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INTRODUCTORY STATEMENT ON THE TOPIC

"METHODS FOR THE PREPARATION OF NATIONAL PUBLIC HEALTH PLANS"

By Guillermo Arbona, M.D., M.P.H.
Chief, Department of Preventive Medicine and Public Health
School of Medicine
University of Puerto Rico

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METHODS FOR THE PREPARATION OF NATIONAL PUBLIC HEALTH PLANS

I. INTRODUCTION

Many authorities in administration maintain that all human activity, whether individual or collective, is preconceived, following a previously traced plan. This fact is not always evident, they point out, since the plan may sometimes exist only in an individual's subconscious mind. Planning, at times, precedes action by such a short interval that the two appear inseparable. Every health agency, on the other hand, operates on the basis of a budget of expenditures, which is in itself a plan. We can assume, then, that every health ministry or department functions on the basis of a plan.

Definition

We propose to discuss the process by which a health plan is formulated, together with the characteristics that make a plan effective. The process of planning has been described in different ways. Professor Dimock defines it thus:

> In its simplest form, planning is what the French call prévoyance, or looking ahead. It applies to individuals as well as to groups such as families, social institutions, businesses, and governments.
>
> The five steps customarily involved in planning are research and analysis so as to understand the problem; the determination of objectives; the discovery of alternative solutions; decision-making, involving the formulation of policies; and the execution of the plan which gets into such things as organization, work scheduling, and procedures. Planning is the antithesis of improvising; planning is systematic foresight plus corrective hindsight. Entailing decision and action, planning is a dynamic concept.
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> Planning in its simplest form also is universal because all individuals and groups make use of it with varying degrees of conscious design. Wherever administration is found, there also will planning be found; and the more problems there are to be solved and component factors to be coordinated, the more attention will ordinarily be devoted to planning. 1/

1/ Marshall Edward Dimock, Business and Government, p. 735.

Advantages

The advantages of a health plan might well be summarized here, not because we need to be convinced of the necessity of a plan, but rather to establish the importance of the process of planning as such.

1. The main purpose of a national health plan is to help utilize available resources as efficiently as possible for solving the health problems of the people. No country has all the resources needed to do all that could be done for the health of its population.

2. The plan serves as a guide for developing the health programs of the country designed to eradicate or reduce disease and to prolong and improve the life of the people. A long-range plan is the necessary basis for the growth of the local and national organization, by stages, and for the orderly expansion of services and facilities for the training of personnel.

3. The plan is an aid in measuring results and in making required adjustments in programs when for some reason the desired goals are not being achieved.

4. The plan serves as an aid to the administrator in keeping the personnel informed of the operation, organization, and objectives of the programs, and of the contribution expected of each member of the staff. In this sense, it is also of educational value in the orientation of new personnel.

5. The plan is likewise useful in keeping the nation's authorities and the people informed of what the health work consists of, what the technical personnel propose to do for improving it, and how the funds invested for the nation's health are being spent.

6. The plan serves to keep international agencies informed of what the country proposes to do for improving the health of its people, what difficulties it faces, and how the available international cooperation can be used to greatest advantage.

II. RESPONSIBILITY

Responsibility for the nation's health services in most countries rests with the minister or secretary of health, whose responsibility to the public is through the chief executive and the legislative bodies. According to the best administrative practices, the minister, or the director general

of health, is responsible for preparing the national health plan, which is subject to approval by the chief executive and the legislature.

A national health plan should be prepared with the participation of the largest possible number of the personnel who will be responsible for the subsequent implementation of the measures planned. In other words, planning is delegated, just as responsibility and authority for executing established plans are delegated. Doing what one feels it best to do is usually more gratifying than doing what someone else considers best. If a person participates in the preparation of a plan, however small his contribution, he will derive more satisfaction in carrying it out. A number of North American firms have achieved a marked increase in efficiency by decentralizing the planning process so as to include participation by the majority of their personnel.

In an automobile factory, for example, there are different levels of planning, just as there are of administration. At the highest levels, decisions are made on the matters of greatest importance, such as model of the car to be produced, cost, type of motor. Decisions on less important matters, such as painting and wheel mounting, are left to lower levels. The crew that works on the wheels obviously has little opportunity to offer opinions on the model, production costs, or type of motor. They can, nevertheless, plan a more efficient organization of their own work and a better division of labor among themselves. Experience has shown that this system not only improves the workers' efficiency but also stimulates new ideas, many of which are put to advantage at the higher levels.

