financing had to be found.

In the analysis that follows, all costs are related to a “unit” of 10 000 people. In the towns, the 10 000 inhabitants will yield 7000 new attenders per year at the health centre. In the rural areas the number of new attenders will be nearer 3500.

Choice of the Type of Financial Self-Help

The finances of the health centres are managed by health committees consisting of members of the local population and the staff of the centre. Various ways of financing were discussed by the Kasongo Project Team and the committees. Private health insurance was discarded because it would have been a psy-
The psychological error to ask all families to make a financial contribution before services were rendered. Charitable contributions were not envisaged because the continuity of the services developed by such means could not be guaranteed.

Direct household expenditure and communal self-help were considered suitable types of private financing. Community participation was in any case a condition for the development of a health centre, as the local community had to commit itself to the building and maintenance of the facility and to making the furniture. In some centres communal self-help covers part of the salaries.

As far as direct household expenditure is concerned, payment for drugs and for each item of service was not considered appropriate because such a system could become a barrier to the continuity of care, especially for chronic patients. However, the health committees opted for another form of direct household expenditure: the payment of a flat rate per sickness-episode (or per episode of risk necessitating preventive activities), however serious or long-lasting a particular episode might be. This type of payment makes explicit the "contract" between the service provider and the service recipient concerning a specific health problem and enhances the continuity of the care. The flat rate can be adapted periodically in each of the health centres, according to the balance between income and expenditure. If a centre has a debit balance, the health committee decides whether the rate should be increased or whether the deficit should be covered by collective resources.

Costs of Primary Health Care

The table shows the different items of expenditure. The consumption of products such as drugs, vaccines, contraceptives, laboratory supplies, stationery, and other miscellaneous items varies according to the number of attenders. On the other hand, the salaries of the staff and supervisor and the cost of maintenance and depreciation of the car, equipment, building, and furniture are fixed and are scarcely influenced by the quantity of services rendered.

The sum of the variable and fixed costs shows a higher cost per inhabitant for the more frequently used urban health centre than for the rural health centre. Per attender, however, the cost is higher in the rural health centre.

Variable costs supported by the central budget

The treatment of tuberculosis and leprosy patients is supported by the central government: the schedule applied in Kasongo to tuberculosis patients costs $17.60 per patient, and one year of sulfone tablets costs $1.10 for each leprosy patient. At the present time, of 1000 new attenders a year, about one person starts an antituberculosis treatment and about 10 leprosy patients require a yearly dose of sulfones, yielding costs of $17.60 and $11 respectively. These figures must be multiplied by 7 in the towns and 3.5 in the country.

The immunization schedule applied to mother and child (2 doses of tetanus toxoid, 1 of BCG, and 3 doses of DPT) is estimated to cost about $0.80, making a total cost of $160 for 200 new attenders per year out of the population of 10 000.

Contraception is not widespread in the towns and is nonexistent in the rural areas. In the urban centres the yearly number of new accepters is a little more than 3% of the birth rate, or about 14 accepters per 10 000 inhabitants. One in three receives, in the health centre, three-monthly doses of long-acting progestogens (costing about $12 per accepter per year), the other two preferring a Lippes loop at the hospital ($1.50 each). The average cost is $5 per accepter, i.e., $70 per 10 000 urban inhabitants.

The hospital provides laboratory supplies and locally produced mixtures and ointments at an estimated cost of $30 per 1000 new attenders, giving total costs of $210 in urban health centres and $105 in rural ones.

Variable costs financed by the health centres

Every month, the central store reports the quantities of drugs ordered by each health centre from a standard list. For 23 of these items, representing about 95% of the expenditure on drugs, the quantity ordered per 100 new attenders is calculated regularly. Between
June 1979 and July 1980 the average cost per 100 sickness episodes (new attenders) was $16, the actual costs in the different health centres ranging (in spite of instructions to apply standard charges) from $12 to $21.

Monthly accountancy reports show that drug costs represent 65% of the locally supported variable costs; cards and other printed matter, except initial family files, 21%; small hospital supplies, such as syringes and needles, 1%; and local miscellaneous expenses, such as soap and ingredients for the preparation of meals for nutritional rehabilitation, 13%.

**Fixed costs supported by the central budget**

The fixed costs that are met by the government or from external sources are not proportional to the workload. They are estimated per 10,000 inhabitants.

The nurse is on the official payroll with a salary of about $1200 a year. The salary of the supervising doctor and the cost of the vehicle are supported by either government or foreign aid. The monthly supervisory activities take an average of 1.5 doctor-days (one day in the field and half a day of preparation and reporting). Estimating a doctor’s salary to be $40 a day, each supervision costs $60 ($720 a year).

A four-wheel-drive car is required for the supervision of the health centres. Under local conditions, the costs of insurance, maintenance, and fuel amount to about $0.50 per km. The average distance from the hospital to the health centre being 50 km, transport for 12

### Yearly cost and financing of Kasongo health centres

<table>
<thead>
<tr>
<th>Items</th>
<th>Cost in US dollars</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Urban health centre</td>
</tr>
<tr>
<td></td>
<td>Central budget</td>
</tr>
<tr>
<td><strong>Variable costs</strong></td>
<td></td>
</tr>
<tr>
<td>Standard list of drugs</td>
<td>1120</td>
</tr>
<tr>
<td>Tuberculostatics (1 case per 1000 new attenders)</td>
<td>123</td>
</tr>
<tr>
<td>Anti-leprosy drugs (10 cases per 1000 new attenders)</td>
<td>77</td>
</tr>
<tr>
<td>Vaccines (200 new maternal and child health episodes per 10 000 inhabitants)</td>
<td>160</td>
</tr>
<tr>
<td>Contraceptives (14 new accepters per 10 000 inhabitants)</td>
<td>70</td>
</tr>
<tr>
<td>Laboratory products, ointments, and mixtures</td>
<td>210</td>
</tr>
<tr>
<td>Printed matter</td>
<td>371</td>
</tr>
<tr>
<td>Other hospital supplies</td>
<td>21</td>
</tr>
<tr>
<td>Local purchases</td>
<td>224</td>
</tr>
<tr>
<td><strong>Fixed costs</strong></td>
<td></td>
</tr>
<tr>
<td>Salary of nurse</td>
<td>1200</td>
</tr>
<tr>
<td>Incentive payment to nurse</td>
<td>100</td>
</tr>
<tr>
<td>Salaries of 3 other staff</td>
<td>1300</td>
</tr>
<tr>
<td>Salary of supervisor (1.5 doctor-days per month)</td>
<td>720</td>
</tr>
<tr>
<td>Transport (100 km per month)</td>
<td>600</td>
</tr>
<tr>
<td>Depreciation of car</td>
<td>200</td>
</tr>
<tr>
<td>Depreciation of bicycle</td>
<td>40</td>
</tr>
<tr>
<td>Depreciation of equipment</td>
<td>140</td>
</tr>
<tr>
<td><strong>Total per health centre</strong></td>
<td>3500</td>
</tr>
<tr>
<td></td>
<td>3225</td>
</tr>
<tr>
<td></td>
<td>6676</td>
</tr>
</tbody>
</table>
supervisory visits costs $600 a year. It has been estimated that a car to the value of $15,000 is replaced every five years; this gives a depreciation figure of $200 per year for each of the 15 centres. For each health centre, depreciation of $140 a year has been estimated to cover a microscope ($500) and other equipment such as scales, cookers, and stethoscopes.

Locally supported fixed costs

An incentive payment to the nurse and the salaries of the other three staff (medicosocial worker, clerk, and sweeper) are borne by the health centre. A bicycle ($200) is needed by each health centre for mobile maternal and child health clinics in remote villages. A replacement every five years would cost $40 a year. The buildings and furniture and their maintenance are taken care of by the community. Built in local style and maintained by local arrangements, it is difficult to estimate the cost.

Discussion

Excluding the cost of the building and furniture, the total cost of a health centre as it functions in Kasongp is $6676 a year in town and $5533 in the country, of which respectively $3176 and $2308 are met by local financing.

The amount of the flat rate varies from one centre to another, as explained above. A rough calculation shows that in an urban health centre 7000 sickness episodes occur each year, 120 new under-fives are treated, and 280 pregnancies are presented. An amount of $0.43 paid for each of these episodes would be sufficient to secure the local financing of $3176. In the “average” rural health centre, with 3500 new attenders a year and the registration of 320 new under-fives and 280 pregnancies, the flat rate should be $0.56 in order to reach the $2308 needed from local sources. The total costs of the health services rendered by the health centres, per inhabitant covered, are $0.67 in the towns and $0.55 in the country districts.

Habicht (2) compared four programmes of primary health care by nonphysicians in Guatemala. The number of sickness episodes ranged from 0.1 to 4.2 per inhabitant per year, and the cost of each diagnostic visit varied between $0.64 and $1.61.

We believe that it is difficult to reduce the cost of services without jeopardizing either their acceptability or their effectiveness. The person in charge of a health centre should be at least a nurse (preferably a nurse-practitioner) with about three years of training. A full-time clerk is required as well for receiving the payments and for keeping the files, registers, and defaulter retrieval systems. Withdrawal of either the low-skilled aid (medicosocial worker) or the unqualified worker (sweeper) would mean that the nurse would be over-worked.

An extension of activities is still possible without overstepping the one dollar threshold. An increase in the number of sickness episodes from 7000 to 10,000 a year would mean an increase in variable costs by about $600 (three-sevenths of $1320, the first three variable-cost items for an urban health centre mentioned in the table). The additional cost of a higher coverage (e.g., 80%) with the existing maternal and child health programme would be between $100 and $150. When the national cold chain is improved, immunization against measles can be added (cost estimated at $200 for 320 doses). An increase in the number of accepters of the family-planning programme to 100 a year would add $430 to the cost. If these additional figures are added to the $6676 for an urban health centre, we see that the enlarged service could be provided for a total of little more than $8000. No additional staff would be needed. The additional cost of monthly doses of chloroquine for 80% of the children would be $160 but it would require a supplementary team member. As long as salaries remain at the present level, the described hypothetical increase
in activities remains feasible for one dollar per inhabitant per year.

In order to apply the costs in the table to other circumstances, each of the items should, of course, be re-estimated. Salaries of the personnel of the centre and/or of the doctor might be much higher; drugs might be supplied at a higher price; and the building might have to be supported by the health services. On the other hand, the road might be better so that a cheaper vehicle could be used for transport. Alternative forms of transport for use by health services in developing countries have been discussed by Gish (3).

