directing council

PAN AMERICAN HEALTH ORGANIZATION

XXVII Meeting

regional committee

WORLD HEALTH ORGANIZATION

XXXII Meeting

Washington, D.C.
September-October 1980

Provisional Agenda Item 10

CD27/34.B (Eng.)
13 August 1980
ORIGINAL: SPANISH

REGIONAL STRATEGIES OF HEALTH FOR ALL BY THE YEAR 2000

EVALUATION OF THE TEN-YEAR HEALTH PLAN FOR THE AMERICAS

1980

C O N T E N T S

INTRODUCTION

INTRODUCTION

The Ten-Year Health Plan for the Americas formulated by the Third Special Meeting of Ministers of Health held in Santiago, Chile, in October 1972, is the culmination of a series of coordination efforts by the countries of the Region to improve the health conditions of their people, which were directed toward development of health in the Hemisphere as a whole.

The Ten-Year Plan has a comprehensiveness of approach that is present throughout all its proposals, which cover practically all areas of major importance in the health field. Within the sphere of application of the Plan, they are organized in such a way as to recognize similarities and acknowledge differences both in the nature of the problems facing the countries and in the approaches taken by the national health systems to solve them.

The efforts of the countries in formulating the Ten-Year Plan are being continued through their agreed actions for implementation. The first step was to formalize the Plan by making it part of the policy of the Pan American Health Organization in Resolution XIII of the Directing Council at its XXI Meeting. The countries then began to implement the recommendations contained in the Plan. Its initial proposal was to draw up or adjust national health policies; a number of countries found that the "Guide for the Analysis of Inclusion of the Goals of the Ten-Year Health Plan for the Americas in National Health Policies", prepared by the Secretariat of the Organization, was of use to them in this endeavor. In addition to formulating and adjusting their national policies, some countries adopted or adapted the goal of the Ten-Year Plan to express their own objectives and goals, and in certain cases, formulated and planned national strategies for attaining them, both in medium-term action and short-term programming. The Directing Council of the Pan American Health Organization at its XXI Meeting was concerned over the progress of the Ten-Year Plan and the way in which its proposals, objectives and goals were being met over time, and so stated in Resolution XIII, whereby the Director of the Office was asked to convene a Working Group to "design an Evaluation System that could be adapted to conditions in the countries and that would be sufficiently flexible to provide comparable results that would in turn enable an evaluation to be made of the achievements of the decade." In accordance with this mandate, the Director convened a Working Group on Evaluation of the Ten-Year Plan; it met in Washington in June 1973 and prepared a report with the guidelines needed to set up a regional-level evaluation system. It also included suggestions to the countries as to how to organize their own evaluation systems.

Following the guidelines of the Directing Council of the Organization and of the Working Group, a methodology was designed to evaluate the Ten-Year Health Plan at three particular points: the first to be done in 1974, in order to determine the status of each of the areas of the Plan when it went into effect; a mid-point evaluation to be done in 1977, the purpose of which would be to assess the progress of the actions agreed on for carrying out the Plan; and a third and final evaluation, to be completed in 1981.

The purpose of the evaluation scheme was to assess the extent to which the Ten-Year Plan had been carried out on an aggregate regional level, to offer explanations for any changes it was felt advisable to make, and to lay the foundations for drawing up new hemisphere-wide strategies. Account was taken of the Working Group's recommendation that the scheme be designed to help each country evaluate how its own goals, programs and strategies were being carried out, and to obtain information for comparisons and evaluations of the achievements at the hemispheric level during the 1971-1980 period. In other words, the evaluation would lead to an assessment of the efforts of each country to carry out its national goals set within the general frame of reference of the Ten-Year Plan.

The initial evaluation proposed for 1974 was completed only at the beginning of 1976, with information from 22 countries representing 92% of the Region's population. The findings of this initial evaluation were submitted for consideration at the XXIV Meeting of the Directing Council of PAHO held in Mexico City (27 September-7 October 1976), Resolution XXVIII of which suggested that the final evaluation of the Ten-Year Health Plan be done in 1980. This recommendation was made because the information received for the initial evaluation had been gathered in 1975, despite every precaution to see that the information referred to the prevalent situation in 1971. Many countries referred to more recent situations, and tended to portray the conditions prevailing in 1974 or even in 1975, either because the 1971 information did not exist, or because they wanted to show a better quality of information. Thus, although this was not the intent, the initial evaluation showed not only the trends and orientations the countries had adopted within the framework of the Ten-Year Plan, but also their status at the time when the midpoint evaluation ought to have been made. In view of the fact that the time-frame of the initial evaluation had changed, to the point where the midpoint evaluation proposed would be of little additional benefit, the Directing Council decided that it would be eliminated, and recommended moving on to the final evaluation in 1980.

The present document shows the findings of the final evaluation of the Ten-Year Health Plan for the Americas. This evaluation was based on information provided by 25

countries of the Region, representing almost 98% of its population. Nineteen countries participated in both the initial and the final evaluations, three in the first evaluation only, and six in only the final. Only one country of the Region did not take part in either of the evaluations (as well as the territories of France, the Netherlands and the United Kingdom).

EXTENT AND LIMITATIONS OF THE FINAL EVALUATION

EXTENT AND LIMITATIONS OF THE FINAL EVALUATION

The central events in an evaluation process are the comparison between the subject being evaluated and its frame of reference, and the judgment on the findings of the comparison. To do this, it is essential to have a clear definition both of the subject being evaluated and of the frame of reference. Both were specified by the Working Group on Evaluation of the Ten-Year Plan, which defined the purpose of the final evaluation as determining the extent to which the goals of the Ten-Year Health Plan had been attained at the regional level, to be based on an assessment of the degree to which national goals set by each country within the framework of the Plan had been attained.

The Ten-Year Plan has goals and recommendations for developing and perfecting practically all aspects of the infrastructure and operations of the Health services systems in the countries, and of the level and structure of health of the population of the Region. For this reason, the amount of information requested of the countries for the evaluation of the Plan was necessarily very large, but it was reduced to the essential minimum by systematic effort. The information received from the countries has been condensed, described and analyzed in the present document.

The concepts examined are general in nature, and this is reflected in the use of qualitative indicators, except, of course, for the Plan's quantitative goals. Since the intention was not to assess the status of the health sector in any particular country, but rather in the Region as a whole with respect to each of the areas, and given the aggregate type of analysis intended, it is necessary to have this generalized type of approach, because of the limitations imposed by the situations such as the following:

a) The same concept often has different meanings, depending on the country. These differences in national definitions--definitions that do not always even exist--mean that the aggregate boundaries that might be adopted for analysis must be very broad. Since many countries had adapted the goals of the Ten-Year Plan to their national policies, it was recommended that those who had been responsible for adapting them also be responsible for gathering the information asked for on the evaluation forms, so that the answers would fall within the same frame of reference for purposes of comparison. However, this could not be done in most cases, and hence there are still areas that are not strictly comparable, whether within a single country over time, or between countries at the same time.

b) Most of the concepts that were around when work on the Ten-Year Health Plan for the Americas was initiated, continue in force. However, as the overall goal of "Health for All by the Year 2000" and the global strategies of primary care, the multisectorial

approach, technical cooperation among developing countries, and others adopted by the countries of the Region took shape, it became necessary for the countries and the Region as a whole to direct their action toward study and adoption of national and regional strategies for attaining the overall goal of "Health for All by the Year 2000." Thus, a number of ideas were reconsidered, some were better defined and, in general, ideas evolved. This relegated some aspects that had been very significant at the start of the Ten-Year Health Plan to second place, while attention came to be centered on a number of other ideas, which have now become prevalent. The result of this change and evolution of ideas is that the homogeneity of ideas that is now appearing makes it slightly difficult to do the evaluation in the terms proposed in 1972.

c) Some of the ideas in the proposals of the Ten-Year Plan are not applicable to some countries. In some instances, they had to make an effort to interpret and substitute in order to give their replies, which of course are not comparable to the replies from the remaining countries.

d) The responses to some aspects of the evaluation have all the variety and subjectivity of those responsible for filling out the questionnaire. In some cases, the replies are almost opinions or value judgments, and should be treated as such. In other cases--fortunately, not many--the replies reflect wishful thinking rather than concrete realities.

e) The evaluation of the national information systems shows that major progress has been made in this area. However, while it is true that the systems are in the process of becoming better organized, it is also true that the information itself continues to be inadequate. This can be seen from the way in which the countries sometimes do not reply to some items, and from the fact that in other cases, the information reported is not consistent with the information collected in the same countries for other purposes. Following the principles used for the initial evaluation, it was decided that, since the information was already available in answers from the countries themselves to other types of requests, there would be no insistence on correcting or confirming the data on the evaluation forms. An attempt was made to report in the tables, the information just as it was provided by the countries, except in cases of obvious typographical errors that might have slipped in and which were corrected. On some quantitative points, the information from the questionnaire was also confirmed by comparing it with information supplied for other purposes that was available in the official files of the Organization.

Finally, when it became necessary for the countries and the Region as a whole to work toward study and adoption of national and regional strategies for attaining the

overall goal of "Health for All by the Year 2000," the Executive Committee of the Organization, at its 82nd Meeting (June 1979), adopted Resolution XIX, which asked the countries and the Organization to bring together in a single process a whole series of actions designed to analyze and formulate national strategies to attain the goal of "Health for All by the Year 2000." This would serve to prepare the contribution by the Region of the Americas to the Seventh Work Program of the World Health Organization and to evaluate the Ten-Year Health Plan for the Americas, which is to be reference material for the countries to make their national proposals for regional strategies within the framework of "Health for All by the Year 2000", in the light of events during the last decade. These regional strategies will in turn be a part of the global strategies that will be adopted by the World Health Organization in 1981.

In the tables given below as a summary of the evaluation of each area covered by the Ten-Year Health Plan, it will be noted that an attempt was made to retain, as far as possible, the same principles, ideas and indicators as were used in the initial evaluation of the Plan. For this reason, few changes were made to the forms used for this purpose in 1974, and some of the changes are merely stylistic. It should be recalled that the concepts used are general in nature, and that numerical indices are used sparingly, unless, as stated earlier, the goals of the Ten-Year Plan were stated in that form. However, certain critical areas of the Ten-Year Plan required special treatment, because of their particular importance in formulating new regional strategies. This is the case with the area of extension of coverage, where the initial evaluation provided no information over and above that available at the beginning of the decade. This was due to the fact that the terms in which the concept was couched in the Ten-Year Plan were not exactly the most adequate, and to the changes that occurred in the idea itself over time. For this reason, research on and analysis of coverage and of the health services systems do not appear in the same form as in the initial evaluation, but rather were the object of special survey, which did not yield the anticipated response. However, the results are included in the final part of the evaluation, reporting the information forwarded by the countries themselves and including analysis of information available from other sources.

GENERAL RESULTS

GENERAL RESULTS

A breakdown of the replies of twenty-five countries of the Region to the evaluation forms, yields the following findings with regard to some of the areas given particular emphasis in the recommendations of the Ten-Year Plan:

1. Major changes have occurred in the consideration of the countries' health policies. Two years after the Ten-Year Plan was drawn up, more than two-thirds of the countries said that they had already defined their policies, while the other third was still in the process of definition. At the end of the decade, there is practically no country that has not drawn up its national health policy clearly specifying the objectives and the structural changes to develop the sector in a manner consistent with the economic and social development of the country. In most cases, the policies set are compatible with the recommendations of the Ten-Year Plan, and are currently being adjusted to take in national strategies for attaining the goal of "Health for All by the Year 2000." The countries' progress in defining their health policies was analyzed in depth in the document entitled "Evolution of the Health Sector in the Seventies and Strategies for Achieving Health for All by the Year 2000."

2. For the most part, the countries took the goals of the Ten-Year Plan as a reference point for their own study and setting of national goals in various areas. Some of the goals were such that had all the countries attained them, fulfillment of the regional goal would have been guaranteed. On the other hand, other national goals adopted at the beginning showed that, even if they were attained, they would not be enough to meet the regional goals. In many circumstances, those countries that had set their national goals in 1974 discarded them over time, and reported different goals in the final evaluation. In most cases, the information reported in the initial evaluation was not taken into account for the final evaluation. This is nothing more than an example of the inadequacies of the information and filing systems. As a result, the goals reported in the initial evaluation often could not be used for comparison with the achievements of the decade.

An increase in life expectancy at birth was an overall goal established in the Ten-Year Health Plan. Since the value of this indicator depends almost entirely on the level and structure of mortality, the factors that affect it cannot be confined to the health sector; rather, they are very closely related to overall economic and social conditions. During the decade, all the countries have raised their life expectancy at birth, but to very differing levels. However, on the average, it may be considered that the goal of the Ten-Year Health Plan was nearly attained in the Region as a whole, with

considerable progress in countries in the Central American isthmus, moderate progress in the countries of the Andean Area, Mexico and the Caribbean, and less in the countries of the Southern Cone and in Brazil.

Control of communicable diseases is an area to which the Ten-Year Plan gave high priority, particularly as regards control of diseases for which vaccination techniques are available. The first evaluation of the Ten-Year Plan mentioned that the extent of the goals the countries had established was such that, even if they were met, it would not be sufficient to achieve the regional goal that had been set. And in fact, the goal was attained for only a few diseases. Of course, smallpox was eradicated in 1971, and has not reappeared. The Region is very close to attaining the Ten-Year Plan goal of reducing deaths from measles. There has been an appreciable decline in deaths from whooping cough, and the regional goal may have on the average been attained; however, some countries continue to have high rates of mortality from these diseases. Deaths from tetanus have been reduced somewhat, but the regional goal has not been attained. The reduction in the incidence of diphtheria and poliomyelitis that was set as a goal has been attained, and even greater reductions are anticipated as the expanded immunization programs begin to operate more efficiently after their initiation two years ago.

The decline in tuberculosis as a major problem in mortality and morbidity has continued, but the goals proposed in the Ten-Year Health Plan for the Americas have not been attained in most of the countries or in the Region as a whole.

Enteric diseases continue to be one of the most important causes of mortality and morbidity in Latin America and the Caribbean. Mortality affects chiefly children under five, and the rate is still very high. The regional goal, set at 50% for the decade, has not been attained, due mainly to the difficulties in further expanding environmental health programs and in extending the coverage of medical care services.

Venereal diseases are a major problem, and appear to be growing more serious. Leprosy is still a significant problem in several countries of the Region, although the information supplied by them does not enable us to determine whether there has been a decline in the incidence and prevalence. It suggests rather that the control programs have experienced their ups and downs during the period.

Yellow fever occurred only as jungle yellow fever, but over the decade, the annual average of cases increased by 25% over the previous ten years. This deterioration is becoming more serious and more complex because of the reinfestation of several countries by Aedes aegypti, changes in the habits of mosquitoes traditionally thought to be jungle mosquitoes, the resistance acquired by the vector, and the increase in the population at risk.

Malaria again became a problem of major proportions in the middle of the decade. Not only were the goals of the Ten-Year not met, but there was also a net deterioration that caused serious concern in a number of countries in the last two years of the decade.

The nutrition and food situation in general did not change substantially over the decade, and the nutritional deficiencies that the countries focused on in the Ten-Year Plan are still prevalent. The information available is too inadequate to reach any definitive conclusions; but, nonetheless, there are indications of a drop in the severity of protein-calorie malnutrition. Progress is known to have been made in food production in a number of countries, although not on the scale necessary to meet the demand of a growing population. In other countries, on the other hand, food production fell off. In any event, it is evident that the goals of the Ten-Year Health Plan for the Americas were not met as a general rule, despite the interest aroused in the problem of malnutrition in most of the countries.

The provision of drinking water and waste disposal services is one aspect of environmental health that received particular attention in the Ten-Year Plan. The Plan's goals for supplying urban populations with drinking water were adopted by most of the countries. However, they did not manage to attain them, or for that matter, the regional goal, due in part to the fact that, in addition to the natural demand created by the growth of the urban population, there were financial and other restrictions in the institutions, and in certain cases, a lack of investment capacity in some countries. The countries of Latin America and the Caribbean managed to provide only less than 40% of their rural populations with drinking water services during the decade, and thus, this goal of the Ten-Year Plan was not met either, although there was laudable progress.

The national goals to provide the urban population with sewerage services, attained or exceeded the regional goal of 70% in only two out of every five countries. It was for this reason that the first evaluation of the Ten-Year Plan had estimated that the regional goal could not be attained; and indeed it was not, since most of the countries were behind in their national goals. Estimates are that in 1980, only 50% of the urban population of Latin America and the Caribbean has access to sewerage services. The goal of providing solid waste disposal services to 50% of the rural population of the Region was also not met; in this case too, as noted in the first evaluation of the Ten-Year Plan, national goals were such that even if they had been attained, the regional goal would not have been met. The figures in fact show that only seven of the fourteen countries of Latin America and the Caribbean have exceeded the figure of 50% coverage with this type of service for their rural populations.

3. Extending the coverage of health services to the population having few or no services was the central goal of the Ten-Year Plan, and probably the most significant and important one. Almost all the countries proposed extending coverage, although with differing approaches, which was understandable in the light of the different national policies that had gone into making each of their health systems. In general, the coverage could be extended by expanding the so-called basic health services with comprehensive minimal services, organized according to the size of the population groups and their concentration or dispersion. The information available at the beginning of the decade led one to understand that people living in towns of 20,000 or more inhabitants had an almost 100% coverage of health services; that people in towns of 2,000 to 20,000 inhabitants were 90% covered, and that people living in localities with less than 2,000 inhabitants had barely a 20% coverage of minimal health services. Attention was immediately focused on how to provide better service to the latter. Most of the countries thus stressed organizing the health services system by expanding the number of basic care units and linking them up by means of a referral system, so as to give the entire population access to a complex level of care if the case so warranted.

As mentioned in the initial evaluation, the information provided by the countries was not sufficient to supplement the data already available on the coverage situation. In fact, from the information the countries provided at that time, it was not possible to determine exactly what levels of coverage were being obtained. The present evaluation still suffers from the problem of a shortage of information from the countries, and further, from the fact that the countries' health services systems are involved in a major process of change, in adapting to a political and social dynamic, and in overcoming serious financial restrictions. Furthermore, the definition of coverage is not the same in the various countries, and it depends considerably on the levels to which the health services systems are developed. It is therefore not possible to find valid indicators for the status of coverage, although it is obvious that whatever the definition, the availability of resources for care is an indicator that could be of some use. In this sense, the information obtained for the present evaluation shows that in thirteen countries for which data exists for both 1971 and 1978, basic care units increased by 61.4% (from 6,532 to 10,543). If this type of growth occurred in all the countries for which information is not available, it is clear that coverage must have increased, at least for the people for whom the new care units were established. In general, these basic care units were set up in towns of between 2,000 and 5,000 inhabitants, and were intended primarily to serve the rural population.

The number of beds for hospital and general care rose by only 12.3% in the 16 countries for which information is available for both 1971 and 1978. This increase is not exactly large, and could mean an increase in coverage only to the extent that the bed-use index has risen substantially.

In summary, it is felt that the countries have made very significant efforts to extend the coverage of their health services and that, to judge from the information from a few countries, the increase in coverage was achieved mainly in some population groups for which there are higher rates of care per inhabitant than at the beginning of the decade. It was not possible to attain the goal of the Ten-Year Health Plan in its entirety, however, although some very significant advances and adaptations can be seen in the health services systems that could lead to rapid development in the coming years.

4. The Ten-Year Plan recognized that if the regional proposals were to be carried out, it was essential that each country establish and develop a health system that was suited to its own characteristics, in terms of sectorial policy. Undoubtedly, most of the countries have been making an effort to organize their systems in terms of the central goal of extending coverage; a number of aspects of the present systems are being studied; in most cases, a certain similarity is detected in the idea of a system organized into various levels of complexity along a scale; greater attention is being given to training and employing non-traditional health personnel; ways are being explored of having more active community participation in the system; the use of more appropriate technologies is being researched and encouraged; and, within different conceptual frameworks in almost all the countries, importance is being given to organizing new health services systems and to exploring and using new sources of financing for the purposes of expanding the services.

5. The area of human resources continued to be a critical area for the health services during the decade. The rate of training was relatively slow, particularly for non-medical personnel, and it was not tailored to the needs of the national goals on extended coverage. There is a marked shortage of nursing personnel, and particularly of personnel to deal with all the less complex services for direct care. The needed coordination between personnel training institutions and user institutions has not yet been achieved; the universities are still on the margins of human resources planning; and, the Ministries of Health have little influence on the universities' human resources training programs.

As regards physical resources, there is still a severe shortage of facilities at all levels of complexity; in a large number of countries, the installed capacity is deteriorating because of poor maintenance. The number of general care beds did not even

keep pace with the growth of the population, and added to this are the increasing needs of the extended coverage, which will require a high level of investment and operating expenditures. For this reason, the countries are involved in studying new sources of financing, and are having increasingly frequent recourse to external financing. The countries are also exploring other internal forms of financing, in which the role that social security institutions might play has prime importance.

6. The responses received for the various areas of the evaluation show that the countries still have difficulties in obtaining and providing information. In general, the health information systems are poorly organized, although in recent years, it has been noted that most of the countries have a particular interest in working to develop them and to find and use methods for programming, monitoring and evaluating their activities from a managerial standpoint, with a view to achieving greater efficiency in the use of their resources.

Having presented these general observations, the next chapter contains the findings of the final evaluation of the Ten-Year Health Plan for the Americas on specific areas established in the Plan.

GENERAL GOAL: LIFE EXPECTANCY AT BIRTH

GENERAL GOAL: LIFE EXPECTANCY AT BIRTH

	1970	National Goal 1980	Latest estimate			
			Year	Both sexes	Males	Females
Argentina	68.2		1975-80	69.4		
Bahamas	66.7	70	1970	66.7	64	69.3
Barbados	68.3	73	1979	69.8	67.2	72.5
Bolivia						
Brazil	59.4	65	1970	59.4	57.6	61.1
Canada						
Chile	62.5[a]	64.4	1976-80	64.4	61.3	7.6
Colombia	58.6	63.6	1975	62.2	60.7	63.9
Costa Rica	68.1	71.1	1977	72.9	70.8	75
Cuba	70.1	71.8[b]	1978	71.8	70.2	73.5
Ecuador	58.8	62.9[b]	1974-79	60.5	59.1	61.8
El Salvador	59	60.5	1978	60.3	...	...
United States	70.9	73.1	1977	73.2	69.3	77.1
Guatemala	51.5	54.9	1973	52.8	52.7	53.6
Guyana	69.1	68[c]	1970	69.1	66.7	71.6
Haiti	46.0	53	1971	47.8	46.7	47.5
Honduras	54.1	57.1	1980	57.1	55.4	58.9
Jamaica	65.5	69[c]	1970	67.8	66.7	70.2
Mexico	61[c]	67	1975	65.4	62.9	67.8
Panama	65.8	69.7	1978	69.7	...	...
Paraguay	60.1	63.6	1975	61.9	...	...
Peru	53.7	58.6	1979	58.2	56.2	60.2
Dominican Rep.	57.1	61.2	1975-80	61.2	59.6	62.9
Suriname	65.5[a]	...	1971	67.7	65.5	68.8
Uruguay	68.4[d]	...	1974-76	69	66	72.4
Venezuela	66.6	70.2	1978	68.8	66.3	71.6
Trinidad & Tobago	66	68	1975	67.5	65.4	69.7

a/ Period 1970-1975. b/ National goal for 1980-1984. c/ Source: "Evaluation of the Ten-Year Health Plan for the Americas, 1971-1980." d/ Estimate for the period 1963-1964.

GENERAL GOAL: LIFE EXPECTANCY AT BIRTH

REGIONAL GOAL: To attain during the decade an increase of five years in those countries where life expectancy at birth at the beginning of the period was under 65 years and an increase of two years in those countries where it was between 65 and 69 years.

According to the latest estimate by the United Nations Population Division, Latin America increased its life expectancy at birth between 1965-1970 and 1975-1980 from 60 to 63.6 years. The greatest increase in this period was achieved in the countries of the Central American Isthmus, which taken together added 5.4 years to their life expectancy at birth, raising it from 53.9 to 59.3 years, hence exceeding the average goal of five years set for the Region by the Ten-Year Plan. Another area where there was a noteworthy increase was the Andean Area, which as a whole added 4.4 years to the 1965-1970 figure. The Southern Cone Countries, which as a group showed a life expectancy at birth of 65.5 years in 1965-1970, added a further 2.4 years in the ten years following, thus exceeding the two-year goal set by the Ten-Year Plan for their category. Mexico increased its life expectancy at birth by 4.5 years over the same period, while Brazil only achieved an increase of 3.9 years. In Caribbean Latin America, Cuba and Puerto Rico, which already had high figures in 1965-1970, increased them by less than two years, while Haiti and the Dominican Republic, on the other hand, with figures of 47.7 and 55.4 years, respectively, in 1965-1970, added 4.5 and 4.8 years in the ten years thereafter, thus coming very close to the Ten-Year Plan goal. The Caribbean countries and territories, which averaged 66.7 years in 1965-1970, amply exceeded the Ten-Year Plan goal by achieving an average of 69.9 years in the last half of the decade. Finally, North America, which had a life expectancy at birth of 60.0 years in 1965-1970, was only able to add an average of 1.1 years to reach 61.7 years in 1975-1980.

SUMMARY: The Region as a whole has come very close to achieving the goal of the Ten-Year Health Plan, with considerable progress in the isthmian countries of Central America; moderate advances in the Andean countries, Mexico and the Latin American Caribbean; less marked increases in the Southern Cone countries and Brazil; and improvements, as anticipated, in the Carribbean countries. The countries of North America, too, where life expectancy at birth was already high at the start of the decade, were also able to add rather more than one year to the 1965-1970 figure.

I. SERVICES TO INDIVIDUALS

I. SERVICES TO INDIVIDUALS

A. COMMUNICABLE DISEASES

	1. Smallpox				2. Measles								
	Priority assigned to the problem			1.1 Number of cases	Priority assigned to the problem			2.1 Deaths per 100,000 inhabitants			2.2 Percentage of children under 5 years vaccinated		
	High	Average	Low	1971	High	Average	Low	1971	1978	National goal 1980	1971	1978	National goal 1980
Argentina			x		x			6.3	2.6 [a]	1			80
Bahamas					x			0.5 [b]				30.2	50
Barbados					x			0 [c]	0 [d]	1	0 [c]	29	50
Bolivia								22 [c]		5 [c]	3 [c]		
Brazil	-	-	-	19	-	-	-	93 [e]				42.2 [f]	80
Canada								0.1 [c]	0 [d]				80 [c]
Chile	-	-	-		-	-	-	6.3	0.5	1	73 [f]	91.2 [f]	80 [c]
Colombia	x				x			11.5	4.5	1	-	35.2	80
Costa Rica	-	-	-		x			4.7	0.1	0	60	78	80
Cuba					x			0.5	0.3	0.2	<80	<80	
Ecuador			x			x		49	25.6 [a]	15	0	g	g
El Salvador			-			x		9.8	1.6	1	4.3	69.2 [f]	80
United States	x				x			0	0 [h]	0	61	62.8	90
Guatemala	-	-	-		-	-	-	105.6	28.1	1	2.4	60.8	80
Guyana	-	-	-	-	-	-	-	0.4	0.5 [i]	1 [c]			
Haiti	-	-	-		-	-	-		0.1				
Honduras			x		x			16	7.8	4.5	0.01	19.8 [a]	100
Jamaica	-	-	-	-	-	-	-	1.4		-	-		-
Mexico			x		x			17.6 [c]	0.6 [j]	0.8 [c]	4.5 [c]	17.1 [j]	80 [c]
Panama	-	-	-		-	-	-	20.8	0.9	1	4.1 [c]	20	80
Paraguay	x				x			26.2	2.2	1.1	0	3.5	80
Peru	x				x			6.4	-	6.7	16	19.2	80
Dominican Rep.	-	-	-			x		3.5	2	2	1.6	14.8	k
Suriname			x				x					0.7	
Uruguay	-	-	-	-	-	-	-	0.2	0.2	0.1	4	65	80
Venezuela			x		x			7.5	2.4	1.5-2	22 [l]	51 [l]	50
Trinidad & Tobago			x	0	x			0.2	0	0[i]	-	-	-

a/ 1977 figure. b/ 1972, source: Health Conditions in the Americas, 1969-1972, PAHO/WHO Scient. Publ. No. 287. c/ Source: "Evaluation of the Ten-Year Health Plan for the Americas, 1971-1980." d/ Annual mortality rates reported by the countries to PAHO/WHO, provisional figures. e/ In 21 state capitals, as recorded in the Evaluation of the Ten-Year Plan. f/ Infants under 1 year. g/ A total of 119,929 children vaccinated in 1978 and 180,560 as goal for 1980. h/ Provisional figure, based on a 10% sample. i/ 1976 figure. j/ 1975 figure. k/ 100% of infants under 1 year and 40% of children 1-4 years. l/ Children between 9 and 35 months (8.03% of the country's population).

1. SMALLPOX

REGIONAL GOAL: Maintenance of eradication.

The program to eradicate smallpox in the Americas was begun in 1967. Between 1967 and 1971, 18,106 cases were recorded, almost all of them in Brazil. After April 1971, despite and intensive search, no further new cases were found and eradication was certified for the Region in 1973.

The regional goal and that adopted by all the countries of the Region was to maintain smallpox eradicated throughout the decade.

This goal has of course been achieved, as smallpox has been declared eradicated worldwide.

2. MEASLES

REGIONAL GOAL: To reduce the rate of mortality due to measles to not more than 1 per 100,000 inhabitants. To vaccinate 80% of the children under five years of age and to maintain this proportion each year.

The estimates available for 1971 place mortality from measles at 0.0 per 100,000 inhabitants for North America, 16.8 per 100,000 for Middle America and 12.5 per 100,000 for South America. The morbidity notified in that year, with considerable under-reporting very likely, suggests estimates of 36.3, 82.7 and 92.6 cases per 100,000, respectively, for the same subregions.

As the figures for 1971 show, at the beginning of the decade mortality from measles ranged between 0 and 105.6 per 100,000 inhabitants for the 24 countries for which data are available; seven of these countries had case numbers below the Ten-Year Health Plan goal for 1980, the average being 6.4 deaths per 100,000 inhabitants. In the upper quartil there are six countries with high measles mortality rates of 16 an over deaths per 100,000 inhabitants. By around 1978, ten out of 19 countries already had measles mortality rates below 1 per 100,000; the other nine countries had achieved substantial reductions, with only two countries still having values in excess of 20 per 100,000.

There were also appreciable increases in vaccination of children under five: in 1971 only four countries had more that 50% of their under-five year olds vaccinated against measles, whereas in 1978 eight out of 20 had already exceeded that percentage and, although the figures are not yet available, it is anticipated that the 1980 percentages will be higher thanks to the Expanded Program on Immunization now being energetically pursued in most of the countries of the Hemisphere.

SUMMARY: The Region is very close to achieving the Ten-Year Health Plan goal as regards to reducing the number of deaths from measles and has made significant progress in its vaccination programs, which were given further momentum in the course of 1979 in 1980.

I. SERVICES TO INDIVIDUALS
A. COMMUNICABLE DISEASES

	3. Whooping Cough								
	Priority assigned to the problem			3.1 Deaths per 100,000 inhabitants			3.2 Children under 5 years vaccinated (percentage)		
	High	Average	Low	1971	1978	Nat. goal 1980	1971	1978	Nat. goal 1980
Argentina	x			1.1	1.3[a]	< 1	72[b]		80
Bahamas			x	-	-			69.1	75
Barbados	x			0.4	-	< 1		80	80
Bolivia				2.0[b]		1.8[b]	7[b]		40[b]
Brazil	-	-	-	1.3[c]				47.8	80
Canada				0.0[b]	0.0[b]	0.0[b]			80[b]
Chile	-	-	-	0.7	0.1	< 1	85.8	92.4	90[b]
Colombia	x			2.9	3.7	< 1	47.7	28.4	80
Costa Rica	x			2.7	0.1	0.6	15	89	80
Cuba	x			0.1	0.2	0.1	> 80	> 80	> 80
Ecuador			x	26.5	13.4	7			80[b]
El Salvador		x		7.6	3.2	3	40	82.6	80
United States	x			0.0	0	0	78.7[h]	68[h]	90
Guatemala	-	-	-	55.6	17.6	< 1	40	82.6	80
Guyana	-	-	-		0.3[a]	1[b]		45.5[i]	-
Haiti	-	-	-		0.4			4	
Honduras	x			15.9	5.5	2.5	12.6	21.1[a]	80
Jamaica	-	-	-	0.3	-		24	36[a]	60[b]
Mexico	x			11.0[b]	2.7[f]	1	15[b]	10.8[g]	80[b]
Panama	-	-	-	9	5	1	-	20	80
Paraguay	x			2.3	0.5	1	2.7	6.9	80
Peru	x			12.5		5.1	10.6	16.5	80
Dominican Rep.			x	0.1	0.1	0.1		33.6[j]	80[b]
Suriname	x				0.3[g]	-		28.6[g]	
Uruguay	-	-	-	0.2	1.1	0.5	65	69	80
Venezuela		x		1	1	< 1	18	35.4	80
Trinidad & Tobago		x		0.2	0	-	0	80	47

a/ 1977 figure. b/ Source: "Evaluation of the Ten-Year Health Plan for the Americas, 1971-1980." c/ Data from 20 state capitals. d/ Period 1969-71. e/ 1976 figure. f/ 1975 figure. g/ 1977 and 1978. h/ Children 1-4 years old. i/ 1979 figure. j/ 100% of infants under 1 and 50% of children 1-4 years.

3. WHOOPING COUGH

REGIONAL GOALS: To reduce mortality from whooping cough to a rate of 1 per 100,000 inhabitants. To vaccinate 80% of all children under 5 years with a complete series of vaccine doses.

The estimates for 1971 place mortality rates from whooping cough at 0.0 per 100,000 inhabitants for North America, 11.2 per 100,000 for Middle America and 7.9 per 100,000 for South America. The cases recorded by notification in that year give estimated rates of 2.7, 52.9 and 89.2 per 100,000, respectively, for the same subregions.

Ten out of 23 countries had already exceeded the 1980 regional goal by 1971, with rates of 1 death or fewer per 100,000 inhabitants; the median was 1.3 per 100,000 and the six countries in the upper quartile showed rates above 9 per 100,000, with the highest being 55.6 per 100,000. The situation changed over the first eight years of the decade, but there were still only ten countries with rates equal to or lower than the regional goal in 1978. The median is 1.2 and the countries in the upper quartile show rates in excess of 3.5 per 100,000 inhabitants. The highest rate observed is 17.6 per 100,000, i.e., a reduction of two-thirds compared with the highest noted in 1971.

As regards vaccination levels, the data for 1971 show extensive variations. However, by around 1978 the figures are noticeably higher: almost a third of the countries have managed to exceed the regional goal and in general all of them have increased the proportion of children under five vaccinated. Nevertheless, taking the Region as a whole, the goal does not appear to have been achieved and only a very determined effort by the Expanded Program on Immunization in the final years of the decade could bring the countries close to meeting it.