In the departments of health, good organization will facilitate the decentralization of planning. The various divisions and subdivisions can formulate their programs within the general standards established at the highest organizational level.

As was stated, in the formulation of a national health plan the final responsibility rests with the minister or the director general of health. It is important to consider the manner in which they obtain staff participation. This will necessarily vary according to the organization of health activities in each country. In Chile the health service has two subdepartments, one to set standards and the other to execute the work. Under the Executive Subdepartment are organized the regional or zone health offices and under these, in turn, the health centers. The Executive Subdepartment delegates administrative functions to the regional offices, which in turn delegate them to the health centers. The delegation of functions includes those of administration and planning. Through the Executive Subdepartment, the Standard-Setting Subdepartment receives from the field personnel information and suggestions that frequently lead to changes in the existing national standards or to the adoption of new ones. This type of organization calls not only for close collaboration between the subdepartment that sets the standards and the one that executes the work, but also for an effective delegation of both authority and responsibility to the regional offices so

that the latter may realize their responsibility for offering suggestions for action by the Standard-Setting Subdepartment.

The delegation of responsibility and authority is viewed not only from the viewpoint of geographic distribution but also from that of the various services. The majority of ministries have divisions dealing with specific problems such as epidemiology, tuberculosis control, maternal and child care, and others. The experts in these divisions are responsible for advising the health minister or director on the objectives and organization of the programs in their respective fields. In formulating the various programs, the experts in these subdivisions must keep in close touch with the staff that works directly with the people, so as to draw upon the experience and receive the suggestions of the field personnel. The standards and procedures adopted by the ministry should establish this practice on a systematic basis, not leaving it to chance.

When the objectives are defined, thought should be given also to the participation of the personnel of the administrative and special services. In a tuberculosis control program aid in purchasing material and equipment is essential. If the administrative staff does not understand the program's objectives or the reasons why the equipment is needed, it may not give all the desired cooperation.

In the same way, operating services such as nursing, health education, social work, and the like that are expected to give assistance ought to take part in the planning of programs and the establishment of objectives. They help by indicating existing limitations, by specifying the contribution they can offer, and in many other ways. Participating in the establishment of objectives and in the general planning, in turn, helps them to better understand what is to be done and what they are expected to contribute.

The most difficult task in a health department is to coordinate planning in such a way that the final plan is in keeping with the relative importance of the different health problems and at the same time is coordinated with the programs of other government departments.

The coordination of planning, like the coordination of any other activity, is never an easy task, for it hinges on the human factor. We all would like others to change their plans to suit ours, but we are not always inclined to change our own to coordinate them with those of others. It has been said that programs can never be coordinated properly unless someone is assigned exclusively to promote coordination.

To achieve this end, some countries have set up planning boards which have, among other duties, that of assisting the various government departments in preparing and coordinating their programs. A good example of a national planning board is the Planning Board of India, whose activities extend to the states and regions of the country and even to the small communities. One of the Board's main functions is to integrate and coordinate the efforts of the country's agencies at the different administrative levels

the efforts of the country's agencies at the different administrative levels in such a way as to achieve the most efficient use of available resources.

There is need for a similar unit in large departments of health. The Philippine Health Department is setting up within the Minister's office a planning unit whose function will be to prepare a coordinated national health plan. The unit will achieve its goal by helping the various divisions of the Ministry plan their programs and integrate them into the national health plan. The Health Ministry of Canada has a research division whose task, among others, is to analyze and evaluate basic information, with special emphasis on technical and administrative methods, basic principles, costs, and social usefulness. This division gives advisory services to other divisions of the Ministry in preparing programs and promotes coordination among divisions.

In some countries the national health service is responsible for health services at all levels of organization -- national, state, and local. In others, the state and even the municipality are autonomous insofar as health services are concerned. Whatever the situation in a country, the national health plan may include plans at the national level for the adequate development of state and local health services, as well as standards, procedures, and even objectives to be carried out by the state and local services. The difference between the one situation and the other is that the national health service, in the first instance, achieves its purpose through direct action, and in the second, through promotion measures. In the first instance, the national health service organizes the health unit in the municipality, and in the second, it stimulates and aids the state or municipality in establishing the unit.