Even in a low-income rural area, half the cost of adequate coverage by a health centre can reasonably be expected to be borne by the local population. The involvement of the primary health team and representatives of the target population in the regular assessment of the services rendered will contribute to a more cost-conscious provision and utilization of health care. Discussions about health costs will facilitate the orientation of community efforts towards health-promoting alternatives such as water supply and improved eating habits.

We should stress that in the Kasongo Project local financing is only one element in a broader set of measures aimed at improving primary care. The others include the delegation of standard curative care to a small team of multipurpose auxiliary personnel; the provision of preventive care by the same team; the organization of the continuity of care; the introduction of flat-rate payments; the limitation of the population served to a maximum of 10,000; discussions with individuals and groups at different levels; logistic support by fully qualified personnel operating at the referral level; and the rationalization of medical care at the referral level.

REFERENCES


Financial planning for Health for All by the Year 2000

Report of an Intercountry Seminar. World Health Organization Regional Office for South-East Asia, New Delhi, 1984, 236 pp., Sw.fr. 7.00 (SEARO Technical Publications, No. 5).

Having accepted the goal of Health for All by the Year 2000, the Member Countries of the South-East Asia Region are now seriously engaged in realigning their health plans in the context of total socioeconomic development, particularly health infrastructure development. However carefully health plans might be drawn up, they will be rendered ineffective unless they have the necessary financial backing. Thus, financial planning assumes considerable importance in such an endeavour, and only an absolute synthesis of health and financial planning can germinate a programme that can be implemented in its totality.

In addition to country presentations and discussions thereon, this book contains an overview of health care and financing studies, and analyses of overall health costs and planning, resource distribution and development of health insurance schemes.
There are two schools of thought on the financing of health care by the community. One considers it as possibly the only feasible way of overcoming the lack of funds for primary health care. The other argues that it places a heavy financial burden on the shoulders of those who can least support it. Here are the conclusions of a review of what has been attempted in the way of community financing of health care in more than a hundred projects and programs.

Advocates of community financing argue that it is a largely untapped resource and may be the only feasible way of overcoming the lack of funds for primary health care. Existing government financing is closely tied to secondary and tertiary care and would not be adequate for primary health care—even if it could be shifted—in face of the massive population growth now occurring. Community financing uses readily available nonmonetary resources, such as labor and local produce. It increases community self-reliance and organizational ability for both health and other problems. It is the key to community participation in general, and its advocates say that this is reason enough to encourage it—even if other funds are adequate. The impressive experience of China is often cited.

Opponents of community financing argue that it places the burden of financing health care on the people least able to support it, namely the rural and urban poor and others without access to existing facilities. Health care is a “public good” and should, therefore, be nationally financed. It improves productivity, contributes to reduced birth rates, and gives people the sort of hope for the future that is essential for development. Community financing is particularly inequitable in countries that provide free services in politically influential areas. Community financing is largely untested outside revolutionary China and a few small privately sponsored projects. Its development costs may be high because of initial failures and the need to mobilize thousands of individual communities. Community financing, its opponents argue, is not the solution its supporters think it is but rather a diversion for governments lacking the political will to generate new national resources or to reallocate existing ones.

This paper favors neither position unequivocally. It is worth looking at the results obtained in the financing of the many projects that have actually been carried out. The project reports reviewed do not support the contention that community financing is untried, but they do indicate that its strengths and weaknesses have not been rigorously evaluated. It is impossible, for lack of adequate documentation, to generalize from reports of community self-sufficiency or near sufficiency in a few projects.

The most common forms of community support are voluntary labor and direct personal payments, and both are of limited utility. Vol-
Voluntary labor is useful chiefly for one-off construction costs, while direct personal payments place the financing burden on the sick and limit access to persons who can afford to pay. Community financing, at best, is just one element in a balanced financing approach. It does not pay for supervision, logistic support, or referral linkages and can be effective only if these services are financed from other sources.

It must be realized that community financing is, at best, only a partial solution, that it may be more difficult and less effective than the reallocation of current resources, and that governments have to encourage and facilitate it, not impose it.

Whenever partial community financing has been attempted, the usual approach has been to identify specific costs and ask the community to cover them. The costs most frequently identified have been:

- costs of construction and maintenance of health posts, sanitation facilities, and other physical resources;
- costs of providing community health workers; and
- costs of basic drugs in local currency.

The choice generally reflects national budgetary constraints, not the communities' willingness and ability to pay. Community financing would be more viable if planners started by studying demand.

Many different strategies for the implementation of community financing have been developed. One approach has been to require communities to commit themselves to covering certain costs as a precondition for government inputs.

- The Hanang project in Tanzania, for example, requires communities to purchase first-aid boxes and to support future health workers during a ten-month training period.

- The project paper for the Sine Saloum project in Senegal states that "No inputs will be invested in any community unwilling to shoulder the responsibility of arranging remuneration of the village health workers, construction of a health hut, and a village medical sales operation."

- A rural medical assistance project in Mauritania requires communities to pay health workers and to purchase and transport medicine and supplies. Agreement on a payment system is necessary before a community health worker begins work, to ensure adequate re-supply.

Other projects have not required prior community commitment but have trained workers or provided an initial drug stock on the assumption of future support. Community financing, particularly of health workers, has often not materialized as expected, and so training and other investments have sometimes been wasted.

The initial costs of community financing often exceed planners' expectations, and this has sometimes led to failure. At least three kinds of input from outside the community are essential: a major effort to promote community mobilization and liaison; technical and managerial assistance to individual communities; and back-up resources for temporary deficits.

These are required in addition to the financing and management of the broader primary health care network, without which community programs will fail. A better understanding of community mobilization and liaison may be needed. Communication between the project and the community must be two-way. The government must describe the services it has to offer, educate the public about environmental and behavioral factors, and convince the community that minimally trained health workers can be effective. The government must also act as a catalyst in helping disparate parts of the community to work together. Because the government's responsive role requires rare bureaucratic flexibility, it is usually more difficult. It includes allowing communities to participate in designing appropriate delivery systems, selecting health workers, developing local financing mechanisms, deciding who
Health care—who pays?

will contribute and how much, managing revenue to prevent misuse, and making sure that all community members benefit appropriately. These activities must occur within units that the members themselves perceive to be communities. In large projects, staff will have to make a vast number of individual contacts with hundreds of communities.

Some projects make no special provision for assisting community financing activities, while others—the Kibwezi in Kenya and the Mauritania project, for example—emphasize continuing stimulation and technical support. While only a little technical knowledge may be needed to build a health hut or pay health workers informally, more is required to make utilization estimates or to guarantee a minimum support level for health workers. Technical skills may be required to assess ability and willingness to pay, analyse cost and expected income, calculate fees, premiums, and other charges, measure utilization, and record all income and expenditure routinely.

Alternative ways of meeting these needs include using consultants, hiring full-time technical staff, and training community managers. Foreign consultants are useful for overall project analysis but can rarely travel from village to village to assist individual activities. As an alternative, full-time traveling technical advisors could be hired to provide individual community counseling.

The training of community managers has been attempted in several places. The Montero project in Bolivia, for example, gave health committee members three days’ training in leadership techniques and two days’ training in financial management and drug procurement. The Niger project gave book-keeping training to the presidents and treasurers of village health committees, though it had to be suspended because of conflicts between health committees and workers. Village groups in Pikine, Senegal, used their own funds to train members in book-keeping procedures (7). Such training is especially desirable in respect of community activities involving cash or drugs, since these are particularly susceptible to misallocation.

The need for back-up funds varies from activity to activity and may become apparent only as a project progresses. Some persons believe that communities should be allowed to fail, because they will not make enough effort if someone else will cover the losses. Others argue that failures are often attributable to professional error, to shortfalls in drug supply, or to other factors beyond the community’s control. Some balance between community self-reliance and outside support is clearly desirable. The Dana Sehat schemes in Indonesia set up their own community credit unions to provide needed reserves, and others could explore this possibility.

Finally, we need to consider where community financing is going and how observers can contribute to its evaluation. The rhetoric of Alma-Ata and the widespread belief in self-reliance demand a more important role for the community, and the goal of health for all calls for the exploration of every financing option. There must be balance in this exploration, however. It must be realized that community financing is, at best, only a partial solution, that it may be more difficult and less effective than the reallocation of current resources, and that governments have to encourage and facilitate it, not impose it. Researchers must produce more case studies and report not only on the income raised but also on the community processes involved in raising funds and on the subsequent effects of this on the scope and accessibility of services. The time has come to move from rhetoric to reality, and from small demonstration projects to routine national programs.

REFERENCE

Health Systems

U. N. Jajoo, O. P. Gupta & A. P. Jain

Rural health services: towards a new strategy?

Experience with a rural health service in 12 villages in the Indian State of Maharashtra showed that such a service could successfully be financed in part by a health insurance scheme. The costs of running this service were considerably less than those budgeted by the Government of India.

In India, 80% of health expenditure goes on a few urban hospitals with intensive coronary care units, dialysis centres, sophisticated cardiac surgery units, cancer institutes, and many other facilities, while the vast majority of the population does not receive even adequate primary health care. Although a large number of charitable hospitals and dispensaries provide low-cost or free medical services to the poor, the funds and staff available are never enough to meet the enormous need. A few contributory health insurance schemes have been established by organized labour, particularly in towns, but we are not aware of any successful schemes among the unorganized rural poor that might serve as a model for wider application. This article therefore describes our experience in setting up a rural health service, initially in a single village in the State of Maharashtra, that was ultimately financed in part by a health insurance scheme.

Starting the Service

We organized a village meeting and a decision was taken to start a weekly out-patients dispensary in the school building. An initial contribution of Rs 4 (US$ 0.40) per family was collected by the village leaders to fund the purchase of medicines for a drug bank. A village health worker was selected and assigned the job of buying the medicines on our advice. Then he dispensed the medicines at cost price and recorded each transaction.

One day a mother brought a sick child who was suffering from bronchopneumonia. The cost of the medicines prescribed was about Rs 15 ($ 1.50). The mother did not have enough money to pay for the medicines and asked to be given a week in which to pay. We agreed, because of the child's need, and later granted credit in similar deserving cases. But many debtors defaulted, and the drug bank was bankrupted. At a village meeting it was unanimously decided that defaulters should not be given medicines on credit until outstanding debts were paid.