SUMMARY: There were appreciable reductions in mortality from whooping cough during the decade, although only half of the countries had achieved the regional goal by 1978. And additional effort will be needed in the immunization program to come acceptably close to the goal set by the Ten-Year Health Plan for the Americas.

	4. Tetanus											
	Priority assigned to the problem			4.1. Deaths per 100,000 inhabitants			4.2. Children under 5 years of age vaccinated with complete series (percentage)			4.3 Pregnant women living in tetanigenuos areas, vaccinated (percentage)		
	High	Average	Low	1971	1978	Nat. goal 1980	1971	1978	Nat. goal 1980	1971	1978	Nat. goal 1980
Argentina				1.8	1.1[a]	0.5			80			100[m]
Bahamas			x	1.1[b]	-	-	-	69	75	-	27	40
Barbados	x			4.2	1.1	0.5		80	85		50	60
Bolivia									40[c]			
Brazil	-	-	-	4.1	6.2[a]	-	-	48[h]	80	-	-	60
Canada				0.0[c]	0.0[d]				80[c]			
Chile	-	-	-	0.3	0.2	0.5	-	92	90[c]	-	-	n
Colombia	x			3.9	2.5	0.5	48	28	80		-	80
Costa Rica	x			13	1.1	0.5	15	89	80	-	-	
Cuba	x			0.7	0.2	0.1	80	80	80	80	80	
Ecuador		x		17.4	9.9[a]	5	-	-	80[c]	-	o	
El Salvador		x		8.4	4.2	3	40	83	80	24	40	50
United States	x			0	0[g]	0	79	68[i]	90			
Guatemala	-	-	-	3.9	2.3	0.5	26	55	80	-	-	60
Guyana	-	-	-	3.7	1.7[a]	-	-	46[j]			43[j]	
Haiti	-	-	-	5.3	5.0			4				
Honduras	x			3.3	2.2	0.7	12.3	21[a]	80		-	60
Jamaica	-	-	-	4.7	1.2	-	24	36[a]	60[c]			
Mexico	x			3.7[e]	2.5[f]	-	-	11[f]	80[c]	-	-	
Panama	-	-	-	11	1	1	-	21	80	-	75	
Paraguay	x			18.6	4.4	2.6	3	7	80	7	11	80
Peru	x			3.7	3	2.0	11	16.5	80			60
Dominican Rep.	x			10.6	1.9	1	18	34	k,1	-	48	80
Suriname	x				1.3[g]	-	-	29[d]		-	-	
Uruguay	-	-	-	0.5	0.6	0.5	73	81	85	-	-	
Venezuela	x			2.9	1.1	<1	18	35	80	35	31[k]	50
Trinidad & Tobago	x			1.3	0.7	0	1.3	48	80	1.3	-	20

a/ 1977 figure. b/ 1972, Source: Health Conditions in the Americas, 1969-1972, PAHO/WHO, Scient. Publ. No. 287. c/ Source: Evaluation Ten-Year Plan 1974. d/ Annual PAHO/WHO Mortality Questionnaire. e/ 1976 figure. f/ 1975 figure. g/ 1977 and 1978. h/ Infants under 1 year. i/ Children 1-4 years. j/ 1979 figure. k/ 100% of infants under 1 and 50% of children 1-4. l/ Children between 2 and 35 months (10.1% of the country's population). m/ To vaccinate 100% of the women of fertile age in rural areas with coverage. n/ The vaccine was first administered to children in 1975. There are no tetanigenuos areas and pregnant women are not vaccinated. o/ First vaccinations and revaccinations: 78,856 (absolute figures).

4. TETANUS

REGIONAL GOALS: To reduce the mortality to a rate of 0.5 per 100,000 inhabitants. To vaccinate 80% of children under five years with a complete series of DPT vaccine doses. To seek to vaccinate 60% of the pregnant women in tetanigenous areas with tetanus toxoid.

In 1971 the estimated mortality rates from tetanus were 0.0, 3.9 and 4.9 per 100,000 inhabitants for North America, Middle America and South America, respectively. In that year only four of the 23 countries for which data are available showed rates equal to or below the goal set by the Ten-Year Plan for 1980. The median for the 23 countries was 3.7 deaths per 100,000 inhabitants and the six countries forming the upper quartile had rates of ten or more per 100,000, the highest being 18.6 per 100,000. This situation has changed and there have been appreciable reductions in mortality over recent years. It is still the same four countries which are below the regional goal, but the median has been brought down to 1.3 deaths per 100,000 while the six countries making up the upper quartile have rates ranging from 2.5 to 9.9 per 100,000. The latter figure is the highest tetanus mortality rate observed in any country in the Region, meaning that a reduction of almost 50% has been achieved compared with the highest rate noted at the beginning of the decade.

The status of antitetanus vaccination presents the same pattern as for whooping cough, since this vaccination is generally performed by means of the tripple vaccine; in other words, figures for children under five who have received the full doses varied greatly from country to country in 1971. At the end of the decade only six of the 23 countries had achieved or exceeded the regional goal of 80% of under five year olds vaccinated. The rest of the countries again showed widely varying percentages, from 7% to 69%. It should be noted that the goals set by the countries may have been changed because the Expanded Program on Immunization changed the vaccination standards by age group. As regards vaccination of pregnant women in tetanigenous areas, data for 1971 are very limited. For recent years, only nine countries have provided figures; the 60% goal set by the Ten-Year Plan has been exceeded in two of them.

SUMMARY: The overall goal of no more than 0.5 deaths from tetanus per 100,000 population in the countries of the Region has not been achieved, although the mortality rates from this disease have been significantly lowered. The situation as regards vaccination has also improved noticeably compared with 1971, although here too the regional goal has not been attained for children or for pregnant women in tetanigeous areas. However, some important changes are to be expected as a result of the intensification of the Expanded Program on Immunization that is being vigorously implemented in most of the countries of the Hemisphere.

I. SERVICES TO INDIVIDUALS
A. COMMUNICABLE DISEASES

	5. Diphtheria								
	Priority assigned to the problem			5.1. Cases per 100,000 inhabitants			5.2. Children under 5 years of age vaccinated with complete series of vaccinations (percentage)		
	High	Average	Low	1971	1978	Nat. goal 1980	1971	1978	Nat. goal 1980
Argentina	x			1.8[a]	0.5[b,c]	-	-	-	80
Bahamas			x	1.2[a,d]	0[b]	-	-	69.1	75
Barbados	x			8.5	7.5	0	-	80	85
Bolivia									
Brazil	-	-	-	5.4[a]	4.3	-	-	47.8[g]	80
Canada				0.3[a]	0.3[b,c]				
Chile	-	-	-	5.2	4.9	-	85.8[g]	92.4[g]	-
Colombia	x			0.3	0.2	0.1	47.7	28.4	80
Costa Rica	x			5.7	0[c]	1	15	89	80
Cuba	x			0	0	0	80	80	
Ecuador		x		2.6	0.3	0.2			
El Salvador		x		2.6	0.02	0.02	40	82.6[g]	80
United States	x			0.1	0.03	0.03	78.7[h]	68[h]	90
Guatemala	-	-	-	0.3	0	1	26	55.2	80
Guyana	-	-	-	4.2	0.3[b]	-	-	45.5	-
Haiti	-	-	-	0.6	0.8			4	
Honduras	x			0.6	0[e]	0	12.3	21.1[e]	80
Jamaica	-	-	-	2	0.4[b,c]	-	24	-	-
Mexico	x			0.3[a]	0.02[f]	-	-	10.8[f]	-
Panama	-	-	-	1.5	0	0	-	21	80
Paraguay	x			5.8	0.2	1	2.7	6.9	80
Peru	x			0.6	0.8	0.5	10.6	16.5	80
Dominican Rep.		x		6.6	6.5	1	-	33.6	1
Suriname	x			1.0[a]	0.3[b,c]	-	-	-	-
Uruguay	-	-	-	0.2	0	0	73	81	85
Venezuela		x		0.8	0.5	1	18[j]	35.4[j]	80
Trinidad & Tobago	x			6.3	0.1	0	1.3	48	80

a/ Source: Health Conditions in the Americas, 1969-1972, PAHO/WHO, Scient. Publ. No. 287. b/ 1979 figure. c/ Cases notified to PAHO/WHO. Provisional figures. d/ 1970 figure. e/ 1977 figure. f/ 1975 figure. g/ Infants under 1 year. h/ Children 1-4 years. j/ Children vaccinated between 2 and 35 months (10.1% of the country's population).

5. DIPHTHERIA

REGIONAL GOALS: To reduce the morbidity rate from diphtheria to 1 per 100,000 inhabitants. To vaccinate 80% of the children under five years with the complete series of doses of vaccine.

Diphtheria morbidity in 1971 was 0.1, 1.0 and 3.9 per 100,000 inhabitants for the subregions of North America, Middle America and South America, respectively. The incidence in 24 countries for which data are available ranged between 0 and 8.5 cases per 100,000 inhabitants in that year. Eleven of these 24 countries had rates equal to or below the proposed regional goal for 1980 and the median for the 24 countries was 1.5 per 100,000. The six countries forming the upper quartile showed incidences of 5.2 to 8.5 cases per 100,000. In the latter years of the decade the same 24 countries showed considerable reductions; only four of them have not been able to bring their rates down to below the regional goal for 1980. As regards the proportion of children under age five vaccinated with the complete series of doses, the same comments apply as for vaccination against tetanus and whooping cough.

SUMMARY: The regional goal has virtually been achieved as regards incidence of diphtheria.

	6. Poliomyelitis									
	Priority assigned to the problem			6.1. Cases per 100,000 inhabitants			6.2 Children under 5 years of age vaccinated with complete series of vaccinations (percentage)			
	High	Average	Low	1971	1978	Nat. goal 1980	1971	1978	Nat. goal 1980	
Argentina	x			2.0[a]	0.1[b]	0.1				
Bahamas			x	-	0.5	0	-	67.3	70	
Barbados	x			-	-	0		76	85	
Bolivia										
Brazil	-	-	-	2.2	1.5	-		44.5[c]	80	
Canada				0.0	0.0[b]					
Chile	-	-	-	0.6	-		85.1[c]	92.7[c]	-	
Colombia	x			0.3	0.5	0.1	9	28.2	80	
Costa Rica	x			0.1	-	0	71	81	80	
Cuba	x			0.0	-	0	93.3	100	98	
Ecuador	x			2.5	0.2	0.1	-	d	-	
El Salvador		x		2.0	0.2	0.2	17[e]	82.2[c]	80	
United States	x			0.0	0.01	0.01	67.3	61.4	90	
Guatemala	-	-	-	5.4	0.5	0.1	7.2	64	80	
Guyana	-	-	-	-	-[b]	-	-	51	-	
Haiti	-	-	-	0.1	0.8					
Honduras	x			1.3	6.3[b]	1	16.7	23.6[e]	100	
Jamaica	-	-	-	-	-[b]	-	53	64[e]	-	
Mexico	x			1.2[a]	1.1[b]	-	-	12.4[f]	-	
Panama	-	-	-	4.8	0	0	-	20	80	
Paraguay	x			11.1	2.2	0.3	21.3	12.2	80	
Peru	x			0.9	0.5	0.1	18.7	16.7	80	
Dominican Rep.	x			2.3	3.1	1	-	52.9[g]	g	
Suriname	x			-	-	-	-	28.8[h]	-	
Uruguay	-	-	-	0.1	0	0	67	85	85	
Venezuela	x			3.8	0.2	0.1	44.3	97.4[i]	90-95	
Trinidad & Tobago	x			4.5	0.0	0.0	1.3	54	80	

a/ Source: Health Conditions in the Americas, 1969-1972, PAHO/WHO, Scient. Publ. No. 287. b/ Cases notified to PAHO/WHO; provisional figure, 1979. c/ Infants under 1 year. d/ Absolute figure: 263,969 vaccinations and revaccinations. e/ 1977 figure. f/ 1975 figure. g/ To vaccinate 100% of the infants under 1, 70% of children 1-4 and 50% of children 5-14. h/ 1977 and 1978. i/ Children between 2 and 23 months (6.6% of the country's population).

6. POLIOMYELITIS

REGIONAL GOALS: To reduce the morbidity rate to 0.1 per 100,000 inhabitants. To vaccinate 80% of children under five with the complete series of vaccine doses.

Most of the countries of the Region are still giving priority to the problem of poliomyelitis. At the start of the decade, data were available for ten out of 24 countries which showed incidences equal to or below the regional goal for 1980 of 0.1 cases per 100,000 population. The median was between 0.6 and 0.9 cases per 100,000 and the highest rate observed was 11.1 cases per 100,000. At the close of the decade 11 of these 24 countries had achieved the regional goal; the median had been brought down to 0.2 cases per 100,000 and only five countries showed case rates of more than 1 per 100,000, the highest value being 6.3 per 100,000. The regional goal for 1980 is on the way to being achieved although the vaccination programs in some countries will clearly have to be speeded up in accordance with the pattern of the Expanded Program on Immunization initiated in the last two years of the decade. The percentage of children vaccinated varied considerably in 1971, when only two countries exceeded 80% of children under five vaccinated with the full series of vaccine doses; the levels reached at the end of the decade are much more acceptable, although still not up to the regional goal set for 1980. The latest indications are that the countries are adopting immunization programs that are expected to lead to adequate coverage for control of poliomyelitis.

SUMMARY: Progress in the decade was significant but not sufficient to obtain the coverage proposed for 1980 in the poliomyelitis immunization programs. The relaxing of these programs in certain countries has led to outbreaks which account for the high rates shown for some of them. However, the outlook is promising in view of the impetus now given by the Expanded Program on Immunization.

I. SERVICES TO INDIVIDUALS
A. COMMUNICABLE DISEASES

	7. Tuberculosis																
	Priority assigned to the problem			7.1 Deaths per 100,000 inhabitants			7.2 New cases per 100,000 inhabitants			7.3 Children under 15 years vaccinated with BCG (percentage)			7.4 New cases that began treatment (percentage)			7.7 Total tuberculosis beds in country (%)	
	High	Average	Low	1971	1978	Nat. goal 1980	1971	1978	Nat. goal 1980	1971	1978	Nat. goal 1980	1971	1978	Nat. goal 1980	1971	1978
Argentina	x			13.1	6.7[a]	5.5		32.4[g]			38[h]						35[a]
Bahamas	-	-	-				43.1	11.5			90.6[i]	95	-	100	100	-	-
Barbados	x			4.7	0.8	50	11.4	6.8	[j]		40	60	100	100	100	1	0
Bolivia																	
Brazil	-	-	-	23.5	20[b]		43.8	49.7			58.6[a]	80	98	-	100	11	?
Canada				2.1[c]	0.9[d,e]			10.6[g]									
Chile	-	-	-	23.8	16		86	75.8		>90	>90	-	90	95	-		-
Colombia	x			14.1	10.4	7	51.6	41.1		64.8	78.8	80	92	100	100	5	1
Costa Rica	x			6.5	2.5	60	23.5	16.3		79.1	85.6	80	95	99	100	6	1
Cuba	x			5.3	1.5	1.5	17.9	13	12.5	90.2	97.3	97	100	100	100	5	1
Ecuador	x			15.6	14.7	8	56.9	33.5	18			[k]	-	2,390[k]	13	15	7
El Salvador		x		10.4	5.1	5	119.8	56.2	56	32	103	80[e]	98	100	100	21	12
United States	x			2.2	1.4[a]	1.1	17.1	13.1	11.6				89	93[b]	100	1	...
Guatemala	-	-	-	20	9		-	37		34	73.1	-	-	80	-	14	6
Guyana	-	-	-	3.4	8.3[f]		17.2	7					...	...	-	7	4
Haiti	-	-	-	2.1	1.4		50.3	105.4			6.7						10
Honduras	x			6.9	3.2[f]		63.7	43.2[a]		80.9	14.3[a]	80	100	100[b]	100	15	10[a]
Jamaica	-	-	-	3.5	2[a]		13.3	17[a]					...	...	-	-	-
Mexico	x			18	14.2		37.2	15.2		34.5	5.2		-	86	-	-	725[k]
Panama	-	-	-	15	5	12	143	37.3	30		10.5	80	100	100	90	11	4
Paraguay	x			25	14	11.2	158	61.4	79	11	6	80	-	-	-	10	-
Peru	x			27	16	12.5	145	97	79.2	45	25	80	70	95	98	20	5
Dominican Rep.	x			6	9	5	32	27.3			32		100	100	100	-	5
Suriname		x		2	2.1[a]		25	17					100	100	-	5	2
Uruguay	-	-	-	9	7.2	5	59.4	53					100	100	100	7	5
Venezuela	-	-	-	10	6.4	7	51.3	32	30.3	3.4	8	80	100	100	100	10	3
Trinidad & Tobago	x			5.3	2.9	2.7	13.5	11	3	1.9	-	-	100	100	100	2.6	-

a/ 1977 figure, b/ 1975 figure. c/ Source: Health Conditions in the Americas, 1969-1972, PAHO/WHO, Scient. Publ. No. 287. d/ 1979 figure. e/ Source: PAHO/WHO mortality questionnaires. f/ 1976 figure. g/ Cases notified to PAHO/WHO, provisional figures. h/ Estimated data. i/ Newborns. j/ Reduction. k/ Absolute figure. l/ 80% of infants under 1 year.

7. TUBERCULOSIS

REGIONAL GOALS: To reduce mortality from tuberculosis by between 50% and 65%. To vaccinate with BCG 80% of children under 15 years. To seek to treat all the detected cases of tuberculosis, mainly by utilizing the techniques and activities of the ambulatory medical care services. To carry out bacilloscopic examinations of 60% to 75% of persons with respiratory symptoms lasting more than four weeks. All these activities should be part of duly qualified general health services.

The majority of the countries of the Region consider tuberculosis an important problem and are continuing to do so despite the undeniable progress achieved over the past 20 years. Around 1971 the total number of cases notified in the Region averaged 195,000 a year, 80% of them being in Latin America and the Caribbean and the other 20% in North America. In 1979 the total number of cases notified was 160,000 again with 80% of them in Latin America and the Caribbean and the rest in North America. These figures imply rates of 53.7 and 36.2 new cases per 100,000 population in Latin America and the Caribbean, in 1971 and 1979, and 17.2 and 12.4 per 100,000 in North America in the same two years.

Aggregate tuberculosis mortality data as of the end of the decade are not available; however, the following inferences can be drawn from the figures provided by the countries in this evaluation. In the United States, tuberculosis mortality fell from 2.2 in 1971 to 1.4 per 100,000 inhabitants in 1977; hence a net reduction of 36%, although still below the Ten-Year Plan goal of 50% to 65% reduction. In Latin America and the Caribbean, eight out of 21 countries are probably achieving reductions of 50% or more.

Regarding vaccinations with BCG, of 17 reporting countries only five have exceeded the goal of vaccinating 80% of children under 15 and another two are over 70%. The rest of the countries show figures from 6% to 58.6%, which means that this particular goal of the Ten-Year Plan has not been achieved.

Most of the countries are achieving the goal of starting ambulatory treatment of all new cases detected and are thus on their way to the goals set in the Ten-Year Health Plan. Suitable data for evaluating bacilloscope use in diagnosing tuberculosis in patients seen for the first time or in persons with respiratory symptoms of more than four weeks' duration are not available.

As regards the proportion of beds available for tuberculosis care, the data provided by the countries appear to indicate that the number of beds has not increased and may even be declining owing to the new rules for treatment of new tuberculosis cases. Treatment is now primarily ambulatory.

SUMMARY: The significance of tuberculosis as a morbidity and mortality problem has continued to decline; however, the goals proposed in the Ten-Year Health Plan for the Americas have not been achieved in the majority of the countries or in the Region as a whole and the disease is therefore still a health problem of concern to many countries.

	8. Enteric diseases								
	Priority assigned to the problem			8.1 Deaths per 100,000 inhabitants			8.2 Deaths due to diarrheal diseases in children under 5 years per 100,000 children in age group		
	High	Average	Low	1971	1978	Nat. goal 1980	1971	1978	Nat. goal 1980
Argentina	x			23.7[a]	15.3[b]			119[b]	
Bahamas	x			-	-	-	-		
Barbados		x		3	2	52[c]	11.6	9.1	50[c]
Bolivia									
Brazil	-	-	-	95.6[d]	36.7[b,d]		845.7	227.9[b,i]	
Canada									
Chile	-	-	-	37.8[e]	2.4[f]		243.8[e]	72.4[e]	
Colombia	x			62.8	49.6		294.2	297.3[b]	
Costa Rica	x			69	9.9	50[c]	355	72.5	50[c]
Cuba	x			17.6	4.9	-	114.8	29.1	
Ecuador	x			119.7	116.2[b]	60	119.3	104[b]	55
El Salvador		x		123.4	83.6	75	492.5	387.4	350.5
United States	x			1.3	0.9[b]	0.8	5.4	4.7[b]	4.6
Guatemala	-	-	-	264.6	165.1	25[c]	779.2	626.8	
Guyana	-	-	-	38.7	58.3		178.8	295.5	
Haiti	-	-	-		15.2			14.5	
Honduras	x			101.5	78.2[b]	61.6	331.8	299.6[b]	199.1
Jamaica	-	-	-	36.5	21.7[b]			231.7[b]	
Mexico	x			140[g]	93.5[h]			373.5[h]	
Panama	-	-	-	38.8	8.3	19	176.1	84.3	100
Paraguay	x			123.9	98	39.9	312.3	283.7	
Peru	x			73.2	107.8	107	362.2	544.4	544
Dominican Rep.	x			50.7	29.1	40[c]	275.7	145.1	40
Suriname	x				14.9[i]	-		98.8[i]	
Uruguay	-	-	-	11.4	14	11	99.8	113	80
Venezuela	x			40.4	31.4	50[c]	558.6	433.1	30
Trinidad & Tobago	x			26.7	24.6	13	212	214.1	10

a/ 1970 figure. b/ 1977 figure. c/ Percentage reduction. d/ Data from state capitals. e/ Source: Health Conditions in the Americas, 1969-1972, PAHO/WHO, Scient. Publ. No. 287. f/ Annual Mortality Questionnaire, PAHO/WHO. g/ First Evaluation of Ten-Year Plan. h/ 1975 figure. i/ 1977 and 1978. j/ Does not include the data for Rio de Janeiro, Espirito Santo and Santa Catarina.

8. ENTERIC DISEASES

REGIONAL GOAL: To reduce present mortality from enteric infections by at least 50%, especially among infants and children.

Enteritis and other diarrheal diseases have the same significance at the end of the decade as they did at its beginning. There are still a major cause of mortality, especially among young children. Most of the countries assign high priority to this problem and considerable efforts were in fact made during the decade to extend coverage of the sanitation services and care for children suffering from diarrheal diseases and malnutrition, but judging by the figures available, the motality rates for children under five per 100,000 of that age group are still high in most of the countries of Latin America. Only five countries have managed to better the regional goal of 50% reduction.

The 1971 mortality rates per 100,000 inhabitants in 20 Latin American and Caribbean countries varied between 3 and 264.6, with a median of 56.7 per 100,000. The five countries forming the upper quartile had rates of 120 per 100,000 or more. In 1978 the rates were lower, ranging from 2 to 165.1 per 100,000 with a median of 36.7, while the five countries in the upper quartile showed rates between 93.5 and 165.1 per 100,000.

As regards mortality among children under five years in 1971, the 17 countries of Latin America and the Caribbean that provided data for this evaluation showed rates between 11.6 and 845.7 deaths of children under five per 100,000 children of that age group; the median was 294.2 per 100,000. The four countries forming the upper quartile had rates in excess of 492.5 per 100,000 children. In 1978 there was a marked reduction in these rates except for certain countries which showed increases that were probably due to improvements in their mortality records. The mortality rates for children under five per 100,000 children ranged between 9.1 and 625.8 with a median of 227.9, while the countries in the upper quartile showed rates of from 363.5 to 626.8 per 100,000 children.

SUMMARY: Enteric diseases are still a major cause of morbidity and mortality in Latin America and the Caribbean. The mortality is concentrated mainly among children under five years of age, in which age group the rates are still very high. The regional goal of reducing this mortality by at least 50% has not been achieved.

I. SERVICES TO INDIVIDUALS
A. COMMUNICABLE DISEASES

	9. Venereal Diseases								
	Priority assigned to the problem			9.1 Cases of Syphilis per 100,000 inhabitants			9.2 Cases of Gonorrhea per 100,000 inhabitants		
	High	Average	Low	1971	1978	Nat. goal 1980	1971	1978	Nat. goal 1980
Argentina	x			30.8[a]	45.9[b]	50	50.4[a]	59.1[b]	65
Bahamas	x			616.4	180.1	100	151.8	661.1	500
Barbados		x				c			c
Bolivia									
Brazil									
Canada									
Chile	-	-	-	12.1	94.4			97.0[b,e]	
Colombia		x		64	73.2		164.8	172	
Costa Rica	x			84	142		179	462.5	
Cuba	x			11.1	43.9	40	4.3	105.5	150
Ecuador		x		24[d]	26.8	14.5	74.0[d]	44.7	22
El Salvador		x		252.1	193.6	c	226.9	112.2	c
United States	x			47	30	27	328.1	468.3	460
Guatemala	-	-	-	29	18		73.2	39.8	c
Guyana	-	-	-	253.4	175.5	c			
Haiti	-	-	-		24.6				
Honduras		x		94.8	76	60	188.5	174.4	164.4
Jamaica	-	-	-	140[d]			1,340[d]		
Mexico	x			24[d]	11.2[e]		26[d]	68[i]	
Panama	-	-	-	59.4	69.2	45	141.4	200.6	99
Paraguay		x		153.4	60.2	60	94	30.6	30
Peru		x		26.7	13.9	10.5	51	27.5	25
Dominican Rep.	x			264.3	410.1	f	531.6	609.7	f
Suriname	x			-	182g			130.2g	
Uruguay	-	-	-	117	86.8	c	172	61.4	c
Venezuela	x			110.4	124.6	c	333.9	208.2	c
Trinidad & Tobago	x			63.7	89.8	55	837.7	267.3	250

a/ 1970 figure. b/ 1977 figure. c/ Reduction or percentage reduction. d/ Source: "Evaluation of the Ten-Year Health Plan for the Americas, 1971-1980." e/ Cases notified to PAHO/WHO. f/ To bring 80% of the cases of infection under control and to track down 50% of their contacts. g/ 1977 and 1978. h/ Absolute figures. i/ 1975 figure.

9. VENEREAL DISEASES

REGIONAL GOAL: To reduce the incidence of venereal diseases, in particular gonorrhea and syphilis.

Most of the countries assign high or average priority to venereal diseases, thus recognizing that they form a national problem. During the four-year period 1969-1972 an annual average of 185,718 cases of syphilis was notified in the Region, the breakdown of which by subregions show average annual rates of 42.1 per 100,000 inhabitants for North America, 49.8 for Middle America and 57.4 for South America. In the following four-year period, 1973-1976, the annual average notified was 180,145 with estimated average rates per 100,000 inhabitants of 36.6, 46.4 and 63.6, respectively, for North America, Middle America and South America. Up to 1976, therefore, there was a downward trend in the incidence of syphilis in North and Middle America, but not in South America where the rates moved slightly upward. In 1971 the rates reported by 19 countries ranged between a minimum of 11.1 and a maximum of 616.4 cases of syphilis per 100,000 inhabitants, with a median of 64 per 100,000. In 1978 the rates were between 11.2 and 410.1 cases per 100,000, with a median of 75 per 100,000. The pattern in these rates from one year to another is very erratic, with ten countries showing a net decrease while in the other nine syphilis incidence appears to have risen. As is known, the notification of venereal diseases still suffers from any shortcomings and no definite conclusions can be drawn as to whether there was an increase or a decrease in incidence during the decade, although there are some indications that the slight downward trend noted in the first part of the decade may in fact be continuing.

As regards gonorrhea, in 1971, according to the data provided by 18 countries for this evaluation, the variation in rates is very considerable, ranging from 4.3 to 1,340 cases per 100,000 inhabitants with a median of 165.4 per 100,000. The countries in the upper quartile show rates in excess of 328 cases per 100,000. In 1978 the same variability is apparent in the rates, which range in that year from 27.5 to 661.1 per 100,000 inhabitants, with a median of 105 per 100,000. The countries in the upper quartile have rates in excess of 208.2 per 100,000 and only six of the 17 countries show a slight drop in the incidence of gonorrhea. The morbidity rates are up in all the other countries.

SUMMARY: Venereal diseases are still a significant problem in the countries, in some of which their incidence has been rising instead of going down. However, Region-wide it would appear that the slight downward trend that began at the end of the previous decade and was maintained during this decade is still continuing.

	10 Yaws						11. Pinta			
	Priority assigned to the problem			10.1 Number of cases			11.1 Number of cases			
	High	Average	Low	1971	1978	Nat. goal 1980	1971	1978	Nat. goal 1980	
Argentina	-	-	-	-	-	-	-	-	-	
Bahamas	-	-	-	-	-	-	-	-	-	
Barbados	-	-	-	-	-	-	-	-	-	
Bolivia										
Brazil	-	-	-	-	-	-	-	-	-	
Canada										
Chile	-	-	-	-	0	-	-	0	-	
Colombia			x	18	127	-	-	-	-	
Costa Rica	-	-	-	-	-	- [a]	-	-	- [a]	
Cuba	-	-	-	-	-	-	-	-	-	
Ecuador			x	-	-	-	-	-	-	
El Salvador	-	-	-	-	-	-	-	-	-	
United States			x	-	-	-	-	-	-	
Guatemala	-	-	-	0	0	[a]	0	0	[a]	
Guyana	-	-	-	-	23 [b]	-	-	-	-	
Haiti	-	-	-	-	11	- [a]	-	-	-	
Honduras	-	-	-	-	-	-	-	-	-	
Jamaica	-	-	-	1	-	-	-	-	-	
Mexico		[c] x	[d] x	-	-	-	-	172 [g]	-	
Panama	-	-	-	0	0	0	0	0	0	
Paraguay	-	-	-	-	-	-	-	-	-	
Peru			x	23	2	0	138	45	40	
Dominican Rep.	-	-	-	-	-	-	-	-	-	
Suriname		[d] x	[c] x	-	-	-	-	-	-	
Uruguay	-	-	-	-	-	-	-	-	-	
Venezuela	-	-	-	0	0	[e]	0,1g	0.01g	[e]	
Trinidad & Tobago	-	-	x	-	-	-	-	-	-	

a/ Maintain eradication. b/ 1959 figure. c/ For pinta. d/ For yaws. e/ Epidemiologic surveillance. f/ 1975 figure. g/ Rates per 100,000 inhabitants.

10. YAWS

REGIONAL GOAL: Eradication.

During the decade, cases of yaws occurred in some Caribbean islands, Colombia, Ecuador and Peru. This disease is no longer a significant health problem and is not considered as such in any of the countries participating in the evaluation. The regional goal of eradication has not been met and today, as before, greater attention is called for in the clinical and epidemiologic areas, together with better laboratory services to determine the true seroepidemiologic status of the disease, chiefly in the countries with the largest number of cases, viz. Colombia, Ecuador and Trinidad and Tobago.

11. PINTA

REGIONAL GOAL: Control and, if possible, eradication.

Pinta only occurred in three countries during the decade: Mexico, Peru and Venezuela. Mexico set eradication as its goal for 1980 and Peru aimed at reducing the number of cases by almost one-third. The former has not yet accomplished eradication but Peru, on the other hand, had reduced the number of cases by over two-thirds. Venezuela did not set goals.

I. SERVICES TO INDIVIDUALS
A. COMMUNICABLE DISEASES

12. Leprosy

	Priority assigned to the problem			12.1 New cases diagnosed per 100,000 inhabitants			12.2 Cases recorded per 100,000 inhabitants (prevalence)			12.3 Infectious cases under treatment (percentages)			12.4 Contacts under surveillance and treatment (percentage)		
	High	Average	Low	1971	1978	Nat. goal 1980	1971	1978	Nat. goal 1980	1971	1978	Nat. goal 1980	1971	1978	Nat. goal 1980
Argentina				2.8[a]	2.3[b]	2.5	75	69[b]	77	a,k	k	78	a,k	k	30
Bahamas			x	1.1	0.4	0.3	-	29	-	-	13	-	-	-	-
Barbados		x		-	1	c	-	-	-	100[i]	-	100	...	-	-
Bolivia															
Brazil	-	-	-	6.2	10.3	c	134	133	c	60	70	100[i]	-	39	45
Canada															
Chile	-	-	-	-	1[d]	-	0.2	0.13	-	100	100	-	-	-	-
Colombia		x		5.3	3.2	2.9	87	79	80	84	89	100	70	90	90
Costa Rica	x			1.4	1.5	b	28	21.8	c	100	100	100	58	88	80
Cuba	x			3.7	3.9	3.5	51.4	59.2	58	99	99	99	86	88	90
Ecuador	x			3	1.8[b]	-	1.6	1.3[b]	0.8	81	85[b]	43	100	100[b]	-
El Salvador			x	0.8	-	-	-	-	-	-	-	-	100	-	-
United States		x		0.06	0.08	0.08[e]	...	...	...	100[i]	...	...	...	...	...
Guatemala	-	-	-	-	-	c	-	-	c	25[i]	-	75	-	-	75
Guyana	-	-	-	7.6	4.9	-	11.5	80.5	-	27	30	-	...	...	-
Haiti	-	-	-	-	0.04	-	-	-	-	-	-	-	-	-	-
Honduras			x	0.6[f]	0.06[f,b]		22.3[f]	12[f,b]		100	10	100	75	3	75
Jamaica	-	-	-	0.8	1.9[b]	-	-	-	-	38[i]	-	-	-	-	-
Mexico	x			-	1.38	-	-	258	-	75[i]	73[g]	-	-	60[g]	-
Panama	-	-	-	0	0	0	0	0	0	100[i]	0	0	0	0	0
Paraguay		x		9.2	8.8	c	199.5	176.2	150	57[i]	76	-	73[h]	71	-
Peru		x		6.4	11.9[i]	20	29.6[i]	28.8[i]	30	65	67	100	29	28	38
Dominican Rep.	x			7.8	7.9		42.4	91		88	93		56	53	
Suriname	x			-	29.5[i]	-	-	-	-	-	-	-	-	6	-
Uruguay	-	-	-	0.18	0.8	-	-	18	-	-	100	-	-	60	-
Venezuela	-	-	-	4.2	2.9	2.7	143	111	108	62	77	80	21	16	70[m]
Trinidad & Tobago	x			6.39	3.8	7.1	120	72.1	91	80	-	95	80	71	75

a/ 1970 Figure. b/ 1977 figure. c/ Reduction. d/ Absolute figure. e/ Approximately 80% of the cases are imported. f/ Incidence rates are low because case detection activities have been cut back and because the disease is a regional problem. g/ 1975 figure. h/ Relates to 6 departments. i/ From First Evaluation of Ten-Year Plan. j/ Figures under-recorded. k/ Between 1971 and 1975 the Anti-Leprosy Campaign was not carried out. l/ 100% of the new cases and 80% of the old ones are under treatment. m/ Contact surveillance being checked, figures do not tally with present situation.