At the various state or municipal levels of organization, the need for planning is the same as at the central level. The national health service will naturally stimulate the state and local services to plan their programs in accordance with the standards it has set for the purpose, after consultation with them.

The absence of legislation should not be an impediment to planning. Legislation making the planning of every government undertaking obligatory would, of course, be desirable, since it would facilitate the coordination of programs among departments. The budgetary law of a country might to a certain extent constitute a good planning law, if it calls for a budgetary procedure similar to the process of planning.

Laws stipulating that planning should take place usually do so without indicating the methods to be followed; these they leave to the implementing agencies, since it is much easier to modify a rule or regulation than to amend a law. In some countries the law requires that the plans of the various agencies be approved by the legislative bodies. This occurs, in fact, with respect to annual plans, when an annual budget is being approved.

Legislative approval is highly advantageous to long-range plans, since this form of approval is effective in ensuring their execution.

III. THE PLANNING PROCESS

Dimock, in the above quoted definition of the planning process, suggests a series of steps to be followed. We have modified these for purposes of the present discussion, according to the following outline:

A. Study and analysis to understand the problems and their relative importance.
B. Study and analysis to determine immediate and future resources: personnel, facilities, operating funds, scientific knowledge, and opinion and attitudes of the population.
C. Definition of short-term and long-range objectives.
D. Formulation of programs of activities, organizational scheme, standards, and methods.
E. Periodic evaluation.

A. Study and analysis to understand the problems

To understand the health problems of a country, one must first know about its population. The data obtained by census and through compilation and analysis of demographic material provide the necessary source of information. They give an over-all view of the country's population, its distribution by regions, age groups, occupational groups, and of educational and economic levels. They are also the key to the population dynamics for the country as a whole and for the various regions.

The importance of this type of information for planning health programs is evident. A knowledge of the country's birth rate, for example, provides an index for determining the needs of maternity services. In planning for the future, a study of the rate of population growth in a given region is helpful in estimating the facilities the region will need in the future and making provision to furnish them.

A knowledge of the educational level of the population can serve as a guide for preparing educational programs. Knowing the economic level helps us estimate the financial participation the population is capable of giving.

Although population data shed light on some of the services that may be needed and to a certain extent guide us in utilizing existing resources to meet the needs, it is through an analysis of mortality and morbidity data

that we learn which health problems are the most harmful to the people. The mortality data available in the American countries have improved greatly and, in most of them, give a good idea of the relative importance of mortality in infants, children, and adults, as well as of the principal causes of death in the various regions, for the different age groups. An essential step in every planning process is the improvement of such data for their proper use and application in establishing long-range programs.

Information on morbidity, however, is generally poor. Statistics are available on some of the communicable diseases that are regularly reported by physicians, and on certain others that have been the object of special studies or surveys. Data on the morbidity of noncommunicable diseases are usually scarce and difficult to obtain. Some information on morbidity can be gathered from hospital and dispensary records and by interviews with private practitioners. The information available can be augmented through surveys. We in public health have experience in this type of work for specific communicable diseases such as tuberculosis, malaria, and intestinal parasitoses. Surveys have been made in recent years on general morbidity and on noncommunicable diseases. However, the methodology for general morbidity surveys is very deficient and as yet costly, and poses serious problems of interpretation.

The knowledge of health problems is improved by studying the physical environment in which the population lives. An attempt is made to discover the factors that favor the prevalence of diseases. Studies are made of water supply, waste and garbage disposal methods, housing conditions, food handling, presence of insect vectors and of animal reservoirs of infection, working conditions, and industrial health hazards. The facility of obtaining this kind of information depends on the local health organization. Health units and centers usually compile this type of information as a matter of routine. Where no local health organization exists, the gathering of information is more difficult and requires special surveys and studies, which usually cover only certain factors of particular interest to us rather than the total environment.

In the study of health problems, more and more importance is being given to the social environment, including such factors as educational and economic levels and customs and traditions, especially as they relate to health. The cultural characteristics of a pupulation frequently favor the development of certain diseases, a fact that apparently is especially true of mental and psychosomatic illnesses, to which ever-increasing importance is being given. The success of many health programs hinges on the attitude of the public, and there is a need for improved or new methods for gaining an understanding of the social environment. At the present time we depend largely on subjective methods, personal observations, and superficial impressions.