The inevitable result—revealed by an analysis of the first year's data—was that the dispensary was being utilized more by the rich in the community than by the poor. Instead of providing medical help for sick children in poor families and others in real need, we were mainly treating the minor illnesses of those who could afford to go to the local hospital 5 km away.
The Health Insurance Scheme

So we again sat with the villagers in an attempt to evaluate our services. The idea of communally contributing money to an insurance scheme according to an individual's capacity to do so was accepted. And there was general agreement that, if the health service was to be accessible to the poor, it must be free at least for acute unforeseen illnesses. It was therefore decided that a village fund for medical treatment should be established and administered by us, based on contributions in kind to be collected at harvest time. The contributions, it was agreed, should vary according to land ownership and wage income. Farmers would contribute 2 bags (2.5 kg) of sorghum per acre and wage-earners a flat rate of 4 bags. Anyone who had additional sources of income would contribute a further 4 bags. Non-contributors would be excluded from free treatment.

When the harvest was being gathered, we went from house to house to collect the promised bags. But, to our surprise, those who had most actively and enthusiastically supported the health insurance scheme in the village meeting were conspicuous by their absence. During our second visit we were met by similar evasions or excuses. By the fourth visit it was obvious that the richer villagers had decided not to support the scheme.

In the end, the total contribution collected fell short of the funds required for the drug bank. So, for that year, we had to rely on free medicine samples. At the end of the second year our analysis of dispensary data showed that 95% of the illnesses dealt with were self-limiting ones that could be treated by a village health worker—upper respiratory tract infections, viral fevers, gastrointestinal infections, etc. The other patients needed expensive medicines (mostly antibiotics) and hospitalization, which poor villagers could not afford. We therefore concluded that rural health services catering for both the poor and the more prosperous cannot be totally self-reliant. We also realized that a dispensary such as ours needs to be run in association with a central hospital, to which patients with acute illnesses can be sent.

From the third year onwards, the village dispensary was linked with Sevagram Hospital for referral and free hospital admissions. But we still had new lessons to learn. A pregnant woman, for instance, was admitted a month before delivery because she complained of recurrent abdominal pains. But we discovered there was nothing medically wrong and that her husband simply expected us to give her free food and treatment for the last month of her pregnancy. Others used admission as a means of avoiding a court summons. And a paraplegic was taken to hospital by relatives and abandoned.

So we modified our criteria for admission. We continued to deal with acute and emergency cases free of charge, funded from the insurance contributions, but started to charge 25% of the hospital bill for normal deliveries and chronic illnesses, e.g., cataract and hernia. We made changes in the village dispensary, too. We handed over responsibility for running it to a village health worker, who was provided with an adequate drug kit. We supported him by providing the services once a month of a mobile health team consisting of a doctor and a woman assistant for maternal and child health care.

In the fourth and fifth years, our work, based on this operational link between a village health worker and a mobile health team, financed in part by village contributions in kind, has been extended to 12 villages. We have made special arrangements to ensure timely referrals to hospital. And, in addition to the clinical work of the dispensaries, we routinely weigh children under 5 years of age, and have undertaken mass vaccination programmes.
Was the Scheme a Success?

Obvious conclusions from our operational records are that it took some time for villagers to trust us and that the health service is cheap to operate.

The total number of hospital admissions increased in parallel with the number of people insured. This suggests that the services provided by the hospital are used if patients can afford them. The average length of stay in the hospital was six days. And it is worth noting that the ratio of annual hospital admissions to the rural population served remained constant over three years at 1:13.

It is difficult to calculate the amount that Sevagram Hospital spends on admissions. It is attached to a medical college and, because it is oriented towards teaching and research, has different costings and admission policies from those relevant to a local service-oriented hospital. But the cost analysis for 1982 leads to the following conclusions—which we hope will be of interest to others involved in improving rural health services.

— Contributions in kind provided 84% of the money required to finance the village health worker, his drug kit, the antenatal assistant, and fuel expenses for the mobile health team.

— Income from non-insured patients (who did not receive free treatment) subsidized the cost of each hospital admission by Rs 16.67 ($1.7).

— Running costs (excluding hospital admissions) were as little as Rs 1.5 ($0.15) per head.

The Government of India at the same time budgeted to spend Rs 27.86 ($2.8) per head for all its medical services. It is our belief that much improved health services, which have the advantage of involving villagers as contributory participants, can be provided within existing resources if the strategy we have described is implemented.

Intersectoral action for health: the role of intersectoral cooperation in national strategies for Health for All


This book elaborates a powerful new health strategy that takes its driving force from the intrinsic value of health. On the surface, the strategy appears straightforward: because the determinants of health are so broad, the control of health risks and prevention of disease will require support from sectors of government and public life that are not directly concerned with health. Yet, as the book goes on to show, the implementation of such a strategy involves the difficult task of uncovering the health components of different sectors and elevating them to the level of conscious planning. The main part of the book is thus devoted to an in-depth examination of what intersectoral collaboration entails in terms of its practical implementation.

Sophisticated in its conceptual approach and yet highly practical in its arguments and explanations, the book offers rewarding reading for any planner or policy-maker interested in learning how intersectoral collaboration can be used to create sustained improvements in the health status of populations.
Primary Health Care

M. Jancloes, B. Seck, L. Van de Velden, and B. Ndiaye

Primary health care in a Senegalese town: how the local people took part

Where the government cannot meet wide-ranging health needs of the population, can the people themselves start their own health service? Do they have the resources to do so—or the leadership?

No satisfactory method has been developed to predict the potential resources of a poor community. To improve their health conditions all people, even the poor, have some resources available. When people are given the opportunity to manage their own affairs and to be involved in decision-making, they can become very efficient and contribute many of the material and human resources needed to organize health facilities, especially in new cities. This was demonstrated by an experiment in Senegal between 1975 and 1981.

A strategy for primary health care with the active participation of the local communities was developed to provide a network of acceptable and accessible health services in the town of Pikine, in the suburbs of Dakar. This was done with government support, which was essential.

Since Senegal became independent in 1960, the capital city of Dakar has experienced a demographic explosion as a result of a huge exodus from the rural areas. To cope with this problem, the Senegalese Government developed an urbanization policy based on the creation of a new town called Pikine 10 miles from Dakar. The town, as planned, had no hospitals and there were only four well-functioning dispensaries.

In successive waves, Dakar's slum population was moved to this new city. In 1959, the population of Pikine was estimated at 30,000 persons. Today there are about 450,000 inhabitants living both in the planned urbanized area and in several squatter settlements. Few houses have electricity, and a proper waste disposal system is far from universal. Employment opportunities in Pikine are few, and the lack of adequate transport makes it difficult to get to work in the Dakar area.

In 1974, a Belgo-Senegalese team of public health experts—Coopération technique Belgo-Sénégalaise—went to Pikine to study the health needs of the population. The team made two important observations.

Mr Jancloes was with the Medical Belgo-Senegalese Cooperation Project, Pikine, Senegal, and is now with the World Bank, Washington, DC, USA. Mr Seck is Director, Medical Circumscription of Pikine, Senegal. Mr Van de Velden is with the Medical Belgo-Senegalese Cooperation Project, Pikine. Mr Ndiaye was President of the Health Council, Association of Pikine Committees for Health, Pikine. The article is a condensed version of a paper entitled "Soins de santé prioritaires financés et contrôlés conjointement par la population et par l'Etat" published in Médecine tropicale, November-December 1982.
Most of the people who used a health facility for common ailments lived within 1 km of it. Therefore the team concluded that instead of having a few large health centers it was better to have many small health units so that the distance between the health units and homes was not more than 1 km.

People were willing to pay a predetermined fee for proper medical treatment with the necessary drugs. This observation was significant because the free health services provided by the government did not have an adequate supply of essential drugs and the government health budget was severely limited.

Taking these observations into account, the team designed a primary health care project in which the communities in Pikine would participate in the development of a network of health services accessible to a large majority of the people. The project began in 1975 with a community meeting in an area of Pikine without any health unit. Unable to receive immediate financing, the community leaders (Elders' Committee) decided to open a health unit in a borrowed two-room private house. They also decided that except for the wages of the nurses employed by the Ministry of Health, all other costs of health care would be borne by the community, patients being asked to pay only a modest fee. Another house was borrowed and necessary changes were made to turn it into a storehouse for drugs and other supplies.

At regular intervals, new health committees were formed in other areas of Pikine and new health units were opened in the same way. In 1980, three maternity centers, two under-fives clinics and 20 other dispensaries in the Pikine area were also integrated into the project. Each health unit served an area with about 25,000 inhabitants and was managed by a health committee comprising about 15 members elected from among the residents of the area. All health committees were unified to form an Association for Health Promotion which was officially recognized in May 1980, by the Ministry of the Interior. In June 1980, the Minister of Public Health recommended that community participation in financing health care services be extended to all regions of the country.

Within the framework of the Pikine project, curative, preventive, and educational activities were expanded progressively. With the help of four physicians and a biologist, consultations in dermatology, gynecology, social psychiatry, and respiratory diseases were also organized. More than one million treatments have been given through the self-financing approach. Under preventive medicine, facilities for the care of pregnant women (about 14,000 pregnancies per year) and of children under 5 years of age were also set up. In particular, an expanded program of immunization was initiated against tuberculosis, diphtheria, tetanus, whooping cough, poliomyelitis, measles, and yellow fever.

According to home surveys carried out in Pikine before the launching of the project, the population coverage rate by the existing health services was as low as 5%. However, after the project started the rate rose to 60% in most areas of Pikine and to 90% in some. In an effort to further improve the coverage and quality of health care, paramedical workers are given courses once a week by the health unit nurses. A training program in management and health education has also been set up for interested members of the health committees.

### Community’s Contribution

Before opening any new health unit or integrating an old one into the project, it is essential to elect a community health committee with the approval of all interested parties—the community, local administration, health services, religious groups, etc.

Prior to the election of the committee a general assembly is called in which all groups of the community are represented regardless of their economic or social status, political views,
and religious or ethnic backgrounds. This meeting is attended by the medical director who explains to the people the purpose of the project, how the community will take part, and the election procedures. Then after several weeks, a new meeting is held to form a more expanded assembly. This assembly elects the health committee comprising about 15 persons. People who have any managerial or administrative skills to contribute to the health unit are usually elected.

The general assembly and the health committee constitute the basic structure of community participation. They make decisions concerning the utilization and management of the community's resources. They also participate in the definition and execution of local health programs.

One of the major responsibilities of the general assembly and health committee is to control the community's financial contribution. At the start of this project, in 1975, the general assembly determined and published the consultation fees, taking into account the prevailing disease patterns and the multiple expenses of a self-reliant health unit. For consultation and total outpatient treatment, the predetermined prices were set at US$ 0.18 for "prepubescent" children, $0.36 for adults, $0.72 for pregnant women, and $3.60 for deliveries. The patients who needed daily injections or needed to be watched were to pay each day. The committee has, however, made adjustments: medical care has been delivered free to certain people (e.g., the blind and widows) in emergency situations, and also to those suffering from certain chronic diseases (e.g., tuberculosis and leprosy).