12. LEPROSY

REGIONAL GOAL: To reduce the incidence and prevalence of leprosy, with a view to the consequent decrease in disabilities resulting therefrom.

Leprosy is a problem that is present in 31 countries and territories of the Region. In 1971 there was a total of 195,234 cases recorded and 8,275 cases were notified in 25 of the said 31 countries and territories. A total of 54% of these cases were lepromatous and it was estimated that 72% of the recorded cases were under control. The number of contacts was 639,863, 36.9% of whom were under surveillance.

By the middle of the decade the estimated number of cases in the Region was 241,000, of which 162,000 or slightly more than two thirds were under control. According to data from 24 sets of national records, 54% of the cases were lepromatous and 22% tuberculoid.

Apart from a few exceptions, the numbers of new cases diagnosed per 100,000 inhabitants in 1978 do not bear any relationship to those reported in 1971; this is due to the different phases reached by the leprosy control programs in the countries. In 1971, the number of new cases diagnosed in 22 countries reporting varied between 0 and 9.2 with a median of 1 per 100,000. The five countries in the upper quartile showed between 6.2 and 9.2 new cases diagnosed. In 1978, the new cases diagnosed in 22 countries ranged between 0 and 29.5 per 100,000 with a median of 1.6 per 100,000. The five countries forming the upper quartile showed rates of 7.9 to 29.5 new cases per 100,000 inhabitants, which indicated that in some of those countries the case search campaign had been intensified. The prevalence figures obtained from the case records of 13 countries in 1971 were between 0.2 and 199.5 patients per 100,000 inhabitants. In 1978 ten of these countries showed reductions of between 1% and 46% in the number of cases recorded per 100,000; the other three, on the other hand, showed increases. Finally, a further three countries that did not have records in 1971 subsequently organized systems for the purpose which were operational in 1978. The prevalence levels indicated by the records of these 16 countries in 1978 ranged from a minimum of 0.13 per 100,000 to a maximum of 176.2 per 100,000, with a median of 44 per 100,000.

According to the information available for 1971, seven out of 18 countries had all their infectious cases under treatment and eight had at least 80% under treatment. For 1978, these data are only available for 15 countries, only four for which had all their infectious cases under treatment while six had fewer than 80% under treatment.

The data furnished by the countries regarding the proportion of contacts under surveillance and treatment are very sparse and show extensive variations for both 1971 and 1978. Only four out of 13 countries reporting stated that over 80% of contacts were under surveillance and treatment, while the percentages for the other nine ranged between 3% and 71%.

SUMMARY: A slight upward trend in leprosy incidence rates was noted during the decade, with erratic variations in the countries owing to the different stages reached in the leprosy control programs. The data available suggest that the Ten-Year Plan goal has not been reached.

I. SERVICES TO INDIVIDUALS
A. COMMUNICABLE DISEASES

	13. Typhus (louse-borne)						14. Schistosomiasis						15. Onchocerciasis					
	Priority assigned to the problem			13.1 Number of cases			Priority assigned to the problem			14.1 Known cases per 100,000 inhabitants (prevalence)			Priority assigned to the problem			15.1 New cases per 100,000 inhabitants (incidence)		
	High	Average	Low	1971	1978	Nat. goal 1930	High	Average	Low	1971	1978	Nat. goal 1980	High	Average	Low	1971	1978	Nat. goal 1980
Argentina							x											
Bahamas			-	-	-	-			-	-	-				-	-	-	-
Barbados	-	...	-	-	-	-	-	...	-	-	-	-	-	...		-	-	-
Bolivia																		
Brazil	-	-	-	-	-	-	-	-	-	244	277b	-	-	-	-	-	-	-
Canada																		
Chile	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-
Colombia			x	60	-	-	-	-	-	-	-	-	-	-	-	-		-
Costa Rica	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cuba	-	-	-	-	-	-	-	-	-	-	3.3	-	-	-	-	-	-	-
Ecuador			x	84	-				x	-	-	-			-	-	-	-
El Salvador	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
United States			x	...	...	...			x	...	...				x	...	...	...
Guatemala	-	-	-	13	4		-	-	-	-	0.1f		-	-	-	288.6	107.8	50
Guyana	-	-	-	-	-	-	-	-	-	-	-	-	-	...				
Haiti																		
Honduras	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Jamaica	-	-	-	-	-	-	-	-	-	-	-	-	x			-	-	-
Mexico			x	-	-	-			x	-	-	-	x			631d	0.1g	-
Panama	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Paraguay																		
Peru	x			79	14	10			x	-	-	-			x	-	-	-
Dominican Rep.	-	-	-							13d	6e		-	-	-	-	-	-
Suriname	-	-	-	-	2a	-	x			-	236.8				x	-	-	-
Uruguay	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Venezuela	-	-	-		0		-	-	-	104.5	-	-	-	-	-	16.9	7.3	5
Trinidad & Tobago			x	-	-	-			x	-	-	-			x	-	-	-

a/ 1977 and 1978. b/ 1977 figure. c/ Source: Cases notified to PAHO/WHO. d/ Source: "Evaluation of the Ten-Year Health Plan for the Americas, 1971-1980." e/ 1979 figure. f/ Source: Survey in an area of high prevalence in the country. g/ 1975 figure.

13. TYPHUS

REGIONAL GOAL: To reduce incidence.

Between 1971 and 1977 a yearly average of 161 cases of typhus was notified in the Region. These cases were concentrated in the mountainous and upland plateau regions of Bolivia, Ecuador, Peru and Guatemala. The numbers of cases notified in 1978 and 1979, respectively, fell to 33 and 94 altogether, concentrated in the same countries. Although these figures are clearly lower than those of the preceding years, this is not a systematic reduction and it can not be assumed that it will continue in the future.

14. SCHISTOSOMIASIS

REGIONAL GOAL: To reduce incidence.

Schistosomiasis is an endemic disease in the northern and central regions of Venezuela, in large parts of Brazil, the coastal region of Suriname and various Caribbean islands. In 1971 only three countries reported the presence of recorded cases and one was planning to make surveys or prevalence prior to initiating control programs. All that can be concluded from the data provided by four countries for 1977 and 1978 is that prevalence declined in the Dominican Republic but increased in Brazil, while Cuba and Suriname do not have previous statistics with which comparisons can be made.

15. ONCHOCERCIASIS

REGIONAL GOAL: To reduce incidence.

Onchocerciasis is endemic in three countries and its incidence in the others is not known. The incidence rates in the three countries mentioned were lower in recent years than they were in 1971.

I. SERVICES TO INDIVIDUALS
A. COMMUNICABLE DISEASES

	16. Chagas' disease						17. Jungle Yellow Fever									18. Plague					
	Priority assigned to the problem			16.1 Known cases per 100,000 inhabitants (prevalence)			Priority assigned to the problem			17.1 Number of cases			17.2 Existence of vaccination programs for exposed population			Priority assigned to the problem			18.1 Number of cases		
	High	Aver.	Low	1971	1978	Nat. goal 1980	High	Aver.	Low	1971	1979[e]	Nat. goal 1980	1971	1979	Nat. goal 1980	High	Aver.	Low	1971[e]	1979[e]	Nat. goal 1980
Argentina	-	-	-	10.1	25.2	25	-	-	-	-	-	-	-	-	-	-					
Bahamas			x	-	-	-			x	-	-	-	-	-	-	-	-	-	-	-	-
Barbados	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bolivia											10								19	10	-
Brazil	-	-	-	-	-	-	-	-	-	3	12	-	Sí	Sí	Sí	-	-	-	146	-	-
Canada																					
Chile			x	-	-	-	-	-	-	-	-	-	No	No	No	-	-	-	0	0	0
Colombia			x	-	-	-	x			7	51	-	Sí	Sí	Sí			x	0	-	-
Costa Rica	-	-	-	-	-	-	-	-	-	-	-	-	No	No	No	-	-	-	-	-	-
Cuba	-	-	-	-	-	-	-	-	-	-	-	-				-	-	-	-	-	-
Ecuador		x		0.1	12.6[a,b]	-	x			3	14	-	Sí	Sí	Sí	x			27	-	-
El Salvador	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
United States			x	-	-	-			x	-	-	-	-	-	-			x	2	10[f]	10
Guatemala	-	-	-	0.3	0.2	c	-	-	-	-	-	-	Sí	Sí	Sí	-	-	-	0	0	-g
Guyana	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Haiti	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Honduras			x	1	0.9	0.5	-	-	-	-	-	-	Sí	Sí	Sí	-	-	-	-	-	-
Jamaica	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mexico			x	-	-	-			x	-	-	-	-	-	-			x	-	-	-
Panama	-	-	-	3.3	3.4	-	-	-	-	-	-	-	Sí	Sí	Sí	-	-	-	0	0	0
Paraguay	x			1.4	0.2	-	x			-	-	-	No	No	No	-	-	-	-	-	-
Peru		x		0.5	0.6	0.6	x			-	97	10	Sí	Sí	Sí	x			22		4
Dominican Rep.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Suriname			x	-	-	-	x			-	-	-	-	-	-			x	-	-	-
Uruguay	-	-	-	728[a]	781	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Venezuela	-	-	-	d	d	-	-	-	-	-	3	-	-	-	Sí	-	-	-	-	-	-
Trinidad & Tobago			x	-	-	-	x			-	17	0	Sí	Sí	Sí			x	-	-	-

a/ 1979 figure. b/ Investigation limited to population of 100,000. c/ To reduce morbidity. d/ The prevalence of infection around 1970 is estimated at 40% of the rural population (endemic area), 1,200,000 infected persons in the country (serologic survey, nil reactions), 500 new cases of cardiopathy due to Chagas' disease recorded per year by the cardiovascular care system, 600 hospital discharges, 500 deaths per year due to cardiopathy caused by Chagas' disease. e/ Cases notified to PAHO/WHO. f/ The average age of cases is 3 years. g/ To maintain eradication.

16. CHAGAS' DISEASE

REGIONAL GOALS: To reduce incidence and carry out studies to learn more about its frequency and distribution. To promote control programs.

Cases of Chagas' disease occur in the majority of the countries of Central and South America, in which it is widely distributed in extensive rural areas. At the beginning of the decade the number of infected persons in the Region was estimated at 7 million. Going by the information provided by the countries for recent years, it is just as difficult today as it was then to present a precise picture of the disease's distribution because the prevalence and morbidity data are incomplete and fragmentary. Also, the majority of the countries assign the problem low priority although there are at least twelve in which epidemiologic research is being pursued and various others in which control campaigns are underway. The sparse data provided by the countries for this evaluation are insufficient for ascertaining whether the prevalence of the disease has been reduced in accordance with the goal of the Ten-Year Plan.

17. JUNGLE YELLOW FEVER

REGIONAL GOAL: To reduce to a minimum the morbidity and mortality caused by jungle yellow fever.

Since 1954 yellow fever has occurred solely in its jungle form in 11 countries of the Region. In the first nine years of the decade 1971-1980 a total of 1,130 cases was notified, i.e., an annual average of 126. During the previous decade, 1961-1970, the total cases notified in the Region numbered 957, hence an average of 100 a year. The problem has therefore grown and also assumed greater complexitiy owing to higher Aedes aegypti infestation, the changes in the habits of mosquitos traditionally considered to belong to the jungle, the resistance acquired by the vector and the increase in the populations at risk.

All the countries concerned state that they have vaccination programs for their exposed populations, but vaccine availability does not appear to be sufficient to cope with a possible urban epidemic.

18. PLAGUE

REGIONAL GOAL: To keep enzootic plague areas under control.

The zones where plague is endemic in the Region are located on the border between Peru and Ecuador, in the southeast of Bolivia, the northeast of Brazil and in the west of the United States. Between 1971 and 1979, 1,832 cases of plague were notified in these five countries, i.e., an average of 204 cases per year, whereas between 1961 and 1970 the total was 5,019, i.e., an average of 502 cases per year. There has therefore been a considerable decrease between the two decades and in the closing years of the 1970's there was a sizable reduction in the enzootic area. Human plague cases in the two-year period 1978-1979 were only one-fifth of the number in 1970 1971, hence convincing evidence that the goal of the Ten-Year Health Plan for the Americas is being achieved.

19. *Aedes aegypti*

	Priority assigned to the problem			Area originally infested (in km²)	Area in maintenance phase (percentage)			Area in consolidation (percentage)			Area in attack phase (percentage)			Area in preparatory phase (percentage)		
	High	Average	Low		1971	1978	Nat. goal 1980	1971	1978	Nat. goal 1980	1971	1978	Nat. goal 1980	1971	1978	Nat. goal 1980
Argentina	x			1,000,000	100	100	100									
Bahamas		x		-	-	-		-	-		-	-	-	-	-	-
Barbados	-	-	-	430	-	-	-	-	-	-	100	100	100	-	-	-
Bolivia																
Brazil	x			933	100	-	100	-	-	-	-	100[f]	-	-	-	-
Canada																
Chile			x	104,373	100	100	-	-	-	-	-	-	-	-	-	-
Colombia	x			345,000	-	-	-			8		15[c]	7	100	85[c]	85
Costa Rica	x			30,000	-	-	-	-	90	100	-	10	-	-	-	-
Cuba	-	-	-	100,000	-	a	a	-	-	-	-	-	-	-	-	-
Ecuador	-	-	-	-	100	100	100	-	-	-	-	-	-	-	-	-
El Salvador	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
United States			x	1,400,000	-		b		-	b	-	-	-	-	-	-
Guatemala	-	-	-		-	15[c]	10	100	-	-	-	75[c]	90	-	10[c]	-
Guyana		x		17,699	-	-	-	-	87[c]	e	100	13[c]	-	-	-	-
Haiti	x															
Honduras	x			64,929	-	-	-	-	-	-	-	31	68	-	-	32
Jamaica	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mexico	x			-	-	-	-	-	-	-	-	-	-	-	-	-
Panama	x			56,246 d	99	95	100	1	5	0	-	-	-	-	-	-
Paraguay		x		200,000	100	100	-	-	-	-	-	-	-	-	-	-
Peru	x			638,000	-	39	100	-	-	-	-	-	-	-	-	-
Dominican Rep.	-	-	-	48,442	-	25	-	-	-	-	-	25	-	-	50	-
Suriname	x			48,500	2	2[c]	-	-	-	-	98	98[c]	-	-	-	-
Uruguay	-	-	-	-	10	10	30	-	-	-	-	-	-	-	-	-
Venezuela	-	-	-	-	-	-	-	-	-	-						
Trinidad & Tobago	x			-	-	-	-	-	-	-	-	100c	100	-	-	-

a/ Since 1974 only vector-control activities have been carried out. b/ No problem as such. c/ 1979 figure. d/ The country was reinfested in 1969 and 1972. e/ To improve the consolidation phase. f/ 1977 figure.

19. AEDES AEGYPTI

REGIONAL GOAL: To eradicate *Aedes aegypti* in the countries and territories which are still infested, and prevent its penetration into those from where it has been eliminated.

In 1971 the situation of the *Aedes aegypti* eradication programs was as follows: of 46 countries and territories of the area initially infested, 32 had programs underway, six were organizing their programs, seven were not doing anything and one had no data available. Of the programs underway, six countries and territories had reached the maintenance phase and were continuing with adequate surveillance. Another four had also reached this phase but their surveillance activities were not considered sufficient. Two political units were in the consolidation phase, and in both cases verification was adequate. Eight countries and territories including two with reinfestation foci were in the attack phase and receiving adequate coverage in their programs. A further 11 were also in the attack phase, but without sufficient coverage. Three political units were still in the preparatory phase; of these, two were with adequate coverage while the third needed to intensify its activities.

For the present evaluation data were received from 16 countries, four of which had 100% of their infested areas in the maintenance phase, one had 95% of its areas in maintenance and the other 5% in consolidation, while another five had between 2% and 39% in the maintenance phase. One country which in 1971 had 100% of its areas in maintenance had gone back to having them in attack in 1978. Only three countries had parts of their areas in the consolidation phase in 1978, the respective percentages being 5%, 87% and 90%. Nine countries had varying proportions of their originally infested areas in the attack phase: in the case of three of them all or nearly all of their areas were involved, while for the other six the percentages ranged from 10% to 75%. Finally, there were three countries with 10%, 50% and 85%, respectively, of their infested areas in the preparatory phase.

The Ten-Year Plan goal has not been achieved: on the contrary, reinfestation has occurred in various countries and has led to a series of problems, such as transmission of dengue in the countries and territories washed by the Caribbean, together with the potential danger represented by the size of the areas where yellow fever is endemic.

I. SERVICES TO INDIVIDUALS
A. COMMUNICABLE DISEASES

	20. Malaria														
	Priority assigned to the problem			Cases per 100,000 inhabitants (incidence)			20.1 Originally malarious areas in which eradication has been achieved (in maintenance phase)					20.2 Originally malarious areas in which transmission has been interrupted and where prospects for eradication with available resources are good (in consolidation phase)				
							Population (per 100,000 inhabitants)		Population of originally malarious area (percentage)			Population (per 100,000 inhabitants)		Population of originally malarious area (percentage)		
	High	Average	Low	1971	1978	Nat. goal 1980	1971	1978	1971	1978	Nat. goal 1980	1971	1978	1971	1978	Nat. goal 1980
Argentina	x			22	1.3		1,648	3,048	55	96	98	432	66	15	2	-
Bahamas			x	-	0.9	0.5						-	-	-	-	-
Barbados	-	-	-											-	-	-
Bolivia																
Brazil				191	250[a]		843	13,845[b]	2	29[a]		16,761	16,199[a]	42	35[a]	-
Canada																
Chile	-	-	-											-	-	-
Colombia	x			173.2	374.6[b]	280.7	-	-	-	-	-	8,650	11,802[b]	68	73[b]	73
Costa Rica	x			14.3	14.8	-	-	-	-	-	-	178	429	31	71	91
Cuba				0.1[c]	1.6[c]		8,692	907	100	100	100					
Ecuador	x			153.3	127.1[d]	70	...	...	...	...	...	1,521	1,933	42	42	42
El Salvador				1471	1524		-	-	-	-	-	-	-	-	-	-
United States			x	5.4[e]	0.8[e]		56,471	61,350	100	100						
Guatemala	x			396.8	236[f].4[b]						1					85
Guyana	x							868[b]		...[b]	h		5[b]		7[b]	i
Haiti				263.0	1,500						90.7					
Honduras	x			1873.3	1005	916.4						437	490	19	18	17
Jamaica				-	0.2[a]	-			-	-[a]	-	-	-	-	-	-
Mexico	x			85	28							11	22	46	66	
Panama	x			95.8	14.5		-	-	-	-	80		1,437		82	
Paraguay	x			17.9	5.4	1.6[f]	-	631	-	22.5	-	-	1,234		44	
Peru	x			84.5	360[g]	500	1,338	1,554	27	27	27	3,119	2,122	64	38	40
Dominican Rep.	x			64.6	298.8		3,593	4,956				280	45			
Suriname	x			228.9	412[b]		210	219[b]	76	76[b]		42	44[b]	15	15[b]	
Uruguay	-	-	-													
Venezuela																
Trinidad & Tobago		x		0.3	0.0[b]	0.0	1	1		100	100	-	-	-	-	-

a/ 1977 figure. b/ 1979 figure. c/ Imported cases. d/ 1980 figure. e/ Nonautochthonous cases. f/ Only for imported cases. g/ Cases under-recorded in 1978. h/ To maintain the areas in the maintenance phase. i/ To improve the maintenance phase.

20. MALARIA

REGIONAL GOALS: To prevent the reintroduction of malaria in the areas, with 81.1 million inhabitants, from which it has been eradicated. To achieve eradication in areas containing 74.5 million inhabitants where there are good prospects for doing so with available resources. To interrupt or focalize transmission in areas, with 12.4 million inhabitants, in which satisfactory progress has not been achieved because of financial problems. To reduce transmission to the lowest possible levels in areas, with 71.3 million inhabitants where progress depends on the solution of serious operational and technical problems.

Of the 34 countries and territories of the Region with originally malarious areas, 12 had achieved eradication before 1971 and two had reached the consolidation phase in their entire territory. The other 20 were applying attack measures in various degrees in their affected areas.

The number of malaria cases per 100,000 inhabitants in the Region, which in the previous decade had shown a rising curve throughout the first part of the period until it reached a maximum of 78 per 100,000 inhabitants in 1967, began an irregular decline as of that year until it came down to a minimum of 49 per 100,000 in 1974. The latter part of the 1970s was characterized by an upsurge of malaria cases, with 465,000 notified in the Region in 1978 and the half-million mark exceeded for the first time in 1979. In the first, second and third three-year periods of 1971-1980, malaria morbidity rates were 56.3, 60.2 and 71.9 per 100,000, respectively. The corresponding figures for North America were 0.5, 0.2 and 0.3; for Central America, on the other hand, they were 147.5, 170.4 and 190.8, which implies an increase of 29% between the first and third three-year periods of the decade. In South America the morbidity rates were 75.8, 71.4 and 87.1 per 100,000 in the three periods mentioned, hence an increase of 15% between the first and third periods. This deterioration in the malaria epidemiologic situation was due mainly to the fact that a group of countries (Bolivia, Colombia, El Salvador, Guatemala, Haiti, Honduras, Nicaragua and Peru) with a total population in excess of 39 million and making up 17.8% of the total malarious area, encountered serious technical, administrative, financial and operating problems in the execution of their campaigns. In another group of countries (Brazil, Ecuador, Mexico, Suriname and Venezuela), with over 95 million people in their malarious areas, i.e., 43.2% of the total population of malarious areas in the Americas, were faced with technical problems such as vector resistance to DDT in southern Mexico, resistance of P. falciparum to chloroquinine in the countries of South America, evasive behavior of vectors and serious human ecology problems. Although these problems are not easily solved, slow progress has been maintained because the programs are receiving adequate support and resources from the respective governments. A third group of countries, Argentina, Belize, Costa Rica, the Dominican Republic, French Guiana, Guyana, Panama and Paraguay, with a total population of over 14 million and containing 6.4% of the Region's total originally malarious area, also showed some worsening in their epidemiologic situation owing to a certain slackening of surveillance activities in some of them plus an increase in recent years in the number of imported cases. However, transmission in these countries is concentrated and no major difficulties are anticipated in eliminating the disease. In the twelve countries and territories where eradication has been achieved (Chile, Cuba, Dominica, Grenada, Guadeloupe, Jamaica, Martinique, Puerto Rico, Saint Lucia, Trinidad and Tobago, the United States and the Virgin Islands), which incorporate 32.6% of the malarious areas of the Americas with 72 million people living in them, transmission has not been reestablished although in 1978 there was a 58-case outbreak in Grenada, which was localized in a small area and considered to be of local origin.

	20. Malaria (Cont.)									
	20.3 Originally malarious areas in which satisfactory progress has not been made because of financial problems (in attack phase)					20.4 Originally malarious areas in which progress would depend on the solution of serious operational or technical problems (in attack phase)				
	Population (per 100,000 inhabitants)		Population of originally malarious area (percentage)			Population (per 100,000 inhabitants)		Population of originally malarious area (percentage)		
	1971	1978	1971	1978	Nat. goal 1980	1971	1978	1971	1978	Nat. goal 1980
Argentina	907	76	30	2	2	-	-	-	-	-
Bahamas	-	-	-	-	-	-	-	-	-	-
Barbados	-	-	-	-	-	-	-	-	-	-
Bolivia										
Brazil						8,051	1,788[d]	20	4[d]	
Canada										
Chile	-	-	-	-	-	-	-	-	-	-
Colombia	3,453	2,987[a]	27	19[a]	19	712	1,423[a]	6	9[a]	9
Costa Rica	-	-	-	-	-	390	179	69	29	9
Cuba										
Ecuador	2,124	2,626	58	58[b]	58		370[e]		8[e]	
El Salvador	3,136	3,906	100	100		807	1,021	26	26	
United States										
Guatemala	1,267	1,792[a]	61	68[a]		820	852[a]	39	32[a]	15
Guyana		23[a]		11[a]		23				f
Haiti						1,059	1,209	24	25	
Honduras	1,832	2,180	81	82	83	-	-	-	-	-
Jamaica	-	-	-	-	-	-	-	-	-	-
Mexico	8	7[c]	37	23		4	3	17	10	
Panama	-	-	-	-	-	1,420	321	100	18	20
Paraguay	-	-	-	-	-	1,958	476	82	17	
Peru	282	1,806	6	32	30	143	177	3	3	3
Dominican Rep.	110	91								
Suriname						23	24[a]	8	8[a]	
Uruguay										
Venezuela										
Trinidad & Tobago	-	-	-	-	-	-	-	-	-	-

a/ 1979 figure. b/ To maintain the same percentage. c/ Excludes the population of the NE watershed of the Gulf of Mexico and the Oaxaca Isthmus. d/ 1977 figure. e/ 1980 figure. f/ To reduce transmission in the malarious areas.

~~In 1978 the population of the Region living in areas classified as originally malarious numbered 220 million~~ (37.5% of the Region's total population). Forty eight percent of this figure (106 million) were living in originally malarious areas where the disease had already been declared eradicated, i.e., were in the maintenance phase of the program. A total of 27.1% (about 60 million) were in originally malarious areas then in the consolidation phase and the remaining 24.9% (54.8 million) in areas in the attack phase. In 1979, of the 513,214 cases detected with positive blood samples, 1.2% were in areas in the maintenance phase, 2.8% in areas in consolidation phase, 95% in areas in the attack phase and 1% in originally nonmalarious areas.

SUMMARY: Malaria began the decade with a declining trend that only continued till 1974, and has shown a rising incidence rate since 1975 which reached over 85 cases per 100,000 inhabitants out of the Region's total population, a figure which would consequently point to a rate of around 227 per 100,000 for the population of the originally malarious areas. Figures of this magnitude are the highest to occur in the Americas over the past 25 years.

This deterioration in the situation is due in large part to serious technical, administrative, financial and operating problems that have arisen in the malaria control problems of a group of countries (three Andean, four Central American and one Caribbean) which accout for almost two-thirds of all the Region's cases. There is also the fact that surveillance measures have been relaxed by another group of countries, while yet other countries ran into problems with higher resistance by the vectors to insecticides and by the plasmodium to chloroquinine.

In terms of averages, therefore, it has not proved possible to attain the goals set by the Ten-Year Health Plan for the Americas.

I. SERVICES TO INDIVIDUALS

B. MATERNAL AND CHILD HEALTH AND FAMILY PLANNING

	1. Mortality								
	1.1 Infant mortality under 1 year of age per 1,000 live births			1.2 Mortality in children 1-4 years per 1,000 children in the age group			1.3 Maternal mortality per 1,000 live births		
	1971	1978	Nat. goal 1980	1971	1978	Nat. goal 1980	1971	1978	Nat. goal 1980
Argentina	62[a]	45	40	3.4[a]	2.2	2	1.4	0.9	0.7
Bahamas	36	28.3[b]	20	1.6[b]	1.1[b]	0.8	-	0.4[b]	0.3
Barbados	29.2	28.8	c	1.2	1.4	c	0.8	0.7	
Bolivia									
Brazil	91.2	82.4	40	5.6	3.6	60	1.4	0.9	40
Canada									
Chile	70.5	38.7	33.2	3.3	1.5	1.8	1.4	0.9	0.9
Colombia	87	80[d]	-	6.4[a]	5.1[b]	-	2.2	1.8[d]	-
Costa Rica	56.4	22.3	30	4.3	1.1	55	1	0.4	c
Cuba	36.5	22.3	e	1	1.1	0.7	1	0.4	0.4
Ecuador	78.5	57.4[b]	-	16.2	10.2[b]	-	2	1.6[b]	-
El Salvador	52.5	50.8	50	8.7	4.3	4	1	0.8	0.8
United States	19.1	14[b]	-	0.8[h]	0.7[b]		0.2	0.1[h]	
Guatemala	87.1	73.3[b]	30	25	26[b]	40	1.6[g]	c	50
Guyana	40.7	50.6[f]	-	11.2[a]	-	-	0.6		...
Haiti	130	125		110	97			3.2	
Honduras	117.6	98.5[b]	70	20.7	14.3[b]	10.4	2.7	1.7[b]	1.7
Jamaica	27.1	...	-	4.6[h]	1.9[b]	...	1.4	0.5[b]	-
Mexico	-	49	-	-	4.3[f]	-	1.5[g]	1.1[f]	-
Panama	37.6	24.8	18.8	7.1	2	4.4	1.1	0.9	0.5
Paraguay	97.4	89.7	58.9	11.3	5.5	2.5	4.0	4.5	2.8
Peru	103 g	90.4 g	88.2	16 g	14 g	13.8 g	3.8 g	3.2 g	31 g
Dominican Rep.	49.1	31.2	-	7.5	3.1	-	1	0.6	-
Suriname	-	32.1[b]	-		1.8[b]	-	0.6 g	0.4[b]	-
Uruguay	40.4	38.2		1.3	1.1	-	0.8	0.6	-
Venezuela	49.8	33.9	29.9	5.3	3.4	2.2	0.9	0.6	0.5

a/ 1970 figure. b/ 1977 figure. c/ Percentage reduction. d/ 1979 figure. e/ Less than 25%. f/ 1975 figure. g/ Estimate. h/ Health Conditions in the Americas, 1969-1972, PAHO/WHO, Scientific Publication No. 287. i/ 1976 figure.

1. MORTALITY

REGIONAL GOAL: To reduce by 40% the mortality among children under one year of age within a range between 30% and 50%.

Infant mortality remained at relatively high levels throughout the 1961-1970 decade in most of the countries of the Region.

In North America where infant mortality had remained practically stationary in 1951-1960 at around 25 per 1,000 live births, a reduction occurred during the 1961-1970 decade that brought the rate down from 26.2 to 19.0 per 1,000 live births in 1971 (a 27% reduction). In Middle America the rates in 1960 and 1971 were 70.4 and 57.7 per 1,000 live births, respectively (18% reduction). For South America the respective figures for 1960 and 1971 were 84.9 and 64.7 per 1,000 live births (24% reduction).

Mortality records in Latin America are generally incomplete and although there was an improvement over the past decade the availability of statistics still leaves much to be desired in various countries. Accordingly, the infant mortality estimates are not very reliable. On the basis of the figures provided by 19 countries in response to the evaluation questionnaire for both 1971 and the latest year available, it can be concluded that only one country shows an increase in its infant mortality rate bewteen 1971 and 1975, and this apparent increase may be due to improvement in its mortality statistics. All the other countries show varying declines in infant mortality of between 2% and 86%. Only four (out of 18) countries show reductions of 50% or more, thus meeting the regional goal. Ten countries achieved reductions in excess of the 30% set as the minimum goal for the Region. The other eight are below 30%. It should be noted, however, that the countries which responded to the questionnaire have in general met their national goals, which were established on the basis of feasibility at the beginning of the decade. In 14 cases these national goals were below a 50% reduction during the decade and in nine cases they were even below the minimum 30% reduction set.

SUMMARY: It can be concluded that the countries of the Region met their own targets for reducing infant mortality and that the regional goal recommended was far beyond the ability of the countries as a whole.

1.2 Mortality among children aged 1-4 years

REGIONAL GOAL: To reduce mortality among children from 1-4 years of age by 60%, within a range of 50% and 70%.

The mortality rates in 1971 among children aged 1-4 years for North America, Middle America and South America, respectively, were 0.8, 7.8 and 6.5 per 1,000 children of that age group. These 1971 values were arrived at following a reduction of 27% in the rates in North America in the previous decade, and of between 39% and 40% in Latin America and the Caribbean. This clearly shows that the success obtained in the decade in reducing child mortality was greater than that achieved with infant mortality.

During the decade under review the achievements with regard to child mortality in the Region were more modest; of 20 countries providing data only six achieved reductions in excess of 50%, although it is noteworthy that two of these even exceeded 70%. At the other end of the scale, three countries were unable to manage reductions of more than 15% and a further three did not achieve any reduction. The median is around 33%. It should be noted, however, that of the various countries that posted small reductions nervertheless achieved their own national goals, which were set below the levels recommended for the Region.

SUMMARY: The countries of the Region managed to satisfactorily meet their national goals but were not able as a whole to achieve the regional goals set.

1.3 Maternal mortality

REGIONAL GOAL: To reduce maternal mortality by 40%, with a range between 30% and 50%.

In 1971 maternal mortality was 1.9, 13.3 and 17.1 per 1,000 live births in North America, Middle America and South America, respectively. These levels were reached following reductions of 50%, 27% and 14.5% respectively, for the same areas in the previous decade. As is apparent, the regional goal aimed at exceeding the reductions achieved in the preceding decade; nevertheless, four out of every five countries adopted the regional goal, as can be seen from the first evaluation of the Ten-Year Plan.

The levels reached by 21 countries around 1978 ranged from between 0.4 and 4.5 maternal deaths per 1,000 live births. The median is 0.9 and the countries in the upper quartile have values above 1.6 per 1,000 live births. These values were achieved with reductions during the decade of between 12% and 64% in these 21 countries, with a median of 34%. The smallest reductions were in four countries which only managed 20% or less. The countries met the national goals they set for themselves in 1971; in general, it can also be concluded that the regional goal was largely achieved as regards the lower range of 30% specified in the Ten-Year Plan.

I. SERVICES TO INDIVIDUALS
B. MATERNAL AND CHILD HEALTH AND FAMILY PLANNING

	2. Service coverage								
	2.1 Pregnant women with prenatal care (percentage)			2.2 Deliveries in hospitals (percentage)			2.3 Women delivered under supervision (percentage)		
	1971	1978	National goal 1980	1971	1978	National goal 1980	1971	1978	National goal 1980
Argentina	-	-	-	81 f	88 g	90 g	-	-	-
Bahamas	-	48 a	60	-	89 a	90	-	95 a	95
Barbados	85	76	100	92	100	100	43	51	100
Bolivia									
Brazil	-	11	60	-	6	60	-	5	40
Canada									
Chile	-	78	90	84	90	91	-	85	90
Colombia	47 b	82 b,c	-		41 c	-	-	-	-
Costa Rica	53	85	75	74	82	85	4	2	40
Cuba	-	92	90	96	98	95	-	-	-
Ecuador	-	31 a	-	30 h	34 a		-	6 a	-
El Salvador	31 d	38 d	41	32 i	42 i	47	4	8	10
United States	98	-	...	99 f	99 e	...	100 f	100 e	...
Guatemala	18	23 a	51	18	18 a	46	-	5 a	40
Guyana	...	49 c	...	23	-	0	95	31 e	
Haiti		26	36		18				
Honduras	28	35 a	50	20	34 a	80	3	7 a	30
Jamaica	...	61 a	-	47	60 a		67	79 a	-
Mexico									
Panama	50	83	60	68	24	80	24	33	30
Paraguay	56	45	60	55	63	60	7	5	30
Peru	19	32	34	21	29	30	5	5	5
Dominican Rep.	-	57	60	49	44	50	8	25	30
Suriname									
Uruguay	-	70			94	0	5		
Venezuela	28	37	50	96	98	98	5	5	20

a/ 1977 figure. b/ Also includes postpartum care. c/ 1979 figure. d/ Prenatal care per 100 live births. e/ 1975 figure. f/ 1970 figure. g/ Deliveries in public and private hospitals. h/ 1972 figure. i/ Deliveries in Social Security and Health Ministry hospitals. j/ Excludes hospitals.