B. Study and analysis to determine the resources

We take resources to mean everything in the country that can be used in some way for the benefit of the population's health. Resources would include, then, the medical and auxiliary medical personnel, nurses, public health workers, and others; the physical facilities, hospitals, and health centers; the funds available for their operation; the entire organization of the health department; the activities of other agencies, private or public, whose programs or interests relate to health; favorable opinion and attitudes of the public, etc.

To inventory a country's resources for health services, one might start by taking stock of public and private organizations engaged in health programs, and of the programs themselves. This appraisal would cover the organization of the ministry of health, the health department and services under it, the personnel available, the physical facilities, and the operating funds. We use the term health ministry to cover the organizations at the state, municipal, or local levels, since in some countries state and local health services are an integral part of the ministry, while in others they function independently. Usually, some of the other public agencies, such as the social security service, the ministries of education, labor, agriculture, and others, also conduct health programs. Thought must also be given to the resources of private organizations, their programs, staff, facilities, and operating funds. Agencies such as the Red Cross and societies to combat cancer or tuberculosis also operate in the majority of countries. If the national health program is to be properly planned, it is essential to know exactly what programs of health work exist in the country, since there must be coordination between the various private and public organizations for maximum effectiveness of action. In a school health program, for example, there is obvious need for proper coordination between the ministries of health and of education and the Junior Red Cross.

Although the study of health organizations in the country takes into account mainly the staff actually participating in the programs, it is necessary also to examine the situation as regards professional personnel at large. One should seek to know the number of physicians, nurses, laboratory technicians, engineers, social workers, and other professional personnel in the country, and to gain some information on how they are distributed geographically, how many are in government service, how many in private practice, etc. One attempts, in considering this information, to know the limitations in personnel that may affect the country's future development, and to plan how to overcome these limitations. Information is likewise sought on physical facilities such as hospitals and beds available in different parts of the country; their type, whether general, tuberculosis or mental, public or private; and also some data on their condition. Information on the buildings and equipment of the health centers and units is also desirable.

It is very important to know what funds are available for operating the services. An observation made frequently in most countries, one that indicates the shortcomings in planning, is that magnificent facilities are available but adequate budget funds are lacking for their operation.

In measuring resources and requirements, certain fixed standards are frequently employed. Thus, in discussing the number of physicians in a country, we usually refer to the number available per inhabitants. Puerto Rico, for instance, states that it has one physician per 1,600 inhabitants. In considering how many physicians are needed, the tendency is to immediately look toward the rate for countries that have the highest proportion of physicians. For example, the United States, has approximately one physician to every 750 inhabitants, and some will therefore claim that we have only half the number of physicians we require since the United States has double the proportion that we have. Yet in the United States there is already the feeling that there are not enough physicians, and someone has suggested that there should be one for every 500 inhabitants. This method of determining needs and measuring resources frequently leads to frustration for the health worker, making him conscious, as it does, of how far off is the day when all the desired personnel will be obtained.

The same occurs in trying to gauge the hospital-bed requirements. Twenty years ago tuberculosis mortality in Puerto Rico was 330 deaths per 100,000 population. By the standard of two beds per death yearly, 10,000 beds were needed in the sanatoria; there were 1,500. It might have been said that nothing could be done to control tuberculosis. Today, tuberculosis mortality has dropped to 30 deaths per 100,000 inhabitants and there are more than four beds per annual death.

If the plan's objectives are to be realistic and there is to be a good possibility of achieving them within the prescribed time, each country must set its own standards and consider those of other countries with caution and in the light of the conditions prevailing in those countries. What is important in the long run is to progress, through the continuous utilization of the available data in the formulation and adjustment of suitable standards in keeping with the country's conditions and with the constant advances in health practices.

It is important to consider also the resources intrinsic in the population itself, in its education, culture, traditions, attitudes, and economy. The health programs most likely to succeed are those which from the outset have the support of the people. The resources and activities and the national plans in such fields as education, agriculture, public works, and others, bear a close relation to the health development of a country and hence to health programs; both in the study of the health plan and in its subsequent execution, a close relationship must be maintained with these agencies.

