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MANAGERIAL ANALYSIS OF HEALTH SYSTEMS

The PAHO Directing Council, at its XXVII Meeting in September 1980, selected the topic "Managerial Analysis of Health Systems" for the Technical Discussions in 1982.

In this document the managerial implications of the goal of HFA-2000 are examined within the context of the basic needs concept as the focus for national socioeconomic development. Three key managerial challenges emerge from the goal of HFA-2000: equity, effectiveness, and efficiency, and the implications of these for the management of health services are discussed. The critical issues for improvement of the health management system are analyzed under eight major headings: a) needs, demands and supply of services; b) participation and community involvement; c) priority group determination; d) organization of the system and administrative structures; e) administration of resources; f) manpower development and utilization; g) appropriate health technology; and h) decision-making and information.

The strategies and approaches which can be utilized by health managers in responding to these issues are reviewed, focusing more on the processes involved in goal setting, strategy formulation, and implementation. Strategy formulation is considered under the headings of goal-setting, environmental analysis and forecasting, strategic options, strategy analysis, and evaluation. Strategy implementation is examined in terms of policy making; planning for change; organizational development; manpower development and utilization; financial management; physical and material resources management; and management evaluation and control.

CSP21/DT/1, Rev. 1 (Eng.)

TECHNICAL DISCUSSIONS

MANAGERIAL ANALYSIS OF HEALTH SYSTEMS

Washington, D. C.

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PART I. INTRODUCTION

1. Frame of reference

1.1 Technical Discussions resolution

The PAHO Directing Council at its XXVII Meeting in September 1980 selected the topic "Managerial Analysis of Health Systems" for the Technical Discussions at the XXI Pan American Sanitary Conference in September 1982. The role of management in the achievement of health for all by the year 2000 is of fundamental importance in meeting the challenge as has been underlined by the Regional Strategies and Regional Plan of Action. The Technical Discussions, therefore, provide the opportunity to develop an appropriate and relevant managerial response to this historic challenge.

1.2 Regional Strategies and Plan of Action for Health for All by the Year 2000

The Regional Strategies and the Plan of Action stress that primary health care and its components constitute the basic strategy for attaining the goal of health for all by the year 2000. They also emphasize the importance of the management process by calling for: (i) the adjustment of health policies and plans in keeping with the new concepts of health and the reorganization of the health sector, stressing community participation and inter- and intrasectoral coordination; (ii) the development of the operating capacity of care of the health sector to maximize its efficiency and effectiveness, and to review and redefine its financing systems; (iii) the strengthening of the planning, programming, implementation, control, and evaluation systems; (iv) the analysis and provision of the human, financial, and physical resources needed for national programs; and (v) the development of research and appropriate technologies in accordance with the needs of the national development process.

Consequently, serious challenges have been posed to Member Governments for the development of their health management systems to achieve the goal of HFA/2000. This is, therefore, an opportune moment for these Technical Discussions. New responses are required to bring about the desired changes in these management systems. Key issues need to be identified to focus attention on specific actions required from Member Governments. Experiences in countries implementing the Regional Strategies and Plan of Action have shown the need for simultaneous change in the reorientation of the health systems, intersectoral coordination, community participation, and the use of appropriate technology. These represent creative, dynamic, and innovative challenges for managers in the health services. Serious analysis of the health systems is not only opportune but essential.

2. Preparation of the document

This document has been prepared with the aim of focusing on the future, without loosing sight of the present or past situations, and learning from lessons of experience on the formulation of strategies, policies and programs for health development.

The information incorporated in the document is taken from three main sources:

a. Regional and Global Strategies, including resolutions and technical documents of PAHO/WHO and other agencies of the United Nations.

b. Responses from Member Governments to a questionnaire on critical health management issues.

c. Global and regional literature on present thinking in health administration, especially those aimed at exploring future roles.

3. Format of the document

The document is divided into four parts:

i. Introduction to the Technical Discussions.

ii. Managerial implications of the goal of HFA/2000: Key challenges.

iii. Management of Health Systems: The Critical Issues.

iv. Strategic Process for Health Development: The Managerial Response.

Figure 1 provides the framework used in the preparation of this document.

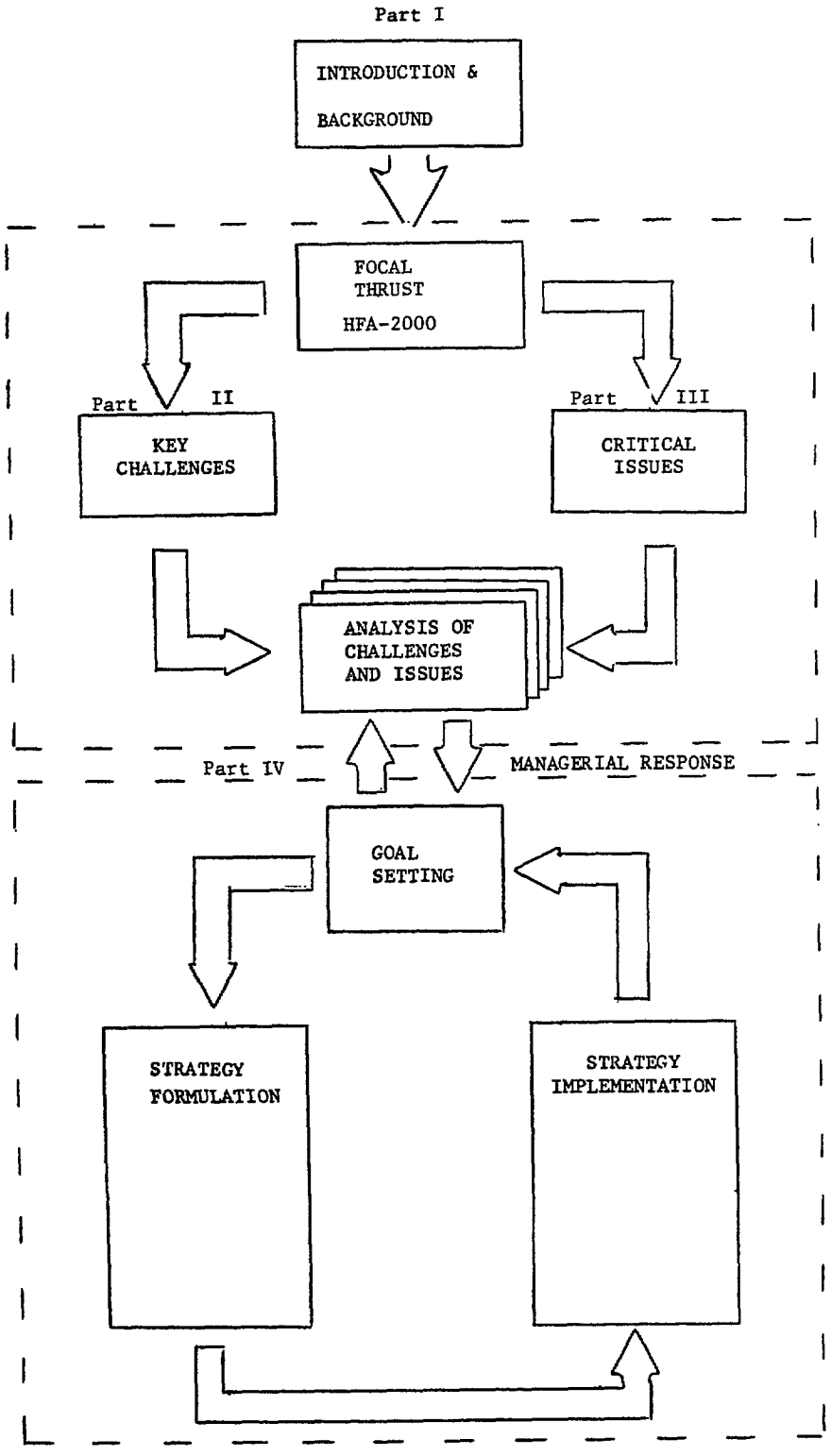

Figure 1. Framework of the Technical Discussions document

In the first part of this document the background to the Technical Discussions for 1982 is explained. The second part concentrates on the identification and description of the key challenges and the managerial implications which emerge from the Regional Strategies of health for all by the year 2000. In the third part, the critical issues which will be faced by health management in the next decades are discussed, outlining the focuses and options which emerged from the response to the questionnaire and are being analyzed in the countries of the Americas. The fourth part presents essential guidelines for framing a health management response which would be effective in approaching the critical issues and suitable for meeting the key challenges which emerge from the goal of health for all by the year 2000.

This document is not an in-depth examination of the current management practices and processes in the health system. Rather, it is an analytical assessment of the extent to which the health systems are currently structured and ready to cope with the managerial challenges ahead.