2. COVERAGE OF SERVICES

REGIONAL GOALS: To achieve coverage of 60% for prenatal care, of 60% to 90% for adequate care at delivery and of 60% for postpartum care. To achieve a coverage of 90% care for children under one year, of 50% to 70% for those from one to four years and of 50% for those five years of age.

2.1 Prenatal care

The proportion of expectant mothers with prenatal care in 1971, according to the data provided by 21 countries in the first evaluation of the Ten-Year Plan, was between 3.1% and 98.4% of pregnant women, with a median of around 31%. Six countries set the expansion of prenatal care coverage at between 50% and 55% and all the other countries adopted goals equal to or higher than the regional goal. Going by the data provided by 20 countries for this evaluation, only nine of them have exceeded or met the proposed regional goal. The proportion of pregnant women with prenatal care is shown as between 11% and 92% with a median of 49%, while for one-fourth of the countries it is 32% or less. The regional goal has clearly not been met, although in general terms the percentage of pregnant women with prenatal care rose in all the countries in the course of the decade.

2.2 Care at delivery

The proportion of deliveries that take place in hospitals was selected as the indicator for adequate care at delivery. The figures furnished by the countries in 1971 indicated a range of between 15% and 99.6% of deliveries taking place in hospitals, with a median of 47%. All the countries set themselves goals of increasing this percentage and four out of every five adopted the regional goal of between 60% and 90% hospital care at delivery. According to data from 21 countries, the proportion of deliveries in hospitals in 1978 was between 6% and 100% and only four out of every seven countries reported percentages of 60% or higher. The majority of the countries have not met the national goals they set for themselves at the beginning of the decade and, clearly, the regional goal is still far from being attained.

2.3 Postpartum care

The proportion of mothers receiving postpartum care in 1971 varied greatly among the countries of the Region. Only 16 countries provided data for that year, the percentages reported ranging from 2.1% to 85%; for almost two-thirds of the countries the figures were below 10%. In or around 1978 the situation had not changed to any significant degree; ten out of 17 countries reported coverage of less than 10%. The regional recommendation was thus far from being attained.

	2. Service coverage (cont.)					
	2.4 Children under 1 year under supervision (percentage)			2.5 Children 1-4 years under supervision (percentage)		
	1971	1978	National goal 1980	1971	1978	National goal 1980
Argentina	-	-	-	-	-	-
Bahamas			80	-	43 [a]	80
Barbados	70 [a]	81 [a]	100			100
Bolivia						
Brazil		30	70		8	50
Canada						
Chile		83	90		81	80
Colombia	72	94 [b]	-	28	40 [b]	
Costa Rica	16		90	16		50-70
Cuba		c			c	
Ecuador	42 [d]	66 [e]	-		17 [e]	
El Salvador	26	53	55	9	23	25
United States	f	f		f	f	
Guatemala	15 [d]	37 [e]	51		17 [e]	24
Guyana	27 [d]	61 [g]			15 [j,g]	...
Haiti		13	34			15
Honduras	43	58 [e]	60 [h]	18	21 [e]	30
Jamaica	44 [d]	70 [e]				
Mexico	30 [a]					
Panama	59	74	65	38	52	50
Paraguay	54	40	70	26	10	60
Peru	36	52	54	15	21	23
Dominican Rep.	20	92			21	
Surinama						
Uruguay						
Venezuela	28 [i]	29 [i]	50	3 [k]	2 [k]	20

a/ Public clinics. b/ 1979 figure. c/ On the average 10 check-ups are provided for each infant under 1 year. d/ Source: "Evaluation of the Ten-Year Health Plan for the Americas, 1971-1980." e/ 1977 figure. f/ Percentage of children under 5 who have seen a doctor: 1971, 87%; 1978, 90%. g/ 1975 figure. h/ Consultation/inhabitant ration. i/ Children under two years of age. j/ Excludes hospitals. k/ Children 2-6 years of age.

2.4 Coverage of infants under one year

In 1971, the proportion of children under one year covered in the 18 countries reporting in the first evaluation of the Ten-Year Plan varied between 15% and 80%, with a median of around 30%. All the countries set themselves goals of increasing these percentages but only one out of three went so far as to adopt the regional goal of 90% coverage for children of this age group.

In or around 1978, most of the countries providing data for this evaluation had raised the percentage of infants under one year with coverage. The figures were then between 13% and 94% with a median in the vicinity of 55%. One-fourth of the countries reported percentages of 30% or less.

The Ten-Year Plan goal was not generally achieved and most of the countries still have some way to go to attain their national goals.

2.5 Coverage of children aged 1-4 years

According to the responses from 18 countries, the proportion of children aged 1-4 covered in 1971 ranged between 5.1% and 87% with a median around 15%. All the countries set themselves goals of increasing this proportion and two out of three adopted the regional goal of coverage for 50% to 70% of this age group. Only two out of the 14 countries reporting in the present evaluation declare coverage in excess of 50%. Therefore, on the basis of existing data the regional goal has not only been achieved but is still quite far from being reached.

I. SERVICES TO INDIVIDUALS
B. MATERNAL AND CHILD HEALTH AND FAMILY PLANNING

	3. Intersectorial policy for protection of family, mothers and children				4. Intersectorial coordination for execution of specific programs			5. Information and services concerning problems relating to fertility and sterility (if national policy not opposed)		
	Clearly defined	Not clearly defined	None	Under study	Adequate	Partial	Little	Offered	Not offered	To be started or intensified
Argentina		x				x			x	
Bahamas	x				x				x	
Barbados		x			x			x		
Bolivia										
Brazil				x			x		x	
Canada										
Chile		x				x		x		
Colombia	x				x			x		
Costa Rica		x				x		x		
Cuba	x				x			x		
Ecuador		x				x				x
El Salvador		x			x			x		
United States	-	-	-	-	-	-	-	-	-	-
Guatemala		x				x		x		
Guyana	x [a]	x				x		x		
Haiti		x				x		x		x
Honduras	x				x			x		
Jamaica		x				x		x		
Mexico	x				x			x		
Panama	x [a]	x				x		x		
Paraguay		x		x			x		x	
Peru	x					x		x		
Dominican Rep.				x		x		x		
Suriname				x		x		x		
Uruguay		x					x		x	
Venezuela	x				x			x		

a/ In 1971.

3. INTERSECTORIAL POLICY AND COORDINATION

REGIONAL GOALS: To formulate an intersectorial policy for protection of the family, mothers and children which would include guarantees their civil and legal rights and protection of their economic and working rights. To provide adequate information and services related to fertility and sterility, whenever the national policies permit this.

3.1 Intersectorial policy

According to information provided by the 22 reporting countries, in 1961 only four of them had a clearly defined policy in this matter, ten had policies that were not clearly defined and the question was under study in a further four.

In 1979 the countries with specific policies number seven, while there are twelve whose policies are not clear and four that are studying the matter. As is apparent, the efforts to formulate an intersectorial policy on family, maternal and chilnd welfare made slow progress in the Region over the past decade.

4. INTERSECTORIAL COORDINATION

Besides a clearly defined policy, actions in the sphere of family, maternal and child welfare require implementation mechanisms that will function all the more efficiently the greater the coordination between the sectors involved in specific programs. According to information from 19 countries, intersectorial coordination was for the most part only partial in 1971. Only three countries rated it adequate while four stated it as very rare.

Coordination appears to have improved over the decade, because eight out of 23 countries refer to is as adequate, in twelve it is only partial and in three it is rare. Some progress has therefore been made in this direction in the Region as a whole.

5. INFORMATION AND SERVICES OF FERTILITY AND STERILITY PROBLEMS

The Ten-Year Plan recommends that the country establish plans and measures for comprehensive family welfare including, when not at variance with national policies, adequate information and services pertaining to fertility and sterility. In 1971 these services were being offered in 15 countries and a further two planned to start or intensify them. In 1979, the number providing such services was 17 (eight out of every ten) and two were planning to start or intensify them, while five did not provide services of this nature.

C. NUTRITION

	1. Protein-calorie malnutrition						2. Anemias in pregnant women		
	1.1 Children under 5 years with grade II malnutrition (percentage)			1.2 Children under 5 years with grade III malnutrition (percentage)			2.1 Pregnant women with nutritional anemias (percentage)		
	1971	1978	National goal 1980	1971	1978	National goal 1980	1971	1978	National goal 1980
Argentina									
Bahamas	...	0.1 [a]							
Barbados	15 [b]	3 [c]	d	10 [b]	0.3 [c]		6 [b]		
Bolivia									
Brazil	22 [e]	18	12 [d]	11 [e]	3	2	40	53	36 [d]
Canada									
Chile	2.6 [f]	2 [g]	3		0.3 [g]	1			
Colombia	9	9 [g]	6	1	4 [g]	1	31		
Costa Rica	12	10 [a]	30 [d]	2	1 [a]	85 [d]	33	-	30
Cuba									
Ecuador	10	10 [a]	8	1	1 [a]	1			
El Salvador	25	20 [h]		3	28 [h]	-		11	
United States	2	1 [g]	1	0.0	0.0 [g]	0.0	8		j
Guatemala	26	26 [g]		6	1	40 [d]	46 [e]	55 [h]	20 [d]
Guyana	16	8 [i,g]		2	1 [g]		55	67 [h]	
Haiti	37 [f]	24		15.7 [f]	3.2			38	
Honduras	27	29		3	3		32	32 [f]	
Jamaica	9 [a]	7	6	1.4 [a]	1	1	45 [e]	61	
Mexico	7 [e]			2.5 [e]	-		33 [e]		
Panama	11 [j]	19 [c]	10	1 [j]	2 [c]	75		20 [k,i]	
Paraguay	8.1 [e]	4 [h]	1.5	2.5 [e]	1 [h]	0.1	3	3	30
Peru	13.1 [e]	11 [f]	10	0.9 [e]	1 [f]	1	35 [l]	-	31 [m]
Dominican Rep.	23	26		4	3			63	-
Suriname		10 [f]		-	3 [f]				
Uruguay									
Venezuela	14.5 [e]			0.9 [e]					

a/ 1977 figure. b/ 1969 figure. c/ 1975 figure. d/ reduction. e/ Source: "First Evaluation of the Ten-Year Health Plan for the Americas, 1971-1980." f/ 1974 figure. g/ 1979 figure. h/ 1976 figure. i/ Percentage of cases notified by health clinics, for first visits by children of 0-4 years. j/ 1967 figure. k/ Prevalence goal for iron deficiency in population. l/ Nutritional iron anemia; 7% must be added for nutritional folic acid anemia and 28% for B-10 complex. m/ Nutritional iron anemia; 6% must be added for nutritional folic acid anemia and 25% for B-10 complex.

1. PROTEIN-CALORIE MALNUTRITION

REGIONAL GOALS: To reduce protein-calorie malnutrition among children under five by 30%, within a range between 10% and 50%. To reduce III degree protein-calorie malnutrition in children under five by 85%, within a range between 75% and 95%.

In 1971, the proportion of children under five with II degree protein-calorie malnutrition in 18 countries of Latin America and the Caribbean ranged from 7% to 37% with a median around 15%. In 1978, 12 countries showed reductions of from 15% to 80%, but in five there was no reduction at all. Only five out of 17 countries reported reductions in excess of the average regional goal of 30%. A further seven showed reductions of between 15% and 23%. The data of this question are not reliable and the progress made is short of the expectations held at the time the Ten-Year Plan was adopted.

No solidly based conclusions can be drawn regarding the fall in the proportion of children under five suffering from III degree protein-calorie malnutrition. In 1971 this proportion appeared to vary between 1% and 11% in 20 countries of Latin America and the Caribbean, while in 1979 it ranged from 0% to 28%. These figures are not considered reliable and the only inference that can be seemingly be drawn from the data obtained is that there is apparently a certain downward trend, although its magnitude can not be ascertained.

2. NUTRITIONAL ANEMIAS

REGIONAL GOAL: To reduce nutritional anemias by 30%.

The indicator used for nutritional anemias is the percentage of pregnant women with such anemias. This information is deficient, both for 1971 and for recent years. In 1971, eleven countries provided figures in percentages that ranged from 0.3% to 70% with a median of 33%. Seven countries set reduction of these rates as goals, two of these national goals being lower than the regional goals. In 1979, according to data from ten Latin American and Caribbean countries, the proportion of women with nutritional anemias varied between 3% and 77%. These figures, if accurate, would point to aggravation of the problem, although they are more likely to be the result of improved data systems. Nor can firm conclusions be therefore drawn regarding this aspect of malnutrition.

I. SERVICES TO INDIVIDUALS
C. NUTRITION

	3. Endemic goiter						4. Hypovitaminosis A		
	3.1 Prevalence of goiter (percentage)			3.2 Prevalence of cretinism (per 100,000 inhabitants)			Prevalence of hypovitaminosis A		
	1971	1978	Nat. goal 1980	1971	1978	Nat. goal 1980	1971	1978	Nat. goal 1980
Argentina	>10	>10		-	-	-	-	-	-
Bahamas	-	...	-	-	-	-	-	-	-
Barbados	-	-	-	-			-	-	-
Bolivia									
Brazil	21	14	10	-	-	-	14	6 [h]	6
Canada									
Chile	-	7 [a]	-				-	2.4 [a]	-
Colombia	4	-	4	-	-	-	17	-	-
Costa Rica	18	-	10	-	-	1	-	32.5 [h]	-
Cuba	-	-	-	-	-	-	-	-	-
Ecuador	23	18 [b]	15	...	...	...	...	...	...
El Salvador	18 [c]	-	-	-	-	-	-	-	-
United States	10 [d]	-	-	-	-	-	-	-	-
Guatemala	5 [d]	-	40	-	-	-	-	5.2 [g]	20
Guyana	-	-	-						
Haiti									
Honduras	18	-	-	-	-	-	90	90 [h]	-
Jamaica				-	-	-	-	-	-
Mexico	10 [d]								
Panama	17 [a]	6 [a]	10				16 [a]		
Paraguay	14 [d]	16 [f]	20		...	...	...	4.7 [g]	-
Peru	22		20	2170 [g]		1953	2.7	-	2.4
Dominican Rep.	10	19	-				10	...	...
Suriname	-	-	-	-	-	-	-	-	-
Uruguay	9	3	-	-	-	-	-	-	-
Venezuela	14 [d]								

a/ 1975 figure. b/ 1977 figure. c/ Survey of children in period 1950-1951. d/ Two cases of cretinism in period 1959-1979. e/ 1967 figure. f/ 1976 figure. g/ Junín-Tambo school population. h/ 1974 figure. i/ To eliminate the problem.

3. ENDEMIC GOITER

REGIONAL GOALS: To reduce prevalence to below 10%. To eliminate cretinism.

In 1971, 16 countries reported goiter prevalences of between 4% and 22% with a median of 14%. Only eight countries provided data for more recent years between 1975 and 1979, with figures ranging from 7% to 19% without any clear indication as to whether there might have been a reduction for the Region as a whole. Half of these countries showed goiter prevalences of 10% or lower.

Information regarding the prevalence of cretinism is practically nonexistent; one country alone reported two cases of cretinism in the 20-year period from 1959 to 1979.

4. HYPOVITAMINOSIS

REGIONAL GOAL: Reduction by 30% for the Region and by 10% to 50% for the countries.

In 1971, only eight countries provided any indication of the prevalence of hypovitaminosis A at the beginning of the decade, with values ranging from 0.1% to 51% and a median of 22% and only two countries set reduction goals of 25% and 75% respectively. Adequate data have not been obtained for recent years so it is not possible to present and evaluation of the status of hypovitaminosis A in the Region.

	5. Biologically oriented national food and nutrition policy			6. Food supplementation programs: Coverage of most vulnerable groups			7. Salt and oil iodization programs			8. Sugar Enrichment with Vitamin A		
	Exists	Does not exist	Under study	Yes, adequate	Yes, inadequate	Do not exist	Yes, adequate	Yes, inadequate	Do not exist	Yes, adequate	Yes, inadequate	Does not exist
Argentina			X		X		X					X
Bahamas		X		X					X			X
Barbados		X				X			X			X
Bolivia												
Brazil	X				X			X				X
Canada												
Chile			X	X				X				X
Colombia	X				X			X				X
Costa Rica	X			X			X			X		
Cuba	X			X					X			X
Ecuador			X		X			X				X
El Salvador			X		X		X					X
United States	X			X			X					
Guatemala			X		X			X			X	
Guyana			X			X			X			X
Haiti			X		X				X			X
Honduras			X		X		X				X	
Jamaica	X				X				X			X
Mexico	X				X		X					X
Panama		X			X		X					X
Paraguay			X		X			X				X
Peru	X				X			X				X
Dominican Rep.			X		X			X				X
Suriname			X		X				X			X
Uruguay	X				X		X					X
Venezuela												

5. BIOLOGICALLY ORIENTED NATIONAL FOOD AND NUTRITION POLICY

REGIONAL GOAL: Adoption by each country of a biologically oriented national food and nutrition policy, and development of coordinated intersectorial programs within this framework.

In 1971 only six countries reported that they had a biologically oriented policy while 13 had such a policy under study and three others did not have one. In 1980, nine out of 23 countries of the Region had a policy of this type, eleven had one under study and three did not have one.

The progress achieved in this respect is not very promising since the proportions in 1980 are more or less the same as in 1971. Biologically oriented national food and nutrition policies are still under consideration rather than under implementation.

6. FOOD SUPPLEMENT PROGRAMS

In 1971, for the initial evaluation of the Ten-Year Plan, 22 countries reported that they had food supplement programs designed to cover the most vulnerable groups of their populations, although only two of these countries stated that their programs were adequate while the other 20 viewed their coverage as insufficient. In 1979, 21 out of 23 countries reported that they were operating such programs to cover their most vulnerable groups; only five of them classified the coverage of their programs as sufficient and two rated them inadequate.

Clearly, the problem of the insufficiency of food supplement programs in the countries of the Region and the lack of coverage of vulnerable groups needing such supplementary food has not been remedied.

7. SALT AND OIL IODIZATION PROGRAMS

These programs are under way in 16 countries, half of which classify them as inadequate. A further seven countries do not have such programs. The number of countries with iodization programs increased during the decade; however, almost a third of them consider the programs insufficient.

8. ENRICHMENT OF SUGAR WITH VITAMIN A

Only three countries have programs for enriching sugar with vitamin A, two of which state that these programs are still insufficient.

I. SERVICES TO INDIVIDUALS
C. NUTRITION

	9. Technical nutrition units						
	9.1 At central level			9.2 At peripheral levels			
	Exists and is satisfactory	Exists but should be strengthened	Does not exist	Exists at all levels	Exists at all levels	Does not Exist	Should be expanded and strengthened
Argentina		x			x		
Bahamas			x			x	
Barbados	x						x
Bolivia							
Brazil		x					x
Canada							
Chile		x					
Colombia		x		x			x
Costa Rica		x		x			
Cuba	-	-	-	-			x
Ecuador		x			x		
El Salvador		x			x		
United States	x						
Guatemala		x				x	
Guyana		x		-	-	-	-
Haiti		x			x		x
Honduras		x			x		
Jamaica		x					x
Mexico		x			x		
Panama		x			x		
Paraguay		x				x	
Peru		x					x
Dominican Rep.		x					x
Suriname		x					x
Uruguay		x					x
Venezuela							

9. TECHNICAL NUTRITION UNITS

REGIONAL GOAL: Organization of units at central and intermediate or regional levels.

Only one of the 22 countries that responded to this section of the evaluation mentioned that a technical nutrition unit at central level did not exist, but in most cases the countries indicate that this unit needs to be strengthened. In two countries units exist in all levels of the health services system and in seven of them only in some levels. In most cases, it is mentioned that all these units need to be expanded and strengthened.

D. OTHER AREAS

	1. Chronic diseases		2. Cancer																			
	Has the country established goals in this area?		Has the country established goals in this area?		2.1 Uterine cancer detection programs			Annual cytological examinations per 100 women over 20 years (percentage)				2.2 Breast cancer detection programs			Annual examinations made per 100 women 20 years of age and over (percentage)				2.3 Specialized cancer hospitals and general hospitals with more than 200 beds that have a tumor registry (percentage)			
	Yes	No	Yes	No	Yes	No	Being planned	1971	1974	1977	1980	Yes	No	Being planned	1971	1974	1977	1980	1971	1974	1977	1980
Argentina	x		x			x							x									
Bahamas		x		x	x								x									
Barbados	x		x		x			-	3	3				x					100	100	100	100
Bolivia																						
Brazil	x		x		x							x										
Canada																						
Chile		x	x		x			-	11a	15a	20			x							4 b	9 b
Colombia	x																					
Costa Rica	x		x		x				10	9			x				0					
Cuba	x		x		x			15	15	15	18	x							100	100	100	100
Ecuador	x		x		x				52		39c		x						80	80	100	100
El Salvador		x		x	x			5 d	7 d	13 d, e	15 d				-	-	-	-	-	-	-	-
United States	x		x		x							x										
Guatemala		x	x		x			3	4	4	5											
Guyana		x		x		x							x						0	0	0	0
Haiti		x		x		x							x									
Honduras	x			x	x			-	-				x						-	-	1	2
Jamaica		x		x	x			-	-	-												
Mexico	x		x		x				20	28	62	x				10	20	90		0	15	55
Panama		x	x		x							x										
Paraguay		x		x	x			-	0.4	1 e	15	x			-	0.4	1 e	15	-	10	10 e	-
Peru	x			x	x			5	9	8	8		x						6	6	6	6
Dominican Rep.		x		x	x					2			x									
Suriname		x		x	x								x									
Uruguay		x		x			x	-	-	-			x		-	-	-		0	0	0	
Venezuela	x		x		x			10	10	10		x			0.1	0.2	1	1				

a/ 1976 figure. b/ Hospitals. c/ Only in Ministry of Health establishments. d/ In women aged 15-45. e/ 1978 figure.

1. CHRONIC DISEASES

REGIONAL GOALS: To decrease the incidence of chronic diseases susceptible to prevention. To encourage early diagnosis and timely treatment of chronic illnesses. To attend to all spontaneous demand for services for this type of malady, including the suburban and rural areas insofar as possible. To conduct epidemiologic research which will make it possible to learn more about the problem, in order to plan adequately the resources for control programs.

As regards chronic diseases in general, the only question asked was whether the countries had set goals for themselves in this area for 1980. It appears that the situation as in 1971 is being repeated at the end of the decade, i.e. half of the countries displayed interest in setting up programs to control chronic diseases. This interest is much greater in those countries where the phenomenon of aging of the population coupled with heightened urbanization is occurring with some intensity.

2. CANCER

REGIONAL GOALS: To reduce case fatality rates from cervical, uterine, breast and laryngeal cancer, and from other neoplasms in which early diagnosis and timely treatment make such a reduction possible. To conduct epidemiologic research for the purpose of identifying the causal agents of the various types of cancer, and in particular the environmental, nutritional and genetic factors associated with gastrointestinal cancer.

Half of the countries of the Region have established goals in the field of cancer control or have at least laid down guidelines for the work in this area. In particular the programs for detecting uterine and breast cancer are under way in most of the countries. For instance, there are programs for detecting uterine cancer in all except two countries. The information regarding number of examinations performed for women aged 20 and over which was used as an indicator varies greatly from country to country; in general there are no very reliable information systems, but the data provided by the countries that responded show that the percentage of women aged over 20 given annual examinations in the course of 1977 ranged from 3% to 28% with a median around 13%.

Only seven countries (one out of every three) conduct programs to detect breast cancer. Of the other twelve countries, two are planning to begin these programs. There are no reliable data as to the number of examinations of women over 20; only four countries produced such information for 1977, reporting percentages between 0.01% and 20%.

The interest in the study of cancer can be demonstrated by the number of general hospitals with more than 200 beds and of hospitals specialized in cancerology with tumor registries. At the beginning of the decade there were seven countries which reported varying percentages of hospitals of this sort with tumor registries, said percentages ranging from 6% to 25% with a median of 20%. In 1977 there were three countries in which 100% of such hospitals had tumor registries while another five countries reported percentages between 1% and 15%.

There is, therefore, greater interest in the countries in these diseases, as is also evidenced by the number of exminations made to detect uterine and breast cancer. Similarly, the increase in the number of general hospitals with over 200 beds and specialized hospitals with tumor registries is an indicator of the interest in epidemiologic research on and control and treatment of cancer.

I. SERVICES TO INDIVIDUALS
D. OTHER AREAS

	3. Mental diseases										4. Alcoholism		5.Use of dependence causing drugs	
	Has country established goals in this field?		3.1 Psychiatric beds per 1,000 inhabitants				3.2 Percentage of psychiatric beds in general hospitals				Do goals exist in these two areas?			
	Yes	No	1971	1974	1977	1980	1971	1974	1977	1980	Yes	No	Yes	No
Argentina					0.8									
Bahamas	x		1	1	1	1	0	0	0	1		x		x
Barbados	x		3	3	3	3	0	0	0	0	x			x
Bolivia														
Brazil	x		1	1	-	-	-	-	-	-	x			x
Canada														
Chile	x		-	-	0.5	0.5	-	-	-	-		x	x	
Colombia	x		0.3	0.3	0.3	1	-	0	0.1	1		x	x	
Costa Rica	x		1	1	1	-	-	20	22	-	x		x	
Cuba	x		1	1	1	1	2	2	2	2		x		x
Ecuador	x		0.2	0.3	0.2	0.2	4	4	5	5	x		x	
El Salvador		x	0.2	0.2	0.2	0.2	-	-	-	-		x		x
United States	x		2.3[a]	2	1.6[b]	-	5[a]	6	9[b]	-	x		x	
Guatemala		x	-	0.2	0.3	0.1	-	-	-	-		x		x
Guyana		x	-	-	-	-	-	-	-	-		x		x
Haiti		x	-	0.03	0.03			3.9	3.9			x		x
Honduras		x	0.1	0.1	0.1	0.1	0	0	0	0	x			x
Jamaica		x	-	-	-	-	-	-	-	-		x		x
Mexico	x		-	-	-	-	-	-	-	-	x		x	
Panama	x		1	1	1	1	0.01	0.01	0.01	0.01		x		x
Paraguay	x		0.2	0.2	0.2	-	-	-	-	-		x		x
Peru	x		0.2	0.2	0.2	0.1	2	0	0	3		x	x	
Dominican Rep.	x		-	-	0.1	-	-	-	-	-	x		x	
Suriname		x	1.5	1.4	1.4	1.3	0	0	0	0		x		x
Uruguay		x	1.3	1.5	1.6	1.6	0	1	2	2	x		x	
Venezuela	x		0.5	0.5	0.5	0.7	0	0.3	0.4	1	x		x	

a/ 1972 figure. b/ 1976 figure.

3. MENTAL HEALTH

REGIONAL GOALS: To improve the quality of primary prevention and care provided by psychiatric services and the accessibility of those services to the population, integrating these activities into the basic health services, with a view to attaining a 60% coverage of the population as a minimum.

There are presently 15 countries (five out of every eight) with goals for actions in the mental health field. At the beginning of the decade the Region had an estimated 625,000 beds in psychiatric hospitals, 475,000 of which were in North America. The rates of psychiatric beds per 1,000 population in 1971 showed very extensive variations which went from 0.01 to 2.7 with a median of around 0.3 psychiatric beds per 1,000. In 1977, according to information provided by nine countries, the number of psychiatric beds per 1,000 population was between a minimum of 0.03 and a maximum of 3, with a median of 0.5. The goals set by the countries for 1980 envisage a reduction in three countries, maintenance of the present rates in nine countries and an increase in two countries.

There is also a trend toward increasing the number of psychiatric beds in general hospitals. At the beginning of the decade there were only three countries with an appreciable number of psychiatric beds in general hospitals. It is noted that most of the countries propose to increase this proportion, although reliable data are not available. It was not possible to investigate ambulatory services in regard to mental health, but it is known that in 1971 twelve countries offered ambulatory psychiatric services, at least in their capital cities, and that this number is now larger even though precise figures are not known.

4. ALCOHOLISM

REGIONAL GOALS: To reduce the trend toward an increase in alcoholism and drug dependency, by making available preventive, treatment and rehabilitation services to cover the entire population.

In 1974, 14 countries stated that they had set goals in this area but only four of them had alcoholism control programs with treatment, preventive and rehabilitation services. In 1979 only ten countries stated that they had set goals for the control of alcoholism; however, it is known that measures to control and prevent alcoholism are being implemented in a growing number of countries. As a general rule, these programs are being run by private bodies and associations with support and promotion from official quarters.

5. USE OF DEPENDENCY-CAUSING DRUGS

In at least 18 countries there are official bodies concerned with control of drug dependency. However, the priority assigned to the problem is not reflected in the establishment of national goals, because only ten countries stated that they had set goals for 1980 regarding measures to reduce the trend toward drug dependency and the provision of prevention services with treatment and rehabilitation.

	6. Dental health												
	Has the country established goals in this field?		6.1 Programs for integration of dental health with different levels of care			6.2 Expansion of coverage and priority attention to children		6.3 Water fluoridation in cities with 50,000 or more inhabitants					
								Number of cities with 50,000 or more inhabitants			Number of cities with water fluoridation		
	Yes	No	Defined	Not well def.	Planned	Not planned	Planned	1971	1977	1980	1971	1977	1980
Argentina	x		x		x		x					15	29
Bahamas	x			x			x			1		0	0
Barbados	x				x		x	1	1	1	0	0	0
Bolivia													
Brazil	x		x				x	120	170	231	19	35	65
Canada													
Chile	-	-	-	-	-	-	-	-	-	-	-	-	-
Colombia	x		x				x	29	-	31	4	14	16
Costa Rica	x		x				x	-	5	5	-	5	5
Cuba	x		x				x	-	-	-	0	1	5
Ecuador	x		x				x	-	1	4	...	1	4
El Salvador	x		x				x	3	4	5	-	-	-
United States	x		x				x	388[a]	388[a]	388 [a]	231[a]	251[a]	264[a]
Guatemala	x		x				x	3	3	3	1	1	1
Guyana		x		x	x		x	1	1	1	-	-	-
Haiti		x	x				x	0	0	0	0	0	0
Honduras	x			x			x	2	2	3	0	1	1
Jamaica	x				x		x	2	2	0	0	0	0
Mexico	x		x				x	3	3	11	3	3	11
Panama	x		x				x	3	3	3	3	3	3
Paraguay	x				x		x	1	1	1	1	1	1
Peru		x		x			x	13	19	19	0	0	1
Dominican Rep.	x		x				x	2	-	7	0	0	1
Suriname	x				x		x	1	1	1	0	0	0
Uruguay		x		x			x	0	0	0	0	0	0
Venezuela	x			x			x	22	28	32	8	3	3

a/ The figures include 28 cities of 50,000 or more inhabitants with natural fluoridation.

6. DENTAL HEALTH

REGIONAL GOALS: To reduce dental morbidity, especially of caries; to increase dental care coverage, giving priority to care for children; to achieve water fluoridation in cities of 50,000 or more population and to intensify dental education activities.

All the countries of the Region consider dental health important, as is evidenced by the fact that 19 of 23 countries have set goals in this field.

Seventeen of 22 countries have programs to integrate dental health in accordance with the different levels of health care in the countries, although in five of them these programs are not clearly defined. In the remaining five countries it is anticipated that programs of this nature will shortly commence.

Expansion of coverage with priority to care for children is planned in all the countries.

In 1977, the 20 countries of Latin America and the Caribbean that provided data for this evaluation had a total of 279 cities with 50,000 or more population, of which 68 or 24% had fluoridized water. In general, the number of cities with fluoridized water tended to increase between 1971 and 1977.

II. ENVIRONMENTAL SANITATION PROGRAMS

II. ENVIRONMENTAL SANITATION PROGRAMS

1. NATIONAL POLICY FOR ENVIRONMENTAL PRESERVATION AND IMPROVEMENT

	1.1 Definition of policy							1.2 Policy Formalization			1.3 Coverage of policy								
				Participation of health sector							Geographical			Institutional			By Programs		
	Defined (year)	Being defined	Not defined	Substantial	Little	None	Declaration	By law	Not formalized	Entire country	Part of country	Mixed	Not defined	All institutions	Some institutions	Not defined	All areas	Some areas	Not defined
Argentina		X		X			X	X		X			X		X		X	X	
Bahamas				X			X			X					X				X
Barbados		X		X					X	X					X			X	
Bolivia																			
Brazil	1975				X			X				X		X				X	
Canada																			
Chile		X				X			X	X				X			X		
Colombia	1950			X			X	X		X				X				X	
Costa Rica			X			X			X										
Cuba	1971			X				X		X				X			X		
Ecuador	1965				X			X		X				X			X		
El Salvador	1976			X			X			X					X			X	
United States	1969			X				X		X					X				
Guatemala	1975			X			X			X					X			X		
Guyana		X		X					X				X			X			X
Haiti	1975	X		X				X		X					X			X	
Honduras	1973			X			X			X					X		X		
Jamaica																			
Mexico	1971			X				X		X				X			X		
Panama			X					X		X					X		X		
Paraguay		X			X		X			X						X		X	
Peru	1978			X			X			X					X				X	
Dominican Rep.		X			X														
Suriname		X		X					X		X			X				X	
Uruguay			X						X				X			X			X
Venezuela	1960			X				X		X				X			X		

1. NATIONAL POLICY FOR ENVIRONMENTAL PRESERVATION AND IMPROVEMENT

The Ten-Year Health Plan for the Americas placed particular emphasis on environmental sanitation programs, thus envincing member governments' recognition of the importance to health of action to protect, develop and improve the environment as one of the conditions essential for health within the ecological complex. National policies to guide such action and govern environmental decision-making were considered a necessity, not only with regard to those aspects constituting the traditional purview of the health sector but also embracing intersectorial activities designed to achieve the objectives and goals of coordinated action by the various national sectors.

Of the 23 countries that took part in the evaluation, 12 have established environmental protection policies and 7 are now doing so. Only 3 countries lacked such policies and made no mention of plans in this respect. A number of those that report current activity to define such policies had already worked out their policies at the time of the 1975 evaluation but are now revising them as a result of preparation for the International Water Supply Decade and other environmental measures now being implemented on an international scale.

The health sector has been assigned an important part in this process in 15 of the 19 countries that have already defined their environmental policies or are now doing so. In four countries its participation was marginal and in one it took no part.

Eight of the 12 countries that have established well-defined policies have enacted them into law, while in 5 others they have been issued in the form of official statements.

Geographic coverage in countries with existing or emerging policies is complete: application is nationwide. In only one country does the policy apply exclusively to part of the national area and in another, certain sanitation activities cover the entire country while other are restricted to partial coverage. Only one country has failed to define the extent of geographic coverage.

Of the 19 countries whose policies have already been or are about to be defined, 8 have assigned duties in this respect to all of the institutions responsible for environmental health. In the remainder, institutional coverage is only partial, although the agencies that do participate may be assumed to be the most important ones in these nations.