In measuring resources, stock is taken of both those immediately available and those to be available in the future. In considering the present

number of physicians in the country and the number expected in two, five, or ten years, we turn our attention to the medical school, where future physicians and occasionally some auxiliary personnel are trained. It is important to remember that these schools, in addition to training the physician, can help instill in the students an appreciation of public health services. In too many countries the medical and other professional schools function apart and isolated from the health services, and students fail to receive the desired instruction in the public health problems and programs of the nation. The trend today, however, is toward closer ties between the ministries of health and the schools of medicine, with a view toward mutual aid. This subject was discussed at length at the seminars on medicine at medical schools, held in Viña del Mar and in Tehuacán, under the auspices of the Pan American Sanitary Bureau. The consensus was that one should strive to achieve the type of close relationship that will enable the schools to profit from the resources of the health services, and vice versa.

What has been said about physicians and medical schools holds true for the schools of dentistry, nursing, engineering, medical technology, and others. Most countries have no schools of public health for training specialized personnel in the public health field and, hence, use the facilities of the existing schools in the Americas, through the award of fellowships. Where these schools exist, they apply what we have said about the relationship with the health services.

When the available professional personnel is insufficient for the needs of the health services, the health authorities should make certain that the pertinent agencies are informed of the requirements and take steps to meet them. The ministry of health may encourage the school authorities to increase the number of graduates or to improve the training. A number of countries have done this in the past and are doing so now. In Mexico, for example, the Ministry of Public Health is helping the medical schools improve their instruction in preventive medicine and public health by paying the salary of a full-time professor of preventive medicine.

In determining physical facilities and operating funds to be available in the future, it is necessary to consider many factors, some of which are beyond the control of the public health administrators. In countries that have national planning boards future physical resources can be estimated more easily, since these boards usually forecast the national revenue, together with the proportion thereof that will be available for meeting health needs. When there are no such boards, we must depend on past experience, on the attitudes and trends in government circles, and on the abilities of administrators. The health plan itself contains the best arguments for convincing the government authorities to provide the facilities required.

We pause here to recapitulate our discussion of this first stage of the planning process: compilation and analysis of the necessary information. At first glance this might seem like a gigantic task, one beyond the capacity of many countries. This is not the case; and even at the risk of over-optimism,

it can be stated that all countries can accomplish this first stage of planning. There is a mass of information in all countries on health problems and resources, which need only be gathered in orderly fashion and analyzed with a view to its use in formulating a health plan. When this is done, one can see what additional minimum data are needed and how they can be obtained. The first indispensable step, of course, is to give one or more experts exclusive responsibility for this task, together with the authority and resources they need to assemble, analyze, and complete the required information. It is my understanding that several Latin American countries are following just such a procedure this year.

C. Definition of objectives

As problems and resources are studied, objectives are brought into focus. When it is found, for example, that diphtheria mortality persists, one almost automatically concludes that the program objective is to reduce and eventually eliminate this disease. Likewise, if the study of resources reveals that half the country's population is covered by the services of health units, it will follow that these health units should have diphtheria control programs. Thus, from the moment one begins thinking of objectives, one already has a good idea of the possibilities.

Objectives can be classified as general and specific, as short-term and long-range, as objectives relative to the health conditions of the population or to the effort that will have to be invested.

A general long-range objective, as related to health conditions, would be to reduce maternal morbidity and mortality in the country, while a specific short-term objective would be to reduce maternal mortality during the coming year by, say, 25 per cent. An objective relative to the effort required might be to provide prenatal care services to a sufficient proportion of future mothers, say, to 30 or 50 per cent, or more, depending on local resources and conditions.

In attempting to determine objectives, the administrator finds that the resources available are insufficient to cope with all the existing problems; this is universally true, for in no country are resources sufficient. It is necessary to decide, then, which problems are to be approached, how intensive the approach will be, and which problems will be left for a later solution. These decisions are among the most important that the administrator has to make. Naturally, a good knowledge of the problems and resources will be helpful, but that is not enough.

Gustavo Molina, in his book Principles of Public Health Administration, suggests the following criteria for making these decisions:

(a) Severity of the damage — number of inhabitants affected and number of deaths or cases produced.
(b) Possibility of preventing the damage on the basis of present knowledge, and possibility of applying this knowledge with the means available.
(c) Cost of the damage — economic loss resulting from persistence of the problem, as against cost of the program to combat it.
(d) Results expected from the program, in the short and long run, directly and indirectly.
(e) Attitude of the community -- support or resistance of the population to the measures to be taken, keeping in mind that it is a function of the health services to give guidance to the community.