A man, usually elderly, chosen by the committee, sits at the entrance of the health unit and sells numbered tickets—red ones for adults and green ones for children. These tickets are issued from a ticket book (with stubs) provided by the health association.

Every day the nurse responsible for the health unit checks the receipts, sometimes recounting the money and stubs, and notes down the amount in his daily record book, which is then initialed by the ticket seller. This auditing of accounts allows the nurse to make monthly budget estimates for recurrent expenditures, especially drug requirements.

Each day the ticket seller turns the money collected over to the treasurer of the health committee, who goes to the bank twice a week, deposits the money in a current account, and obtains a receipt.

All current expenses are paid by check, co-signed by the president and the treasurer of the health committee. However, the checkbook and check register are kept by the nurse. Extraordinary expenditures (e.g., a refrigerator) have to be submitted to the committee for approval.

Most committees distribute funds as follows: 65% for drugs and disposable medical supplies, 15-25% for incentive payments for health volunteers, 5% for miscellaneous, and the rest for extraordinary expenditures. When ordering drugs, only the nurse is authorized to sign the requisition.

The accountant presents a financial statement to the health committee three times a year. The table shows an example of a yearly financial statement for health unit with a maternity facility.

In order to organize the supplies of drugs, vaccines, cleaning products, and disposable medical supplies for all health units, the Association for Health Promotion has opened a community store, which is supervised by the medical director. This store purchases drugs from the government pharmacy. If the pharmacy has a shortage of drugs, the community store is allowed to buy them elsewhere. It purchases supplies at wholesale, stores them, and arranges for their distribution. Drugs and disposable medical supplies must be paid for by check (credit is never extended) and distributed immediately every day.

Medical guidance was continuously given by medical doctors and nurses through supervisory contacts in the field and through meetings. Twice a month, separate meetings for nurses and for midwives were called to satisfy educational needs and to solve different logistical problems together. In addition, medical and nursing courses were given once a week by nurses, who were health post leaders or health
Empirical evidence

Financial statement of a self-financed health unit

<table>
<thead>
<tr>
<th>Income</th>
<th>$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Children</td>
<td>45 628 tickets at $0.18 each</td>
</tr>
<tr>
<td>Adults</td>
<td>35 217 tickets at $0.36 each</td>
</tr>
<tr>
<td>Pregnancies</td>
<td>1062 tickets at $0.72 each</td>
</tr>
<tr>
<td>Deliveries</td>
<td>1598 tickets at $3.60 each</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Expenditure</th>
<th>$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drugs</td>
<td>12 875</td>
</tr>
<tr>
<td>Cleaning equipment</td>
<td>1 482</td>
</tr>
<tr>
<td>Vehicles (fuel and maintenance)</td>
<td>1 227</td>
</tr>
<tr>
<td>Laboratory expenses</td>
<td>245</td>
</tr>
<tr>
<td>Center expenses</td>
<td>1 493</td>
</tr>
<tr>
<td>Preventive consultations</td>
<td>288</td>
</tr>
<tr>
<td>Incentive payments:</td>
<td></td>
</tr>
<tr>
<td>for ticket clerks</td>
<td>1 300</td>
</tr>
<tr>
<td>for health volunteers</td>
<td>4 098</td>
</tr>
<tr>
<td>other</td>
<td>982</td>
</tr>
<tr>
<td>Recurrent expenses</td>
<td>617</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>2 770</td>
</tr>
</tbody>
</table>

27 409

volunteers. Although rather theoretical, these courses were aimed at accomplishing the delegated tasks.

The most complex financial problem was managing the accounts of the community drug store. At this level, the self-financing system has required the periodical intervention of a skilled accountant. Before a drug unit cost price could be set, it was necessary to determine the cost of the system as a whole, allowing for inflation rate, contingencies, unexpected consumption, delivery delays, and so on.

**Government’s Contribution**

The government provides the basic structure of its health services to which the community contributes. In other words, the health units are part of the general health services. The community contributes financial and human resources to improve the coverage of the health units and at the same time to improve their efficiency and effectiveness. The government, for its part, provides the medical staff, technical guidance, and logistic support and has helped the community volunteers to develop sound accounting procedures.

The government also engaged a social worker to encourage community participation because communities seldom take the initiative spontaneously. The influence of this social “booster” should not be underestimated, but a social worker capable of playing this role is hard to find.

**Financial Contributions of the Community and Government**

The financial contributions of the community and government varied from one health unit to another. In a health unit that treated 120 patients a day, the personnel salaries depended to the extent of 76% on government allocations, but for a larger health unit with twice as many patients the government paid only 28% of the salaries. The average cost of a consultation was estimated at $0.49. Financing of health care directly by the beneficiaries fosters a spirit of self-reliance in the community, and allows decentralization of decision-making. Even though absolute self-reliance is not technically and financially possible, it is possible in spirit. For example, the committees of Pikine disagreed with the government’s proposal not to charge people for repeated mass-vaccination campaigns. In order to ensure a reliable supply of vaccines they decided to combine the funds generated by their self-financing services with those from the state. The community also supported the campaign through a block census and arousing of public awareness.

The minutes of the various health committees in Pikine show that the funds were allocated more for answering the needs of people than the needs of medical personnel. For example, the committee gave preference to building wind or sun shelters in waiting places rather than to buying refrigerators or giving incentives to health volunteers.
Jürg H. Sommer

Health care costs out of control: the experience of Switzerland

Supply and demand in medicine are far removed from the classical free-economy model. Only by restoring a competitive market will it be possible to bring health costs down in a permanent way. Until then, costs will have to be controlled by rigorous management and by restraints on the intake of students into medical schools.

The sharp rise in health care spending is a worldwide phenomenon. There is a substantial measure of agreement among the experts of developed countries about the main causes:

— demographic changes producing populations that are older on average;

— a changing pattern of disease towards chronic illness and handicap associated with aging, often aggravated by life-style factors;

— advances in medical technology introducing far more sophisticated patterns of diagnosis and care and extending the scope of medical care;

— rising public and professional expectations connected with technological advance and increased reliance on formal health services for alleviation and comfort, rather than on informal coping mechanisms in the family and the community;

— higher wage and salary costs caused by a catching-up process of health sector wages and by increased specialization and higher skill levels; and

— a transfer of financing from direct payment by individuals to insurance schemes and government (1).

These causes are certainly true for Switzerland too, and most of them will continue to operate in the future.

In Switzerland, overall expenditures for health services, estimated at 2.8% of GNP in 1950, rose to 3.3% in 1960 and to 7% in 1980. Between 1960 and 1980 the fraction of GNP spent on medical care more than doubled, representing a tenfold increase in total health care expenditures in 20 years (see table). Projections for 1982, at about 15.2 billion Swiss francs or 2400 Swiss francs per capita (US$1090), amount to 7.4% of GNP.

<table>
<thead>
<tr>
<th>Year</th>
<th>Total health care expenditures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Swiss francs (millions)</td>
<td>as percentage of GNP</td>
</tr>
<tr>
<td>1950</td>
<td>600</td>
</tr>
<tr>
<td>1960</td>
<td>1200</td>
</tr>
<tr>
<td>1970</td>
<td>4400</td>
</tr>
<tr>
<td>1980</td>
<td>12300</td>
</tr>
<tr>
<td>1982 projection</td>
<td>15200</td>
</tr>
</tbody>
</table>

Expenditure on personal health services has increased at a far greater rate than consumer prices, as the figure shows. Within the health sector, it is the cost of hospital services that has increased most dramatically, the largest item being personnel, whose share of total hospital expenditure rose from 44.3% in 1950 to 77.6% in 1981 (2).

Three factors render the observed cost escalation unlikely to abate without fundamental changes in national health care policy.

1. The aging population
   Demographic projections imply a rise in the proportion of the elderly (65 and older) to about 16% in 2000 and to more than 24% in 2040. Medical care use increases dramatically with age: for example, the health care costs at 70 are on average five times greater than at 20 years. Holding all other factors constant, the change in the population structure alone by 2040 will increase health care costs by 23% (3).

2. The growing number of physicians
   The number of physicians has more than doubled in the last two decades while the population increased by only 18%. As a result, there is now one physician professionally active for every 400 people, one of the highest physician/population ratios in the world. At the same time, the Swiss universities are producing 800–900 new physicians yearly; their number is thus expected to double again between 1975 and 1990 and to triple between 1975 and 2010. As the statistics of the sickness funds show, the more physicians practising in an area, the higher are the per capita health care costs in that region.

3. Overcapacity in the acute-care sector
   The expansion of hospitals in the fifties and sixties was based on projected population increases that turned out to be far too high. As a result, in 1980, with 6.7 acute-care hospital beds per 1000 people, Switzerland had about 50% higher short-stay hospital capacity than Belgium, Canada, the United Kingdom, or the USA, and the average length of stay was 14.3 days compared with 7.6 days in the USA. Many of these expensive short-stay hospital beds are occupied by frail elderly people who need nursing care rather than sophisticated medical services.

Are We Spending Too Much?
Nobody knows the “right” share of the GNP to be spent on medical care. However, a review of the literature reveals little evidence that
Health care—who pays?

Further investments in medical services in developed countries will lead to any marked reductions in overall mortality and morbidity rates. The per capita expenditures for health care among Western nations vary by more than 200% but most of their health indices vary by less than 5% and there is little correlation between the two (4). Once a reasonable minimum of care is provided, factors other than medical care—diet, life-style, heredity, environment—appear to have a much larger effect on health and longevity than does more medical care. Yet Switzerland is currently investing an additional 1.5 billion Swiss francs every year in medical care. How do we know how much medical care is really wanted by the Swiss?

The standard economic approach is to rely on signals sent by market forces. In theory, consumers with well-defined preferences are assumed to be able to purchase goods and services from a variety of suppliers. Because they attempt to maximize their use of these goods and services, given their income levels, they wish to find the lowest-cost supplier. Suppliers are assumed to maximize profit. As a result, they have an incentive to produce their goods and services at the minimum possible cost and to offer the range of qualities that consumers want to purchase; otherwise, another supplier may take business away. If there is an inefficient group of suppliers in an industry, it is assumed that other firms from outside the industry will enter the market in pursuit of profits, thereby ensuring that those goods consumers most wish to purchase with their incomes are produced at minimum cost (5).

The Swiss medical marketplace differs from this model in many important respects.