4. Background and resolutions

Several WHO and PAHO resolutions provide the background for these Technical Discussions. The World Health Assembly in 1977 (Resolution WHA30.43) decided that the main social targets of the governments of the world should be to strive for the attainment of a socially and economically productive life for its citizens by the year 2000. The Alma-Ata Conference in 1978 reaffirmed this pledge and agreed that primary health care was the key for attaining this target as part of general socioeconomic development, in the spirit of social justice. The World Health Assembly in 1979 (Resolution WHA32.30) urged Member States to define and implement national, regional, and global strategies for attaining the goal of health for all by the year 2000. A document on formulating strategies for health for all by the year 2000 was prepared by WHO (1979) to guide governments in the preparation of their strategies. In 1981, WHO approved the Global Strategy for health for all by the year 2000, which presented guiding principles based on national experience.

In the Region of the Americas, the III Special Meeting of Ministers of Health (1972) agreed that the main objective for the development of the health services was the extension of coverage to all unserved and underserved rural and urban populations through reorganization and expansion of the health systems, and an increase in their operational capacity with the aim of improving the effectiveness and productivity of the system. This was one of the major components of the Ten-Year Health Plan for the Americas adopted in 1972.

The IV Special Meeting of Ministers of Health of the Americas, in 1977, reaffirmed its commitments to the extension of coverage of health services, in the context of intersectoral coordination and declared primary health care to be the key strategy. The PAHO/WHO Directing Council at its XXVII Meeting in September 1980 approved the Regional Strategies for the Region of the Americas for achieving health for all, and the Directing Council at its XXVIII Meeting in September 1981 approved the Regional Plan of Action.

The goal of health for all by the year 2000 and the strategy of primary health care have continued to emphasize the importance of management in the delivery of health care. The Regional Strategies and Plan of Action have stressed the importance of developing the infrastructure of the health system and of improving the efficiency, operational capacity, and impact of the system.

Since the beginning of this year (1982) several regional workshops have been held in Washington for senior government officials from the health sector (including social security) and national planning agencies on the implementation of the Regional Strategies and Plan of Action for health for all by the year 2000.

PART II. MANAGERIAL IMPLICATIONS OF THE GOAL OF HFA/2000: KEY CHALLENGES

1. Basic needs and HFA/2000

During the last decade, national policymakers and international organizations became convinced that the strategy of direct satisfaction of basic needs is the major objective of development and directly attacks the conditions of poverty. In this strategy, certain elements usually can be found. Basic needs merge as a dynamic concept which evolves to some degree along with the growth of the economy and the rising expectations of the population. The definition of basic needs includes but is not limited to food, education, housing, and health. The strategy emphasizes the direct provision of goods and services to the poor. The acceptance of structural changes to achieve the redistribution of the benefits of development is also seen as a precondition for the adoption of a basic needs strategy.

The basic human needs strategy has within it a clear focus on the direct satisfaction of the objectives of the health sector. It also is the strategy that virtually demands that social development be treated at least on a par with economic development. It assumes a more integrated form of planning, so that--from the health perspective--there is an emphasis on the vital links among the different sectors of the economy and their implications for the social sectors. It also assumes greater efficacy in the actions of each sector if they are sensitive to their impact on the other sectors. In each country, the definition of the appropriate set of priority basic human needs and the critical path for satisfying them will vary according to available resources, community demands, political will, and institutional capacities.

The goal of HFA/2000 is a social goal and is directly related to the basic needs concept. It touches not only on health care provision but relates to development philosophies and policies which deal with the achievement of a level of health acceptable to and affordable by the communities served. It relates not only to access or utilization of the health services but to taking preventive, promotional, or early correctional measures and to the educated and concerned participation of communities.

2. Primary health care and community participation as focal thrusts for health development

The IV Special Meeting of Ministers of Health of the Americas, held in Washington, D.C. from 26 to 27 September 1977, focused on the extension of coverage, primary health care, and community participation; later on the Alma Ata Conference concluded that: "Primary health care is essential health care based on practical, scientifically sound and socially acceptable methods and technology made universally accessible

to individuals and families in the community through their full participation and at a cost that the community and country can afford to maintain at every stage of their development in the spirit of self-reliance and self-determination. It forms an integral part both of the country's health system, of which it is the central funcion and main focus, and of the overall social and economic development of the community. It is the first level of contact of individuals, the family and community with the national health system, bringing health care as close as possible to where people live and work, and constitutes the first element of a continuing health care process."

With this perspective, national strategies for primary health care must meet the criteria of universality, equity, and continuity in satisfying health needs. The achievement of HFA/2000 demands the improvement of well-being and the reduction of social inequalities because of the need to facilitate, for all sectors of the population, access to health services, giving priority to the human urban and rural groups exposed to the greater risks.

The strategy of primary health care includes an intersectoral approach since meeting the health demands and achieving improved levels of health for the community depend on interacting factors which are, for the most part, outside the control of the health sector. These factors, e.g. housing, income, education, cultural patterns, etc., are generally defined as conditioning factors of the health status of individuals and society as a whole. The majority of these factors are within the jurisdiction of other national development sectors with which the health sector needs to be linked and coordinated, for its own development, as a means and an end to achieve the general well-being of the population. The health sector ought to develop its capacity to identify the requisites or conditions for actions in other sectors. In this manner, intersectoral linkages can be formed for continuous actions.

The strategy of primary health care cannot respond to a "universal model," but rather to the particular style of development characteristic of each national or local community, and depends on the sociocultural, economic, and historical configuration being dealt with.

The full involvement of the community in health care activities and the assessment and implementation of appropriate technologies for health are key components of the primary health care strategy. Community participation involves not simply a temporary involvement in health actions but a permanent educational process by which the community's knowledge, efforts, cultural wealth and resources are harnessed in a

well-informed manner in the pursuit of its total well-being. This participation takes different forms in different parts of the world and it could vary from self-care actions to interventions at the local or national political level.

It has been stated that to extend health services coverage utilizing the primary health care strategy, countries must adapt and utilize appropriate technologies. This means that the health technologies used must be efficient, effective, feasible, and in harmony with the sociocultural and ecological setting in which the population lives.

3. Challenges for the health system

3.1 Changing environment and managerial implications

The political, social, and economic environment, together with the normative regulations and the infrastructure, constitutes the framework within which health administrators perform. On the conceptual level, the complexity of managing health services has increased. The concept of health has expanded; the demand for services has grown, and so have the services offered, their specialization and technology in keeping with the strategy of extension of coverage to groups within the society that traditionally did not receive these services. The interrelationship between the various components which exists at different levels of the system has become progressively more critical, demanding from the administrators, greater efforts in interpersonal relations, coordination, and integration of their services. The process of social, political, and economic transformation, which is evident when rapid changes are superimposed before the structure can be adapted, influences the work environment. The incorporation of these new dimensions has significant implications for the management of health systems.

First, the goals and objectives of the strategies will be increasingly influenced more by political and socioeconomic factors which are external to the health system and less by the health system managers and providers.

Second, the conventional role of health managers in decision-making will be overshadowed by an increased participation of communities and health personnel in decision-making. This is implied very clearly in the regional health strategies, which emphasize the need for community participation.

Third, the nature of strategic challenges changes frequently and rapidly and managers need to be sufficiently sensitive to perceive the need and the opportunity for innovation.

Equity, effectiveness, and efficiency emerge as the key challenges that confront health managers. These challenges emphasize different desirable and complementary outcomes of the strategic management process. The trade-off formula of efficiency versus equity needs to be reformulated to indicate efficiency as complementary to equity. The health services suffer from various degrees of inefficiencies both at the institutional and systems level, and these cannot be solved without addressing first or at the same time the inequities in the system. On the other hand, effectiveness provides a powerful evaluative criteria to measure the extent to which the potential impact of a set of interventions is actually achieved in a particular situation. Efficiency as the proportion of total cost, representing the combination of resources and time, that can be related to actual benefits achieved, however, has a number of alternative methodological approaches. The way these three challenges interact, as a result of different options of managerial responses, is still not clearly understood and should attract systematic inquiry.

3.2 Equity

Striving to reach the whole population, rather than a few, places extreme pressure on every aspect of the health system. In the concept of health for all by the year 2000, the word all is the most critical element. Not everyone can pay for the use of health services. Mechanisms for facilitating a more equal access can be based on different equity values, such as equal financial access and equal treatment for equal need. In essence, equal financial access implies leveling the financial barriers for all and the existence of a high level of social solidarity.