In 8 countries, policy encompasses all of the program areas that have a bearing on environmental health. In the rest, such coverage is only partial.

SUMMARY: Most of the countries of the Region have placed increasing emphasis on the definition of policies to protect and improve the environmental. Almost all of them have made or are now making efforts to define such policies within the context of their overall development goals.

II. ENVIRONMENTAL SANITATION PROGRAMS

2. NATIONAL PLAN FOR ENVIRONMENTAL PRESERVATION AND DEVELOPMENT

	2.1 Formulation of strategies			2.2 Areas of coverage of the strategies																2.3 Programming of the strategies			2.4 Intersector coordination		
	Formulated	In process of formulation	Not formulated	Water supply	Sewerage and disposal of excreta	Collection and disposal of solid waste	Water pollution	Air pollution	Soil pollution	Noise control	Occup.health & indust.hyg.	Animal health & Vet.Pub.H.	Control of pesticides	Food control	Quality control of drugs and medicaments	Traffic accidents	Administration	Other areas	Programmed	Partially or in process	Not programmed	Assignment of functions and responsibilities to various sectors and institutions: Yes	Assignment of functions and responsibilities to various sectors and institutions: In part	Assignment of functions and responsibilities to various sectors and institutions: No	Formal mechanism of coordination: Yes	Formal mechanism of coordination: No
Argentina		X			X		X	X	X															X	X
Bahamas		X			X	X	X	X	X														X		
Barbados						X			X															X	
Bolivia			X			X																	X		
Brazil	X			X			X										X	X	X					X	
Canada		X		X			X		X			X					X	X	X	X		X	X		
Chile	X			X			X		X	X					X		X	X	X	X	X	X		X	
Colombia		X			X			X	X									X							X
Costa Rica																									
Cuba		X			X			X	X			X	X	X	X		X	X	X	X	X	X			X
Ecuador				X			X														X	X			X
El Salvador				X		X																	X		
United States		X		X			X						X							X	X	X		X	
Guatemala		X			X		X	X	X		X				X			X	X	X				X	X
Guyana		X			X		X	X					X	X				X	X	X	X	X			X
Haiti		X		X			X		X		X		X	X		X	X	X	X	X	X	X		X	
Honduras		X			X			X									X	X	X						X
Jamaica	X		X				X		X	X	X		X			X	X	X							X
Mexico				X			X		X				X		X					X		X			X
Panama		X			X		X																	X	
Paraguay																									
Peru	X				X			X	X									X							X
Dominican Rep.																									
Suriname		X		X			X		X									X			X			X	
Uruguay		X					X		X											X				X	
Venezuela		X			X		X																	X	

2. NATIONAL PLAN FOR ENVIRONMENTAL PRESERVATION AND DEVELOPMENT

The interest displayed by the Governments in the field of environmental health is evident from the fact that 8 out of every 10 have worked out or are now formulating their strategies within the framework of national planning for environmental protection and development. These strategies apply to such traditional areas of action as drinking water supply, sewerage and waste disposal services, collection and disposal of solid waste and food quality control. Increasing attention is given to air, water and soil pollution, occupational hygiene and surveillance of the use of insecticides.

Except for one country, each of those that have mapped out their strategies have translated them, partially or completely, into programs that clearly indicate the intention to put them into effect.

Only 4 countries prefer to eschew formal mechanisms of intersectorial coordination for the implementation of environmental health programs. This marks substantial progress with regard to the situation existing at the beginning of the decade. In addition, a greater number of countries have delegated more explicit functions and responsibilities to each of the institutions and sectors in this area.

3. WATER SUPPLY AND SEWERAGE

	3.1 Diagnosis of subsystems									3.2 Definition of sectorial or institutional jurisdiction								
	Study of legal and administrative framework			Preinvestment and financing studies						In provision of water supply						In sewerage services		In excreta disposal
										Urban areas			Rural areas			Urban areas		Rural areas	
	Made	Not made	Being made	Made	Not made	Planned	Defined	Defined in part	Not defined	Defined	Defined in part	Not defined	Defined	Defined in part	Not defined	Defined	Defined in part	Defined	Not defined
Argentina			X			X	X			X			X						X
Bahamas	X			X			X				X		X						
Barbados	X			X			X			X				X		X			
Bolivia																			
Brazil	X			X			X				X			X				X	
Canada																			
Chile	X			X			X			X	X		X						X
Colombia	X			X				X			X			X				X	
Costa Rica		X				X	X			X			X				X		
Cuba	X						X			X			X				X		
Ecuador	X					X	X			X			X				X		
El Salvador	X			X			X			X			X				X		
United States	X			X			X			X			X				X		
Guatemala	X			X			X			X			X				X		
Guyana	X			X			X			X			X					X	
Haiti	X			X			X			X						X		X	
Honduras	X			X			X			X			X				X		
Jamaica																			
Mexico	X			X			X			X			X				X		
Panama			X	X			X			X			X				X		
Paraguay			X	X			X			X			X				X		
Peru	X			X			X			X			X				X		
Dominican Rep.	X			X			X			X			X				X		
Suriname	X			X			X							X				X	
Uruguay							X				X		X						X
Venezuela	X			X			X			X			X				X		

3. WATER SUPPLY AND SEWERAGE

3.1 Diagnosis of the subsystems

Only one of the 22 countries that responded to this part of the evaluation stated that it had not conducted a study of the legal and administrative framework surrounding action with regard to water supply, sewerage and waste disposal. Preinvestment and financing studies for the civil works needed to provide their populations with water supply have been made by 19 and scheduled by another 3. These studies are particularly concerned with specific action plans for the Water Decade.

Similar studies have been made to cover construction and expansion of urban sewerage services, and to a lesser degree, estimated on waste disposal service in rural areas within the specific context of planning strategies to extend primary care coverage to such areas.

SUMMARY: Most of the countries of the Region have assessed the status of their water supply, sewerage and waste disposal systems. They have also estimated their needs and financial and other requirements for the extension of such services. Significant progress has been made in this respect during the decade, thus complying with one of the recommendations made by the Ten-Year Health Plan for the Americas.

3.2 Definition of sectorial and institutional jurisdiction

One of the countries has started on this task. The other 21 have completed their assignment of sectorial and institutional jurisdiction for urban water supply service, usually to municipal agencies or public utility companies. As a rule, the health sector is responsible for monitoring water quality. Sectorial and institutional jurisdiction over rural water supply is less well defined, but usually goes to the health sector too.

In most of the countries urban sewerage services are part of a well-defined sectorial and institutional framework (only 5 countries state that such definition is only partial or does not exist). Municipal authorities are generally responsible for the installation and maintenance of sewerage systems, but jurisdictional problems still remain with regard to the treatmet of sewage and industrial waste continues to be a health sector concern through its various agencies or in coordination with those of other sectors involved in rural development programs.

SUMMARY: The decade has seen progress toward improved definition of the jurisdiction exercised by various sectors and institutions over water supply and sewerage systems. Certain areas remain undefined with regard to the responsibility for some components of these systems that are still in the process of being solved.

II. ENVIRONMENTAL SANITATION PROGRAMS
3. WATER SUPPLY AND SEWERAGE

	3.3 Water supply							
	Urban population with piped water in dwellings (%)				Rural population with piped water (%)			
	Situation studied			National goal for 1980	Situation studied			National goal for 1980
	1971	1974	1978		1971	1974	1978	
Argentina	64	65	64	80	12	13	14	80
Bahamas			95[a]	95				
Barbados		98	97	100		36	65	70
Bolivia								
Brazil	61	65	67	80	40	42	45	
Canada								
Chile	62	78	88	100	15	29	41	45
Colombia	76	...	75	80	20	...	31	70
Costa Rica	95	95	98	98	55	58	61	66
Cuba	85	90	93	95				
Ecuador	60	65	70[a]	80	4	7	15	24
El Salvador	48	49	61	63	12	20	30	31
United States	100[b]			100[b]	92[b]			
Guatemala	40	41	41	50	13	14	14	33
Guyana	85[b]		92[a]	95[b]	70[b]		60[a]	90[b]
Haiti			9[c]				1[c]	
Honduras	61[b]	61	52	65	11[b]	7	13	34
Jamaica	93[b]				48[b]			87[b]
Mexico	64[b]			72[b]	19[b]			30[b]
Panama	90	93	95	96	49	53	64 1	60
Paraguay	18[b]	21	31	73[b]	3[b]	6	6	37[b]
Peru	65	67	69	68	10	11	12	16
Dominican Rep.	a	38[d]	56[d]	80	7[d]	10[d]	19[d]	10
Suriname	65	74	80	80	31	35	66	80
Uruguay								
Venezuela	64[b]			80[b]	44	49	59	64

a/ 1979 figure. b/ Information obtained from the evaluation conducted in 1974.
c/ May 1980. d/ A large percentage of the population has individual service.

3.3 Water supply

REGIONAL GOALS: To provide 80% of the urban population with residential water connections or, as a minimum, to supply half of the population now lacking such service. To make water supply available to 50% of the rural population or, as a minimum, to supply 30% of the population now lacking such service.

3.3.1 Urban drinking water supply

The information obtained from 23 regional countries at the start of the decade in 1971 indicated that in 2 out of 3 countries, less than 80% of the urban population had household water supply connections. The national goals those countries set for themselves for 1980 were met only in a few cases. A rough estimate based on 1978 information supplied by 15 Latin American countries indicates that in 1980 about 70% of the Subregion's urban population--an estimated 233 million--had running water in their homes. The efforts made by those countries simply to maintain that 1971 level are noteworthy, however, in view of the 74-million (46%) increase in Latin American and Caribbean urban population and over 100 million (30%) in the Region as a whole.

SUMMARY: It was impossible to meet the goal of household water connections for 80% of the Latin American and Caribbean population because in addition to the increased demand resulting from urban population growth during the decade, financial, institutional and other restraints arose and certain countries were unable to make the corresponding investments.

3.3.2 Rural drinking water supply

At the start of the Ten-Year Health Plan for the Americas, it was estimated that in 1971, 24% of the rural population of Latin America and the Caribbean had access to water supply--ranging from a minimum of 3% to a maximum of 92%, the median being 19%. The 1980 goals set by 19 countries ranged from a minimum of 16% to over 90%, with a median of 60%. Judging from the information received, only 7 of 19 Latin American and Caribbean countries that submitted data for this evaluation could meet their own national goals in 1980. They account for only 15% of the Subregion's rural population and as a whole they achieved 35% coverage of their rural dwellers with water supply service. If all of the countries of Latin America and the Caribbean had met their national goals, subregional coverage of rural population would have amounted to only 44%. But those goals were highly optimistic, and actual coverage achieved is probably less than 40%.

SUMMARY: Latin America and the Caribbean have covered less than 40% of their rural population, leaving 79 million rural dwellers without adequate water supply service. They are far from achieving the regional goal established under the Ten-Year Health Plan. The countries failed to submit reliable information that could serve as a basis for evaluating compliance with the minimum objective of providing coverage for 30% of the rural population without access to this service.

3.4 Sewerage and excreta disposal

	Urban population with sewerage service (%)				Rural population with excreta disposal service (%)			
	Situation studied			National goal for 1980	Situation studied			National goal for 1980
	1971	1974	1978		1971	1974	1978	
Argentina	33	34	34	70	79	70	70	50
Bahamas			15[a,b]					
Barbados								
Bolivia								
Brazil	33	34	36	50	60	63	65	
Canada								
Chile	36	47	61	70	12	9	8	
Colombia	64	...	65[c]	70	9	...	9[c]	55
Costa Rica	35	44	43	50	40	86	86	100[d]
Cuba	50	53	55	57	[f]	[f]	[f]	[f]
Ecuador	45	52	69[a]	70	3	7	11[a]	18
El Salvador	38	38	48	51	12	15	26	30
United States	98				82[d]			
Guatemala	40	40	40	50	13	14	17	33
Guyana	13[d]		42[a]	23[d]	0[d]			
Haiti							0.1[g]	
Honduras	51[d]	43	43	43	9[d]	11	18	42
Jamaica	28[d]				81[d]			
Mexico	36[d]			40[d]	9[d]			60[d]
Panama	93	97	98	75	69	71	80	75
Paraguay	15[d]	11	25[a]		23	55	60[a]	57[d]
Peru	59	60	57	59	0	1	1	2
Dominican Rep.	17	41	59	60	15			30[d]
Suriname	71	63	65	35	4			8
Uruguay			48[e]				78[e]	
Venezuela	39[d]			75[d]	45	51	58	59

a/ 1979 figure. b/ Population with sewerage service connections. Waste disposal service is available to all urban population in addition to a number of private treatment plants. c/ 1976 figure. d/ Figure provided by Ten-Year Plan evaluation conducted in 1974. e/ 1975 figure. f/ Rural population (200,000) is scattered, not in settlements, and water supply and waste disposal services are available. g/ May 1980.

3.4 Sewerage and waste disposal

REGIONAL GOALS: To provide sewerage service to 70% of the urban population or, as a minimum, to reduce by 30% the proportion of the population lacking such service. To install sewerage systems and other sanitary means of waste disposal for 50% of the rural population or, as a minimum, to reduce by 30% the number of inhabitants not possessing any adequate facilities.

3.4.1 Urban sewerage

In 1971 it was estimated that 38% of the urban population of Latin America and the Caribbean had access to sewerage service and the Ten-Year Health Plan proposed the goal of extending coverage to 70% by 1980. Several countries adopted the same goal but most of them applied more prudent criteria of individual feasibility. Judging from the data submitted by the 15 Latin American countries that made surveys in 1978, sewerage service to urban population will fall short of 50% in 1980: it will range between 25% and 98%, with a median of 48%.

SUMMARY: Laudable progress was made in Latin America and the Caribbean. Some countries achieved their own national goals, most of which were below the 70% target set for the Region. The Subregion is thus far from attaining its overall regional objective. Only through a weighted average with North America could the Region as a whole approach that goal. It was impossible to verify compliance with the minimum goal of a 30% cutback in an urban population lacking this service since the countries did not supply sufficient information for that purpose.

3.4.2 Rural areas: waste disposal service

In 1971, 4 countries in Latin America and the Caribbean exceeded the regional goal of providing waste disposal service for 50% of the rural population and only 6 had set goals for 1980 that were higher than that of the Ten Year Health Plan. At the close of the decade, the situation has improved somewhat but is still far from satisfactory. Only 7 Latin American countries have surpassed the regional goal but 4 of them had already done so at the beginning of the decade and 2 others were close to it. Few of the others have managed to top their own national goals of less than 50%. As the first evaluation of the Ten-Year noted, the national goals were so high that even if they had been feasible, the regional goal would have been impossible for several countries of the Subregion. The figures available indicate that only 7 of the 14 countries in Latin America and the Caribbean that reported on their situation in the last year available had exceeded 50% coverage of rural population with waste disposal facilities.

SUMMARY: Less than 40% of the rural population of Latin America and the Caribbean has access to waste disposal service. Subregional countries as a whole have failed to exceed this level and some of them are still far from attaining it. Lack of adequate information makes it impossible to evaluate compliance with the minimum goal of a 30% reduction in the rural population without such service.

II. ENVIRONMENTAL SANITATION PROGRAMS
3. WATER SUPPLY AND SEWERAGE

	3.5 Investment programming								3.6 Programs of administrative institutional improvement and development in operation					3.7 Inclusion in overall and regional development plans					
	For 1980			Projects prepared										Overall			Regional		
	Programmed	Programmed in part	Not Programmed	In process of program	Yes	Some	No	In process	At national level	At regional level	At institutional level	At local level	Do not exist	Yes	No	In part	Yes	No	In part
Argentina		X				X			X							X			X
Bahamas				X				X	X					X					
Barbados	X				X				X					X			X		
Bolivia																			
Brazil	X					X						X		X			X		
Canada																			
Chile	X				X				X					X			X		
Colombia	X					X			X	X	X	X				X			X
Costa Rica	X				X						X				X			X	
Cuba	X				X				X			X		X			X		
Ecuador	X				X				X		X					X			X
El Salvador	X				X				X					X			X		
United States	X				X				X	X	X	X		X			X		
Guatemala		X				X					X			X			X		
Guyana	X				X						X			X					
Haiti	X				X						X			X			X		
Honduras	X				X				X					X			X		
Jamaica																			
Mexico	X				X				X	X	X	X		X			X		
Panama				X	X				X					X			X		
Paraguay	X				X						X					X			X
Peru	X				X				X					X			X		
Dominican Rep.	X					X			X	X	X	X		X			X		
Suriname	X				X				X					X			X		
Uruguay											X								
Venezuela	X				X				X	X	X			X			X		

3.5 Investment programs

As the decade ended, 19 of 21 participating countries had scheduled national investments in water supply and sewerage services, although on a limited basis in 2 of them. The 2 remaining countries were starting to set up such programs. Most of the countries have formulated their investment projects affording the conclusion that governments are carrying out the recommendations of the Ten-Year Plan with regard to scheduling investments and drawing up projects for the implementation of such investments in the areas of water supply and sanitation.

3.6 Institutional administrative development and improvement

The countries are carrying out the Ten-Year Plan's recommendations to seek greater efficiency in providing water and sewerage services by introducing administrative and managerial mechanisms at every level, particularly in institutions providing water supply to large cities.

3.7 Inclusion in development planning

With one exception, every country in the Region has completely or partially incorporated its plans to institute and improve water and sewerage services into national global and regional development planning, thus complying with the recommendations made in this respect by the Ten-Year Health Plan for the Americas.

4. COLLECTION AND DISPOSAL OF SOLID WASTE

	4.1 Diagnosis of subsystems						4.2 Goals adopted by country						4.3 Inclusion of goals and plans					
	Study of legal and administrative framework			Preinvestment and financing studies			Number of cities with 20,000 or more inhabitants			Cities with adequate systems			In overall plans			In regional plans		
	Made	Not made	Being Prepared	Made	Not made	Being Prepared	In 1971	In 1977	In 1980	In 1971	In 1977	In 1980	Yes	No	In part	Yes	No	In part
Argentina	X					X	110[b]		123	10[b]		25			X			X
Bahamas			X			X	2	2	2	2	2	2	X			X		
Barbados	X			X			1	1	1	0	1	1	X			X		
Bolivia																		
Brazil	X[a]													X			X	
Canada																		
Chile	X					X	43	48	52	1	3	4		X		X		
Colombia	X			X			60	85	90	0	0	5			X		X	
Costa Rica	X			X			1[a]	6	...	0	1	0		X			X	
Cuba	X			X			37	42	50	15	26	38	X			X		
Ecuador			X	X			19	23	23	0	0	2		X			X	
El Salvador			X			X	10	16	18	1	1	2			X			X
United States	X			X						c	c	c	X			X		
Guatemala			X			X	5	7	13	1	1	6			X			X
Guyana																		
Haiti	X				X		4		6[d]									
Honduras			X			X	...	12	12	-	2	2	X			X		
Jamaica																		
Mexico	X			X			...	183	-	-	-	-	X			X		
Panama			X			X	7	7	7	2	2	4	X			X		
Paraguay			X		X		5	5	6	-	1	5		X			X	
Peru	X					X	43	43	43	-	-	-		X				X
Dominican Rep.	X			X			16	17	18	3	13	15	X			X		
Suriname	X			X			1	1	1	1	1	1		X			X	
Uruguay				X					20			20						
Venezuela	X				X		-	-	-	-	4	8			X			X

a/ From the First Evaluation of the Ten-Year Health Plan. b/ 1970 figure. c/ All cities. d/ 1978 figure.

4. COLLECTION AND DISPOSAL OF SOLID WASTE

REGIONAL GOAL: To establish adequate systems for the collection, transport, processing and disposal of solid waste in at least 70% of all cities with 20,000 or more inhabitants.

4.1 Diagnosis of subsystems

Interest in the collection and disposal of solid waste has multiplied during the decade. Studies of the legal and administrative subsystem framework have been completed in 14 out of 21 countries and are in progress in the other 7. Only 2 countries lack preinvestment and financing studies for waste collection and disposal service, which have been completed in 10 countries and are under way in another 8. This will afford a basis for concrete proposals for the financing of present inadequate urban facilities.

4.2 Goals adopted by the countries

The Ten-Year Plan's regional goal is still far from becoming a reality. In 1971 it was estimated that there were about 1,000 cities in Latin America and the Caribbean with 20,000 or more inhabitantas. The information submitted by 17 countries of the Subregion for the first evaluation indicated that 25% of these cities had adequate solid waste collection systems. In recent years, that figure dropped to 10% (in 16 countries that supplied data) while the number of cities of 20,000 or over may well exceed 1.500 now.

4.3 Inclusion of plans and goals in development planning

This problem has aroused the interest of development planners and the number of countries that have included solid waste collection and disposal in the government's overall regional development planning has increased since 1971.

II. ENVIRONMENTAL SANITATION PROGRAMS

5. WATER, AIR, SOIL POLLUTION AND NOISE CONTROL

	5.1 Water pollution control programs (in operation or planned)							5.2 Air pollution control programs												5.3 Soil pollution control programs			5.4 Technical guidelines and regulations for noise control		
								Number of cities with sampling stations				Number of sampling stations													
												TOTAL				From the Panamerican Network									
	In water basins	In coastal waters	In other bodies of water	Do not exist	Exist	Do not exist	Only projects	1971	1974	1977	1980	1971	1974	1977	1980	1971	1974	1977	1980	Exist	Do not exist	Only projects	Yes, adequate	Yes, incomplete	Being developed	Do not exist
Argentina	X				X			5	5	5	7	13	23	21	44	12	7	5	18		X					
Bahamas	X	X						-	-	-	1	-	-	-	11	-	-	-	-						X	
Barbados	X	X	X				X	-	1	1	1	-	1	1	1	-	1	1	1	X					X	
Bolivia																										
Brazil	X	X	X		X			-	-	-	4	-	-	-	-	-	-	-	-	X					X	
Canada																										
Chile	X				X			1	1	1	1	2	2	16	16	2	2	2	2		X			X		
Colombia	X	X			X			4	6	6	9	14	19	19	25	14	19	-	25	X					X	
Costa Rica				X	X			-	-	1	5	-	-	2	7	-	-	2	-			X		X		
Cuba	X	X	X		X			1	5	7	8	2	12	13	18	2	12	13	18	X			X			
Ecuador	X	X			X			-	-	3	3	-	-	6	8	-	-	6	8	X				X		
El Salvador	X		X		X			1	1	1	2	3	3	2	5	3	3	2	5	X						X
United States	X	X	X		X			-	-	-	-	-	-	-	-	-	-	-		X			X		X	
Guatemala	X		X		X			-	1	1	1	-	1	1	3	-	1	1	3		X				X	
Guyana				X		X		0	0	0	0	0	0	0	0	0	0	0	0		X					X
Haiti	X			X				-	-	-	-	-	-	-	-	-	-	-	-	X						X
Honduras	X						X	-	-	-	-	-	-	-	-	-	-	-	-	X					X	
Jamaica																										
Mexico	X	X	X					-	1	5	16	-	13	57	97	-	-	-	10	X				X		
Panama	X	X			X			-	-	1	2	-	-	2	4	-	-	-				X	X			
Paraguay	X		X				X	-	-	-	1	-	-	-	2	-	-	-	2[a]			X				X
Peru	X	X					X	1	1	1	1	3	3	3	5	3	3	3	4		X				X	
Dominican Rep.				X		X		-	-	-	-	-	-	-	-	-	-	-	-			X				X
Suriname				X		X		-	-	-	-	-	-	-	-	-	-	-	-	X			X			
Uruguay				X	X			1	1	1	1	1	1	1	4	1	1	1	4		X		X			
Venezuela	X	X	X		X			1	1	-	-	4	4	-	-	4	4	-	-	X		X		X		

a/ If accepted by the Pan American Standard Air Pollution Sampling Network.

5. WATER, AIR. AND SOIL POLLUTION AND NOISE CONTROL

REGIONAL GOALS: To establish policies and execute water, air, and soil pollution and noise level control programs that are consistent with basic environmental sanitation and industrial and urban development.

5.1 Water pollution

Regional countries have evinced increasing interest in water pollution control. Of the 22 countries that responded to the evaluation of the Ten-Year Health Plan, 17 noted the existence of prospective or operational programs to control pullution in water basins, 11 in coastal waters and 9 in other bodies of water. But these programs have not yet developed to the point where they can cope with industrial and urban development levels. The lack of treatment facilities for domestic and industrial liquid waste is a critical problem and requires urgent attention.

SUMMARY: Apparently there is increased interest in these areas on the part of the different countries, but more effective action is needed.

5.2 Air pollution

Interest in this problem has grown during the decade. The operation of control programs is mentioned by 13 of the 22 countries. However, they are limited in scope and with few exceptions are for monitoring purposes only. In 1977 there were 34 cities in Latin American and the Caribbean with 144 sampling stations, 36 of them part of the Pan American Network.

SUMMARY: Appreciable progress has been made in this area of environmental health, but still greater attention is needed, along with legal provision for institutions, structures and resources that will afford improved control.

5.3 Soil pollution

More countries are taking steps to control soil pollution than at the beginning of the decade. Ten of the 22 that participated in the evaluation reported the establishment of programs for this purpose. Another 5 mentioned the existence of less than adequate programs and nothing had been done in the rest. Here, too, greater interest is evident in the countries, primarily with regard to the indiscriminated use of pesticides and the increase in industrial waste.

SUMMARY: The countries are displaying increased interest in this area and studies are in progress to arrive at a more complete assessment of the situation.

5.4 Noise control

The first evaluation of the Ten-Year Plan noted the low priority assigned to noise control programs as one of the environmental problems. This continues to be the case, judging from the few countries (3 out of 22) with adequate regulations and tehnical guidelines in this respect. The regulations and guidelines in the rest of the countries are either incomplete or are being developed, or they do not exist. The situation has improved since 1971 when no such provisions were reported by any of the countries, and only 8 of them mentioned any steps being taken in this direction. At present, only 4 of the 22 countries report the absence of such measures.

SUMMARY: Progress has been made in this area, despite the low priority still attached to it.

6. OCCUPATIONAL HEALTH AND INDUSTRIAL HYGIENE

	6.1 Policy defined for protection of working population exposed to occupational hazards			6.2 Sectors and institut. responsible for occupational health and industrial hygiene				6.3 Mechanisms for coordination between services and institutions				6.3 Occupational health programs			6.4 Evaluation of occupational hazards and population exposed to them			6.5 Goals and estimates of population exposed to hazards for which protection provided (percentage)	
	Yes, adequate	Yes, but inadequate	Under study	Does not exist	Min. of Hlth.	Min. of Labor	Social Security	Others	Exist, adequate	Exist, inadequate	Do not exist	Exist, adequate	Exist, incomplete	Do not exist	Yes, made	Only in part	Not made	1971	1974	1977	1980 (goal)
Argentina		X				X		X	X				X			X		-	-	-	50
Bahamas		X	X		X	X				X			X			X		-	-	-	-
Barbados		X	X		X	X				X			X			X		-	-	15	50
Bolivia																					
Brazil	X					X		X		X			X			X		9	11	15	20
Canada																					
Chile	X				X			X	X				X			X		55	60	65	70
Colombia		X			X	X	X				X		X			X		-	25	40	70
Costa Rica			X		X	X		X			X			X		X		-	-	-	-
Cuba	X				X	X		X	X			X			X			100	100	100	100
Ecuador	X				X	X	X	X	X				X			X		-	a	-	-
El Salvador		X				X	X			X			X			X		-	-	-	-
United States	X							X	X				X			X		-	-	-	90
Guatemala		X			X	X	X			X			X			X		-	-	-	-
Guyana		X			X	X				X			X				X	-	-	-	-
Haiti		X				X					X		X				X				
Honduras	X				X	X	X			X			X			X		-	-	13	26
Jamaica																					
Mexico	X				X	X	X		X			X				X		-	-	-	-
Panama	X				X		X			X			X			X		-	-	40	40
Paraguay			X		X	X	X	X		X			X			X		7	7	8	10
Peru		X			X	X	X	X	X				X		X			60	55	56	60
Dominican Rep.		X				X	X				X		X			X		-	-	-	-
Suriname		X				X				X			X			X		-	-	-	-
Uruguay			X		X	X		X		X			X			X					
Venezuela		X			X	X	X	X		X			X			X		7	8	10	10-12

a/ The Occupational Hazards Division was established under the IESS. b/ Now attained. c/ Economically active population.

6. OCCUPATIONAL HEALTH AND INDUSTRIAL HYGIENE

REGIONAL GOAL: To protect 70% of the workers exposed to estimated or known occupational hazards in countries where programs are fully operational and 50% in countries where programs are not yet sufficiently developed.

6.1 Policy to protect exposed working population against occupational hazards

Of the 22 countries that responded to the evaluation, 19 reported specific policies for the protection of workers exposed to occupational hazards. Only 8 of them rated their policies as satisfactory; the other 11 were dissatisfied with theirs and 2 were in the process of making changes. Studies were being conducted in the 3 countries that had no policy. The situation with regard to occupational health policy has not changed radically during the decade. Coverage varies widely from one country to another and some of the countries place greater emphasis on certain occupations and risks than do others.

6.2/3 Responsible sectors and institutions and occupational health programs

Responsibility in the area of occupational health and industrial hygiene is generally shared by the Ministry of Health, the Ministry of Labor, and Social Security and in some cases by other agencies. The lack of proper coordination among the sectors and institutions has impeded greater progress. Only 2 countries report the existence of satisfactory occupational health programs; in one there are no programs; and in the rest, programs are inadequate.

6.4 Evaluation of occupational hazards and of exposed population

Only partial evaluation of occupational hazards and those exposed was conducted in most of the countries. Only 2 reported having completed this task. Because of the lack of thorough evaluation, coverage of the working population cannot be presumed to be adequate.

6.5 Goals and estimates of population exposed to and protected against hazards

Only 12 countries set goals to be attained in 1980 with regard to protection of population exposed to hazards. Target goals were achieved in only a few instances. Generally speaking, the Region is far from succeeding in this respect.

II. ENVIRONMENTAL SANITATION PROGRAMS

7. ANIMAL HEALTH AND VETERINARY PUBLIC HEALTH

	7.1 Zoonoses control															
	7.1.1 Canine rabies												Bovine 7.1.2 brucellosis			
	Incidence (per 100,000 dogs)				Dogs vaccinated in large cities (percentage)				Stray dogs in large cities (percentage)				Prevalence			
	1971	1974	1977	Nat. goal 1980	1971	1974	1977	National goal 1980	1971	1974	1977	National goal 1980	1971	1974	1977	Nat. goal 1980
Argentina	24	45	86		23	22	73	80								
Bahamas	-	-	a	-	...	...	b	-	-	-	b	-	-	-	-	-
Barbados	-	-	-	-	-	-	-	-	-		-	-	15	-	3	m
Bolivia																
Brazil	28.8[c]	81.6 [d]	289.54[d]	-	19	31	75	-	-	-	-	-	6	5	4	-
Canada																
Chile	2	0.7	0.7	-	63	63	67	70	15	18	21	20	15 [c]	-	8	-
Colombia	-	49.6	34.8	25	18	82	48	[e]	5	3	7	5	7	5	4	5
Costa Rica	38.8	5.8	-	-	-	41	73	100	20	30	10	10	2.3[c]	-	10	9
Cuba	20.8	11.4	4.7	-	-	-	-	-	-	-	-	-	1	1	1	-
Ecuador	700 [c]	-	-	-	28	32	30	80	20	20	20	20	2.7[c]	-	6	5
El Salvador	-	-	9.5	-	-	-	-	-	-	-	-	-	...	...	2[f]	-
United States	0.2	0.2	0.1[f]	0.1	40	40	40[f]	50	20	20	20[f]	20	1	1	1[f]	1
Guatemala	23.9	34.2	31.3	g	5	18	15	80	-	-	-	-	-	4	9	m
Guyana	0 [c]	-	h	-	1	1	1[j]	-	80	70	60	1	2 [c]	1	-	1 c
Haiti	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Honduras	0[c]	-	793[a]	-	-	-	284[j]	105,300[k]		-	92[j]	80.370[k]	3.6[c]	-	2	1
Jamaica													2	0.4	0.5[h]	0.1
Mexico	-	195.9	148.9	-	-	16	19	-	...	...	...	...	...	...	...	...
Panama	62[c]	-	-	-	-	-	55	-	...	...	...	...	1.2[i]	-	3	-
Paraguay	68	51	46	54	-	7	30	80	...	...	15	...	3	3	-	-
Peru	99.1	2.1	-	-	46	19	1	80[l]	...	...	...	...	4.1[c]	-	-	-
Dominican Rep.	44	27	22	-	1	0.5	14	30	50	50	50	-	11	11	4	-
Suriname	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Uruguay								80				20			1	
Venezuela	34	37	38	30	31	29	31	80	20	15	14	10	6	4	3	1

a/ 1979 figure. b/ No statistics available, but the problem is serious. c/ Source: First Evaluation carried out in 1974 of the Ten-Year Health Plan for the Americas, 1971-1980. d/ Laboratory data. e/ Maintenance. f/ 1978 figure. g/ Control. h/ 1979 figure. i/ 1973-1977 period. k/ Absolute figures. l/ In Lima. m/ Eradication.

7. ANIMAL HEALTH AND PUBLIC VETERINARY HEALTH

7.1 Control of zoonoses

7.1.1 Canine rabies

REGIONAL GOAL: Eradication in major cities of the Region. Vaccination of 80% of the canine population in the most important cities. Elimination of stray dogs.

Despite the efforts made during the decade, rabies is still common in the Region. In North America, incidence is low and limited to wilderness or rural areas, rarely affecting humans. But in Latin America canine infection is widespread in all too many countries. Some progress has been made in a few but most of them are very far from reaching the goals set at the beginning of the decade. The incidence for the last year for which statistics are available, between 1977 and 1979, ranges between 0 and 793 for every 100,000 dogs in the major cities. Annual averages for the decade in Latin America and the Caribbean were over 15,000 dogs with rabies, more than 120,000 persons bitten by dogs and cats and almost 175,000 treatments. In the four years from 1973 through 1976, 1,093 cases of human rabies were reported—an annual average of 273 cases, just 10 fewer than the average for the previous four years. The annual average number of human cases reported in the Region was 300 (tentative figure).

The number of dogs vaccinated against rabies in each country's large cities failed to reach the goal of 80%, although three countries came fairly close in 1977, 1978 and 1979. Levels range from 1% to 75%, with a 35% median. As is evident, vaccination of dogs is not sufficiently widespread to keep the disease under control. Elimination of strays has not yet been completed: figures in the 10 countries that reported were between 7 and 60%, the median being 20%.

7.1.2 Bovine brucellosis

REGIONAL GOAL: Eradication in countries where prevalence is 1% or under and reduction to below 2% in other countries with this problem.

As reported in the initial evaluation of the Ten-Year Plan, 11 of the 15 countries that responded had patterned their national goals on the regional one. Several of them had to lower their sights to more realistic levels. A general downward trend is evident in the rates of prevalence, but not to the extent hoped for, since only 2 out of 16 countries neared or achieved the regional goal.