1. New providers cannot enter the market freely.
2. Most hospitals are not profit-oriented; their existence is guaranteed in so far as the cantons and communes will cover their losses more or less automatically.
3. The average patient lacks the knowledge to decide whether he could profit from a particular therapy. Therefore, the usual presumption of consumer sovereignty is not valid.
4. The consumer expects the physician to translate his vague medical needs into demand. Because of the great uncertainties that pervade medical care and the variety of acceptable treatments, the physician has wide latitude in his recommendations.

5. The sickness funds pay the physicians a fixed fee for every service provided, and so no price competition occurs when new physicians are entering the market.

Thus, the Swiss medical marketplace is not in any way a competitive market. Consumers and providers are not rewarded for cost-conscious behaviour.

— The insured patient has no incentive to search out suppliers that deliver the same product at a lower price. All members of his sickness fund will share any costs of his use of medical services, and his own premium will be negligibly affected.

— The more services the physician in private practice provides, the higher is his income. A physician who avoids services of questionable or low efficacy gets penalized with less income. Physician gross incomes account for only about 19% of total health care spending in Switzerland, but physicians control or influence most of the rest. Yet the Swiss health care system assigns them no responsibility for the economic consequences of their decisions. Most physicians have no idea of the costs of things they order—and no real reason to care.

— The more revenues paid on a per diem basis by the sickness funds a hospital can get, the lower is its deficit. Medically unnecessary patient admissions, unnecessary prolonged lengths of stay, and higher costs are the result.

— The sickness funds can only control their own administrative portion of the pre-
mium. If they attempt to control the claims portion, both consumers and providers object, and play the insurers off against each other.

In contrast to a competitive market, the incentives in the Swiss health care system are cost-generating, not cost-saving. Therefore, we cannot simply rely on market forces when considering whether the medical services consumed by the Swiss are really worth their cost. Even though the suspicion is great that they are spending too much, there is no firm evidence that the Swiss are unwilling to invest between 7% and 8% of GNP in medical care. However, when the federal government convened a national conference on health cost containment at the end of 1982, its highly publicized first meetings did reveal a consensus that the Swiss just do not want to let this percentage get much higher. If so, how can health care costs be held more in line with the rest of the economy?

Two main approaches to containing health care costs can be distinguished.

1. The numbers of general practitioners and specialists, the size and equipment of hospitals, and other medical resources should be better matched to the needs of the population served.

2. The existing financing and delivery system has to be changed to a system in which providers are rewarded for finding ways to give better care at less cost and consumers are motivated to search for such efficient suppliers.

### Resource Controls

Even though there are no agreed standards on the “right” physician density or short-stay hospital bed density, international comparisons indicate that Switzerland is heavily over-invested in both respects and, if short-term savings are to be achieved, measures like the following ones will be needed.

1. The size and the scope of the hospital system in every canton should be checked and possible overcapacities in beds, personnel, and equipment identified. The reduction of unnecessary beds will automatically shorten the average length of stay.

2. Cantons and communes should ensure that an adequate, well-coordinated range of home care and social support services exists in their area that allow the elderly to stay at home as long as possible. In an aging society, an increasingly important approach in controlling health care costs is the way in which limited resources are matched to the needs of the elderly.

3. The present very liberal policy towards the training of physicians should be modified. By reducing the output and graduating only 250 medical students yearly, the physician/population ratio would still increase to one physician per 300 people in less than 10 years, but such a measure would at least stabilize the physician density, although at a very high level. As a consequence, Switzerland would need only one or two of the five medical schools that it has at present.

Resource control is effective but has its limitations because no system can succeed in cost restraint if those who are expected to reduce expenditure get financially hurt in the process. In the long run, nothing will succeed that does not alter the cost-increasing incentives built into the Swiss health care system.

### Creating a Competitive Health Insurance Market

We have imposed on medical care a financial system borrowed from casualty insurance, which assumes that financial incentives do not play an important part in decisions about the use of health services. The idea underlying casualty (fire and collision) insurance is that the damage is caused by act of God and the cost of repair can be determined objectively.

Medical insurance, as the American economist A. C. Enthoven points out correctly, does not fit this model at all (6). The element of...
judgement and choice in the decision to seek care and in the amount of care provided is too great. Uncertainty pervades medical diagnosis and treatment. In most cases there is not one correct or standard treatment. There may be several accepted therapies. Health insurance, by making more free care available to the patient and thus increasing the doctor's remuneration, leads to more and more costly care being demanded and provided. In a world of limited resources the more we spend on medical care the less we can spend for other purposes. Yet our present health insurance arrangements are shaped as if the available resources were unlimited. A basic strategy of reform has to make sure that somebody has an incentive to ask (and answer) difficult but necessary questions like: are the extra days in hospital worth their cost?

Since it is not the insurers but the providers and the patients who control the cost and use of services, health economists believe that the remedy for spiralling health costs is to make the providers compete between themselves. The main point of this approach is to allow the consumer to choose among several groups of providers, with different insurance premiums. The consumer will be rewarded for choosing an efficient provider and the latter will be rewarded because it gets the business. The inefficient providers will therefore have to shape up or fail for lack of patients—a remarkable change from the present system. The competitive strategy relies on the (assumed) consumer's ability to choose the most appropriate health care plan if given the necessary information on costs and benefits and an economic incentive to choose prudently. Because consumer preferences are so varied, the availability of many different provider and insurance systems would be most likely to maximize individual satisfaction.

Competing sets of providers, known as alternative finance and delivery systems in the USA, include prepaid group practices, individual practice associations, primary care networks, and preferred provider organizations. They all have in common that premiums are paid to an organization that itself accepts responsibility for providing or arranging comprehensive medical care and assumes at least part of the financial risk in the provision of services.

The premium is set in advance on the basis of a fixed amount per person per month. Thus the organization has a fixed budget within which to provide the care. More services do not mean more revenues. Preventing medical problems or treating them in less costly ways is rewarded. In an alternative delivery system, the patient accepts a limited choice of doctors (those participating in that particular system) in exchange for what he or she perceives to be better benefits at lower costs. In contrast to the insured fee-for-service system, the provider organization is responsible for a voluntarily enrolled population. Thus it can carefully plan the availability of resources to match the needs of this population. There is evidence in the USA that prepaid group practices reduce total per capita costs of medical care by 10-40% compared with the costs for similar people cared for under insured fee-for-service (7).

The following main elements of fair economic competition among various types of health plans, including traditional insurance and fee-for-service, are proposed by Enthoven in his “consumer choice health plan” (6).

1. The population has to be divided into “actuarial categories” based on age, sex, location, and other factors determining predicted medical need.

2. Each health plan would set its own premiums for each actuarial category on the basis of its own costs and its own judgement of what it can charge in a competitive market.

3. Each plan would be required to cover a minimum list of basic health services. To make price comparisons easier, all policies could then be described in terms of basic health services plus a manageable number of additional benefits.
4. Each plan would be required to charge the same premium to all persons in the same category enrolled for the same benefits in a given area.

5. Each health plan would be required to participate in an annual government-supervised open enrolment, in which it would have to accept all eligible persons choosing to join it.

6. Each plan would be required to publish a clearly stated annual limit on family expenditure for the services covered.

7. People unable to afford the full premiums would get a refundable tax credit to help them pay. This subsidy might be adjusted according to economic status, age, and family size but would not be payable just because people wish to choose more costly plans.

Only an actual test in a country or area will show if the proposed market strategy has enough regulatory safeguards against potential abuses in "selection of risks" or "preferential pricing", as Milton and John Roemer caution (8). Yet abuses occur in any system, and pains-taking private and public surveillance is the best answer we have.

Data Collection

To evaluate the results of cost controlling strategies, policymakers and planners must have a valid and reliable measure of the actual level and the rate of increase in health care expenditures. Such a measure would be provided by the following annual area-wide figures of per capita expenditure:

- population-based expenditure, to remove variations due to patient migration;
- expenditures adjusted for health risk factors (age, sex, etc.) to correct for differences in health status between areas; and
- expenditures adjusted for general cost-of-living factors outside the control of the area health system.

By using area-wide expenditures for the resident population, random fluctuations due to specific patient differences are averaged out. Ideally, the areas used should be natural health care market areas, i.e., areas outside which residents seldom travel to obtain health care.

McClure terms the resulting measure "actuarially equivalent expenditures" (9). They permit comparisons to be made, between planning areas, of the adequacy and efficiency of the health care system and allow us to identify much more precisely the areas where cost performance of the health care system is acceptable and those where it is deemed to be excessive and wasteful. It is important for Switzerland to introduce the collection of such data to facilitate planning and the setting of targets.

Since high cost areas, i.e., those with actuarially equivalent expenditures much greater than the national average, are more wasteful than low cost areas, both efficiency and equity suggest that high cost areas should be held to a lower target rate than low cost areas. However, there is no technically "right" way to determine precisely the optimum level of health care expenditures. The choice of target rates of increase is a political decision.

* * *

Why does a small country like Switzerland need over 500 sickness funds? In their special agreement of 1965, these funds tried to exclude any competition among themselves. They agreed not to advertise comparisons with other funds or try to enlist members who are already insured in another fund. Without competitive pressure, they have been very passive with respect to health cost controls. A fundamental reform is needed in the way medical care is financed and organized.

Currently, Switzerland does not have any alternative delivery systems at all and until such plans are started, there is little incentive for practitioners to adopt a more cost-effective approach to health care. Sooner or later, however, the ever increasing health care costs and the rapidly rising number of physicians will
force the providers to study new ideas about how to finance and deliver medical care. It is certainly time for the concerned consumer groups, business, labour, and the federal and cantonal governments to begin to exert pressure for a change in health policy.

Although competition may work slowly and imperfectly, it would at least point the Swiss health sector in the right direction—towards organized systems with built-in incentives for economy and consumer satisfaction.

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Discussion

Brian Abel-Smith

—There are serious risks in giving control to the providers of health care

Dr Sommer’s opening statement that the sharp rise in health care spending is a worldwide phenomenon could have been made more appropriately 10 years ago. Sadly, a considerable number of countries in Africa and Latin America have responded to the world economic crisis and their severe debt problems by cutting health expenditure. And several developed countries, such as Belgium, Denmark, Ireland, the Netherlands, and the United Kingdom, have cut real health expenditure in certain years or have plans to do so, particularly with respect to general hospitals. In other words, health care costs are not out of control everywhere.

My remaining comments refer only to the situation in the more developed countries.