The other value level of equal treatment according to need implies the elimination of all the restrictions that affect the utilization of the services and not only the financial ones. To achieve equitable distribution of services, it will be necessary to consider such measures as redefinition of the health financing system, including subsidies, to stimulate the universal utilization, and accessibility of services and the development of new criteria for appropriation and reallocation of resources within the wider society. This would lead to a better distribution of services and benefits. A major issue would be to determine to whom the resources will be given and how useful the resources will be to them. Each society, in accordance with its culture and resource possibilities, needs to decide on the mix of values that will sustain equitable access for health beneficiaries.

Equity is a value of high social significance which is debated in the sensitive arena of political ideology. Future health administrators will not be able to isolate themselves or avoid the responsibility for decisions which would have profound influence on the level of equity in

the assignment of resources within the health sector and in the distribution of health benefits. The concept of the administrator as an individual decision-maker placed at the apex of a health system ought to give way to that of an administrator capable of interacting with representative forces of the community in search of decisions sustained by a broad base of collective consensus. The readjustment of social priorities represents a unique challenge for health administrators and an unavoidable yardstick by which they will be evaluated by future generations. The challenge of equity constitutes the core of the strategic problem which will confront the health administrators in the next decades.

3.3 Effectiveness

Selection of the appropriate interventions for achieving the maximum health benefit, within the available technology, constitutes the second component of the strategic challenge which must be faced by administrators.

Transition from a state of less health to a state of greater health is determined by multiple factors that go beyond the influence of the health services. Understanding of the causality of this transition or change in order to determine the effectivess of the continuum of interventions and of resource application has turned out to be a highly complex problem.

The impact on health depends not only on the utilization of services and on the efficiency with which these services are provided; it is, in addition, closely related to social and environmental factors.

Without a useful instrument for estimating the degree of impact of any combination of interventions, administrators must depend on their own intuition for adopting corrective measures.

But even if there were better instruments for evaluating the changes in health conditions derived from the impact of programmed interventions, the challenge of effectiveness relies on the capacity for producing the necessary changes. Health providers are paid today for what they do, not for what they accomplish.

Frequently the change needed in individual or institutional behavior in order to orient it toward the objective of collective health loses priority in the face of the pressures brought about by each patient's need for care.

The tactics that are being conceived are readjustment in the balance of principal interventions in health so as to direct more resources and the best talent toward actions of health promotion and protection, together with structural strategies for spacing the concentration and adpation of technologies that are used, and, basically, a growing

emphasis on modifications in the standard of living through intersectoral actions. Their programming and implementation will be of vital importance for the work of future health administrators.

3.4 Efficiency

The first strategic challenge that faced health administrators was to produce sufficient services of good quality in order to meet the demand. The primary concern of health administrators was the efficient application of the resources supplied directly by those who requested the services or which were obtained through indirect mechanisms. But many decades ago this simple configuration of the strategic problem began to change with the sustained increase in demand, the growing scarcity of resources, the accelerated increase of the costs and, of course, by an ever-increasing specialization in the health field, coupled with an inexhaustible incorporation of new and more complex technologies of diagnosis and treatment. The increasing investment throughout Latin America and the Caribbean in infrastructure for providing more health services, which added to the growing budget of current expenditure, has not been accompanied by an equal concern for increasing productivity. The critical shortage of resources, together with the decision to expand benefits to the entire population, has made it necessary to take a new approach to efficiency based on its potential for multiplying the available resources.

This challenge of efficiency will test the administrator's capacity for technological innovation and for finding new ways to combine resources to deliver health services.

Health administrators in the developing countries of the Region frequently refer to the resource allocation process as the "distribution of poverty." Often the limited resources for operating the services that benefit the low income population contrast with large investments in complex technology that produce little benefit for a few. The increase of efficiency requires important changes in the allocation of resources and in their structure, as well as in the processes of delivery of services, in accordance with the socioeconomic realities in which they are immersed.

PART III. HEALTH SYSTEMS MANAGEMENT: THE CRITICAL ISSUES

1. Introduction

The issues raised in this chapter are based on the information received from Member Countries in response to the preliminary document and questionnaire used in the preparation for these Technical Discussions. This information has been summarized to indicate the critical managerial issues faced by governments and the approaches being taken to deal with these issues. The opportunity has also been taken to analyze other relevant official documents and current literature pertaining to this topic.

2. Configuration of critical issues

Health systems are organized to achieve certain objectives while strategies are high-level decisions to achieve those objectives. All managers are faced with the problems of distinguishing objectives from the means used to attain them. Objectives do not originate in a vacuum. They emerge as a response to critical issues of the health systems.

Managers are faced with many complex problems. There are two approaches which can be used for the simplification of this complexity. One is to select the important components of the system (e.g. health information systems) for initial consideration. The other is to select the important attributes (e.g. the appropriateness of technology) as a way of breaking the problem into more manageable units. In both cases, the idea is to decide on strategy before tactics. This means starting with what is important, leaving the details for later, and concentrating on the few vital components or attributes.

It involves staying on top of the problem and making as many decisions as possible at this level before descending into the morass of details. This is the role of senior management. Critical issues are those few vital sets of problems within the competence of top management. When top managers get submerged in many trivialities, the health systems drift into the future without direction.

The following figure shows the levels of management and their relationship with types of decisions and with managerial issues.

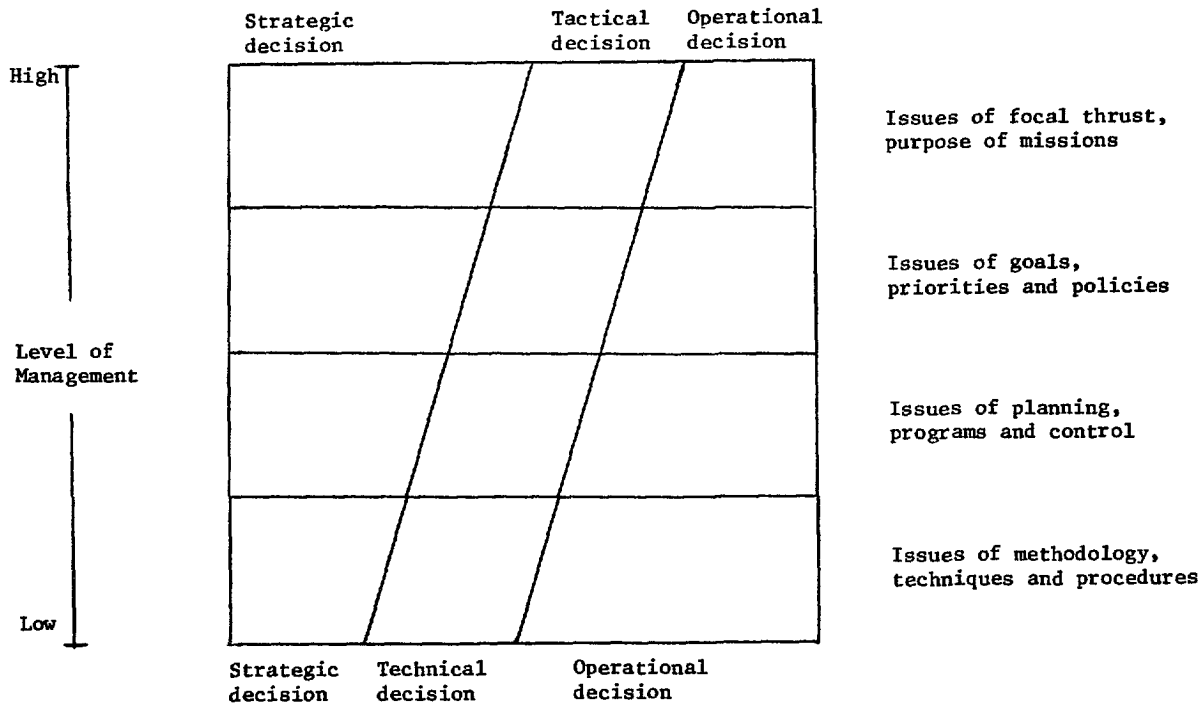

Figure 2. Balance of strategic, tactical, and operational decisions at various management levels

The selection from competing issues at the different managerial levels, with an appropriate mixture of strategic, tactical, and operational decisions, provides a simple framework for discussing the role of health managers.

The issues identified in this document are directly related to the concepts involved in the goal of health for all by the year 2000, the Regional Strategies, and the Plan of Action for implementation of the Regional Strategies. In the next two decades, therefore, these are the issues that will be of public concern in the field of health for Member Governments. Those issues which confront top managers in the health system have a different emphasis from those which confront managers who function at the operational level. In the case of the former, more emphasis is placed on decisions related to strategy and tactics. This bias is, therefore, reflected in the critical issues identified. Figure 3 illustrates an overview of the interrelationships between the different critical issues.