	7.1 Zoonoses control (Cont.)															
	7.1.3 Bovine tuberculosis				7.1.4 Hydatidosis								7.1.5 Leptospirosis			
	Prevalence (percentage)				Prevalence (percentage)				Slaughterhouses supervised (percentage)				Existence of problem in animals			
	1971	1974	1977	National goal 1980	1971	1974	1977	National goal 1980	1971	1974	1977	National goal 1980	1971	1974	1977	National goal 1980
Argentina					25	18	11	9	-	-	50	60				
Bahamas	-	-	-	-	-	-	-	-	100	100	100[f]	100	-	-	-	-
Barbados	-	-	-	-	-	-	-	-	-	-	-	-	SÍ	SÍ	SÍ[b]	g
Bolivia																
Brazil	2	4	3	-	16	16	17	-	2	4	6	-	SÍ	SÍ	SÍ	-
Canada																
Chile	12[a]	-	7[b]	9[a]	-	-	-	-	35	35	28[b]	25	SÍ	SÍ	SÍ[b]	-
Colombia	-	a	18	c	-	-	-	-	-	-	-	5	-	-	-	-
Costa Rica	0.8[a]	...	0.3	0.3	-	-	-	-	100	100	100	100	...	...	...	...
Cuba	0.1	0.1	0.1	-	-	-	-	-		SÍ	SÍ	-	0.0	-	-	-
Ecuador	-	-	-	-	-	-	-	-	30	45	80	100	-	-	-	-
El Salvador	-	-	0.5[b]	-	-	-	-	-	-	-	-	-	-	-	-	-
United States	0.0	0.0	0.0[b]	d	-	-	-	-	100	100	100	100	SÍ	SÍ	SÍ	g
Guatemala	0.4	3	5	e	20	20	20	g	6	8	10	50	SÍ	SÍ	SÍ	g
Guyana	3.5	3	2[a]	d	-	-	-	-	30	-	-	100	SÍ	34	-	g
Haiti		-	0.9	-	-	-	0.2[e]	-	-	-	-	-	-	-	-	-
Honduras	1.2[a]	-	1	0.2	-	-	-	-	-	-	-	-	-	-	-	-
Jamaica	1	0.1	0.4[f]	0.0					100	100	100[f]	100	SÍ	SÍ	SÍ[f]	
Mexico	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Panama	0.2[a]	-	1	-	-	-	-	-	-	-	-	-	-	-	SÍ	-
Paraguay	-	-	12	-	-	-	-	-	-	-	43	-	-	-	-	-
Peru	2.8[a]	-	-	1[a]	15.2[a]	4	5	2	-	100	100	100	-	-	-	-
Dominican Rep.	5	5	0.3	1[a]	-	-	-	-	-	-	-	-	SÍ	SÍ	SÍ	-
Suriname	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Uruguay			0.4		46	51	47		16	18	13			45	48	
Venezuela	1	0.3	0.4	d				g	30	40	60	80	SÍ	SÍ	SÍ	g

a/ Information from First Evaluation carried out in 1974 of the Ten-Year Health Plan for the Americas. b/ 1978 figure. c/ Investigate and control. d/ Eradication. e/ Control. f/ 1979 figure. g/ Reduction.

7.1.3 Bovine tuberculosis

REGIONAL GOAL: Eradication in countries in which prevalence is 1% or less and reduction to a prevalence of less than 1% in the remaining countries affected by this problem.

In the first evaluation of the Ten-Year Plan, 15 of the 22 countries noted the existence of the problem, with prevalence of 0.1% to 14.6%. Judging from the response of the 16 countries that reported affirmatively, the goals of the Ten-Year Plan were not met between 1977 and 1979 except in one country. Bovine tuberculosis continues to be prevalent, although to a lesser extent in most of these countries. In 6 of the countries that noted its presence, prevalence exceeded 1%; in the remaining 10 it was below 1%.

7.1.4 Hydatidosis

REGIONAL GOAL: To reduce prevalence. To supervise 100% of the slaughterhouses and public and private places where animals are slaughtered for consumption.

As is evident, there has been little response from the countries with respect to the prevalence of hydatidosis. However, it is known to exist to a marked degree in South America, where an annual average of 1,316 human cases was reported over the four-year period 1973-1976, primarily in Argentina, Uruguay, Chile and Peru. Prevalence in animals was reported by only 5 countries in 1977; in all but one of them, there was no appreciable decline from the level at the start of the decade. Control of all slaughterhouses as a goal for each of these countries in 1980 was implemented in 6 of the 14 countries that suplied information for the evaluation--which had already achieved that objective at the start of the decade. In the other 8, coverage ranged from 6 to 8%.

7.1.5 Leptospirosis

REGIONAL GOAL: Evaluation of the nature of the problem.

Human cases of leptospirosis reported between 1971 and 1976 numbered 733--an average of 122 cases a year, 54% of them in North America and 46% in the islands and the land surrounding the Caribbean. Some of those countries also reported the infection in animals, as did 3 South American countries. Little progress has been made in obtaining better information about the problem and thus in evaluating its size and scope.

II. ENVIRONMENTAL SANITATION PROGRAMS
7. ANIMAL HEALTH AND VETERINARY PUBLIC HEALTH

7.1 Zoonoses control (Cont.)

	7.1.6 Equine encephalitis								7.1.7 Foot-and-mouth disease								
	Incidence				Equines vaccinated (percentage)				Incidence				Phase of program	Disease-free areas (percentage)			
	1971	1974	1977	National goal 1980	1971	1974	1977	National goal 1980	1971	1974	1977	National goal 1980		1971	1974	1977	National goal 1980
Argentina																	
Bahamas																	
Barbados																	
Bolivia																	
Brazil							33		183.1	31.1	88.1		f				
Canada																	
Chile																50[h]	
Colombia				a			71		12.4	12.5	5.1		70g				
Costa Rica	...	...	...	...	...	...	...		-	-	-	-	g	100	100	100	100
Cuba	93	80	23											100	100	100	
Ecuador		2			5	33	34	40		0.1	0.1	0.1	0.1				
El Salvador							14[h]						h				
United States													i	100	100	100[b]	
Guatemala				c					0	0	0	0	0	100	100	100	100
Guyana		30				60				10			g	100	95	100[d]	100
Haiti																	
Honduras																	
Jamaica					40	45	40 b	50[d]						100	100	100	100
Mexico																	
Panama							30										
Paraguay	...	...	...	...	...	...	...	...	...	...	720 j	1	g	-	-	85	85
Peru	0.0	0.0	0.0	0.0	40	40	40	50	150 k	120 k	25 k	12	1				
Dominican Rep.	2	2	1										g	100	100	100	
Surinsme																	
Uruguay																	
Venezuela		79	45					e	109[m]	49[m]	64[m]	c	n				

a/ Control and maintenance. b/ 1978 figure. c/ Reduction. d/ 1979 figure. e/ Increase in vaccination. f/ Implementation. g/ Evaluation. h/ No program exists. i/ Zoonosis eradicated. j/ Per 100,000 bovines. k/ Per 1,000 bovines. l/ Maintenance. m/ Foci. n/ Control.

7.1.6 Equine encephalitis

Only 3 countries submitted information on the incidence of equine encephalitis in 1977: they reported 1, 23 and 45 cases, respectively, per thousand horses. Those figures show a drop from the ones reported in 1971, but there is no way of assessing trends in the remaining countries because of the lack of information.

None of the countries has met the 1980 recommended goal of vaccinating 80% of the horse population.

7.1.7 Foot-and-Mouth Disease

Foot-and-mouth disease continues to be endemic to most of South America but has been eliminated in North America, Central America and the Caribbean. Each South American country has its control program and over 70% of the cattle population is systematically vaccinated.

Cases are still found in Brazil, Colombia, Paraguay, Peru, Venezuela and Ecuador, where varying degrees of incidence were reported both in 1971 and in 1977. Chile was successful in eliminating it entirely, and Paraguay reported that 85% of its area was clear. No further information is available in this area.

CONCLUSION: The Ten-Year Health Plan recommends the promotion, strengthening and consolidation of animal health and veterinary public health services in order to achieve proper coordination between the countries' Health and Agriculture Ministries. The necessary units for this purpose must be set up or strengthened within the ministerial infrastructures.

	7.2 Veterinary public health unit in Health Min.								7.3 Zoonoses control programs in the Ministry of Health				7.4 Min. of Health & Agriculture coordination in zoonoses & foot-and-mouth disease control prog.			7.5 Epidem. surveillance on zoonoses	
				Programs under way													
	Exists	No	Being organized	National level	Regional level	Local level	Exist	No Planned	Funds allocated by Ministry to these programs (US$ thousands)	Investment by other ministries for zoonoses control (US$ thousands)	Adequate	Should be improved	Does not exist	Adequate	Should be improved	Inadequate	Programs
Argentina																	
Bahamas		x					x					x				x	
Barbados	x			x			x				x			x			
Bolivia																	
Brazil		x						x					x			x	
Canada																	
Chile		x			x	x		x				x				x	
Colombia	x			x	x	x	x		191,000		x					x	
Costa Rica		x					x					x					x
Cuba		x[a]					x				x			x			
Ecuador		x						x		5,680,000[b]			x				x
El Salvador	x			x				x				x				x	
United States	x			x			x					x				x	
Guatemala	x				x		x		35,674[c]			x					x
Guyana	x		x	x				x		15,000	x					x	
Haiti		x						x				x				x	
Honduras		x		x			x		d			x					x
Jamaica				x	x	x	x		50,000	500,000	x					x	
Mexico	x				x		x				x			x			
Panama	x			x	x	x	x					x				x	
Paraguay	x			x			x		25	1,640		x				x	
Peru	x			x	x	x	x					x				x	
Dominican Rep.		x					x		282	2,000		x					x
Suriname		x					x	x				x				x	
Uruguay	x			x	x		x	x				x				x	
Venezuela	x			x	x		x	e	100,000		x					x	

a/ The Institute of Veterinary Medicine, under the Agriculture Ministry, conducts national programs.
b/ 1974 to 1978. c/ 1979 Figure. d/ Funds included under the allocation for communicable diseases.
e/ Rabies control program.

7.2 Veterinary public health units in health ministries

Twelve of the 21 countries (4 out of 7) have this type of unit within the Health Ministry and all of them conduct programs at the national level; 8 of them also have regional programs and 7 have local ones. As compared with the situation in 1971, visible progress has been made in extending programs to peripheral areas. There are other veterinary public health units not located in the Health Ministries that also carry out his type of program.

7.3 Zoonosis control programs in the ministry of health

Programs of this type are carried out by 15 countries and are scheduled in 3 others. Only 4 countries lack control programs. The situation remains substantially the same as in 1971 and many countries limit their efforts to certain zoonoses, and particularly to rabies control.

7.4 Coordination between health and agriculture ministries

Coordination is considered satisfactory in only 6 of the 21 countries (2 out of 7). Two countries lack such coordination and it is inadequate in the rest.

Progress has been made as compared with the situation in 1971, since more countries have improved interministerial coordination of zoonoses and foot-and-mouth disease control programs.

7.5 Epidemiological surveillance of zoonoses

This is rated satisfactory in only 3 countries (1 out of 7). In the remainder it is deficient or needs improvement.

Some progress has also been made in this area in comparison to 1971, but not enough.

II. ENVIRONMENTAL SANITATION PROGRAMS

	8. CONTROL OF USE OF PESTICIDES										9. FOOD QUALITY CONTROL								
	8.1 National legislation on pesticides control			8.2 Laboratories for analysis on pesticides			8.3 Programs on pesticide use and control			8.4 Annual volume of pesticides produced in the country or imported (tons)	9.1 National legislation on food quality			9.2 Laboratory for food control			9.3 Food control programs		9.4 Average annual production (last three years) of food products registered and tested
	Adequate	Inadequate	Being studied & revised	Adequate	Inadequate	Do not exist	Being planned	Underway	Do not exist	Being studied		Adequate	Inadequate	Being studied and revised	Adequate	Inadequate	Being studied	Underway	Do not exist	Under study	
Argentina												x			x			x			2,000
Bahamas		x				x		x						x		x		x			
Barbados	x			x				x						x			x	x			
Bolivia																					
Brazil			x	x					x	200,000		x			x			x			5,570
Canada																					
Chile	x		x	x				x		3,500 b		x			x			x			...
Colombia		x	x		x			x		20,000 c			x	x			x	x	x		500
Costa Rica		x	x			x	x		x	...			x				x			x	
Cuba	x				x			x		844		x			x			x			
Ecuador		x			x				x				x			x				x	1,100
El Salvador		x			x					x				x		x		x			660
United States	x			x				x				x			x			x			55,353d
Guatemala		x			x			x				x									116
Guyana			x		x			x		36,341		x				x		x			3,061
Haiti		a				x			x	5286.2			x			x				x	
Honduras						x			x			x			x			x			1,476
Jamaica			x	x				x					x			x		x			
Mexico		x			x				x			x				x		x			3,171
Panama		x				x			x	172			x		x			x			
Paraguay		x				x			x	450				x		x		x			-
Peru			x		x				x				x			x					550
Dominican Rep		x				x			x					x		x		x			1,871
Suriname	x				x				x	951		x			x						
Uruguay			x		x				x					x		x				x	
Venezuela	x						x	x		50,000			x	x		x		x			2,848

8. CONTROL OF THE USE OF PESTICIDES

REGIONAL GOAL: To reduce the number of poisonings and human deaths due to indiscriminate use of pesticides in Latin American and Caribbean countries during the decade.

Indiscriminate use of large quantities of pesticides has aroused increasing concern in most countries. This has led to the study of proper legislation to control the use of pesticides and to establish programs for that purpose. Six of the 21 countries (2 out of 7) report that current national legislation is adequate for control purposes. In the remainder it is not, and 8 of them are making studies in this respect. The situation is evidently worse than in 1971, when 8 countries reported satisfactory legislation but in fact the problem has become more widespread and an increasing number of countries are concerned with making studies and adopting laws to support control action.

Substantive progress has been made in setting up laboratories for pesticide analysis, which indicates the interest that exists in solving this problem. Efficient laboratories are now operating in 5 countries and only 6 lack laboratory facilities.

Ten countries--i.e., more than half--now have control programs in effect and only 6 have not yet taken any action in this respect. This too marks considerable progress in this area since 1971.

9. FOOD QUALITY CONTROL

REGIONAL GOAL: To reduce human sickness and economic losses caused by biological, physical and chemical contamination of foodstuffs and subproducts and to preserve the quality thereof.

Most of the countries have proposed goals in this area, although progress appears to have been limited. The proportion of countries with adequate legislation (not even half of them) remains the same as in 1971. Legislation is inadequate in 7 countries (1 out of 3) and the remaining countries report that studies of legislation are in progress. Effective laboratories for food quality control are operating in 8 countries but are considered insufficient in 13 others. Studies for the operation of laboratories are underway in another 2. Visible progress has been made during the decade but a great deal remains to be accomplished.

Most of the countries report the existence of operative control programs, which means that the situation is substantially similar to that in 1971. The difference lies in the intensity and coverage. There are no evaluation indicators in this respect, so that it is impossible to assess developments thus far.

10. DRUG QUALITY CONTROL

	10.1 Unified drug control agency			10.2 Legislation on drug quality control			10.3 Laboratories for drug analysis and evaluation			10.4 Drug evaluation and registration system		
	Exists	Does not exist	Being planned	Adequate	Inadequate	Being revised	Adequate	Inadequate	Planned to improve	Adequate	Inadequate	Being revised
Argentina	x			x			x			x		
Bahamas		x			x			x			x	
Barbados	x					x					x	
Bolivia												
Brazil	x			x				x		x		
Canada												
Chile	x			x					x	x		
Colombia	x			x				x		x		
Costa Rica	x			x					x			x
Cuba	x					x			x			x
Ecuador	x			x					x	x		
El Salvador		x				x		x			x	
United States	x			x			x			x		
Guatemala			x			x						
Guyana	x			x					x		x	
Haiti		x									x	
Honduras		x				x			x			x
Jamaica	x			x				x	x	x		
Mexico	x			x				x		x		
Panama	x			x			x			x		
Paraguay		x				x			x			x
Peru	x			x			x			x		
Dominican Rep.	x				x				x		x	
Suriname		x			x			x			x	
Uruguay	x					x		x			x	
Venezuela	x			x				x		x		

10. DRUG QUALITY CONTROL

REGIONAL GOAL: To carry out programs in every country to monitor the quality of drugs produced domestically as well as those imported.

Only 6 countries (2 out of 7) report the lack of a central agency for drug control. The situation appears to have remained substantially unchanged since 1971.

Drug quality control legislation is reported as adequate in 13 countries and 7 others are reviewing prospective laws in this respect. Progress was made during the decade and the countries are displaying greater concern regarding the need for legislation for drug control.

There are very few properly equipped laboratories for drug analysis and evaluation. Eighteen countries (9 out of 11) report a shortage of laboratories for this purpose and 9 have plans for improving them. Progress in this respect since 1971 has been marginal.

Finally, the drug evaluation and registry system in 11 countries (half of them) is considered satisfactory. In another 11 it is inadequate and 4 of them are making imrovements. The situation is similar to that in 1971: no substantive changes have been achieved.

II. ENVIRONMENTAL SANITATION PROGRAMS

11. ACCIDENT CONTROL

	11.1 Mortality due to accidents: deaths caused by accidents of all kinds, per 100,000 inhabitants				11.2 Deaths caused by traffic accidents per 100,000 inhabitants				11.3 National traffic accident prevention program		11.4 Intersectorial coordination for accident prevention	
	1971	1974	1977	Forecast for 1980	1971	1974	1977	Forecast for 1980	Exists	Does not exist	Adequate	Inadequate
Argentina	51.4[a]		70		21	25	23		x		x	
Bahamas		103	79			29	26		x			x
Barbados	34	26	26		19	14	9			x		
Bolivia												
Brazil	57[b]				22	36	40	45	x			
Canada												
Chile	91[b]	66.7[c]	-	-	21[b]	-	-			x		
Colombia	34	41	38		10	15	16		x			x
Costa Rica	39	52	52	...	4	16	23	...		x		x
Cuba	32	32	40		12	11	18		x		x	
Ecuador	61	66	66	66	15	21	21	18	x		x	
El Salvador	75	91	107[d]		13	15	23[d]			x		x
United States	55	50	48	-	26	22	23	-	x		x	
Guatemala	37[b]				8[b]				x			x
Guyana	61	65			26	24	27		x			x
Haiti		1.8	3.4		0.1	-	0.3			x		x
Honduras	69	67	55		5	2	9	-		x		x
Jamaica	26[b]				7[b]							
Mexico	48[b]	50	45[e]		8[c]	15	16[e]		x		x	
Panama	51	55	59	38	16	15	17		x			x
Paraguay	33	35	36		7	7	7	6		x		x
Peru	37	37	34	32	14	19	11	12		x		x
Dominican Rep.	18	18	19		9	8	8		x			
Suriname	32		39		18		18			x		x
Uruguay	44[a]		50			7[c]	1			x		x
Venezuela	47	56	58	60	24	32	34	36	x			x

a/ 1970 figure. b/ Source: First evaluation conducted in 1974 of the Ten-Year Health Plan for the Americas, 1971-1980. c/ Source: Health Conditions in the Americas, 1969-1972, PAHO/WHO Scientific Publication No. 287. d/ 1978 figure. e/ 1975 figure.

11. ACCIDENT CONTROL

11.1 Accident mortality rate

REGIONAL GOAL: To reduce the number of traffic and industrial accidents, as well as those occurring in the home and in areas of recreation and tourism thus reducing fatalities and disabilities.

In 1971 accidents of all types represented one of the five chief causes of death in most of the countries of the Region, and the main cause for certain age groups. Mortality rates for 22 countries were between 18 and 91 deaths from all types of accidents for every 100,000 persons in 1971, with a median of around 40. By 1977, the rates for 18 countries had risen to between 19 and 107 deaths per 100,000, with a median of 49. Thus the death rate for all types of accidents has remained unchanged or has risen in the first seven years of the decade. This is indicative of the increasingly critical nature of the Region's accident problem, contrary to expectations when goals for reducing it were established under the Ten-Year Health Plan.

11.2 Deaths from traffic accidents

Traffic accident fatalities in 1971 accounted for almost 40% of deaths from all types of accidents, ranking among the first ten causes of death. The rates were between 4 and 26 traffic accident fatalities for every 100,000 persons, with a median of 14. By 1977 the rates in 20 countries ranged from 1 to 40 per 100,000 with a median of 18. Accordingly, traffic deaths have risen in the first seven years of the decade in the Region as a whole and in most of the individual countries.

11.3/4 National traffic accident control program

National traffic accident control programs are operating in 13 of the 23 countries, showing the growing concern over this problem in the Region inasmuch as only 7 out of 18 countries reported such programs at the start of the decade. However, the necessary intersectorial coordination for the operation of these programs is adequate in only 5 of the 23 countries, so that little progress has been made in the interim.

SUMMARY: The accident problem continues to magnify in importance. It is one of the principal causes of death in most of the countries and considering that 10 to 25 persons suffer temporary or permanent disability for each one that dies as a result of a traffic accident, the situation is even more serious than the fatality records indicate.

III. SUPPORTING SERVICES

III. SUPPORTING SERVICES

A. NURSING

	1. Nursing system																	
	1.1 Definition of nursing functions for different levels of care				1.2 Definition of technical standards for different levels of care				1.3 Definition of type and number of nursing personnel required				1.4 Organization and operation of information systems for supervision					
	Defined	Defined in part	Not yet defined	Being defined	Defined	Defined in part	Not yet defined	Being defined	Defined	Defined in part	Not yet defined	Being defined	In operation	Organized in part	Not yet organized	Being studied		
Argentina																		
Bahamas	x					x			x				x					
Barbados	x					x				x		x	x					
Bolivia																		
Brazil	x							x	x				x					
Canada																		
Chile	x				x				x				x					
Colombia		x				x				x				x				
Costa Rica	x				x				x			x						
Cuba	x				x				x				x					
Ecuador	x				x				x					x				
El Salvador				x		x				x				x				
United States		x				x				x				x				
Guatemala		x				x						x			x			
Guyana	x				x				x				x					
Haiti																		
Honduras	x				x				x					x				
Jamaica	x				x				x				x					
Mexico		x			x					x				x				
Panama		x				x			x					x				
Paraguay	x							x	x					x				
Peru	x					x						x			x			
Dominican Rep.	x					x			x					x				
Suriname	x						x		x				x					
Uruguay		x				x					x				x			
Venezuela	x				x				x				x					

A. NURSING

1. NURSING SYSTEM

REGIONAL GOAL: Organize nursing in at least 60% of the countries, as a system in which the level of nursing care and the staffing required to meet the health goals of each country are defined. Provide the population with nursing care which is free of risk for the patient in 60% of hospitals with 100 or more beds, and in 60% of community health services.

In 1971, less than half the countries had defined the nursing function for various levels of care, or the type and numbers of personnel required. The remaining countries had only arrived at a partial definition of the functions and personnel needs, or had none at all. The technical standards for the various levels of care had been defined in less than one third of the countries. The information system for monitoring nursing activities had been defined and designed only in part or not at all in most of the countries.

The information supplied by 23 countries for the present evaluation shows clear progress in organizing the nursing systems. Sixteen countries have defined the nursing function for the various levels of care, and in six more, the definition has been partially completed; only one country reports that the definition is being planned.

Twenty countries have a definition of the technical standards for the various levels of care, although ten say that their definition is only partial. One country has not arrived at a definition, while two have it under way. Progress has thus been made in defining technical nursing standards; what remains to be done depends mainly on how the levels of care are defined within the broader framework of the countries' health systems services.

At present, the number of countries that have defined the type and numbers of nursing personnel required at the different levels of the health system is greater than in 1971: 14 have done so, while another six have completed part of the definition. The remaining three coutries are without a definition, although two are planning it.

In 1971, most of the countries had not identified or designed an information system to monitor nursing activities; today, ten countries have such a system in operation, while another ten have it partly organized. Three countries have no system. Progress in this area is evident, although there is still much to be done in setting up information systems to monitor nursing activities.

SUMMARY: To judge from the information provided, more than 60% of the countries have outlined their nursing systems, and greater progress can be expected as the health services systems themselves are better defined.

III. SUPPORTING SERVICES
A. NURSING

	2. Quality of nursing care															
	2.1 Definition of nursing care standards								2.2 Administrative organization of nursing training							
	In providing services to individuals				In services to the community				In institutions or units delivering services to the individuals				In services to the community			
	Defined	Defined in part	Not yet defined	Being Defined	Defined	Defined in part	Not yet defined	Being Defined	Organized	Organized in part	Not yet organized	Being organized	Organized	Organized in part	Not yet organized	Being organized
Argentina			x				x				x				x	
Bahamas			x			x				x					x	
Barbados			x				x				x				x	
Bolivia			x				x			x					x	
Brazil	x			x							x				x	
Canada		x				x				x					x	
Chile			x				x				x				x	
Colombia		x					x			x					x	
Costa Rica		x				x					x				x	
Cuba			x				x				x				x	
Ecuador																
El Salvador			x				x			x					x	
United States	x							x							x	
Guatemala		x				x				x					x	
Guyana			x				x			x					x	
Haiti			x				x				x				x	
Honduras			x				x				x				x	
Jamaica			x				x				x				x	
Mexico		x				x				x					x	
Panama			x				x				x				x	
Paraguay																
Peru		x				x				x					x	
Dominican Rep.																
Suriname			x				x					x			x	
Uruguay							x			x					x	
Venezuela																

2. QUALITY OF THE NURSING SERVICES

It is easier to provide a risk-free level of care to the people served when standards are established for the content of the care and for the quality expected. At the beginning of the decade, there were few countries that had set their standards, either for institutional care or for community services. In 1971, only 6 of the 22 countries had set their standards for nursing care in institutions or health care units. In 1979, on the other hand, 14 countries have completed their definitions, and only nine say that they are partially complete. In other words, while in 1971 only one third of the countries had set their nursing care standards, in 1979, more than half the countries had done so.

The administrative structure of nursing services, both in the direct service units and in the community services, changed very little over the decade; five out of every seven countries say that these services were organized, and the remainder have them partially organized, or are planning to do so.

III. SUPPORTING SERVICES
A. NURSING

	3. Coverage of nursing services											
	3.1 Preparation of technical-administrative manuals for use of auxiliaries				3.2 Percentage of trained auxiliaries					3.3. Supervisory activities		
	Exist	Exist but incomplete	Do not exist	Being prepared	1971	1976	1977	Goal for 1980	Organized and in operation	Being carried out in part	Not being carried out	Being organized
Argentina	x									x		
Bahamas			x		100	100	100		x			
Barbados	x[a]			x[a]	61	65	80	100	x			
Bolivia												
Brazil	x				...	...	50	50	x			
Canada												
Chile	x				100	100	100	100	x			
Colombia		x			45	49	54	66		x		
Costa Rica	x				63	66	97	100		x		
Cuba	x				100	100	100	100	x			
Ecuador	x				20	40	50	80		x		
El Salvador			x		60	65	74	80		x		
United States	x				...	...	...	...	x			
Guatemala		x			15	20	40	50				x
Guyana			x		14	31	33	40	x			
Haiti												
Honduras				x	100	100	100	...		x		
Jamaica	x				25[b]	40[b]	50[b]	40[b]				
Mexico	x					90	90	100		x		
Panama		x							x			
Paraguay		x			32	48	53	-		x		
Peru			x		31	40	60	x		x		
Dominican Rep.				x	40	75	94			x		
Suriname	x								x			
Uruguay				x	80	85	91	95		x		
Venezuela	x				56	65	80	95	x			

a/ In some areas. b/ Includes nursing and community health auxiliaries.

3. COVERAGE OF NURSING SERVICES

Sixteen of the 23 countries responding to this section of the evaluation say that they have technical and administrative manuals for the use of nursing auxiliaries, although five of these countries state that their manuals are incomplete. In seven of the remaining countries there are no manuals, although three are preparing them. The situation does not appear to have changed from the situation at the beginning of the decade.

In 1971, only four countries had trained 100% of their auxiliaries through special training courses. In 1977, these same countries still had 100% of their auxiliaries trained. In 1971, half of the countries had 50% or more of their auxiliaries trained; in 1977, half of the countries had 80% or more trained. Progress has been made, and if it continues, in 1980 the countries will be able to meet their own goals for training auxiliary nursing personnel.

Supervision of the nursing services is organized and is operating in half the countries, while it is only partially operative in the remainder. This situation is similar to that at the beginning of the decade.

III. SUPPORTING SERVICES

B. LABORATORIES

	1. Definition of types or laboratory examinations by care levels			2. Standards for equipment personnel and operation of laboratories by care level			3. Standards for operation of regional and national consultation and reference networks		
	Defined	Not defined	Being defined	Exist	Does not exist	Being prepared	Exist	Does not exist	Being prepared
Argentina									
Bahamas		x		x			x		
Barbados		x			x		x		
Bolivia									
Brazil	x			x					x
Canada									
Chile			x			x			x
Colombia	x			x	x	x	x	x	x
Costa Rica	x			x			x		
Cuba	x			x			x		
Ecuador		x			x		x		
El Salvador	x					x		x	
United States									
Guatemala		x				x			
Guyana	x			x				x	
Haiti	x			x				x	
Honduras	x			x					x
Jamaica	x			x			x		
Mexico	x			x					x
Panama	x			x			x		
Paraguay			x			x		x	
Peru			x			x			x
Dominican Rep.			x			x			x
Suriname	x			x			x		
Uruguay									
Venezuela		x				x	x		

B. LABORATORIES

REGIONAL GOAL: To increase the coverage and to organize the laboratories into "systems" having diagnostic functions, producing biologicals for human and animal use, and serving as blood banks required to back up the health programs.

At the beginning of the decade, almost four out of every five countries had set national goals for the decade for setting up, operating and developing a system of laboratories and blood banks.

Organizing a laboratory system means defining the types of examinations that should be done at each level of care. In 1980, only 12 countries (two in three) have defined the types of laboratory examinations according to level of care; this has not been done in five countries, although four are planning to do so. The situation is very much the same as it was at the beginning of the decade, and is obviously very dependent on the definition of levels of care within each country's health services system.

The lack of defined levels of care has also affected the setting of standards for equipment, personnel and operations of the laboratories for each of the levels. Only ten countries (half) have such standards at present, while seven (one third) have them under study. However, three countries have not even drafted any standards.

In ten countries (half), there are standards of operation for regional and national consultation and referral networks. In seven countries (one in three), such standards are being drafted, while they do not exist in five countries, nor are they even under study.

The first evaluation of the Ten-Year Helth Plan yielded information on the percentage of care units with a full-time doctor that had laboratory services. Only 14 countries reported their percentage at that time: it ranged from 7.7% to 100%, averaging out at around 40%. Half of these countries proposed that by 1980, 100% of their care units with a full-time doctor would have access to laboratory service, and the other countries ranged from 35% to 90%.

Information was obtained for the present evaluation from 14 countries, none of which managed to have 100% of their units with a full-time doctor having laboratory service. The percentages in these 14 countries ranged from 16% to 95% in 1977, with an average of about 50%: this is an indication that some progress has been made over the decade, although it is not in accordance with the expectations of the Ten-Year Plan.

	4. Care units with full time physician provided with laboratory service (percentage)				5. Network of blood banks organized by care levels, with central reference banks consistent with regionalization services			
	1971	1974	1977	Goal for 1980	Exist	In operation in part	Do not exist	Being Studied
Argentina								
Bahamas					x			
Barbados	90	95	95	100		x		
Bolivia								
Brazil							x	
Canada								
Chile						x		
Colombia	70	57	80	100				x
Costa Rica	23 a	34 a	36 a	100 a	x			
Cuba	91	91	91		x			
Ecuador	11	17	35	45		x		
El Salvador	52	51	47	54			x	
United States								
Guatemala	84	62	44	65			x	
Guyana							x	
Haiti								x
Honduras	25	32	42	75				x
Jamaica					x			
Mexico		964 b	17 c			x		
Panama	51	70	64	100	x			
Paraguay	43	57	52	...		x		
Peru	10	28	29	30				x
Dominican Rep.						x		
Suriname		30	35	45			x	
Uruguay								
Venezuela	79	84	81	100	x			

a/ Only units of the Ministry of Health. The following percentages apply to the Costa Rican Social Security Bank: 1971, 42%; 1974, 42%; and 1977, 55%; and goal for 1980, 53%. b/ Absolute figure. c/ Only units of the Secretariat of Public Health and Welfare.

Only six countries (three in ten) report that they have blood bank systems set up by level of care with central reference banks, corresponding to the regionalization of the services. In five more countries, the system is operating only partially. Almost half the countries report that no such system exists, although five countries do have plans to set up one. Obviously, some progress has been made in this area, but the countries have not been as successful as had been hoped.

SUMMARY: The progress made in organizing laboratory services as national systems has not been any faster than the progress in organizing the health services systems themselves. There are at present more units with a full-time doctor that have access to laboratory services than was the case at the beginning of the decade, but the ideal of 100% is far from being achieved.

III. SUPPORTING SERVICES

	C. REHABILITATION					D: HEALTH EDUCATION	
	Were goals set in this field?		Inclusion of basic rehabilitation services into medical care programs			Were goals set in this field?	
	Yes	No	Yes	Limited	No	Yes	No
Argentina	X		X			X	
Bahamas	-	-	-	-	-	X	
Barbados	X		X			X	
Bolivia							
Brazil						X	
Canada							
Chile	X		X			X	
Colombia						X	
Costa Rica						X	
Cuba	X		X			X	
Ecuador	X		X			X	
El Salvador	X		X			X	
United States	X		X			X	
Guatemala						X	
Guyana		X			X		X
Haití	X		X			X	
Honduras		X					
Jamaica						X	
Mexico	X		X			X	
Panama		X	X			X	
Paraguay						X	
Peru							X
Dominican Rep.	X		X			X	
Suriname	X					X	
Uruguay						X	
Venezuela	X		X			X	

C. MEDICAL REHABILITATION

REGIONAL GOAL: Include basic rehabilitation services in all medical care programs to ensure that the handicapped can live as normal a life as possible.

It was estimated at the beginning of the decade that Latin America and the Caribbean had not less than ten million people who had some kind of disability and who were unable to realize their physical potential unless they had rehabilitation services. There is no reason to believe that the size of the problem is any less at the end of the decade, and thus in 1980, there may be in Latin America and the Caribbean about 13 million people who have motor, sensory or cardio-pulmonary disabilities, with problems such as paralysis, amputations, speech, hearing or visual defects, or a life restricted by cardiac or pulmonary problems.

Technology is available to make a notable improvement in the well-being of the handicapped, but its use has been limited by the lack of resources, both of specialized personnel and of financing for equipment, materials and other facilities. Some progress could be noted during the decade in certain countries that pay more attention to rehabilitation and set goals of including basic rehabilitation services in their medical care programs. Twelve of 15 countries (four in five) answering this section of the evaluation did set up such goals, in contrast to the situation at the beginning of the decade, where only four in nine attached any importance to the problem.