While accepting Dr Sommer’s list of the main causes of higher health spending, I do not think that they all apply in every country (e.g., the catching-up process of health-sector wages). Moreover, there is a notable omission from the list, viz., the effects of payment systems that create strong financial incentives for excessive services (fee-for-service for doctors and daily payments for hospitals) in countries such as Switzerland; this crucial point is only mentioned later by Dr Sommer. The ageing population is a very small factor, accounting for a projected increase in health care costs of less than 0.5% per annum according to Dr Sommer’s figures; an increase of this order could easily be absorbed with only a modest rate of economic growth.

Dr Sommer asks: “How do we know how much medical care is really wanted by the Swiss?” One might similarly ask: “How do we know how much education is really wanted by the Swiss?” But at least teachers are not in a position in which they can generate any extra spending on education that they think might conceivably help their pupils (whether by extra classes, further supporting staff, or sophisticated equipment) and get rewarded for doing so. Spending on education is largely a political decision. Later in his article, Dr Sommer actually remarks that the choice of target rates of increase is a political decision. Why does he exclude the possibility of target rates of decrease also being a political decision?
The pressures for increased spending on health care are being successfully controlled in some countries by tightening budgets, by regulation, or by changing the financing system from health insurance to a national health service, which may also involve changes in the way in which doctors are paid, as has happened in Italy.

Where health expenditure is financed wholly or largely by central or local government budgets or a combination of the two, health care spending is, by definition, under political control. This has long been the case in some north European countries, in Canada (in the case of hospitals), and in New Zealand. What is ingenious is the way budget ceilings are increasingly being imposed on state health insurance systems, in whole or in part. Thus budget limits have recently been imposed on hospitals in Belgium, France, and the Netherlands.

In the Netherlands, budget limits have also been imposed on specialists’ earnings outside hospitals. Any extra services provided by existing or new specialists up to 1986 will lead to proportionately lower fee levels. In the Federal Republic of Germany, the system of target-setting for different sectors of the health care system, though not binding, has not been ineffective over the years.

The establishment of budget ceilings for general hospitals has been accompanied in some countries by the stimulation of less costly alternatives to hospital care, including long-stay facilities at lower rates, nursing homes, day hospitals, and home care. Other countries have negotiated changes in the relative value scales of fee-for-service systems of payment for doctors’ services, so as to reduce the financial incentive to provide technical services, particularly diagnostic tests. A range of measures has also been taken to restrain expenditure on drugs for ambulant patients: thus positive and negative lists have been drawn up, pharmacists’ margins have been reduced, and tighter controls have been applied to drug prices and sales promotion. I have described the full range of recent regulatory measures adopted by 12 European countries (f).

In 1968–69, Portugal changed over from national health insurance to a national health service, and Italy did so in 1980; a similar move is being planned in Spain and Greece. While the change extends rights to all citizens, it can also secure economies by abolishing the costly bureaucratic process of establishing title to health insurance and establishing budgets for services under political control. It can also help to achieve the goal of health for all through greater geographical equity in the distribution of health resources and through the coordination of local curative and preventive services.

As Dr Sommer points out, Switzerland does not yet have a quota for numbers of medical students. In the EEC, only Belgium and Italy lack such a quota. Some countries have used quotas to secure drastic reductions in student entry. One solution to the overproduction of Swiss doctors might be for the Swiss Government to supplement local salaries for doctors willing to serve in developing countries. This would cost less than it would if they stayed in Switzerland providing more services than are needed. He also points out that Switzerland has no system of controlling hospital bed numbers such as operates in every country of the EEC.

The essential point I am making is that other countries are finding ways of controlling the cost of health care without embracing the particular one that Dr Sommer advocates. His solution, which is being canvassed in the USA, is to establish competing insurance organizations offering comprehensive medical care from a budget determined by their premium income. There is nothing new in this idea. Indeed it is precisely this system that was used by the early sickness funds or friendly societies of Europe a century ago.

The crucial point is that the early sickness funds were non-profit-making and were controlled by consumers, not providers. Dr Sommer is content to allow providers not only to control these organizations but also to pocket the profit from them.

Dr Sommer underestimates the difficulties and ignores the dangers of his solution. Dividing the population into “actuarial categories” is no easy matter. What about persons with pre-existing health problems, including psychiatric illness? What about persons with handicaps and disabilities? Moreover the health insurance policies he proposes would include a number of additional optional benefits that would make it even more difficult for consumers to choose “their efficient provider”. Quite a number of consumers might assume that the most expensive provider is necessarily the best. The main danger is that in trying to remove cost-increasing incentives Dr Sommer...
Health care—who pays?

would generate incentives for dangerous underprovision. Is it ethically desirable to put doctors into a position where the less they do for their patients, the more money they will make? For this is what it means "to make the providers compete between themselves".

I accept that there may be constitutional obstacles (e.g., the strong power of the cantons in Switzerland) in the way of adopting the solutions that some countries have painfully evolved. The power of certain pressure groups may often be such that really effective regulatory mechanisms or changes in financing systems never get through the legislature. It may even be unthinkable for consumer organizations or politicians to control budgets governing professional activity, despite all WHO's preaching about community participation. If, in such circumstances, Dr Sommer's solution is the only viable political option, it should be recognized that it involves serious risks not only in terms of effectiveness but also to the health of some patients. It is far from being the best solution to what is essentially a political problem.


Jan E. Blanpain

—Cost containment has already been achieved in some countries

Dr Sommer says that further investment in medical services will probably not lead to any marked reductions in mortality and morbidity, a standpoint deriving from the observation that the life expectancy of adults in developed countries did not notably increase between 1950 and 1975. He also believes that changes in life-style will yield better results, although there is no documentary evidence supporting this view.

McDermott (1) and Fries (2) advocated a revision of the conventional wisdom regarding the so-called ineffectiveness of health care. In terms of the effective functioning of individuals and the postponement of the time in life when fitness is lost, health care has undoubtedly contributed more than can be inferred from mortality statistics. Katz et al. (3) suggested using the active life expectancy (the years before impairment of the activities of daily living) as a more sensitive and valid criterion for the assessment of alternative health policies.

Recent statistics indicating a dramatic increase in the life expectancy of adults in a growing number of countries demonstrate the need to reconsider the relationship of medical care to health and survival (4). The issue is complicated by disappointing results in major experimental programmes aimed at achieving changes in life-style (5) and by the finding that, on the whole, preventive programmes contribute to a rise in health care expenditure (6).

Dr Sommer presents the cost explosion in Switzerland as if it were a universal phenomenon. However, the second health expenditure survey conducted by the Organisation for Economic Co-operation and Development in the industrial countries during 1982–83, presented in May 1983 at the European Health Policy Forum, indicates that in a number of countries—Australia, Belgium, Canada, Finland, Norway, and the United Kingdom—health expenditure as a percentage of gross national product has levelled off. In Canada this happened in 1972, and in Finland and Norway expenditure is actually beginning to fall. Thus cost containment in health care is feasible and, indeed, has been achieved. It is probably a question of political will, acceptance by the public, cooperation of the providers, and the use of effective methods.

Finally, Dr Sommer restricts himself to setting resource control against the creation of a competitive market. He neglects such approaches as utilization review, price control, budgeting, and cost sharing. The Canadian results show the importance of budgeting as a cost-control mechanism, while the Belgian experience demonstrates how price controls combined with utilization control and cost sharing can dampen down the cost explosion.

Pierre Gilliand

—Free competition or prearranged strategy?

Dr Sommer claims that the only way to bring about a lasting reduction in health care costs in Switzerland is to restore a competitive market but then immediately proposes drastic intervention in the form of limitation of the intake into medical schools.

It has to be understood that the services provided by the public and private sectors of the health system in Switzerland are highly complex and interdependent. No panacea is available to resolve the problem of mounting costs. In my opinion a planned comprehensive approach is necessary.

During the third quarter of the twentieth century, economic progress permitted spectacular development of the medical and hospital sector, while the wider coverage of social insurance schemes made it easier to obtain access to care.

Quantitatively, Switzerland is now well provided with hospital facilities and health personnel, and the quality of the health care delivery system has reached an enviable level by international standards. Life expectancy at birth is high by world standards.

Some of the reasons why the costs of medical and hospital care in Switzerland are getting out of control are mentioned by the author, and many others could be added. Chronic deficits are in prospect, and we are heading towards a two-tier system of medical and hospital care: one for the poor and one for the rich. The house is on fire, yet our politicians are using only buckets of water to quench the blaze. Many of the people offering advice are obsessed with economics, whereas few are economy-minded. My interpretation of the facts is similar to Dr Sommer's, but I differ from him in the remedies to be applied.

The introduction of a strict limit on the number of students entering medical schools would not mitigate the urgency of the economic problems. The number of doctors practising would not be affected until almost the year 2000. And who can say today what the ideal physician/population ratio will be at the start of the twenty-first century, or how practices will develop, or what the relationships will be between the various health professionals? The notion of cutting the annual output of doctors by two-thirds to three-quarters and reducing the number of medical schools from five to one or two is opposed to the spirit and federalist traditions of Switzerland.

Moreover, such a measure would have many bad effects. The fear of excessive numbers of doctors is a red herring: excessive use of facilities and excessive costs are the real problems. Limitation of intake into medical schools is only likely to delay measures for the rationalization of health policy and reorganization of the health sector. In any case, forces have been at work for many years to keep the number of new doctors down. Fewer candidates are passing the preparatory examinations, and the number of young people reaching university age is declining each year owing to the fall in the birth rate a generation ago.

Efforts need to be focused on the training of doctors, the promotion of certain specialist fields, the way in which care is delivered, the methods of payment, and the evaluation of services, so as to ensure that the right medical skills are available and to safeguard the quality of the services patients receive.

It is essential to bring costs in the health field under control, otherwise it will become necessary to ration services. When the same facilities are available in many different places and health care procedures are performed in accordance with the principles of free trade and free enterprise, costs are bound to become inflated. Action needs to be taken "upstream", by coordinating the means available. The expenditure explosion needs to be combated by careful allocation of resources. For example, the ageing of the population has many repercussions in the health field; some Swiss cantons are trying to forestall the consequences of the growing proportion of old people with disabilities, but the efforts are small and the obstacles immense.

I do not believe in spontaneous competition in the public health field. Needs increase faster than the possibilities of meeting them. Prevention could simply lead to an increase in medical interventions. The financing arrangements proposed by Dr Sommer are apparently intended to provide a framework for competition. There is a need for caution here: what may be a good thing in North America is not necessarily so in a different sociopolitical structure. We must be wary of inflexibility and niggling inspection procedures.