3. Needs, demands and supply

Access and coverage are, respectively, the demand and supply side of primary health care and, in general, of health care. Both are functional concepts. Access is the function of transforming health needs and demands into actual utilization of individual and collective health services. There are restrictions in this process in that some health needs never express themselves as demands, and some demands are never met.

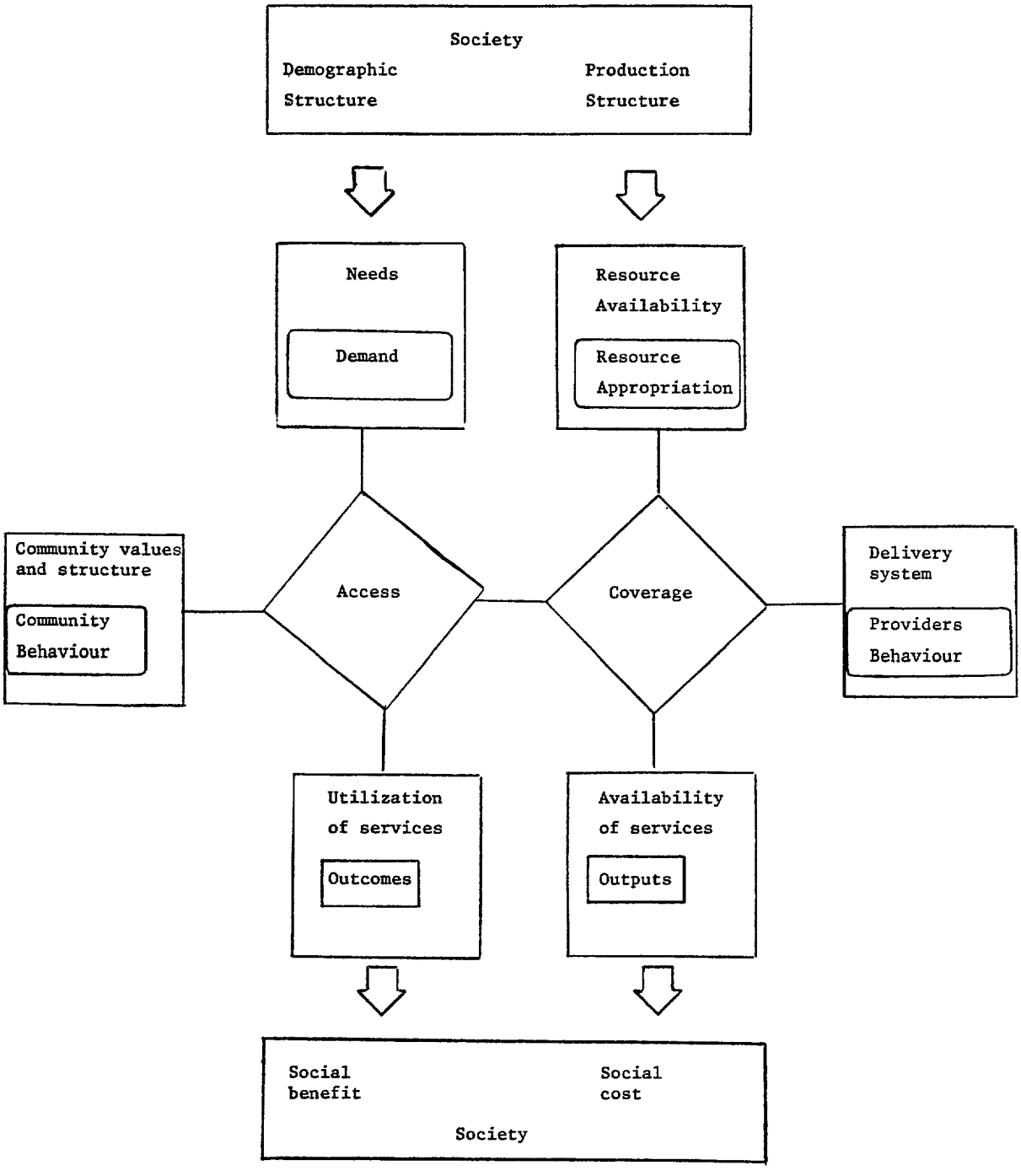

Figure 3. Overview of the interrelationships between the different critical issues

Coverage is also a function of transformation of health resources into available services for individual and collective use. In this transformation, there is also some restriction which reduces the potentiality of these resources to provide services. In their response to the questionnaire, the Governments recognized the need to:

- Reorient the nutrition and consumption habits of the community in the promotion of individual and collective health.

- Expand the outreach function of health services for an active search and early detention of health problems in the communities.

- Strengthen comunity participation through various means, to achieve an equitable access and universal coverage.

- Eliminate cultural, economic, legal, and geographic barriers that restrict equitable access to health and environmental services.

- Improve the distribution of services based on priority of health needs and levels of care.

- Develop reference systems to ensure access to all the levels of care of the system according to needs.

These responses indicate the acceptance, by governments, that accessibility implies the continuing and organized supply of care that is geographicaly, financially, culturally, and functionally within easy reach of the whole community. The care has to be appropriate and adequate.

4. Participation and community involvement

The Plan of Action emphasizes the community as a potential resource and a dynamic factor in producing changes essential for attaining the goal of HFA/2000. A combined objective is the active participation of the community and the promotion of positive health attitudes. Consequently, comprehensive health education beginning in childhood is a priority. This is a recognition of the integral role of education of the individual and the community in achieving their active and effective participation in health and development activities.

The Technical Discussions of the XXII Meeting of the PAHO Directing Council in 1974, and the IV Special Meeting of Ministers of Health of the Americas in 1977 focused on community participation and related topics as crucial for the effective and efficient extension of coverage.

In recent years, the countries have sought to address the issue of community participation or involvement in the development process in many different ways. The application of community participation as a main strategy for HFA/2000 requires the acceptance of the commitment to involve the community as a partner in a more comprehensive manner at all levels of the health system. The commitment should be considered within a comprehensive intersectoral perspective in which health objectives are an integral part of the overall community effort to improve the quality of life of the people.

There is no universal blueprint for community participation. The style and mechanisms of community participation are a complex and dynamic expression of the historical, socioeconomic, political, and cultural realities of a country.

In their responses to the questionnaire, governments recognized the need to:

- Respect the indigenous modes of organization and participation of the communities and support their positive influence.

- Increase the involvement of the communities in the process of identifying and defining priority health needs and in support of specific health activities.

- Strengthen the community participation process, at all levels of the health system, in a comprehensive and intersectoral manner and not only as a source of voluntary labor.

- Develop the value of accountability of the health providers to the communities they serve and the implementation of practical mechanisms for establishing accountability.

- Expand the role of local health administrations and strengthen their relationship with local governments.

- Create a higher level of responsiveness by central health structures to meeting the expectations of different society groups and their health needs.

5. Priority group determination

The Governments of the Region have agreed that the strategy of primary care should be valid and applicable to the entire population, and not be restricted to neglected or marginal groups, although the fulfillment of the basic needs of these groups is a principal objective. In that sense, priority will be given to marginal urban and rural populations and, within this group, the high-risk families and individuals.

The degree to which a population group is exposed to risk is determined by a variety of factors over which the individual may or may not have control.

In this context, the Plan of Action places emphasis on the activities of promotion and prevention supplemented by health education, duly combined with those of treatment and rehabilitation, and coordinated with those related to the improvement of the environment. These combinations must take into account the exposure of priority population groups and the various factors of risk, and ensure the maximum effectiveness and efficiency of resources.

The actions should be articulated and integrated into program groups, by each country, in accordance with its particular health problems and national characteristics. The nature of risk factors, according to the degree to which their modification depends on the action of the health sector, will indicate the need for intersectoral coordination for increasing the efficiency of the overall resources. Mechanisms for bringing the analysis of health problems to the peripheral levels will need to be developed, making it possible to establish local priorities. These peripheral analyses should feed into the analysis at progressively higher levels and contribute to the enhancement of knowledge of the problems and of possible technological solutions.

Epidemiological methods and data will enable health services administrators to define, within the general population subgroups, those particular groups exposed to given risks. However, the definition and selection of priorities is in essence a value judgement which results from the interaction of both political and professional ideologies of those involved in the decision-making process, and of the historical and cultural framework that determine the situation in each country.

In their responses to the questionnaire, governments recognized the need to give high priority to:

- Rural and urban marginal populations whose health needs are not covered by the system.
- Age groups that are more vulnerable to diseases.
- Population groups with high risk levels.
- Health problems for which effective educational and preventive interventions are available.
- Cultural minority groups with low health consumption habits.
- Population groups that need continuing care and are dependent on such care.