The net progress that can be seen in this field is apparent in the growing concern to provide certain simple services for a greater number of handicapped people, rather than offering sophisticated services to only a small number of patients.

D. HEALTH EDUCATION

REGIONAL GOAL: To organize health education as part of the process of active and informed community participation in all disease prevention and cure activities.

At the beginning of the decade, almost all the countries of the Region had health education services within the institutional structure of the sector. However, it may be said that their level of operations was limited, both as regards coverage and in the type of action undertaken. The general field of health education was following a course laid out for other needs and was not geared to the current orientations of the community participation process. The orientation has undergone major changes over the past decade, and health education is now seen as an integral part of the development of the communities, while the techniques used are being modified to suit them to the requirements of extended coverage and primary care.

Twenty-one of 23 countries have set themselves development goals in the field of health education in which they think of it as part of an integral process of community development and as using modern mass communications techniques to mobilize the resources of the community in support of the work of the health care units, to act both by themselves and on their own behalf. The change of direction in health education is still going on, and most of the countries do not yet have the resources to carry out the national plans and strategies they have devised.

E. EPIDEMIOLOGICAL SURVEILLANCE

	1. National surveillance system															2. Human Resources of the system		3. Community participation
	1.1 Surveillance system at central level within administrative structure			1.2 Surveillance system in health regions or areas			1.3 Technical standards for operation			1.4 Information system			1.5 Geographic coverage					
	Exists	Inadequately organized	Does not exist	In all areas or regions	In some areas or regions	Do not exist	Adequate	Inadequate	Being revised	Efficient	Inefficient	Being revised	Entire country	Part of the country	Sufficient	Insufficient	Effective	Ineffective
Argentina																x [a]		x
Bahamas	x			x				x				x		x		x		x
Barbados	x				x					x			x			x	x	
Bolivia																		
Brazil	x			x					x		x		x			x		x
Canada																		
Chile			x			x	x			x			x			x	x	
Colombia	x				x			x	x		x		x			x		x
Costa Rica	x				x		x			x				x	x		x	
Cuba	x			x			x			x			x		x		x	
Ecuador	x	x			x			x				x		x		x		x
El Salvador	x			x			x			x				x		x		x
United States	x			x			x					x	x		x		x	
Guatemala		x			x				x		x			x		x		x
Guyana		x				x		x			x			x		x		x
Haiti	x				x				x		x			x		x		x
Honduras	x			x			x					x		x		x		x
Jamaica	x				x					x						x		
Mexico	x			x			x				x		x			x		x
Panama	x				x		x			x				x		x		x
Paraguay		x		x				x			x		x			x		x
Peru	x			x					x		x			x		x		x
Dominican Rep.		x			x			x					x			x		x
Suriname		x			x				x			x		x				
Uruguay	x			x					x			x	x			x		x
Venezuela	x			x			x			x			x		x			x

a/ In technical and administrative areas.

E. EPIDEMIOLOGICAL SURVEILLANCE

REGIONAL GOAL: To establish and maintain epidemiological surveillance units in accordance with each country's national organization and regionalized structure.

All but one of the countries have a central surveillance unit in their administrative structures. In six cases, the units are said to be poorly organized.

Ten countries (less than half) have surveillance units in all their health regions or areas, while another ten have them only in some. In two countries, there are no units outside the central one.

The technical operating standards of the national surveillance system are felt to be adequate in ten countries, and inadequate in the remainder. They are under review in seven countries.

Only eight countries (somewhat more than one third) feel that the information system feeding into their surveillance systems is efficient. The remaining countries find it poor, and six of them have it under review.

In half the countries, the country is totally covered by the surveillance system, while the others have only partial coverage.

Progress has been made in setting up the epidemiological surveillance systems in the countries of the Region. However, the accomplishments fall somewhat short of the ideal that led the countries to be concerned with this aspect within the terms of the Ten-Year Health Plan for the Americas.

IV. DEVELOPMENT OF THE INFRASTRUCTURE

IV. DEVELOPMENT OF THE INFRASTRUCTURE

	1. ADMINISTRATIVE SERVICES																	
	1.1 Administrative reform									1.2 Macro-administrative adjustment								
	Is there a process of administrative reform of the public sector?			Is the health sector participating?		Of the health sector?			Has a sectorial diagnosis been made?		Has an analysis of the most important institutions been made?		Institutions analyzed			Proposals derived from sectorial analysis accounting for macro-administrative adjustment		
	Yes	No	Under study	Yes	No	Yes	No	Planned	Yes	No	Yes	No	Ministry of Health	Social Security	Others	Yes	No	No macro-administrative adjustment
Argentina	X			X		X			X		X				X			X
Bahamas		X			X		X			X	X				X			X
Barbados		X				X			X		X		X	X	X	X		
Bolivia																		
Brazil	X			X		X			X		X		X		X			X
Canada																		
Chile	X			X		X			X		X							
Colombia		X			X	X			X		X		X		X	X		
Costa Rica	X			X		X			X			X				X		
Cuba	X			X		X			X		X				X	X		
Ecuador	X			X		X			X		X				X	X		
El Salvador	X			X		X					X		X	X	X	X		
United States	X		X	X		X			X		X				X	X		
Guatemala	X			X		X			X		X		X	X		X		
Guyana	X					X			X		X				X	X		
Haiti			X		X				X		X		X			X		
Honduras	X			X		X			X		X			X	X	X		
Jamaica	X			X		X												
Mexico	X			X		X			X		X		X	X	X	X		
Panama			X	X			X		X		X		X	X		X		
Paraguay			X		X		X		X			X						X
Peru	X			X			X		X		X		X		X	X		
Dominican Rep.		X			X	X			X		X		X	X			X	
Suriname	X			X			X											
Uruguay	X			X		X					X				X	X		
Venezuela	X			X		X			X	X	X	X	X	X	X			

1. ADMINISTRATIVE SERVICES

1.1 Administrative reform

In 1971 most of the countries emphasized this aspect of infrastructure development and set goals to be attained by the year 1980 for administrative reform and the operation of administrative services.

A process of administrative reform in the public sector is under way in 17 out of 24 countries. In 3 countries there is no such process and in another 4 it is under study. The health sector has participated in all the administrative reform processes and is participating in the study of the reform of the public sector. The process of administrative reform of the health sector itself is under way in 19 out of the 24 countries that participated in this evaluation; the other 5 countries indicate that this administrative reform of the health sector is being planned. This situation shows the interest the countries have sustained throughout the decade in organizing their administrative systems, issuing regulations governing them, and making them more efficient.

1.2 Macro-administrative reform

In all the countries, except 2, a sectorial diagnosis has also been made and in all the countries, except 3, a detailed analysis has been made of each of the most important institutions that make up the health sector either the ministry, social security institutions, or other institutions. The sectorial diagnosis and institutional analysis has led to proposals for the overall administrative reform of the sector in 15 countries in which it has been carried out or is under way. In 3 countries this overall reform has not been made.

IV. DEVELOPMENT OF THE INFRASTRUCTURE
1. ADMINISTRATIVE SERVICES

	1.3 Adjustment of institutional administration																							
	Intra-institutional reorganization									Regionalization								Organizational regulations					
										Organization of administrative services by operational level													
	Of the Ministry			Of Social Security			Of other institutions			In the Ministry			In Social Security			In other institutions			Organizational Law of the sector		Institutional organizational regulations		
	Yes	No	In process	Yes	No	In process	Yes	No	In process	Yes	No	In process	Yes	No	In process	Yes	No	In process	Yes	No	Being studied or revised	Ministry	Social Security	Others
Argentina	x		x						x		x									x				
Bahamas			x			x			x		x			x			x			x				x
Barbados			x								x						x					x	x	x
Bolivia																								
Brazil			x			x	x		x	x		x			x	x		x	x		x	x		x
Canada																								
Chile	x									x									x					
Colombia	x					x				x			x						x			x		x
Costa Rica			x			x			x	x			x				x			x		x	x	x
Cuba	x									x									x					x
Ecuador	x			x						x			x						x			x	x	x
El Salvador			x			x			x			x			x			x			x			
United States	x			x						x			x				x		x		x			x
Guatemala						x			x					x			x		x					x
Guyana			x		x			x			x		x				x			x				x
Haiti			x								x								x			x		
Honduras	x					x			x	x			x							x		x	x	x
Jamaica	x			x						x			x											
Mexico	x			x			x			x			x				x			x		x	x	x
Panama			x			x	x			x			x							x		x	x	x
Paraguay			x		x			x			x			x			x			x		x		x
Peru			x							x									x			x		x
Dominican Rep.			x		x			x		x				x			x			x		x	x	
Suriname			x								x								x					
Uruguay	x				x			x				x			x					x		x		
Venezuela			x								x			x			x		x			x		

1.3 Reform of institutional administration

1.3.1 Intra-institutional reorganization

The institutional reorganization of the Ministry of Health has been carried out in 10 countries while in the 12 remaining countries of the 22 that provided information for this evaluation this reorganization is under way. The governments have also expressed interest in adjusting the administrative structure of their ministries to the needs of the health programs.

Only 4 countries mentioned that intra-institutional reorganization has also been carried out in social security institutions while in 8 further countries this reorganization is under way and in 4 it has not been carried out.

Nine countries also mentioned that the reorganization of other sectorial institutions has been carried out or is under way.

1.3.2 Regionalization

Most of the countries have come to consider it necessary to organize their administrative services by care level. This organization by care level has been carried out in the Ministries of Health of 14 countries (2 out of 3) whereas in another 8 countries it is under way.

Eight countries have organized administrative services by operational level in social security agencies and another 4 countries state that this organization is under way.

1.3.3. Organizational regulations

Fifteen countries (5 out of 8) have an organic law for the sector and another 4 countries are revising this law.

In addition in 15 countries (5 out of 8) the Ministries of Public Health have regulations for the organization of their institutions. Only 8 countries state that the social security institutions also have such regulations. Fifteen countries also mentioned the existence of organizational regulations for other sectorial agencies.

	1.3 Adjustment of institutional administration (Cont.)																						Development and introduction of manuals of administrative procedures for use at all levels of administration		
	Reorganization and adjustment of administrative services																								
	(a) Personnel			(b) Budget			(c) Accounting			(d) Supplies			(e) Communications			(f) Transportation			(g) General services					
	Yes	No	In process	Yes	No	In process	Yes	No	In process	Yes	No	In process	Yes	No	In process	Yes	No	In process	Yes	No	In process	Yes	No	In process	Yes	No	In process
Argentina	x		x	x		x	x		x												x				
Bahamas			x			x			x			x			x			x			x				x
Barbados	x					x		x				x		x				x				x		x	
Bolivia																									
Brazil	x		x			x	x		x			x	x		x	x			x	x		x			
Canada																									
Chile			x			x	x			x			x			x			x						
Colombia			x			x			x			x			x				x			x			
Costa Rica			x			x			x			x			x				x			x			x
Cuba	x			x			x			x			x			x			x			x			
Ecuador	x			x			x			x			x			x			x			x			x
El Salvador			x			x			x			x			x				x			x			x
United States			x			x			x		x				x			x					x		x
Guatemala			x			x			x			x										x			x
Guyana			x			x			x			x			x				x			x			x
Haiti			x			x			x			x			x				x			x			x
Honduras			x	x			x			x					x				x			x	x		
Jamaica																										
Mexico	x			x			x			x			x			x			x				x		
Panama			x			x			x			x			x				x			x			x
Paraguay			x			x			x			x			x				x			x			x
Peru			x			x			x			x			x				x			x			x
Dominican Rep.			x			x	x				x				x	x				x			x		
Suriname		x			x				x		x			x				x			x			x	
Uruguay			x			x			x			x			x				x			x			x
Venezuela																										

1.3 Reform of institutional administration (continued)

1.3.4 Reorganization and reform of administrative services

Major advances have taken place in the reorganization and reform of administrative services of the health sectors in the countries, in particular in the Ministries of Public Health. The response of 22 countries to each one of the components of the administrative services are as follows:

a) Personnel: In 6 countries (1 out of 4) the personnel services have been reorganized and reformed; in the remaining countries such reorganizational reform is under way.

b) Budget: In 5 countries the reorganization and reform of budgetary processes has been completed; in all the other countries this reorganization and reform is under way.

c) Accounting: In 8 countries (1 out of 3) the organization of accounting procedures has been completed; in all the remaining countries except one this reform is under way.

d) Supplies: In 5 countries (1 out of 5) advances have been made in adjusting the procurement systems to the needs of the programs; in all the remaining countries except 3, the procurement systems are being reformed.

e) Communications: Five countries (1 out of 5) state that they have completed the reform of their communications systems; in all the remaining countries except 2 this reform is under way.

f) Transportation: In 6 countries (1 out of 4) the use of transportation has been streamlined and systematized; in 4 of them no action in this respect has been taken and in the remaining countries the improvement of transportation services is under way.

g) General services: Five countries (1 out of 5) state that this part of the administrative services is consistent with their needs; in 3 countries no action has been taken and in the remaining countries the reorganization and reform of the general services is under way.

1.3.5 Administrative manuals

The existence of administrative manuals for use at all levels of administation is a useful indicator of the status of administrative services. Of the 20 countries that reported, 6 (3 out of 10) state that they have such manuals, 2 state that they have no such manuals, and the remaining 12 state that such manuals are being prepared.

IV. DEVELOPMENT OF THE INFRASTRUCTURE

2. INFORMATION SYSTEMS

	2.1 National health information system			2.2 Coverage of system						2.3 Coordination of information system									2.4 Information units			
				Politico-administrative			Sectorial			Programmed			Intersectorial			Interinstitutional			Interprogram			Institutional level			Programs
	Organized	Organized in part	Not organized	Being studied	National	In part	Mixed	Entire sector	Some institutions	Mixed	All programs	Some programs	Adequate	Deficient or inadequate	Does not exist	Adequate	Deficient or inadequate	Does not exist	Adequate	Deficient or inadequate	Does not exist	Sectorial	Ministry of Health	Other health institutions	Other	Human and animal health	Other
Argentina																											
Bahamas		x				x			x			x		x			x			x			x				
Barbados		x			x			x			x			x			x			x		x	x	x		x	
Bolivia																												
Brazil			x		x						x			x			x			x			x			x	
Canada																												
Chile	x				x			x			x		x						x			x						
Colombia	x				x			x			x		x			x			x			x				x	x	
Costa Rica	x				x			x				x	x				x			x			x					
Cuba	x				x			x			x		x			x			x			x	x					
Ecuador	x				x			x			x												x	x			x	
El Salvador		x				x			x			x		x			x			x			x	x	x	x	x	x
United States	x				x				x			x		x			x											
Guatemala		x					x			x			x					x		x			x				x	
Guyana				x			x			x			x										x					
Haiti		x			x				x			x											x			x		x
Honduras	x				x				x			x			x			x			x		x	x			x	
Jamaica		x		x			x			x			x															
Mexico				x		x					x			x									x					
Panama	x				x						x				x			x			x							
Paraguay				x			x					x		x														
Peru		x					x				x			x														
Dominican Rep.		x			x					x		x																
Suriname	x				x			x			x																	
Uruguay		x					x			x			x															
Venezuela		x			x			x				x																

2. INFORMATION SYSTEMS

REGIONAL GOAL: To implement and develop information, evaluation, control, and decision-making systems with the depth and detail required by the administration and planning processes.

2.1 Organization of the national health information system

According to the replies received from 23 countries, 19 of them (8 out of 10) have organized their health information system while 10 countries state their organization is only partial; only 1 states that it has not organized the system and 3 are studying it.

2.2 Coverage of the system

The politico-administrative coverage of the health information system is national in nature in 15 of the countries; partial in 2 of them; and mixed (that is to say, that in some respects it is national and in others it covers only certain politico-administrative areas) in 6 countries. As regards sectorial coverage, in most cases the entire sector is covered. In 6 countries the system covers only some institutions and 5 countries have a mixed coverage in the sense that for some types of information it covers the entire sector whereas for others it covers only some institutions.

With respect to program coverage the information systems in 10 countries involve all the health programs and in 13 countries they involve only some programs.

2.3 Coordination of the information systems

In most cases the intra-sectorial coordination of information systems is unsatisfactory or inadequate. Only 5 countries (1 out of 5) consider it to be adequate.

Inter-institutional coordination is in most cases considered to be deficient or inadequate and finally the coordination of inter-program information systems is also unsatisfactory or inadequate in most cases although 6 countries consider it to be adequate.

The coordination of information systems is a problem in practice at all levels of the health services systems and in all sectors.

2.4 Information units

Fourteen countries mentioned the existence of information units at the sectorial level. In contrast, in 15 countries there are information units at the ministerial level and only 3 countries have administrative information units at the level of the health institutions.

In some cases (4 countries) there are specific information units for human and animal health programs.

2.5 Information areas covered by system

	Human resources									Physical resources							
	Availability			Education and training			Use			Availability			Education and training			Use		
	Yes	In part	No	Yes	In part	No	Yes	In part	No	Yes	In part	No	Yes	In part	No	Yes	In part	No
Argentina																		
Bahamas		x			x			x			x			x			x	
Barbados	x			x			x			x						x		
Bolivia																		
Brazil			x			x		x			x			x			x	
Canada																		
Chile	x			x			x			x			x			x		
Colombia	x			x			x			x			x			x		
Costa Rica		x			x			x			x			x			x	
Cuba	x			x			x			x						x		
Ecuador	x				x		x			x			x				x	
El Salvador		x			x			x			x			x			x	
United States	x			x			x			x						x		
Guatemala		x			x			x			x			x			x	
Guyana		x			x			x				x			x			x
Haiti		x			x			x			x			x			x	
Honduras		x		x			x			x			x			x		
Jamaica		x			x			x			x			x				x
Mexico	x			x			x			x			x			x		
Panama	x					x		x		x					x		x	
Paraguay		x			x			x			x			x			x	
Peru		x				x			x		x				x		x	
Dominican Rep.		x			x			x			x			x			x	
Suriname	x			x			x			x			x			x		
Uruguay			x			x			x			x			x			x
Venezuela			x		x			x			x			x			x	

2.5 Information areas covered by the system

2.5.1. Human resources

In 20 out of 23 countries the information system covers the availability of human resources although in 11 of them such information is only partial. Only 3 countries do not provide information on the availability of such resources.

In 19 countries the information system covers the education and training of human resources although in 11 of them such information is only partial and in 4 of them the system does not provide such information.

In 21 countries the information system covers the utilization of human resources although in 12 of them it only covers it in part.

2.5.2 Physical resources

In most of the countries (20 out of 23), the information system covers the availability of physical resources, although in half of them it only covers it in part. Sixteen countries have systems that provide information on the formation of physical resources although in most of them (12 countries) this information is only partial.

In 20 countries the information systems cover the utilization of physical resources but in only 8 of them is such information complete.

IV. DEVELOPMENT OF THE INFRASTRUCTURE
2. INFORMATION SYSTEMS

2.5 Information areas covered by system (Cont.)

	Financial resources						Production of services			Epidemiological surveillance			Environmental health			Programming and administrative control		
	Availability			Use														
	Yes	In part	No	Yes	In part	No	Yes	In part	No	Yes	In part	No	Yes	In part	No	Yes	In part	No
Argentina																		
Bahamas		x			x			x		x				x			x	
Barbados	x			x			x			x			x				x	
Bolivia																		
Brazil	x			x				x		x				x			x	
Canada																		
Chile							x			x			x					
Colombia		x			x		x			x			x			x		
Costa Rica	x	x		x	x		x			x				x			x	
Cuba	x						x			x			x			x		
Ecuador		x		x			x				x				x			
El Salvador		x			x			x		x				x			x	
United States		x			x		x				x			x				
Guatemala	x			x				x			x							x
Guyana		x			x			x			x							x
Haiti		x			x			x			x						x	
Honduras	x			x			x			x			x					
Jamaica		x			x			x			x						x	
Mexico	x			x			x			x			x					
Panama	x			x			x			x							x	
Paraguay		x			x			x			x							x
Peru		x			x		x			x				x			x	
Dominican Rep.	x			x				x			x							
Suriname	x			x				x			x			x				
Uruguay			x			x		x			x			x				x
Venezuela		x			x			x		x				x			x	

2.5 Information areas covered by the system (Continued)

2.5.3 Financial resources

In 22 countries the information systems cover the availability of financial resources although in 12 of them such information is partial. The utilization of financial resources is covered by the information services of 21 countries although in 11 of them such information is only partial.

2.5.4 Production of services

In all the countries the information system covers the production of services; however, only 11 cover it completely and 12 provide partial information.

2.5.5 Epidemiological surveillance

In all the countries the information system covers epidemiological surveillance; however, in 10 of them such information is only partially covered.

2.5.6 Environmental health

In all countries without exception the information system covers environmental health; however, such coverage is only partial in 2 out of 3 countries.

2.5.7 Programming and administrative control

The information systems cover programming and administrative control only in 7 countries (1 out of 3); in 10 countries such coverage is only partial and in 4 countries this aspect is not included in the information system.

	2.5 Information areas covered by system (Cont.)															2.6 Reporting system			2.7 Electronic computers		
	Scientific and technological information															Is there a regular and stepped up system for supervision?			Plan use resource for data processing		
	At national level			At institutional level			Exchange with other countries			Other programs			Other areas								
	Yes	In part	No	Yes	In part	No	Yes	In part	No	Yes	In part	No	Yes	In part	No	Yes	No	Being studied	Yes	No	Being studied
Argentina																					
Bahamas																		x	x		
Barbados																x				x	
Bolivia																					
Brazil			x			x			x				x	x				x	x		
Canada																					
Chile		x		x												x			x		
Colombia	x			x			x									x			x		
Costa Rica			x			x			x									x	x		
Cuba	x			x			x									x			x		
Ecuador			x		x			x								x			x		
El Salvador		x			x											x			x		
United States																	x		x		
Guatemala	x				x		x									x a/			x a/		
Guyana																	x		x		
Haiti		x			x			x								x				x	
Honduras		x			x			x		x						x			x		
Jamaica																		x	x		
Mexico		x		x			x									x			x		
Panama			x			x		x								x			x		
Paraguay			x			x			x									x		x	
Peru			x			x			x	x			x			x			x		
Dominican Rep.		x			x			x					x			x			x		
Suriname																	x			x	
Uruguay			x		x				x							x			x		
Venezuela			x		x			x								x			x		

a/ Deficient.

2.5 Information areas covered by the system (Continued)

2.5.8 Scientific and technological information

Scientific and technological information is an area that is not satisfactorily covered by the information systems. A few countries have systems that cover this type of information as a whole; only 3 at the national level and 4 at the institutional level; 4 exchange information with other countries.

2.6 Reports system

In most of the countries (15 out of 23) there are systems for regular and periodical reports for the control of technical and administrative management. Three countries do not have such a system and in 5 others it is being studied.

2.7 Use of computers

Only 3 out of 22 countries state that they do not use computers for data processing.

IV. DEVELOPMENT OF THE INFRASTRUCTURE

3. HEALTH STATISTICS

3.1 Present Status of Data Production Systems

Vital Statistics

	3.1.1 System of data registration, collection, proc. & anal.				3.1.2 Coverage of System							3.1.3 Availability of data (Last yr. data available)		3.1.4 Quality of inf.				3.1.5 Use		
	Yes, adequate	Yes, but inadequate	Does not exist	Improvements to be introduced during year	Entire health sector	Public sector: Complete	Public sector: Part	Ministry of Health only	Defined registration or int. areas	Other areas	Unknown coverage	In official publication	In tabulations for official use only	Adequate	Acceptable only for some import. items	Inadequate	Unknown (Not been evaluated)	Extensive	Limited	Little
Argentina																				
Bahamas		x		1980	x							1978				x		x		
Barbados	x				x							1976		x				x		
Bolivia																				
Brazil		x		1976	x							1977	1978		x			x		
Canada																				
Chile	x				x							1978		x				x		
Colombia	x				x								1977		x			x		
Costa Rica	x				x							1977	1978	x				x		
Cuba	x				x							1978	1978	x				x		
Ecuador	x				x							1977		x				x		
El Salvador	x				x							1977	1978			x		x		
United States	x				x							1978	1979	x				x		
Guatemala		x		1981	x							1977	1978		x				x	
Guyana		x					x					1972	1975		x				x	
Haiti		x								x		1978	1979		x				x	
Honduras		x			x							1977	1977			x			x	
Jamaica		x			x								1977							
Mexico		x			x							1974	1975			x		x		
Panama		x			x							x			x			x		
Paraguay		x			x							1977	1978		x			x		
Peru		x		1981	x							1973	1973	x				x		
Dominican Rep.		x			x							1978			x				x	
Suriname		x		x	x								x		x				x	
Uruguay	x			a/	x							1977	1978	x				x		
Venezuela	x				x							1978		x				x		

a/ Introduction of perinatal death certificate in 1980.

3. HEALTH STATISTICS

3.1 Present status of data production systems

● Vital statistics

Twenty-three countries state that they have a system for the recording, collection, processing and analysis of vital statistics data. Ten of these countries, that is to say, just under half, consider the system to be adequate and the remaining 13 countries describe it as deficient.

This system covers the entire health sector except in one country which states that the coverage is restricted to the Ministry of Health and another country in which the coverage is not known. At the beginning of 1980 there were 8 countries in which vital statistics were available in official pubblications for 1978; another 8 countries had them available for 1977; and the remaining countries for various years running from 1972 to 1976. Fifteen countries state that they have tabulations for internal use of the statistics relating to the year following that for which there is an official publication.

Nine countries (just under half) consider that the quality of the information is adequate whereas another 9 consider it adequate only for certain important items; the remaining 4 countries state that the quality of these statistics is unsatisfactory. Sixteen countries (8 out of 11) state that considerable use is made of vital statistics while the remaining 7 countries state that such use is limited.

3.1 Present Status of Data Production Systems (Cont.)

Communicable Diseases

	3.1.1 System of data registration, collection, proc. & anal.				3.1.2 Coverage of System						3.1.3 Availability of data (Last yr. data available)		3.1.4 Quality of Inf.			3.1.5 Use		
	Yes, adequate	Yes, but inadequate	Does not exist	Improvements to be & introduced during year	Entire health sector	Public sector: Complete	Public sector: Part	Ministry of Health only	Defined registration or ind. areas	Other areas	Unknown coverage	In official publication	In tabulations for official use only	Adequate	Acceptable only for some import. items	Inadequate	Unknown (Not been evaluated)	Extensive	Limited	Little
Argentina																				
Bahamas		x			x								1978	x			x			
Barbados	x				x							1978		x			x			
Bolivia																				
Brazil		x		1977	x							1975	1975		x		x			
Canada																				
Chile	x				x							1978		x			x			
Colombia	x				x								1978	x			x			
Costa Rica	x				x							10/1979	10/1979	x			x			
Cuba	x				x							1978	1978	x			x			
Ecuador		x				x						1979		x			x			
El Salvador	x					x						1978	1979		x		x			
United States	x				x							1978	1979	x			x			
Guatemala		x		1980			x					1979	1979			x		x		
Guyana		x						x					1979			x				x
Haiti		x									x	1978	1979		x			x		
Honduras	x					x						1979	1979		x			x		
Jamaica		x					x					1979								
Mexico		x		x			x					1979	1979		x		x			
Panama	x						x					x			x			x		
Paraguay		x		1980			x					1977	1979		x			x		
Peru	x				x							1978	1979	x			x			
Dominican Rep.		x				x						1979			x		x			
Suriname		x		x	x								x		x			x		
Uruguay		x			x							1977	1978		x		x			
Venezuela	x				x							1978		x			x			

3.1 Present status of data production systems (Continued)

● Communicable diseases

Eleven countries (just under half) believe that they have a system of registration, collection, processing and analysis of data on communicable diseases that is adequate to their purposes. Another 12 countries considered that their system is unsatisfactory In 12 (just over half) the communicable disease statistics system covers the entire health sector whereas in the remainder it covers all or part of the public sector or only the Ministry of Health; in 1 country only one registration area is covered.

The data for any one year is available within one or two years in official publications. In most cases such data are available in tabulations for internal use after a period of one year.

Ten countries believe that the quality of the information is adequate while another 10 consider it adequate for only certain important items; the countries report that the quality of the information is unsatisfactory. Fifteen countries state that the use of the information is considerable while 7 countries consider it restricted or scanty.

IV. DEVELOPMENT OF THE INFRASTRUCTURE
3. HEALTH STATISTICS

3.1 Present Status of Data Production Systems (Cont.)

Morbidity of patients discharged

	3.1.1 System of data registration, collection, proc. & anal.					3.1.2 Coverage of System						3.1.3 Availability of data (Last yr. data available)		3.1.4 Quality of inf.				3.1.5 Use	
	Yes, adequate	Yes, but inadequate	Does not exist	Improvements to be introduced during year	Entire health sector	Public sector: Complete	Public sector: Part	Ministry of Health only	Defined registration or inf. areas	Other areas	Unknown coverage	In official publication	In tabulations for off. use only	Adequate	Acceptable only for some import. items	Inadequate	Unknown (Not evaluated)	Extensive	Limited	Little
Argentina																				
Bahamas	x						x					1978		x				x		
Barbados	x					x						1978		x				x		
Bolivia																				
Brazil		x				x							1978			x		x		
Canada																				
Chile	x				x							1978		x				x		
Colombia	x				x								1978	x				x		
Costa Rica		x			x							1974	1976				x			
Cuba		x						x					1978					x		
Ecuador	x				x							1977		x				x		
El Salvador		x					x					1976			x			x		
United States	x				x							1977	1979	x				x		
Guatemala		x		1980			x					1977	1979			x				x
Guyana		x						x					1977		x					x
Haiti		x									x	1978	1979		x			x		
Honduras	x				x							1978	1979	x				x		
Jamaica		x						x					1979							
Mexico	x			x				x				1976	1978	x				x		
Panama	x				x	x						x	x	x					x	
Paraguay		x		-			x					1977	1979		x				x	
Peru	x				x							1977	1979		x			x		
Dominican Rep.	x							x				1978	1979		x			x		
Suriname	x				x								x	x	x					x
Uruguay	x							x				1977	-	x				x		
Venezuela	x				x							1978		x				x		

3.1 Present status of data production systems (Continued)

● Morbidity of discharged patients

All the countries state that they have a system for the registration, collection, processing and analysis of data on the morbidity of discharged patients but 3 out of 7 countries state that this system is unsatisfactory. Progress has been made in this regard since at the beginning of the decade only 4 countries believed that they had an adequate system.

The system covers the entire health sector in only 10 countries while in the remainder (another 13 countries) it covers, in some cases, only institutions of the public sector and in particular the Ministry of Health.

At the beginning of 1980 data available in official publications for the year 1968 were available only in 5 countries while the tabulations for internal use data for 1969 existed in 8 countries. A certain delay in the production of statistics is to be noted. In 3 countries it was two or more years.

The quality of the information contained in the publications is considered to be adequate to the needs of the country in 12 countries (just over half); acceptable only for some items in 7 countries, that is, one third of the countries; and deficient or of unknown quality in 3 countries.

The information produced is considered to be widely used in 12 countries (just over half) while the remainder considered that its use is restricted or scanty.

3.1 Present Status of Data Production Systems (Cont.)

Morbidity attended in outpatient departments

	3.1.1 System of data registration, collection, proc. & anal.					3.1.2 Coverage of System						3.1.3 Availability of data (Last yr. data available)		3.1.4 Quality of inf.			3.1.5 Use	
	Yes, adequate	Yes, but inadequate	Does not exist	Improvements to be introduced during year	Entire health sector	Complete	Public sector: Part	Ministry of Health only	Defined registration or inf. areas	Other areas	Unknown coverage	In official publication	In tabulations for official use only	Adequate	Acceptable only for some import. items	Inadequate	Unknown (not evaluated)	Extensive	Limited	Little
Argentina																				
Bahamas		x					x				1978				x				x	
Barbados	x					x					1978		x					x		
Bolivia																				
Brazil		x														x			x	
Canada																				
Chile		x																		
Colombia	x						x					1978	x				x			
Costa Rica		x			x							1977				x				
Cuba		x																		
Ecuador		x							x											
El Salvador		x					x				1976				x				x	
United States	x				x							n/a	x						x	
Guatemala		x		1980			x				1976	1977			x					x
Guyana		x						x							x					x
Haiti		x								x	1978	1979		x					x	
Honduras	x							x			1978	1978	x				x			
Jamaica		x						x				1978								
Mexico										x						x				x
Panama		x						x				x			x					x
Paraguay		x					x				1977	1978		x					x	
Peru			x	1980																
Dominican Rep.		x		x				x			1978	1979			x				x	
Suriname		x					x					x			x				x	
Uruguay	x							x			1976	1978		x			x			
Venezuela	x				x						1978		x				x			

3.1 Present status of data production systems (Continued)

● Diseases dealt with in outpatient departments

Only 6 countries have a system for the recording, collection, processing, and analysis of statistics on the diseases of patients treated in outpatient departments and consider it to be adequate. In all the remaining countries there is no such system or it is deficient. The coverage of the system is rather limited in most of the countries; in only 3 of them does it cover all the health sector, both public and private; in one it only covers the entire health sector and in most cases it only covers the statistics of the Ministry of Public Health. In those countries that have an adequate system the statistics are usually available from one year to the next. In these countries the quality of the information is considered to be adequate for the use the country wishes to make of it. In the remaining countries the quality of the information usually leaves much to be desired or is unknown. The use made of this information is considerable only in 4 countries and is restricted or scanty in the remainder.

IV. DEVELOPMENT OF THE INFRASTRUCTURE
3. HEALTH STATISTICS

3.1 Present Status of Data Production Systems (Cont.)

Human Resources

	3.1.1 System of data registration, collection, proc. & anal.				3.1.2 Coverage of System							3.1.3 Availability of data (Last yr. data available)		3.1.4 Quality of inf.				3.1.5 Use	
	Yes, adequate	Yes, but inadequate	Does not exist	Improvements to be introduced during year	Entire health sector	Public sector: Complete	Public sector: Part	Ministry of Health only	Defined registration or inf. areas	Other areas	Unknown coverage	In official publication	In tabulations for official use only	Adequate	Acceptable only for some import. items	Inadequate	Unknown (not evaluated)	Extensive	Limited	Little
Argentina																				
Bahamas		x					x				1978		x						x	
Barbados	x					x					1978		x						x	
Bolivia																				
Brazil			x	1981	x											x			x	
Canada																				
Chile	x						x				1978			x				x		
Colombia	x						x					1978	x				x			
Costa Rica						x					1978		x							
Cuba	x				x						1978	1978	x					x		
Ecuador	x					x							x				x			
El Salvador		x					x									x		x		
United States		x			x						1977	197	x				x			
Guatemala			x	1980			x					1978		x						x
Guyana		x					x					1978		x				x		
Haiti		x								x	1978	1979			x			x		
Honduras				x		x					1978	1978	x				x			
Jamaica			x	1980			x													
Mexico	x					x				x	1978	1979		x		x				
Panama	x						x				x			x			x			
Paraguay			x																	
Peru		x		1981			x				1978	1979			x			x		
Dominican Rep.		x					x				1978	1979			x			x		
Suriname	x				x							x	x					x		
Uruguay	x						x					1978								
Venezuela	x				x						1978			x			x			

3.1 Present status of data production systems (Continued)

● Statistics on human resources

Ten countries state that they have an adequate system for the registration, collection, processing and analysis of data on human resources. Four countries do not have such a system and in 7 countries such a system exists but is unsatisfactory. Four countries state that they do not have such a system but propose to introduce improvements in 1980 and 1981.