On the other hand, financing by budget allocations agreed between the parties concerned, tak-
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ing into account the purposes of hospitals and other health establishments, is proving successful in the canton of Vaud. By fixing the amounts allocated to these establishments in advance, instead of meeting deficits at the end of the financial year, expenditure is brought under control. The health establishments must keep within their budget allocations but are given greater managerial autonomy.

This system should be extended to medical fees as a whole. The corollary to the fixed budget is that information must be available so that evaluation can be performed. It would be up to the doctors to work out their own policy within the agreed financial framework. Competition could then take place but would be characterized by the control of resources instead of the explosion of costs.

Health can be seen as an investment as well as a cause of expenditure. Improved health standards should be seen as an investment in the greater well-being of the population in general and of the sick in particular. Moreover, health is a powerful driving force for the economy and for employment.

Controlling costs does not mean that the proportion of the national product devoted to public health will be reduced. In order to keep up with progress and cope with the likelihood of a shorter working week, more personnel will probably be needed, despite rationalization measures. The care of the sick demands direct relationships between patients and health personnel. Rationalization is hardly possible at the patient's bedside, unless we are prepared to accept a decline in the quality of service and less individual attention. The only way to curb the expansion of costs is to channel part of the demand for institutional care towards the outpatient sector and to give priority to the care of patients in their own homes. This will only result from a strategy agreed between the parties concerned, in which the patient's right to decide is respected.

Health policy embraces all measures that contribute to people's health, and its goals will not be achieved by some hypothetical self-regulation resulting from competition. Rather will they result from the gradual yet strict application of coordinated measures, namely:

- improvement of the income of the poorest among the old through supplementary benefits, so that these people do not have to enter an institution simply because of poverty;
- an increase in home nursing and support services and in home calls by doctors;
- a corresponding reduction in the number of hospital beds and an increase in beds for the old and handicapped;
- the construction of dwellings designed for the handicapped and the very old, so that these people can continue to look after themselves—a social policy that might be financed from the substantial funds of the employees' old-age insurance scheme;
- an improvement in the continuity of care, by making hospitals and other establishments more flexible and getting them to coordinate services with the outpatient sector;
- the encouragement of neighbourliness and mutual help, to prevent the old and handicapped from retreating into seclusion and to promote human contact and social integration; and
- a redesigning of the system of financing health services, using mechanisms that are plainly visible and can therefore be evaluated.

The Swiss health system cannot maintain the expansionist trend of the third quarter of the twentieth century. The methods of public health financing have both socialist and capitalist features—not the easiest of situations to contend with, as is illustrated by Dr Sommer's call for simultaneous competition and highly restrictive measures.

Keeping a tighter rein on health care, at both the individual and community levels, involves a gradual restructuring of the ways in which care is provided. Particular attention must be paid to the fact that the population is ageing considerably, while the total number of people is constant or even declining. Some kind of rationing will probably be necessary, but it would be a serious matter to ration services and personnel: action needs to be taken to deal with excessive facilities and equipment in a country where, in the health field, pseudocompetition and considerations of prestige tend to increase material resources at the expense of relationships between health personnel and patients.

The era of half measures is coming to an end. This is a time for choosing between freedom of competition and prearranged strategy. I prefer the second alternative, which could give scope for the exercise of individual responsibility and independence.

There is no basis for fearing excessive numbers of doctors.
Bengt Jönsson

—in Sweden the health care explosion is a thing of the past

The health care systems of Sweden and Switzerland differ in organization, financing, and management. Nevertheless, there are striking similarities in the trends of health care costs over the last 20 years. From 1960 to 1980, a period of significant economic growth in Sweden, the share of health care expenditure in the national domestic product of the country rose from 4.7% to 9.6%. However, both economic growth and the increase in health care expenditure were most rapid during the earlier part of the period. From 1963 to 1973 the real economic growth rate was 3.8% per year, whereas for the next ten years it was only 1.5% per year. Health care costs increased by 5.1% annually from 1963 to 1973, and by 3.6% per annum from 1973 to 1983. Thus the reduction in the growth of health care expenditure was less marked than the reduction in economic growth.

An examination of the trend in health care expenditure during the last three years and of forecasts for the coming years clearly indicates that the growth of health care expenditure will decline even further. The projection for 1984-88 is that real costs will rise by 0.7% per year. In Sweden the health care cost explosion is a historical phenomenon, and the main problem now is to adapt the health care system to a limited growth of resources.

This would not be very difficult if the health care system were static. However, new objectives for the health services and advances in medical technology will require significant structural changes in the health care system in the years to come, involving an increase in resources for prevention and primary health care, and a decrease in those for hospital care. These developments have to take place against a background of a more or less constant amount of resources, and so a major challenge is presented to the system.

Like Switzerland, Sweden now has about 25 physicians per 10 000 population. In 1960 the number of physicians per 10 000 inhabitants was 9.5 in Sweden and 13.5 in Switzerland, so growth has been more rapid in Sweden. From 1950 to 1970, health care costs increased faster than the number of physicians. The imbalance was solved by increasing the number of other staff per physician. During the next decade the reverse happened, but the imbalance was solved by reducing average working hours for physicians. In the present decade the number of physicians will increase twice as fast as the total resources, and the imbalance will probably be corrected by increasing the physicians’ share of total health care expenditure. In the long run, however, there has to be a balance between the total resources and the number of physicians. Furthermore, manpower planning in the health service must include all categories of personnel.

In Sweden about 17% of the people are aged 65 or more; this proportion is higher than in most other countries, and people over 65 consume 50% of health care resources. However, there is no evidence that the increasing proportion of elderly people will significantly increase health care costs. Only 10-15% of the increase in Swedish health care expenditure can be explained by demographic factors. It is much more interesting to observe the dramatic changes in health care consumption per capita in different age groups than to make forecasts of what will happen if consumption patterns remain constant and the number of elderly people increases.

It is frequently said that increased wages paid to health care employees have resulted in markedly increased health care costs. In support of this hypothesis, its formulators have pointed out that a great many health care employees are low-paid and that the thrust of wage policy is to raise the pay level of this very group. In Sweden, average hourly wages, including payroll taxes and social security contributions, are lower in health care than in manufacturing industry but higher than in other service trades, such as retailing and catering. Historically no clear trend can be detected in the relative pay of health workers. The increase in health care costs cannot be explained by rises in the relative pay level of the sector’s employees, but corresponds to a real increase in the input of resources. Income redistribution in favour of the sector’s employees is not involved. I believe this to be true in most other countries.

Our main problem is to adapt the health care system to a limited growth of resources.

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The basic economic need in the Swedish health care system is to improve resource allocation. This can be tackled by market reform and improved management. Sweden has a small private health care sector, whereas about 85% of resources are spent in public institutions. An intense debate is in progress about the right mix of public and private sectors. There is obviously room for more competition and more private contractors, but changes in this direction will only be marginal. It is therefore necessary to improve management within the public system. I agree with Dr Sommer that physicians' decisions are the key to efficient decision-making in the health care system. Consequently, decentralization and deregulation can open the way to greater efficiency. Budgeting and accounting systems have to be developed that will give the right incentives for efficient decision-making and cost containment. It is also necessary to undertake more careful evaluations of new as well as established medical technologies. Sweden will probably choose a middle way, involving both market reform and improved health planning, for the development of the health services.

Frans F. H. Rutten

—Market strategies within a social insurance system

Dr Sommer suggests that Switzerland should go in the direction of a competitive health insurance market. He does so after describing current resource allocation in health care and identifying a number of adverse incentives built into the system. The problems described by Dr Sommer will be familiar to policy-makers and researchers in other European countries.

What phenomena have led to the presence of so many adverse incentives in our health care systems? In the first place, certain historical factors common to the various systems in Europe explain the existence of fee-for-service remuneration for physicians, the free location of physicians, and other matters.

Political economists point to another way of explaining the inefficiency in our health care systems. Given the hypothesis that all parties in the political scene pursue their separate objectives, many of the problems of collective decision-making and government regulation can be explained. Marmor & Christianson (1) have shown this to be true for government policies in the USA, and the same reasoning can be used to explain a number of peculiarities of government policies in Europe, such as those in the Netherlands (2). If it is indeed impossible to redress the failures of collective decision-making in health care, the introduction of more market mechanisms in health care allocation would be the way to proceed. This is the clear position of advocates of competition like Alain Enthoven (3) and Clark Havighurst (4).

I would like to consider two basic options for introducing market mechanisms in health care allocation. With emphasis on the competitive approach, I would like to sketch a way in which we could proceed, taking into account traditional views on how to provide health care within the social security systems in Europe.

In these systems, resource allocation through individual decisions by suppliers and consumers in a market is replaced by collective decision-making in government or in social security agencies. There seem to be two points at which market incentives might be introduced: in the relationship between insurer and producer, or in that between consumer and producer.

The first approach is mentioned by Sommer when he describes the development of prepaid group practices in the USA: the insurer selects from competing providers and enters into contract with those who deliver good quality at low cost. The insurance organization may even own a number of health care institutions itself. As is pointed out by Sommer, Enthoven has proposed government regulation to protect prepaid group practices from unfair competition with traditional insurers and to prevent socially undesirable consequences of competition.

The second approach is based on the idea that efficiency in health care can be achieved only if patients themselves have a direct financial stake in...
efficient health care delivery. In contrast with the first approach, this involves cost-sharing, which is being widely introduced in a number of European countries. Thus in Belgium drugs have been classified according to the therapeutic and social criteria: four categories are distinguished, and the percentage of expenditure reimbursed through social health insurance differs between them. In the first category there is full reimbursement, whereas in the fourth there is none. Cost-sharing has also become more important with respect to other service items. Furthermore, co-insurance of 40% for physiotherapeutic care has been introduced, and people now pay a fixed amount for each day spent in hospital. In the Federal Republic of Germany there was virtually no cost-sharing by patients before the introduction of a law on cost control in 1977; now there is co-payment and co-insurance for a number of selected services. Recently, a fixed co-payment per hospitalization day was introduced in Germany. In the Netherlands, co-payment has been introduced for pharmaceutical consumption within the public scheme. From the Rand Health Insurance Study (5) we know that the decrease in consumption attributable to cost-sharing can be quite substantial. Recent information from the same study (6) suggests that long-term effects on the health of people who lower their consumption because of cost-sharing are insignificant.

One reason why cost-sharing is being widely used for cost containment is that it can be intro-

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Cost-sharing can be introduced relatively easily in a social insurance context.