6. Organization of the system and administrative structures

Reorganization is not a simple problem of the formal design of structures; it implies a redefinition of the mission of the principal institutions of the sector, so that they may align themselves with the regional goals. This task involves administrative rationalization and the political will to reassign responsibilities with the corresponding degree of authority among institutions and between organizational levels of the government health service.

The degree of horizontal integration among health institutions, the integration of different vertical programs and projects, and the coordination of intersectoral structures and programs are a few questions that need to be addressed under this issue.

The concept of primary health care has important implications for the management structure of the health sector, the principal organizations of which are the ministry of health, the social security agency, the private sector, and the water authorities. One aspect concerns the levels of decision-making within the system. Primary health care implies the provision of increasing authority to the peripheral levels in the making of decisions. It also requires a well-defined organizational structure which emphasizes decentralization of authority and responsibility, has clearly defined roles and functions for the different organizational levels, and has developed effective mechanisms for the coordination of these health activities. Most organizations within the health sector have established a system of regionalization in which decentralization and coordination are important elements.

The existence of well-defined levels of health services is closely related to the extension of coverage through regionalization and deconcentration. It implies that at each level of the system, the functions to be performed are clearly defined and that there is a system of referral between the network of health institutions. An important issue is the problem of balance in the delivery system among the primary, secondary, and tertiary levels of care to provide a coherent response to the varying degrees of complexity of health needs.

This network of referral applies not only within the health system of the ministry of health and the social security agency but also between the two systems. This raises the issue of intrasectoral coordination and the extent to which these two major health agencies coordinate their institutional development and provision of services on the basis of well-integrated health policies and programs aimed at priority health needs. The importance of this organizational issue was emphasized by the selection and discussion of the theme "Coordination of Social Security and Public Health" at the Technical Discussions of the Directing Council held in September/October 1977. Quite often the Central Government agencies responsible for the socioeconomic development of the country promote this type of joint ventures in the development of health services.

Intersectoral coordination is another element of the social well-being concept which is indispensable for achieving health for all. The need for coordination with other sectors with responsibility for agriculture, education, and industrial development have been well documented in the Regional Strategies and Plan of Action. The existence of strong mechanisms for this at the central, regional, and local levels of the governmental system are the starting points for breaking down the normal bureaucratic separation which develops between the government agencies responsible for these subject areas and their competition for the same scarce resources.

In their responses to the questionnaire, Governments recognized the need to:

- Adjust the balance of the delivery system in such a way that coverage matches the national configuration of health needs, in relation to primary, secondary, and tertiary levels of care.

- Strengthen the integration of vertical programs to a comprehensive delivery system for primary health care and environmental services.

- Improve the relationship between the local, regional, and central levels through appropriate allocation of responsibilities and authority supported by a relevant information and communications system.

- Strengthen the interrelation of the health delivery system with the educational and research institutions, as well as with the productive sector.

- Coordinate the missions and programs of the institutions of the health sector for achieving a joint response to the goal of health for all.

- Define the relations between organizations in the health sector and with other sectors responsible for socioeconomic developments at local, regional, and national levels.

7. Administration of resources

Many countries of the Region in their effort to expand the coverage of services have had to face the problem of the relatively restricted nature of government income and thereby its limited capacity for financing such programs.

The implications of the goal of HFA/2000 will require that the national financing strategies for the next decades be concerned with the urgent need to create regular mechanisms for gathering information on the origin and the significance of funds that are assigned to the sector, on the destination and utilization of the services that it produces in terms of the socioeconomic groups that derive benefit from the services, and on the productivity of the resources allocated to the sector.

The information obtained will be crucial for decision-making, both for the creation and allocation of financial resources and for their control and adjustment.

The primary care strategy requires the analysis, reorientation, and control of sectoral and institutional financing. This includes identification of the critical areas of the current systems and of funding sources, and implementation of strategies of financing which include the public sector, the organized community and the private sector, in order to increase the resources available, the distributive potential of the sector to ensure equity, technical, and administrative innovations for reducing costs and to improve the production and productivity of the health services.

In their response to the questionnaire, governments recognized the need to:

- Reduce financial barriers to ensure the access of the total population to the health services.

- Develop criteria for the allocation of resources according to national health priorities established by the health policies and plans.

- Consolidate the financial information system to monitor the flow of financial resources, from its origins to its utilization, and as an input for policy and program formulation.

- Increase the level of equity in the contribution of all the population to financing the health system.

- Improve the mechanisms for the appropriate allocation of financial resources in the quantity, quality, and timing needed.

- Adjust the present legislation and financial norms in accordance with the new health strategies.

8. Manpower development and utilization

The most important asset of a country is its people, both as demanders of health and environmental services and as health providers. Their individual and collective behavior, their skills, motivation, and capacity to deal with various problems and implement solutions, makes the difference not so much in terms of economic but rather of cultural development.

Interprofessional conflicts, inappropriate distribution, low motivation and performance, frequent strikes, and high unemployment are some of the negative aspects of this issue. Health delivery is a labor-intensive function. Health providers work in teams where interaction and coordination become critical elements in the provision of services. Appropriate conditions of employment, as well as a satisfactory climate to stimulate high performance, are major dimensions of this issue.

The inclusion of community health workers and the expansion of the composition of various health teams has added another concern. Traditional roles are changing, substitution and overlapping of functions are more frequent, and managers have the difficult task of negotiating with various interests.

The distorted supply of manpower in quantitative and qualitative terms is becoming an explosive problem that is creating not only unemployment but frustration for some occupational groups.

In the response to the questionnaire, governments have recognized the need to:

- Emphasize training needs of primary care teams including community health workers and develop an appropriate educational response. Some countries stress the need for an extensive literacy program.

- Focus on the redistribution of personnel to improve staffing in underserved areas in support of priority activities.

- Strengthen the primary health team and improve internal communications and linkages with referral staff.

- Optimize the composition of the primary health teams through appropriate allocation of functions and responsibilities to each one of its members.

- Readjust the incentive structure for the attraction and retention of qualified staff in support of primary health care, especially those working in isolated areas or less agreeable surroundings.

- Improve the level of participation of primary health care teams in the decision-making process and increase their level of self-reliance and accountability to the community.

9. Appropriate health technology

Appropriate technology has emerged as a critical issue closely related to basic needs. It implies the recognition and validity of local technologies and the capacity for innovation. It emphasizes their effectiveness and acceptability, both by communities and health providers. In a sense, it is a search for technological options that could promote community and health development in a more meaningful way, without relying on large capital investments and high skilled manpower.

It is also a plea for technologies that can be acquired and supported at affordable cost and that are, at the same time, effective. The idea that the technological selection should also promote job opportunities at local level and stimulate local and national production is another appealing feature of this issue.

This issue also opens the discussion on the impact of medical technology on increasing health cost and on the increasing concern about inappropriate and overutilization of half-way and sophisticated technology whose marginal benefit is questionable.

In the response to the questionnaire, governments have recognized the need to:

- Develop methodology for the assessment and evaluation of the effectiveness, acceptability, reliability, and cost of priority health technologies.

- Improve the selection process of appropriate technology through definition of criteria, policies, and procedures.

- Stimulate the creative and innovative potential of health teams and institutions to expand the technological frontiers.

- Promote technologies adaptable for local utilization through self and mutual help health programs, and facilitate the performance of community health workers.

- Strengthen the local and national capacity to produce the critical inputs and equipment that are needed in support of primary health care.

- Support innovation initiatives and dissemination of technologies, including evaluative research of their benefits and negative impacts.

10. Decision-making and information

The need for relevant and readily available information to facilitate the decision-making process has been so stressed by modern managers that the importance of a good information system can be easily noted by the very emphasis managers place on it. In fact, modern decision-making is so complex and involves such a high number of variables that only a comprehensive information system can provide the necessary information for an effective choice. In this sense, modern management has stimulated the development, with the aid of computers, of sophisticated systems for the storage and processing of information, mainly in a quantitative perspective. Without disregarding the importance of these systems, two aspects in their utilization are worth noting.

First, although the progress verified by the modern world in data processing and storage has a fantastic dimension, it has not been matched by equal progress in data collecting. The speed of data processing is much higher than the speed of data collecting. Since a world of rapid changes makes all information rapidly obsolete, the danger exists that slowly collected data feeds a process system with outdated and no longer relevant information.

Second, the emphasis information systems place on quantitative data may jeopardize the decision-making process. Emphasis on quantitative analysis in most instances has led to the idea that qualitative data are not important simply because they cannot be quantified. The effectiveness of the decision-making process is not only a product of the quantity of information available but also of the social values and social commitments that qualify the options in terms of their adequacy for the specific organizational environment. Quantitative analysis is an aid to the decision-maker and does not replace his/her social commitment.