In determining the objectives, it is important to remember that periodic and final evaluations of the plan should be made. The objectives must therefore be stated in terms that will permit later measurement of results. This is not easily done in some phases of health work. The objective of providing prenatal services for 30 per cent of all pregnant women is easy to measure. But it is quite another matter to measure how these services have helped improve the health of mothers. In other words, it is easy to measure the quantity of services rendered but very difficult to measure their quality and intrinsic yield. Only through the efforts we all may contribute in this direction will we some day be able to develop the proper methodology for measuring the quality and effectiveness of health services, including the medical services.

Another consideration with regard to objectives is the need for separating those that might be called objectives of organization and service from the real objectives that relate to the population's health -- not that the former are less important, but because they are means to an end rather than the end itself. It might well be the objective of a health ministry to furnish, or provide for the furnishing of, public health services for the country's entire population over a period of five years, the end objective being to improve the population's health by means of these services. The organization of such services is, therefore, a means necessary to that end. As another example, a health ministry might include in its plans the organization of a health education program. Let us suppose that at the end of two years that service has been organized; the objective has been fulfilled insofar as organization is concerned. The attainment of that health education service's objectives, however, can only be measured by analyzing the aid it has furnished to the ministry's programs, and to what extent it has succeeded in contributing toward the improvement of the population's health.

D. Formulation of programs of activities

How are the objectives to be attained? There must be a program of activities and proper organization. Theoretically, the plan of activities determines the organization. In practice, however, it is difficult to first determine the activities and then think of the organization, because quite frequently the latter already exists, and it is more difficult to change an existing organization than to establish a new one. This is a problem that frequently confronts the administrator. Even so, one should consider the program of activities before the organization, and then see how the existing organization compares with the one desired and to what extent it can be changed.

The program of activities should indicate the standards or norms, methods and procedures to be followed and used. Thus, a diphtheria prevention program should indicate who will be protected, what product will be employed, what dosage will be used, and the method of application. These are all details of a national health plan, and it is perhaps not necessary to include them as part of the plan itself; but they are important details in the execution of the plan and some reference should be made to them if it is decided not to include them in the plan proper.

Entering into the details of executing a national health plan would in itself constitute a treatise on health administration. It is worth while recalling here what was previously stated on the importance of the human factor in any undertaking. A good plan can be no better than the personnel who carry it out. Frequently, a good plan fails in unskilled hands, while a poor plan may succeed in able ones. A good plan facilitates the administration of a health program. Fortunately, in the vast majority of cases good planning goes hand in hand with good administration.

E. Evaluation

In discussing objectives, we mentioned that they should be stated in terms that will later permit periodic evaluation of how far they are being achieved. Some authorities in administration believe that every plan should be evaluated twice a year; others think it sufficient to evaluate the plan yearly.

Evaluation of a program has one purpose: to determine to what extent the established objectives are or are not being attained, to see what changes must be made, and to put these into effect. In the course of a program's development, newly acquired knowledge, techniques, or procedures may also have to be incorporated.

The ministries of health prepare their budgets annually for approval by the bodies making the appropriations. Information on the program's development and on the results achieved usually provides the best argument for favorable consideration of budgetary requests.

IV. INTERNATIONAL COOPERATION

At an international meeting such as this, it is natural to consider the national health plans from the viewpoint of international cooperation.

Countries throughout the world have given their support to close cooperation in matters of health. An exchange among the various countries with respect to national health plans would in itself be extremely valuable. If there were written national health plans that could be exchanged among countries, they would certainly occupy a preferential place on the library shelves of the various departments. For the administrator to have at hand the health plans formulated by other countries would be of immeasurable value.

The formulation of a well-defined health program would facilitate the collaboration given by the Pan American Sanitary Bureau and the World Health Organization, and by other international agencies and foundations such as the International Cooperation Administration of the United States Government, the Rockefeller Foundation, and others. It would give these agencies an indication of the country's most urgent needs and of what its authorities intend to do, which would help them see more clearly how their international collaboration might be made more effective.

The international agencies can aid the countries in the preparation of their national health plans, for planning is a field pre-eminently suited to international collaboration. The aid which an international agency may give to a country in the matter of planning will be effective in the degree to which it is directed toward helping the nation develop the process of planning.

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