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duced relatively easily in a social insurance context. It seems, however, much more difficult to introduce a fundamental change in respect of competition, as described by Sommer. Government circles have shown clear interest in the ideas of Enthoven and Havighurst, but this has not resulted in action to stimulate competition in health care. On the contrary, there seems to be a tendency to make social insurance systems more dependent on government finance and to decrease the influence of private enterprise in health care, especially in southern Europe. Italy established its national health service in 1978, and Portugal introduced a national system financed out of general revenues one year later. Similar measures are being considered in Greece and Spain (7).

Sommer’s article points to, but does not answer, the question of whether the gradual introduction of socially acceptable competition into European social insurance systems is possible. I shall make a number of suggestions on how to proceed in this direction. Let me first briefly mention some basic characteristics of most European social health insurance systems.

— The fees of health care providers and the prices of health care institutions are fixed by a national or regional authority.

— Premiums are collected centrally, and social insurance agencies or sickness funds are reimbursed for expenditure incurred.

— Social insurance agencies or sickness funds are obliged to settle contracts with any provider or health care institution meeting certain quality requirements.

In such a system there is no financial incentive whatsoever to strive for efficiency in health care provision. In my opinion, it would be possible to stimulate competition between health care providers by adopting a four-stage strategy.

1. The social insurance agencies or sickness funds would be freed from their obligation to settle contracts with any provider or health care institution meeting certain quality requirements. This is currently under debate in the Netherlands. Social insurance agencies would be able to break contracts with providers failing to meet certain efficiency criteria. In this way a situation similar to that in the USA could develop, in which, for instance, “preferred provider organizations” come into existence, i.e., organizations that offer people a reduction in insurance premiums as long as they use the services of only a restricted group of health care providers.

2. The rules for reimbursing sickness funds would be altered, e.g., by changing from reimbursement on the basis of costs incurred towards budgeting. This would give social insurance agencies or sickness funds a clear incentive to contain expenditure. The budget for the sickness fund could, for example, be based on the number of people insured, allowing for the characteristics of the insured population. In this situation, sickness funds might be inclined to assume an active role in the selection of providers offering both high quality and low costs.

3. There would be a change from a system of fixed prices to one of maximum prices. This would allow competition between providers, not only on
the basis of quality of care and efficient behaviour, but also in respect of fees and prices.

4. Reimbursement from central funds to social insurance agencies or sickness funds would not go beyond a point at which additional funds would have to be raised by sickness funds themselves as direct consumer charges, and competition would be possible in respect of these charges. Regulation as proposed by Enthoven and described by Sommer could help to achieve a socially acceptable distribution of health care resources.

Because of the need for brevity, I have not considered a number of difficulties. It makes a difference, for example, whether one or several sickness funds are operating in a region. Only in the second case would consumers be able to make a choice between competing sickness funds on the basis of premium and service. Discussion of these issues has begun in the Netherlands, where a social insurance system coexists with a considerable private sector, in which there is now vigorous competition between health insurers. As health economists have pointed out, in order to obtain the full benefits of competition, it should not be restricted to insurers but should also include health care providers and institutions (8, 9).

In this contribution I have made a few suggestions as to how such a situation might be gradually attained. It may be interesting to follow developments in the Netherlands, where government policy-makers have made proposals for extending the private sector and incorporating more market incentives into the system.


Detlef Schwefel
—From cost containment to effect assessment

In pre-industrial societies, agriculture frequently had the highest share of gross national product; why should the health sector not rank high in post-industrial societies? A structural shift of the economy in favour of health care could be justified in four ways. Firstly, in terms of the quality of growth, this sector produces health, a basic need-oriented item. Secondly, because health care is labour-intensive it creates and secures jobs—and indirectly health—in times of mass unemployment. Thirdly, there are essential forward and backward linkages to other sectors, like the equipment and chemical industries. Finally, the market for health care expands quite strongly with the supply. Many other economic sectors do not have comparable advantages. Why should we not allow the health sector to expand? Why should the health sector not be one of those leading economic recovery after recession? To force cost-containment policies on the health sector could be misguided from the economic point of view as well as inhumane.

But do we really produce health through health care? Is there not room here for scepticism? Nearly all statements on the efficacy of health care are hypothetical rather than factual, or relate only to isolated topics. There are few comprehensive evaluations of health care covering both context (e.g., availability, quality) and effects, especially side-effects (e.g., iatrogenic diseases) and after-effects (e.g., cost increase because of higher life expectancy). On the other hand, some factors seem to affect health more than the health care sector itself, viz., nutrition, sanitation, and real income. Without contrasting the economic and health impacts of health care against those of other sectors, a plea for containment of expenditures or costs in health care seems to be at least premature, and certainly inhumane, since health care undoubtedly produces more health and well-being than most other social and economic sectors do. So, if cost containment is nothing but expenditure containment, let us contain it, even if we do not fully understand whether health care prevents illness or produces health and well-being. A similar situation

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is presented by many economic and social sectors: we know the outputs but seldom the outcomes in terms of satisfaction of basic needs.

In all economic and social sectors, inefficiency is unethical because it involves the wastage of resources that could have been put to better use (1). There seems to be a variety of inefficiencies within the health care sector: misallocations, surplus of specialists and beds, shortage of general practitioners, double diagnoses, overtreatment, extremely high use of technologies, unnecessary hospitalization, and excessive utilization and wastage of drugs.

If there are no policies of primary prevention, where can we best use measures to decrease costs and increase efficiency within the health care sector?

Let us consider cost containment in the Federal Republic of Germany. Assuming that supply creates demand in health care and that the most important resource allocations are made by providers, then, given that over 80% of health insurance expenditure in the country is induced by practice-based physicians, it is clear that cost containment requires persuasion or incentives directed towards these physicians. This was done, in fact, in Bavaria. The Federal Republic, however, has chosen a comprehensive procyclical approach (instead of alleviating health problems caused by recession anti-cyclically) based on macroeconomic data. About 60 representatives from government and industry meet twice a year (in what is called a "concerted action") to analyse the background and to discuss strategies and measures for cost containment, such as ceilings on expenditure increases. So far it is not clear whether such policies strengthen efficiency rather than merely reduce expenditure or transfer it to the weakest parties involved. It is also uncertain whether people do not inadvertently undercut such policies and vitiate any long-term containment effects.

In spite of all the uncertainties, there is an explosion of ideas (salvation doctrines) about how to achieve cost containment and efficiency in the Federal Republic of Germany. Most proposals try to combine market intervention with bureaucratic regulation, as with the closing of the market for new physicians and the opening of that for practising doctors. Proposals are made for reducing welfare policies, for rationalization, for the introduction of markets and competition, and for co-payment. Bureaucratic planning is now often disregarded, and what might be called the health underground economy often bears costs that had been contained elsewhere.

Greater freedom for market forces in health care should lead, via competition, to the emergence of cost-effective providers (physicians and insurance companies), since consumers would be able to exercise choice. Proposals regarding supply — alternative delivery systems, consumer choice health plans, health maintenance organizations, workers' cooperatives — have not yet found favour in the Federal Republic. Demand-oriented proposals are predominant: co-payment for minor diseases, drugs, dental care, and hospitalization have been implemented for the 90% of the population with statutory insurance rights. As in other highly developed countries, only embryonic measures for competitive supply have so far been taken; demand management measures are more likely to be effective. Consequently, we do not have valid answers in respect of such matters as risk selection, preferential pricing, unjustified demand decreases, cost shifting, monopolization, consumer sovereignty, consumer preferences, and distributional equity. At present we can only speculate about them.

Throughout the cost-containment discussion the federal authorities are said to have increased their power. Professional medical organizations and the administrations of sickness funds have tried to strengthen their positions too. But there is no strong evidence, either empirical or theoretical, on their effectiveness and efficiency in overcoming problems arising from lack of consumer sovereignty, high transaction costs, and inadequate information. Such features usually call for state intervention (2). It is uncertain whether the state and the bureaucracy fulfil their raison d'être by defining need and demand and by producing merit goods. The belief that effectiveness can be strengthened by state intervention is a matter of social theory or political preference. There is an absence of empirical knowledge based on thorough evaluation.

There are other uncertainties. For example, to what extent do lay people themselves contribute to health and well-being, independently of the health market and health plans, through participation, self-help, and life-style? It is not clear how mem-
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bers of the public, using their own common sense, react to cost-containment policies, which are shifting the costs in terms of time, pain, and money to the private sector, nor how this is to be avoided or reversed. The only certainty is that strong provider interests compete with weak consumer interests. According to the extent to which costs are contained by the market or by health plans, the third sector—the lay system or the shadow economy—expands. Costs contained elsewhere are paid here.

Various of these doctrines of salvation have been implemented in the world: full competition in many Third World countries, models of competition with only slight state intervention in the developed countries, comprehensive planning of health care in widely diverse countries, many forms of payment such as capitation reimbursement or fee-for-service occurring in one and the same country and, all over the world, alternative delivery models of every kind. Before starting to implement one of the modern doctrines of salvation on a large scale, one should try to evaluate the effects, side-effects, and after-effects of intended policies, checking them against comparable policies carried out at other times and in other areas and creating scenarios to assess which policies are likely to work.

As regards evaluation, a direct transfer of theories or results from other sectors to the health sector is impossible; health care is not a commodity like soap. Doctrines of salvation should be open to verification. We need independent, rigorous health systems research rather than mere belief.

To summarize, we do not know whether expenditure or cost containment in health care is relevant from a macroeconomic point of view. It is conceivable that containment policies are abolishing the most effective measures. It is unclear whether cost containment has the effect of increasing efficiency or of decreasing expenditure; shifting expenditure to other areas might prove even more inefficient. We simply do not know which of the usual doctrines of salvation—competition, planning, and/or self-help—can do most to improve effectiveness and efficiency. In the absence of concrete information, we should not try excessively to curb costs and expenditure in health care but should invest in the rigorous evaluation of the effects and side-effects of actual and alternative measures within and outside the health sector, even if this means increasing health care costs. Expenditure on health care seems to be more useful in terms of health and economics than expenditure on arms and many other items in the economy, and this should be our main hypothesis.


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**Increasing the operational capacity of the health services for the attainment of the goal of Health for All by the Year 2000**


The Technical Discussions held in connection with the XXX Meeting of the PAHO Directing Council in 1984 permitted top-level decision-makers from PAHO’s Member Countries to jointly consider their health services’ operational capacities and general measures needed to increase them. Principal questions considered during the discussions were: general policy and sectoral organization; the organization and administration of services; and requisites for achieving community participation in health development.

This book will prove useful to policy-makers and others concerned with strategic planning for health services and with potential expansion or modification of those services to meet people’s basic needs.