In their response to the questionnaire, governments recognized the need to:

1. Promote and strengthen research activities for the assessment and evaluation of critical issues and/or the formulation of strategic options.

2. Increase the efficiency of information processing to facilitate the interrelationship of different types of data and the comprehensive analysis of the health system performance.

3. Integrate relevant information produced at different levels of the health care system and make it available on a timely basis to meet the needs of the decision-makers.

4. Readjust the health information systems in support of the decision-making process for the implementation of the primary health care strategy and the goal of health for all by the year 2000.

5. Improve the utilization of information for monitoring and evaluating the impacts and outputs of the health strategies.

PART IV. THE MANAGERIAL RESPONSE: STRATEGIES AND APPROACHES

1. The nature of the managerial response

At present, there is not in existence either a proven step-by-step management procedure which could guarantee the success of the health system in meeting the equity, effectiveness, and efficiency challenges of health for all goal, or a genuine theory of management to support this response.

But there is consistent evidence to show that management could be the deciding factor in the realization of success or failure. This evidence focuses attention on the role of strategic managers to develop goals or a clear sense of direction aimed at reorienting the health system to:

- formulate creative and opportune strategies for achieving goals and objectives;
- implement effective result-oriented strategies and policies that can motivate people towards a high standard of performance;
- monitor the critical factors to obtain an insight of the needs of the population and the ability of the health system to meet these needs.

Strategies and policies are concerned with decisions which give an organization purposeful direction towards chosen goals and objectives. Strategic matters are the concern of top management, but not exclusively so. A significant amount of strategy/policy discretion resides at various management levels.

Top management strategies are decisions that affect the total system and its relationship with the sociopolitical environment, and are intended to produce some desired long-term outcomes. Figure 4 demonstrates the relationship between strategic inputs, strategic process, and strategic impact. The relevance of this total process to preconditions, unforeseen events, and side effects/spillovers is also indicated.

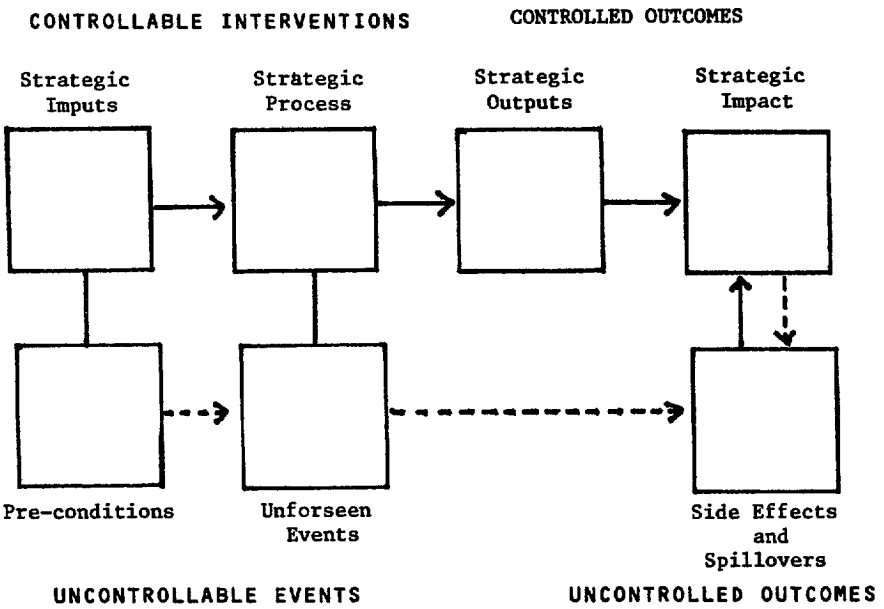

Figure 4. Strategic decisions

The desired outcomes are stated as goals. The selection of these goals is a way of designing the desired future or the "what should be" future. Strategies are intended to change the course of events; they represent an intervention in the present that will have its impact on the future. Risk taking is a part of strategy making. Inappropriate assumptions about the course of events, or the emergence of unforeseen events, could produce undesirable effects.

Top management strategy decisions have long lasting effects that are irreversible in the short run. Top managers are not only responsible to their organizations but also accountable to the society at large. The significant influence they have in shaping social institutions that affect the life of the entire population cannot be overstressed. This is a complex task where improvisation is risky. It is not only technically complex, it is also complex in behavioral and value terms. Strategic management is a special type of leadership that requires effective performance towards the achievement of relevant social goals with high ethical standards.

2. Goal setting

A clear understanding of goals or purposes is the starting point for strategy making. In a general sense, a goal structure provides the normative future or direction towards which the health system should move. Goals do not just arise out of spontaneous generation. They must have some source and energy that launch them into the arena of public

concern. These sources are the critical issues that at a particular moment in the development of a nation become a social or organizational concern.

Goal-setting should consider all inputs, such as demands and support from the outside community. That is why goal-setting starts outside the public agency, with the identification of community values, preferences, needs, and capacity to support specific policies. External knowledge lays a primary role in goal-setting and strategic formulation. Nevertheless it is generally neglected by managers because it deals mostly with uncontrolled events and requires from the agency not only a greater capacity to face uncertainties but also better managerial ability, not common to traditional health administration.

Since the producing of relevant external knowledge threatens the discovery of incompetence and generates greater uncertainty, traditional management represses uncertainty and maintains the existing status quo by emphasizing internal knowledge. Internal knowledge generally carries a bureaucratic bias, since it is mostly produced by common sense, the present available technology, and current administrative procedures.

The result of not incorporating maximum external knowlege is a system of goals and strategies which lacks congruence with the external environment and community preferences. In this sense, even when the dimensions of efficiency and effectiveness are emphasized through the use of modern management techniques and training, the results of the effort may be useless. Through internal knowledge one can build rational, uniform, consistent systems, capable of implementing efficiently and effectively undesirable social goals. Therefore, it is worth noting that goal-setting and strategy formulation in management processes do not aim at uniformity and internal consistency, but rather to help management in the ambiguous task of continuously adjusting the health system to an environment of pluralities, discontinuities, and rapid changes.

Another important dimension is goal structure. This is not only the formal problem of presenting goals in their hierarchical relationship, but also involves complex decisions.

If the dominant goals are extracted from the demand side, access objectives will have predominance over coverage. If the supply side has predominance, coverage becomes an overriding issue. In both cases, external versus internal objectives need to be balanced. If demand and external objectives are dominant, then, for instance, community participation should be higher as an objective than providers' participation. Utilization objectives should be higher in rank than availability issues. Outcome objectives, in terms of health results, should also be stronger than output or production objectives.

On the other hand, if supply and internal objectives are the control focus, then coverage, availability, cost containment, providers' participation, and formal organization objectives will be predominant.

In the Regional Strategies of health for all by the year 2000, six minimum targets and indicators are proposed. Of these six, the dominant one is:

> "To ensure access by all inhabitants of the countries to appropriate levels of health services by the year 2000."

This objective defined at the demand side is complemented by three outcome objectives that read:

> "The target for life expectancy at birth is established at 70 years by the year 2000."
>
> "The minimum target for infant mortality for all countries in the Region by the year 2000 is established at no higher than 30 infant deaths per 1,000 live births."
>
> "The minimum target for mortality in the 1-4 age group for all countries in the Region by the year 2000 is established at no higher than 2.4 deaths per 1,000."

Two additional objectives are stated on the supply side as availability of services and read as follows:

> "By the year 2000 the regional target is to vaccinate all infants (various vaccines); all pregnant women against tetanus; and to extend coverage to priority target groups for other diseases preventible by immunization as indicated."
>
> "The target for all countries in the Region is to provide safe drinking water and sanitation services to the greatest possible number of inhabitants by 1990, and to extend this coverage to all by the year 2000."

The configuration and hierarchical order of objectives is contingent on the country's particular situation.

3. Strategy formulation

3.1 Overview of the process

The task of management in formulating strategies is twofold: First, it must develop a broad view of what to achieve and, second, of how to manage a network of the processes that lead to the achievement of

that desired situation. Strategy formulation focuses on the process more than on the overall direction followed by the health system. This last concern is the focus of goal-setting, already mentioned.

Behavioral and institutional factors make strategy formulation substantially more complex. If strategy formulation deals with the long term, precedent setting, and the commitment of critical resources, then the process of developing strategies is the nonroutine activity of altering normal patterns of planning and operations; it means change. The focus and distribution of relative power in the health systems have a significant influence on the formulation of strategic decisions. Often, the struggle to increase this relative power by different internal and external coalitions overshadows the real strategy-making process.

An important aspect is the interorganizational relationship of strategies. In the health field, this is related to public and private sector strategies, health sector and other sector strategies, health ministry and social security strategies, health and educational strategies, and other interagency interactions.

The manner in which the health system tries to link itself with the environment has important influence on meeting the critical challenges, especially the equity and effectiveness challenges. The core argument is that strategy formulation should analyze the environmental context to enhance the probability of strategic success. The general options available to managers are to confine themselves to maintaining the existing access/coverage status or to alter this balance. The regional health goals not only insinuate but clearly specify the need to alter this balance by expanding access and changing the coverage function.

3.2 Environmental analysis and forecasting

Environmental analysis and forecasting for health focus on the assessment of the economic, technological, demographic, political, legal, institutional, and sociocultural context. Environmental changes can make health responses relatively obsolete in the short run. The health environment is changing fast. There are many more sources of potential change than in the past. Quite often the health system must accommodate itself to changes in its environment which are beyond its control and influence. This requires a degree of flexibility and time for effective responses and, consequently, a need to anticipate important environmental changes. The way health managers gather and analyze information about the environment, forecast, and act to anticipate change is an effort to narrow the range of uncertainty.

In general, societies and institutions prefer to continue with existing strategies and policies and with small incremental developments unless strong pressures have built up for reform. Such pressures for change threaten the social and institutional order and the established relations.

3.3 Strategic options

Strategic innovations are generated by relevant professional, administrative, consumer, and political groups. These groups develop shared opinions which help to shape the orientation of their action and influence.

Ideologies play a significant role in shaping opinions as they are social mechanisms to create collective consciences; they build solidarity and shape group behavior. There are a variety of political ideologies within countries that affect the innovation and selection of strategic options. These options take sides on the role of market versus the role of government interventions in the distribution of social benefits and costs. This is the dominant strategic option related to the equity-efficiency challenge. They also take sides on how political control will be exercised. This is the dominant strategic option for community participation. There are also cultural ideologies that provide different options on the welfare role of the government. Some group ideologies play a deciding role in strategic choice. One of these is the health providers' ideology. Free choice of doctor, fee for services, self-regulatory professionalism are a few examples of the powerful influences of these ideologies on deciding strategies.

The regulative, redistributive, and productive functions of governments reflect the influence of state and public administration ideologies. These ideologies provide a different perception on how to regulate quantity and quality. How strong the regulatory strategy to control the quality of drugs, medical equipment, and health practice will be is the result of different ideological conceptions. Others deal with issues such as the exercise of fiscal control over financial resources and the feasibility of giving this responsibility to the local communities or leaving it in the hands of a central fiscal agency. The permanency of manpower in their jobs, the way selection of personnel is carried out and even ethical standards of health professionals are determined by the prevailing government ideology. At the institutional level, the management philosophy is also a framework that reduces the range of options. How much control, how much delegation of authority, how much freedom for decision-making represent a range of options determined by managerial ideology.

Community and health consumer ideologies are also sources of options. Middle-class consumers have been fighting to retain and develop their privileges in obtaining access when they want it and to the professional providers of their choice in the institution of their selection. Lower income groups are bypassing health centers and local hospitals in search of care at larger medical centers. Social security health consumers have another set of expectations.

Managers have to understand that strategic options are not produced spontaneously and that they have some freedom to develop and select policy options.

3.4 Strategy analysis and evaluation

Strategy analysis and evaluation answer the basic questions: First, will the existing health system strategy lead to the achievement of its goals and objectives? If not, then it will be necessary to change the existing strategy. Secondly, will any proposed alternative strategy lead to the better achievement of these goals?

There are various approaches for performing this evaluation. The first step is to determine whether the Organization's goal structure is internally consistent. A second step is to evaluate the formulation process including the accuracy, reliability, sensitivity, comprehensiveness, and consistency of the information used in the process. A third complementary approach is to evaluate the content of the strategy. This includes internal consistency of the various components, scope, resources, skill deployment, flow of resources, etc. It also includes analysis of the consistency of the strategy with the objectives to be achieved. The review of the capability to generate the resources needed in the long run is another key consideration. Of equal importance is the evaluation of the environmental assumptions on which the strategy is based, like economic and demographic trends, technological development, and political and sociocultural trends. Finally, the content of any proposed strategy must be evaluated in terms of its compatibility with the values, goals, and expectations of community and political leaders.

Two additional steps need to be taken in this strategy evaluation exercise. One is to assess whether the strategy can be implemented. The second is the early monitoring of performance indicators that are directly linked to the strategy and provide an early indication of its long-term effectiveness. Such early assessments are important both for an effective strategy implementation and for the reformulation of an ineffective strategy because the ultimate test of any strategy is in the evaluation of its inputs and outcomes.

Strategies must pass the goal consistency test. The objective of increasing accessibility to health services is not consistent, for instance, with reducing the availability of services. They must pass the

frame test. Before one can decide whether or not a given strategy will work, some indication that the right issues are being selected is needed. To carry out the frame test, an evaluator must have or construct a frame that identifies the critical issue within the chosen domain. If objectives do not address these issues, they should be rejected. They must also pass the competence test. Strategies that simply substitute one ill structured dilemma for another should also be rejected.

Finally, strategies must pass the test of whether they will be successful. Two broad approaches can be used. First those that are concerned with the availability and deployment of resources and, second, those that attempt to predict outcomes associated with particular actions. The first methods range from simple tables of flows of resources to complex computer simulations and linear programming models. The second methods range from trend analysis to complex forecasting models.

4. Strategy implementation

4.1 Overview of the process

Health strategy is part of social strategy, and the manner in which nations choose to address matters of social strategy, the questions they ask, and the solutions they select cannot derive from some simple algorythm. The strategic solutions have to take into account the nature, history, and traditions of existing institutions and relationships, the attitudes and behavioral characteristics of pressure groups, the sector's organic development, public opinion, the goals and values of the society and of its members.

Strategy implementation deals with changing the course of events in the desired direction. The present turbulence faced by health systems and other government sectors is caused mainly by the increased complexity of their sociotechnological functions by multiple changes in contemporary society and by the more dynamic interrelationships and increased interdependence among government agencies. These multiple forces must be met by health managers with a process of adaptation and planning for change at top organization levels as well as institutional and health team levels.

Health for all calls for significant change and organizational renewal. It is a most difficult task to change large, traditional, and successful institutions. But social and health systems are in transition already. The transition is taking place in all countries. Leaders of all social institutions are coping with this transition in a reactive way, with values, structures, and leadership styles that have been needed for a long time.

The departure from some traditional management practices towards new forms of management values and behaviors can be shown in current trends towards collaborative relations, linked objectives, anticipation of crisis, comprehensive strategies, long-term planning, and innovative administration. These trends are noticeable in the practice of health administrators in the countries as well as in some of the health management literature.

Strategy implementation is the art of planning and managing change. The most obvious way for people and groups to understand and facilitate change is through full information and participation. But their knowledge and awareness is not sufficient. People need to understand both the need for change and the nature of it.

4.2 Policy making

There is not a clear cut borderline between strategies and policies. They have an element of continuity that makes it difficult to establish the distinction.

The health sector has a long tradition in policy formulation. Some of these policies are expressed in legislative actions, institutional regulations, and specialized rules and regulations; some are customary norms that are accepted but never written. The leading question relates to policy innovation. If strategies change, policies need to be modified. If financial resources are to be allocated toward different goals and through different mechanisms, the financial policies must be modified. If communities should participate in decision-making, organizational policies must be changed.

The instrument to assess the need for policy change is policy analysis. Policy analysis is not an exact science nor can it become one. Policy analysis seeks to help a decision-maker to select a better choice than otherwise would have been made. Policy analysis utilizes different methods drawn from economics, political science, sociology, and quantitative fields. It shares methodologies with strategy evaluation but makes considerable use of systems analysis and operational research methods. The analysis works with objectives, options, impacts, criteria, and evaluative models.

Without policies, decision-makers would be left with no guidance. They would have no reference, no blueprint to follow. Policy formulation is a normative design endeavor.

The key policy changes desired which would require a response include intersectoral coordination, the integration of health with socioeconomic development, intersectoral coordination, intrasectoral coordination, effective community participation, financing of health services, and redistribution of resources.

4.3 Planning for change

Different strategies have been proposed for planned change. Planned change may take many different forms. Such forms may be informal, unwritten, and in the minds of management leaders; or they can be formal, with plans that are well documented, including specifications for carrying them out with schedules and deadlines.

Whatever the nature of the planning process, it is generally accepted that it is one of the most important management functions. The process of leadership for change is a performing art, and planning is one of the necessary skills to be practiced. Strategic planning is concerned with anticipating events, making a diagnosis, and shaping an appropriate course of action. This leads to the concept of planning systems from broad to detailed planning and the different levels involved in this process.

Planning is an integral part of overall socioeconomic development. New planning approaches need to be developed to achieve this integration in an effective and efficient manner. This achievement forms part of the required managerial response.

Broad programming forms part of a wider managerial process for national health development. This process entails policy formulation and definition of priorities. It includes as well the formulation of programs which realize the previously defined priorities, the allocation of resources to make the programs viable, and the integration of these programs into the national health system.

Broad programming entails the translation of national health policies, goals, priorities, and trends in order to reach the priority goals which are contained in a long-term plan of action but which are carried out through the accomplishment of shorter-term goals.

In societies where change takes place rapidly, the planning process must strengthen the political decision-making. In this manner, the general planning scheme will truly accompany the political process. It will incorporate and integrate the programming and the implementation phase.

4.4 Organizational development

Organizational development has emerged in the last decades as an important component of the managerial response, enriched by the contribution of social and psychological sciences. It has expanded significantly the static organizational concepts of earlier responses. The need for change has been an incentive for research on the role and performance of managers. Different studies have shown that traditional thinking about

the work of managers as rational decision-makers was erroneous. Management behavior is better understood when focusing on the interactions of managers, on the way they obtain and disseminate information, on the decisions they take, and on their managerial style. Leadership has received considerably more attention, as have such topics as communication, group behavior, and conflict resolution.

This concept of organizational development can be used to strengthen the ministry of health, establish coordination with other health agencies and obtain effective support for decentralization of the system while maintaining quality of service and control. They can also achieve integration of vertical and horizontal organizational structures, strengthen linkages within the system and the flow of information for management decision-making, and create an effective system of management and supervision.

4.5 Manpower development

Manpower development, including the supply and utilization side, is probably one of the less innovative management functional areas. The stiffness of conventional systems has not been overcome. The efforts to introduce some industrial management methods like job descriptions, classification, and evaluation have failed to produce benefits. Performance evaluation and scientific selection of personnel have also made little or no impact. A new way of thinking needs to be developed starting with an understanding of health personnel needs and increasing significantly the participation of health personnel in objective setting and in strategy formulation.

Manpower training, on the contrary, has been enriched by a better understanding of the learning process and by the increasing teaching technology that has become available. Still, large-scale approaches for inservice training are lacking, and most of the technologies rely on a traditional classroom approach. Training delivery systems appropriate for large scale manpower development is a high priority. Incentive building remains as an unexplored possibility.

The shifting and changing roles of health personnel, in response to the need to improve efficiency and effectiveness in the delivery of health services, and the different combinations of health personnel utilized in the delivery of services are some of the issues to be resolved by managers in the area of manpower development. Other pertinent areas include the continuous evaluation of training programs and the increased emphasis that needs to be placed on strengthening the management of supervisory functions.

4.6 Financial management

Financial management has an extended range of approaches and methodologies waiting to be utilized by health management. The improvement of data-base management, the integration of financial data into a larger reporting system and the development of analytical tools must play more significant roles in strategy implementation. Budget management and resource allocation methods are for behind in their development. The effort to relate planning and budgeting in the countries of the Region did not work as intended. Traditional budgetary methods do not allow fine tuning in resource allocation and control. Resource flow is another main consideration. Trickle down distribution does not help the appropriate allocation of resources at the local level and for community based services and programs. New channels and directions for financial and resource flows must be designed. Health economic issues like health expenditure, insurance systems, investment and appropriation of resources have not been included in research and teaching agendas. If equity is a main concern, then these issues must be addressed.

4.7 Management of physical and material resources

Management of physical and material resources, including health facility design, construction, maintenance, and supply systems, is an additional component of the management response. Progress has been made in recognizing the importance of maintenance of health facilities and equipment. Still, considerable operational capacity is unproductive or lost due to inefficient conservation and maintenance. The goal of HFA/2000 is putting new pressures for the extension of this infra-structure and the increase of availability of services. The emphasis on the maintenance of those facilities and equipment directly associated with priority primary care activities should become the main thrust of maintenance programs. Design construction of large numbers of small facilities must attract more attention from architects, engineers, and designers. Managing large capital investment projects involving national and international financing has emerged as a very critical task. Project design, management, and evaluation provides an additional opportunity to articulate more appropriate management responses.

The supply of a large number of items through extended distribution networks is challenging management skills. Critical suppplies and essential drugs are proving to be excellent tactics for concentrating effort on those few items that make a big difference in achieving health for all.

Management of equipment probably would benefit from a similar approach. If the few items of equipment that make a difference are identified, selection, importation or production strategies could be

easily designed. Computarized information and control systems will facilitate the decision-making porocess around such issues as quantity, quality, and cost.

4.8 Management evaluation and control

Management evaluation and control applied to different functions of the health delivery system must not only be improved but reshaped. Control and evaluation of the impact of change becomes the first priority of top management.

This will not develop from the standard information systems. It will be more a product of evaluative research and of assessment studies. The variety of information that needs to be drawn from different services and integrated into evaluative modes is more then can be expected of conventional information systems. The selection of the critical management research topics is not a decision that can be left to researchers. This is a decision in which strategic managers must participate. One of the paradoxes of top managers is that in most cases they are extremely busy tackling day-to-day problems. They lack adequate management training and do not have enough time for more training. On the other hand, managers in specialized staff positions, such as planners, operational researchers, and financial analysts, have the time and management training but are far removed from the main stream of decisions. New ways have to be found to provide specialized support to practicing managers.

5. Management innovation for the future

All managers of the health sector, from today to the year 2000, have already concluded their formal education. If one takes into consideration the average time one spends in service before reaching top-level positions, one observes that all future managers are already working somewhere in the system. In a world of rapid changes, future managers will reach their top-level positions when a great part of their formal education and past experience will be obsolete or inadequate for the new conditions they will have to face. Therefore, continuing education in order to revise knowledge and transmit new values will have to be emphasized in management development programs.

Furthermore, in a world of rapid changes the past becomes more and more irrelevant for the projection of the future. Organizational strategies based on past experience and tendency studies will have to give place to prospective management speculative studies to project alternative courses of action. Management ability will be less based on technical knowledge or career experience and more and more on individual capacities for anticipatory analysis, facing uncertainties, and formulating strategies to respond rapidly to crisis and changing conditions in the environment.

Innovation will be a constant challenge to management in the effort to maintain active and relevant institutions. Health oranizations will have to vary and acquire different forms according to new conditions. Therefore, the producing of new managerial knowledge through specific research projects will have to be stimulated. Research should be viewed less as an activity which should be pursued at the level of universities and more as a means of investigating problems faced by health managers and discovering new approaches for overcoming these problems and giving direction to health management training programs. Otherwise, health organizations will be without alternatives for action when greater demands are placed on them.

PART V. CONCLUDING COMMENTS

This document has dealt with the managerial analysis of health systems and the importance of these systems in meeting the goal of HFA/2000. The key managerial challenges identified in the context of this goal were equity, efficiency, and effectiveness. The important critical managerial issues were reviewed and extracts from country replies to the preliminary document and questionnaire, which covered these issues, were provided. These critical issues were a) needs, demands, and supply; b) participation and community involvement; c) priority group determination; d) organization of the system and administrative structures; e) administration of resources; f) manpower development and utilization; g) appropriate health technology; and h) decision-making and information.

The response required from health managers in meeting these managerial challenges was outlined under the broad heading of strategy formulation and strategy implementation. This response was summarized as the need to:

a) formulate creative and oportune strategies for achieving the goal of HFA/2000;

b) implement the strategies with the aim of achieving measurable results and with the full commitment of health providers and the community served;

c) monitor the critical factors that measure the extent to which these strategies are achieving their objectives and indicate the changes needed to ensure that the overall health goals are met.

Member Governments of PAHO, which have approved the Regional Strategies (Official Document 173) and the Regional Plan of Action (Official Document 179), are facing the task of developing and reviewing national strategies and policies in the light of these Regional Strategies and Plan of Action, within the socioeconomic environment which exists in each country. The issues and approaches discussed in relation to strategy formulation and implementation are very pertinent for orienting this process at the country level.

This broad strategy formulation and implementation process, as opposed to detailed administrative systems and procedures, has been emphasized because of the need to ensure that the overall development of the health system is in keeping with the goal of HFA/2000. Strengthening of detailed administrative systems could then take place within this overall development process. The role of senior health managers in this process is paramount, as on their shoulders rests the resonsibility for formulating and guiding this reorientation of the managerial system. Serious consideration must be given to these issues now if the goal of HFA/2000 is to be achieved.