The systems cover the entire public health sector in 5 countries (1 out of 4); in another 4 countries they cover the health sector only; and in another 12 countries they cover only part of the public sector, which is usually the Ministry of Health.

The statistics are available from one year to the next; their quality is deemed efficient in 6 countries, adequate in 9, and acceptable for only a few important items in 6 countries. The use of this information is considered wide in 6 countries (1 out of 4) but restricted or scanty in the remainder.

3.1 Present Status of Data Production Systems (Cont.)

Establishments

	3.1.1 System of data registration, collection, proc. & anal.				3.1.2 Coverage of System						3.1.3 Availability of data (Last yr. data available)		3.1.4 Quality of inf.				3.1.5 Use	
	Yes, adequate	Yes, but inadequate	Does not exist	Improvements to be introduced during year	Entire health sector	Complete	Public sector: Part	Ministry of Health only	Defined registration or inf. areas	Other areas	Unknown coverage	In official publication	In tabulations for official use only	Adequate	Acceptable only for some import items	Inadequate	Unknown (Not evaluated)	Extensive	Limited	Little
Argentina																				
Bahamas		x					x				1978		x						x	
Barbados					x						1976		x					x		
Bolivia																				
Brazil			x	1980	x											x			x	
Canada																				
Chile	x				x						1978		x			x				
Colombia	x				x						1976	1978	x				x			
Costa Rica						x					1978		x							
Cuba	x				x						1978	1978	x				x			
Ecuador	x				x						1979		x				x			
El Salvador		x			x									x				x		
United States					x															
Guatemala		x		1980			x				1978	1979		x				x		
Guyana	x				x							1978	x					x		
Haiti		x								x	1978	1979			x			x		
Honduras	x					x					1978	1979	x				x			
Jamaica			x				x													
Mexico	x						x					1979	x				x			
Panama	x						x				x		x				x			
Paraguay		x					x				1977				x				x	
Peru		x		1980	x						1978		x				x			
Dominican Rep.		x					x				1978	1979	x				x			
Suriname	x				x							x	x					x		
Uruguay	x						x					1978								
Venezuela	x				x						1978		x				x			

3.1 Present status of data production systems (Continued)

● Establishments

In 13 countries (more than 4 out of 7) there is an appropriate system for the registration, collection, procesisng and analysis of data. In the remaining countries (9) such a system is deficient or non-existent.

In 12 countries the statistics on establishments cover the entire health sector. In 2 they cover only the public sector as a whole and in the remainder only statistics for the establishments of the Ministry of Health.

Statistics on establishments for one year are usually available within a two-years time. Fifteen countries (3 out of 4) consider the quality of the information provided by the system to be adequate; the remainder considered it to be acceptable for only some items or deficient. The use made of this information is wide in half of the countries and is considered restricted or scanty in the other half.

IV. DEVELOPMENT OF THE INFRASTRUCTURE
3. HEALTH STATISTICS

3.1 Present Status of Data Production Systems (Cont.)

Services and care in hospitals

	3.1.1 System of data registration, collection, proc. & anal.					3.1.2 Coverage of System						3.1.3 Availability of data (Last yr. data available)		3.1.4 Quality of inf.				3.1.5 Use	
	Yes, adequate	Yes, but inadequate	Does not exist	Improvements to be & introduced during year	Entire health sector	Public sector: Complete	Public sector: Part	Ministry of Health only	Defined registration or inf. areas	Other areas	Unknown coverage	In official publication	In tabulations for official use only	Adequate	Acceptable only for some import. items	Inadequate	Unknown (Not evaluated)	Extensive	Limited	Little
Argentina											1978		x					x		
Bahamas		x					x				1978		x					x		
Barbados	x					x														
Bolivia			x	1981	x											x			x	
Brazil																				
Canada																				
Chile	x				x						1978		x				x			
Colombia	x				x							1979	x				x			
Costa Rica					x						1976	1977	x							
Cuba	x				x						1978	1978	x				x			
Ecuador	x					x					1978		x				x			
El Salvador	x				x						1978	1979	x				x			
United States	x										1978	1978	x							
Guatemala		x		1980			x				1978	1978		x					x	
Guyana		x			x									x					x	
Haiti		x								x	1978	1979		x				x		
Honduras	x					x					1978	1979	x				x			
Jamaica		x					x					1978								
Mexico	x				x						1978	1979		x			x			
Panama	x					x					x		x				x			
Paraguay		x					x				1977	1978				x		x		
Peru		x		1980	x						1977	1978		x				x		
Dominican Rep.		x					x				1978	1979		x				x		
Suriname		x					x					xx				x		x		
Uruguay	x						x					1979				x		x		
Venezuela	x				x						1978		x				x			

3.1 Present status of data production systems (Continued)

● Statistics on hospital services and hospital care

Twelve countries (more than half) state that they have an adequate system for recording, collecting, processing and analyzing data on hospital services and care; only one country states that such a system does not exist and the 9 remaining countries state that it exists but is deficient.

In 10 countries (a little less than half) the system covers the entire health sector; in 5 countries it covers the entire public sector; and, in the remaining countries, it is limited to part of the public sector, usually the Ministry of Health.

The data provided by the system are usually available one year later. The quality of the information provided by these data is considered adequate in 13 countries (more than 3 out of 5), acceptable for only some items in 5 countries, and unsatisfactory in the remaining 4 countries. Half of the countries state that the use made of this information is wide while the other half state that it is restricted or scanty.

	3.1 Present Status of Data Production Systems (Cont.)																		
	Administrative																		
	3.1.1 System of data registration, collection, proc. & anal.				3.1.2 Coverage of System							3.1.3 Availability of data (Last yr. data available)		3.1.4 Quality of inf.			3.1.5 Use	
	Yes, adequate	Yes, but inadequate	Does not exist	Improvements to be & introduced during year	Entire health sector	Complete	Part	Public sector: Ministry of Health only	Public sector: Defined registration or inf. areas	Other areas	Unknown coverage	In official publication	In tabulations for official use only	Adequate	Acceptable only for some import. items	Inadequate	Unknown (Not been evaluated)	Extensive	Limited	Little
Argentina																				
Bahamas	x				x							1978		x				x		
Barbados		x					x						1980			x			x	
Bolivia																				
Brazil	x						x										x			
Canada																				
Chile																				
Colombia	x				x							1978	1978	x			x			
Costa Rica																				
Cuba	x				x										x					
Ecuador		x					x								x		x			
El Salvador																				
United States		x		1981		x										x			x	
Guatemala		x					x						1979		x				x	
Guyana		x					x							x				x		
Haiti	x				x						x	1978	1979	x			x			
Honduras			x								x									
Jamaica																				
Mexico		x				x						x		x					x	
Panama			x																	
Paraguay		x					x					1979		x				x		
Peru	x						x					x		x				x		
Dominican Rep.	x				x							x		x				x		
Suriname														x				x		
Uruguay	x				x															
Venezuela																				

3.1 Present status of data production systems (Continued)

● Administrative statistics

Only 16 countries reported on the system of administrative statistics. Seven of them consider the system to be adequate for data collection, processing, and analysis; another 7 consider it to be deficient; and, 2 countries report that they have no such system.

In most cases the system covers only the administrative statistics of the Ministry of Health. Only 2 countries state that the system covers the entire health sector, and another 5 countries report that the system covers the public sector either in part or in whole.

Because of the scanty information provided, it appears that the data are available almost immediately or, at most, the data are available in the year following that to which it relates. In 7 countries, the quality of the information is considered to be adequate; in 13, acceptable for some items; and, in the remainder, deficient. Only 4 countries consider the use made of the statistics to be wide; the remainder consider it to be restricted or scanty.

IV. DEVELOPMENT OF THE INFRASTRUCTURE
3. HEALTH STATISTICS

3.1 Present Status of Data Production Systems (Cont.)

Services and care in other establishments

	3.1.1 System of data registration, collection, proc. & anal.				3.1.2 Coverage of System						3.1.3 Availability of data (Last yr. data available)		3.1.4 Quality of inf.			3.1.5 Use	
	Yes, adequate	Yes, but inadequate	Does not exist	Improvements to be & introduced during year	Entire health sector	Public sector: Complete	Public sector: Part	Ministry of Health only	Defined registration or inf. areas	Other areas	Unknown coverage	In official publication	In tabulations for official use only	Adequate	Acceptable only for some important items	Inadequate	Unknown (Not been evaluated)	Extensive	Limited	Little
Argentina		x					x					1978			x			x		
Bahamas	x					x							x					x		
Barbados																				
Bolivia			x	1981	*											x				x
Brazil																				
Canada	x				x							1978		x				x		
Chile	x					x							1979	x				x		
Colombia						x						1976	1977	x						
Costa Rica	x				x							1978	1978	x				x		
Cuba			x								x									
Ecuador	x					x						1978	1979	x				x		
El Salvador												1977	1978	x						
United States		x		1980			x					1978	1978		x					x
Guatemala			x																	
Guyana		x									x	1978	1979		x			x		
Haiti	x					x						1978	1979	x				x		
Honduras																				
Jamaica	x					x						1978	1979		x			x		
Mexico	x					x						x		x				x		
Panama		x					x													
Paraguay		x		1981	x							1978	1978		x				x	
Peru													x			x			x	
Dominican Rep.		x					x													
Suriname																				
Uruguay	x				x							1978		x				x		
Venezuela																				

3.1 Present status of data production systems (Continued)

● Services and care in other establishments

In the 18 countries that replied to this section of the evaluation 9 believe that they have an appropriate system for the registration, collection, procesing and analysis of data on outpatient services and care. The other 9 countries believe that their systems are unsatisfactory or they do not have such systems.

In 4 countries the systems cover the entire health sector; in another 7 countries the systems cover the public sector as a whole; and, in the remainder, they cover only part of the public sector, in particular the Ministry of Health.

Information on this type of statistics for any one year is usually available after one or two years. The quality of the information is considered adequate by 10 countries (2 out of 3) and acceptable for only some important items by 4 countries. The remaining countries consider it deficient or unknown. In just over half the countries, the use made of this information is considered to be wide, whereas in the remaining countries it is considered to be restricted or scanty.

3.1 Present Status of Data Production Systems (Cont.)

Health investments

	3.1.1 System of data registration, collection, proc. & anal.			3.1.2 Coverage of System						3.1.3 Availability of data (Last yr. data available)		3.1.4 Quality of inf.			3.1.5 Use		
	Yes, adequate	Yes, but inadequate	Does not exist	Improvements to be introduced during year	Entire health sector	Public sector: Complete	Public sector: Part	Ministry of Health only	Defined registration or inf. areas	Other areas	Unknown coverage	In official publication	In tabulations for official use only	Adequate	Acceptable only for some import. items	Inadequate	Unknown (Not been evaluated)	Extensive	Limited	Little
Argentina																				
Bahamas		x					x					1978			x			x		
Barbados	x				x							1979		x				x		
Bolivia																				
Brazil	x				x								1980	x				x		
Canada																				
Chile																				
Colombia	x						x						1980	x				x		
Costa Rica																				
Cuba	x				x							1979	1978	x				x		
Ecuador																				
El Salvador	x					x								x				x		
United States																				
Guatemala		x		1981			x						1979		x				x	
Guyana	x							x					1978	x						x
Haiti		x					x					1978	1979		x				x	
Honduras	x					x						1978	1979	x				x		
Jamaica			x								x									
Mexico		x				x						1978	1979		x			x		
Panama		x				x						x			x				x	
Paraguay			x																	
Peru			x																	
Dominican Rep.		x						x								x				
Suriname	x					x						x		x				x		
Uruguay																				
Venezuela	x				x							1978			x					

3.1 Present status of data production systems (Continued)

- Health investments

Nine of the 18 countries that reported state that they have an adequate system for the registration, collection, processing and analysis of such data. In the other 9 countries, the system is deficient or does not exist. In 4 of these countries, the system covers investments made in the entire health sector, whereas in 5 countries it only covers the public sector as a whole. In the remaining 6 countries, the system only covers investments made by the Ministry of Health.

Data on investments are available almost immediately. The quality of the information is considered adequate in 8 out of the 18 countries that reported and acceptable for only some important items by another 5; in the two remaining countries, the quality is considered to be unsatisfactory. The use made of the information provided by this system is wide in 7 of the countries and restricted in the remaining countries that reported.

IV. DEVELOPMENT OF THE INFRASTRUCTURE
3. HEALTH STATISTICS

3.1 Present Status of Data Production Systems (Cont.)

Environmental health

	3.1.1 System of data registration, collection, proc. & anal.				3.1.2 Coverage of System							3.1.3 Availability of data (Last yr. data available)		3.1.4 Quality of inf.			3.1.5 Use	
	Yes, adequate	Yes, but inadequate	Does not exist	Improvements to be & introduced during year	Entire health sector	Complete	Public sector: Part	Ministry of Health only	Defined registration or inf. areas	Other areas	Unknown coverage	In official publication	In tabulations for official use only	Adequate	Acceptable only for some important items	Inadequate	Unknown (Not been evaluated)	Extensive	Limited	Little
Argentina		x					x					1978			x			x		
Bahamas	x				x						1978		x					x		
Barbados		x						x						x				x		
Bolivia	x																			
Brazil																				
Canada	x					x						1978		x				x		
Chile																				
Colombia	x				x						1978	1978	x					x		
Costa Rica		x		1981																
Cuba	x				x						1978	1978	x					x		
Ecuador		x		1981																
El Salvador	x				x						1978	1979	x					x		
United States			x	x																
Guatemala		x		1981			x				1978	1978			x			x		
Guyana		x			x							1978	x					x		
Haiti		x								x	1978	1979				x		x		
Honduras	x					x					1978	1979	x					x		
Jamaica			x							x										
Mexico		x																		
Panama	x						x				x		x					x		
Paraguay		x					x				1977	1978			x					x
Peru			x																	
Dominican Rep.		x					x					1979			x					x
Suriname		x				x						x			x			x		
Uruguay																				
Venezuela	x				x						1978			x				x		

3.1 Present status of data production systems (Continued)

● Environmental health statistics

In only 8 of the 21 countries is there an adequate system for the registration, collection, processing and analysis of environmental health data. Three of the countries state that they do not have such a system and another 10 that that their system is unsatisfactory. In only 4 countries does the system cover information for the entire health sector; in 3 countries the system covers only the entire public sector; and, in another 5, it only covers information for the Ministry of Health.

The data provided by this system for any one year are usually available within one or two years.

Six countries (3 out of 7) consider the quality of the environmental health information provided by the system to be adequate; another 3 countries consider it acceptable for only some important items; while another 6 countries consider it to be unsatisfactory. In 6 countries (2 out of 5), the use made of this information is considered to be wide, while in another 9 countries it is considered restricted or scanty.

	3.2 Vital Statistics												
	Approximate completeness of vital statistics		Information used to estimate under-registration				Source of information used to estimate under-registration				Percentage of deaths with medical certification	Plans for improving vital statistics	
			Births		Deaths								
	Known	Unkown	%	Year	%	Year	Sample surveys	Other investigations	Census data	Other sources		Exist	Do not exist
Argentina													
Bahamas	x		30	1978	5	1978		x			85	x	
Barbados	x		2	1979	1	1979				x	100	x	
Bolivia													
Brazil	x		40	1978	40	1979				x	80		
Canada													
Chile	x		9	1978				x			89		
Colombia	x		47	1975	29	1973			x		75		
Costa Rica	x		2	1976	1	1976			x	x	18	x	
Cuba	x		-4	1978	-4	1978		x			100		
Ecuador	x		15	1978	22	1978		x			53	x	
El Salvador	x				24	1970		x	x		43		
United States	x		-1	1978	-1	1978		x			99		
Guatemala	x		8	1978	10	1978			x		25	5 a	
Guyana		x									91	x	
Haiti		x											
Honduras	x		10	1977	40	1977				x	151	x	x
Jamaica		x										x	
Mexico		x			20	c					78	x	
Panama		x									75		
Paraguay		x									42		
Peru	x		29	1973	46	1973	x				67	x	
Dominican Rep.	x		30	1970	45	1970	x	x				x	
Suriname	x		0	b	15	1977		x			85		
Uruguay	x		5	1975					x		98	x	
Venezuela	x				4	1978		x			71		

a/ Was improved. b/ Year not specified. c/ Covers the period 1972-1974.

3.2 Vital statistics

Eighteen countries (more than 7 out of 10) are aware of the degree of the completeness of their vital statistics. In 7 countries the extent of under-registration is not known.

Ten countries have determined the extent of under-registration by means of special investigations; another 5 countries used census data for that purpose; and, 4 countries used other sources. In 14 countries that determined under-registration of births by some means, it varied between 1% and 47% with a mean value of 10%. Only 20 countries reported on the percentage of deaths that were medically certified, which ranges from 18% to 100% of deaths with a mean value of between 75% and 78%. Twelve countries mentioned plans for the improvement of vital statistics.

IV. DEVELOPMENT OF THE INFRASTRUCTURE
3. HEALTH STATISTICS

3.3 Data Processing equipment

	Is equipment available adequate?		Type of equipment				Personnel				Sufficient calculating machines		Plans for expanding and improving equipment	
									Plans for training					
	Yes	No	Electronic	Electro-mechanical	Manual tabulation	Other	Trained	Not trained	Yes	No	Yes	No	Yes	No
Argentina														
Bahamas	x		x				x		x		x		x	
Barbados		x												
Bolivia														
Brazil	x		x	x	x			x	x		x		x	
Canada														
Chile	x		x				x				x			
Colombia	x		x				x		x		x		x	
Costa Rica	x		x				x				x			
Cuba	x		x	x			x				x			
Ecuador	x			x			x		x		x			
El Salvador		x		x	x		x		x			x	x	
United States	x		x	x	x		x				x			
Guatemala		x		x	x			x	x			x	x	
Guyana		x			x			x		x		x		x
Haiti		x			x			x	x			x	x	
Honduras	x		x	x	x		x	x			x		x	
Jamaica	x		x	x	x		x		x			x	x	
Mexico	x		x				x		x			x		x
Panama	x		x				x		x			x	x	
Paraguay		x		x	x				x			x		x
Peru	x		x				x		x		x		x	
Dominican Rep.	x											x	x	
Suriname	x				x									
Uruguay	x		x						x		x		x	
Venezuela		x		x			x		x		x			

3.3 Data processing equipment

Six countries out of 22 have no suitable equipment for the processing of statistical data. In 13 countries (just ove half), electronic equipment is available for procesing some or all health statistics. In 10 countries (almost half), electro mechanical equipment is available for this purpose; and, in 4 of them this equipment is supplemented by electronic equipment i some applications. Nine countries continue to use manual tabulation of data for processing certain statistics.

With respect to the availability of personnel for information processing, 4 countries do not have trained personnel fo that purpose. Most of the countries have plans for training personnel dealing with these activities.

Most of the countries (8 out of 10) also have plans for improving and expanding the equipment available for data processing

	4. DEVELOPMENT OF HUMAN RESOURCES												
	4.1 Manpower planning process												
	Integration with health planning process			Manpower development plan				Coordination with or integration into national manpower development plan				Participation of universities in health manpower planning	
	Integrated	Integrated in part	Not integrated	Exists and is underway	Only formulation exists	Only isolated projects	No plan	Coordinated	Coordinated in part	Not coordinated	No national plan	Participation	Limited participation	No participation
Argentina													
Bahamas						x					x		x
Barbados	x			x				x					x	
Bolivia														
Brazil														
Canada														
Chile	x			x					x				x	
Colombia	x			x				x				x		
Costa Rica		x			x					x			x	
Cuba	x			x				x				x		
Ecuador	x			x					x				x	
El Salvador			x			x					x		x	
United States														
Guatemala	x			x				x						x
Guyana			x		x					x			x	
Haiti	x			x				x						x
Honduras	x			x					x				x	
Jamaica		x				x					x		x	
Mexico		x				x				x			x	
Panama		x			x				x				x	
Paraguay			x			x			x				x	
Peru														
Dominican Rep.		x		x					x			x		
Suriname							x				x			x
Uruguay			x				x				x			x
Venezuela		x		x					x				x	

4. DEVELOPMENT OF HUMAN RESOURCES

4.1 Human resources planning processes

REGIONAL GOAL: To develop in each country a human resources planning process integrated into health planning. This goal is accompanied in the Ten-Year Plan by a set of recommendations on strategies for achieving it, including integration with overall economic and social development processes, definition of functions and modules of medical care, administrative and support personnel, the creation of new types of personnel, an increase in the number of personnel available in order to increase coverage, strengthening of information systems, training of research workers, promotion of research, and strengthening of personnel training institutions and programs.

The nature and patterns of the human resources planning processes differ from country to country. In some countries there are only coordination mechanisms, while in others the process has permanent directing structures, operating capacity, and decision-making and execution powers. In addition, the institutional coverage of the process varies widely, depending on the degree of active participation of the institutions that use human resources. The planning period also varies from short-term programming to long-term plans.

In the first evaluation of the Ten-Year Plan, the strengthening of the processes in the initial years of the decade was noted: recognition of the problem, organization of technical units in Ministries of Health, growing participation of sectorial institutions, incorporation of teaching and training methods, etc.

At the end of the decade, the processes showed some progress, but not enough to meet the expectations embodied in the Ten-Year Plan. Only 18 countries provided information on the integration of human resources planning with the health planning process; less than half (8 countries) stated that the process was integrated; while another 6 countries (1 out of 3) mentioned that such integration was only partial. In 4 countries the processes are not integrated.

Although the situation in this respect is unsatisfactory, there is no doubt that considerable progress has been made since the number of countries, in which the integration of both planning processes has been achieved, has increased.

In 10 out of 20 countries a national plan for the development of human resources is under way. In 2 of the remaining 10 countries, there is no plan. In 3 countries the plan has only been formulated, and in 5 there are only isolated projects. Again substantial progress has been made in this respect compared with the beginning of the decade, where only one out of 5 countries had a plan for the development of human resources under way.

In 5 countries of the 20 (1 out of 4) that provided information for this evaluation, there is no national plan for the development of human resources. In 1 out of 3 of the 15 remaining countries, the plan for the development of health manpower is properly coordinated with the national plan. In 7, that coordination is only partial, and in 3 there is no coordination. This situation also represents an advance compared to that of the beginning of the decade since more countries have a national plan for the development of human resources and/or the plan for the development of health manpower is coordinated either completely or partially with that national plan.

The participation of universities in the health manpower planning process continues to be limited or non-existent in most countries. No progress in this regard is to be noted during the decade; on the contrary, there appears to have been a deterioration.

IV. DEVELOPMENT OF THE INFRASTRUCTURE
4. DEVELOPMENT OF HUMAN RESOURCES

	4.2 Manpower training program																
	Inventory of health manpower (type, number, distribution and use)				Projection manpower needs for achievement health plan objective				Design and use of personnel modules for maximizing efficiency of services				Have new types of personnel been created?		Productive capacity of personnel education and training institutions				Manpower absorption capacity of human resources for health services in country	
	Exists for the year	Does not exist	Being prepared	Yes	No	Being prepared	Being designed		Being used		Yes	No	Is sufficient for all types of personnel	Is sufficient only for certain types of personnel	Has not been determined	Is sufficient for all types of personnel	Is sufficient for certain types of personnel	Has not been determined
							Yes	No	Yes	No								
Argentina																		
Bahamas			x		x			x				x			x			
Barbados	1978					x		x			x			x				x
Bolivia																		
Brazil																		
Canada																		
Chile	1979			x			x		x			x	x				x	
Colombia	1978			x			x		x		x		x				x	
Costa Rica			x	x				x			x			x			x	
Cuba	1979			x			x			x	x		x			x		
Ecuador	1979			x				x			x			x			x	
El Salvador		x			x		x				x			x		x		
United States		x		x			x		x			x		x			x	
Guatemala	1979			x			x			x	x			x			x	
Guyana			x	x				x			x			x			x	
Haiti	1978			x			x				x			x			x	
Honduras	1974			x			x				x			x		x		
Jamaica			x		x			x			x				x			x
Mexico	1974		x		x			x		x	x			x			x	
Panama	1980			x			x			x	x			x			x	
Paraguay	1974			x			x			x	x			x				x
Peru	1978			x			x				x			x			x	
Dominican Rep.					x			x		x	x			x		x		
Suriname	1979			x							x			x		x		
Uruguay		x				x		x				x		x			x	
Venezuela			x			x						x		x		x		

4.2 Manpower training program

Human resources programming calls for an updated inventory of human resources that will make it possible to ascertain th type, distribution, use and employment of such resources. In the first evaluation of the Ten-Year Plan, such inventory existed i only 6 out of 22 countries that participated in that evaluation. In 1980, 13 out of 22 countries have such an inventory, and i another 6 such an inventory is being prepared. This situation also represents an advance in the information systems necessary fo developing human resources.

More than two-thirds of the countries have made or are in the process of making a projection of the human resource required for carrying out the national health plans.

In half the countries, personnel modules have been designed to maximize the efficiency of the services, although only 3 o them mentioned the fact that such modules are being used. Progress has been made at least in the design of the modules compare with the situation noted in the first evaluation; however, the use of such modules is still limited, primarily because of the lac of better definitions of the care levels of the health services of the countries.

Seventeen out of 22 countries state that during the decade new types of personnel have been established within the healt services. At the beginning of the decade, most of the countries were studying the advisability of these new types of personnel which shows the high priority assigned to human resources within the various service production schemes adopted in the countries.

The productive capacity of these institutions for the education and training of personnel is sufficient for every type of personnel, except in 3 out of 22 countries. In the remainder, this capacity is sufficient for only a certain type of personnel The lack of capacity of health manpower training institutions is an important obstacle which has been impossible to overcome an which is related to the lack of coordination of training institutions and institutions using those resources. Furthermore, these institutions that use human resources do not have sufficient capacity to absorb the human resources of the type that may b produced. Only 6 out of 22 countries state that they have sufficient capacity to absorb all types of personnel. In the remainin countries, it is only possible to absorb a certain type of personnel.

	4.3 Personnel education and training goals									
	4.3.1. PHYSICIANS					4.3.2. DENTISTS				
	Number available (per 10,000 inhabitants)			Trained during the period 1971-1980		Number available (per 10,000 inhabitants)			Trained during period 1971-1980	
	1971	1978	Estimated for 1980	Estimated number	National goal	1971	1978	Estimated for 1980	Estimated number	National goal
Argentina	20.2	24.0 [a]	24.0			5.8	6.2 [a]			
Bahamas		8.9 [b]	9.2				1.0 [b]	1.1		
Barbados	5	7				0.6	0.7			
Bolivia										
Brazil	7.5 [c]					0.8				
Canada										
Chile	6.2	6.2 [a]		2,776		3.4	4		1,445	
Colombia	4.6	5.7	6.4	7,412	8,900 [c]	1.7	1.9	2.6	1,965	3,007 [c]
Costa Rica	5.2	7.2	6.8	682	1,112	1.4	1.9	2.1		
Cuba		13.7	15.3	9,365	15,200		3	3.6	2,400	3,600
Ecuador	5.1 [c]	8.0	10.9		5,555 [c]	0.9	2.2	3.2		1,270 [c]
El Salvador	3.0	3.5	3.9	864		1.3	1.1 [b]	1.2	86	
United States			20.1	133,000				5.7	47,400	
Guatemala	2.8	4.6	5.1	2,154	3,000 [c]	0.4	0.7	0.8	351	151 [c]
Guyana	2.4	1.3 [a] [d]			85 [c]	0.3	0.2 [a]			6 [c]
Haiti	1.1 [e]	0.8 [f]	1.2	1,350		0.1 [e]	0.1 [f]	0.2	90	
Honduras	2.6	2.6	2.9	512 [g]	1,107	0.1	0.2	0.2	106 [g]	295
Jamaica	4.1 [c]	3.6	3.7		370	0.5	0.4	0.4		
Mexico					40,010 [c]		3.4			8,720 [c]
Panama	6.7	8.1	8.4	589		1.6	1.3	1.4	105	
Paraguay	5.8 [c]		5.2	770			2.5 [h]	2.7	330	
Peru	5.3	6.6	6.8	4,882	3,270 [c]	1.7	2.0	2.0	1,176	400 [c]
Dominican Rep.	4.5 [c]	3.9					0.3			
Suriname	4.6	5.7	8.6	77			0.6	40		
Uruguay	11.6		19.3	2,252				7.1	875	
Venezuela	9.6	10.5	10.5	4,991	3,391	2.3	3.7	3.7	2,943	2,281

a/ 1977 figure. b/ 1979 figure. c/ First Evaluation made in 1974 of the Ten-Year Health Plan for the Americas, 1971-1980. d/ Excluding private practitioners. e/ 1973 figure. f/ 1976 figure. g/ 1973-1978 period. h/ 1974 figure.

4.3 Personnel education and training goals

4.3.1 Physicians

REGIONAL GOAL: Eight physicians per 10,000 inhabitants.

According to information from 22 countries, in 1980 only 9 (3 out of 7) had surpassed the regional goal. The remaining 13 countries show ratios ranging from 1.2 to 7 physicians per 10,000 inhabitants. That is to say, that 6 out of the 9 countries mentioned had already surpassed the regional goal at the beginning of the decade. However, the production of physicians in the countries of Latin America and the Caribbean, despite the fact that the absolute numbers have increased, has not been sufficient to fulfill the expectations embodied in the Ten-Year Health Plan. The goal has proved to be very ambitious, and constraints on feasibility both in the production and in the absorption by health service systems were not taken into account.

4.3.2 Dentists

REGIONAL GOAL: Two dentists per 10,000 inhabitants.

Twelve out of 23 countries (just over half) attained the regional goal and some of them surpassed their own national goals. Of these, 5 countries had surpassed this goal at the beginning of the decade. The remaining 11 countries have ratios ranging from 0.2 to 1.4 dentists per 10,000 inhabitants, and are a rather long way from attaining the number proposed in the Ten-Year Plan.

	4.3 Personnel education and training goals (Cont.)									
	4.3.3 NURSES					4.3.4. VETERINARIANS				
	Number available (per 10,000 inhabitants)			Trained during period 1971-1980		Number available (per 10,000 inhabitants)			Trained during period 1971-1980	
	1971	1978	Estimated for 1980	Estimated number	National goal	1971	1978	Estimated for 1980	Estimated number	National goal
Argentina	2.1	6.7 [a]	7.0							
Bahamas		34.0	37.6	451						
Barbados	20	27		435						
Bolivia										
Brazil	3.6 [b]									13000[b]
Canada										
Chile	2.7	3 [a]		2492						
Colombia	1.1	1.9	2.2	3485	5751 [b]	1350	2748	3128	1778	3151[b]
Costa Rica	4.2	6.2	6.6			1	1	3		2
Cuba		12.9	16.1	11000	16000					
Ecuador		0.6[c,d]	2.4	156	2000		3			
El Salvador	3.0	3.3	3.8	503			95 [g]			
United States			52.5					375000	146000	
Guatemala	2.2	2.0	2.1	306	1606 [b]	75	305	365	290	
Guyana	2.5	10.1[a]			900 [b]	10	15[a]			12[b]
Haiti	0.9 [e]	0.9 [f]	1.4	810						
Honduras	1.7	0.9	1.1	47 [g]	1661					74
Jamaica	5.7 [b]	16.7	16.9	3205	3500		1	4		4
Mexico	4.1 [b]				25720 [b]					
Panama	6.3	6.7	6.9	370						30[b]
Paraguay		2.8 [b]	3.7	520			395[h]	586	385	
Peru	3.3	5.0	6.0	6531	2200 [b]	872	1433	1595	804	
Dominican Rep.			0.7							
Suriname	10.6	18.6	23.9				6	8		
Uruguay			2.8	600				1200	329	
Venezuela	5.9	6.7	6.5	3150	4974					

a/ 1977 figure. b/ Source" First Evaluation made 1974 of the Ten-Year Health Plan for the Americas, 1971-1980. c/ 1979 figure. d/ Nurses attached to the Ministry of Health. e/ 1973 figure. f/ 1976 figure. g/ 1973-1978 period. h/ 1974 figure.

4.3 Personnel education and training goals (Continued)

4.3.3 *Nurses*

REGIONAL GOAL: 4.5 nurses per 10,000 inhabitants.

In 12 out of 22 countries, the number of nurses per 10,000 inhabitants in 1980 was higher than the regional goal. Six of these countries had surpassed the regional goal by 1971. Several countries made very considerable efforts to train nursing personnel during the decade, although few of them met their own national goal for training nurses. The scarcity of nurses in the countries of Latin America continues to be a major problem for the health services of the Region. There are 11 countries that have between 0.7 and 3.8 nurses per 10,000 inhabitants, which is inadequate for virtually any definition of the care level adopted by health service systems. Therefore, the average targets of the Ten-Year Plan have not been met by the countries of the Region.

4.3.4 Veterinarians

REGIONAL GOAL: 18,000 veterinarians to be trained.

The information obtained is not sufficient to determine the extent to which this goal has been attained.

	4.3 Personnel education and training goals (Cont.)									
	4.3.5 SANITARY ENGINEERS					4.3.6 STATISTICIANS				
	Number available			Trained during period 1971-1980		Number available			Trained during period 1971-1980	
	1971	1978	Estimated for 1980	Estimated number	National goal	1971	1978	Estimated for 1980	Estimated number	National goal
Argentina										
Bahamas		1	1	1			1 [b]	1		2
Barbados	1	4			1 [a]					
Bolivia										
Brazil					290 [a]					150 [a]
Canada										
Chile										
Colombia	40	247	317	272	351 [a]					35 [a]
Costa Rica	19		37		18	3	3	11		8
Cuba							13	20	15	19
Ecuador	118 [a]					1 [a]	12			10 [a]
El Salvador	10	20 [b]	20			1				
United States										
Guatemala	7	63	79	72		1	2			
Guyana	4									
Haiti		1 [c]	2						10	
Honduras	-	8	16 [d]	8	18	-	-	-	-	
Jamaica	1	3	13	-	15	1	2	5	-	5
Mexico	250 [a]				100 [a]					
Panama	3	4	4	1	40 [a]	1	1	1		
Paraguay		17 [e]	21	7			2 [e]			
Peru	210	303	319	115	24 [a]					
Dominican Rep.										
Suriname		1	1	1		-	-	-	-	
Uruguay										
Venezuela	130 [a]									

a/ From the First Evaluation of the Ten-Year Plan. b/ 1979 figure. c/ 1976 figure. d/ 1973-1978 period.
e/ 1974 figure.

4.3 Personnel education and training goals (Continued)

4.3.5 Sanitary engineers

REGIONAL GOAL: 3,200 engineers to be trained.

Sufficient information was not obtained to determine the extent to which this goal was attained.

4.3.6 Statisticians

REGIONAL GOAL: 300 statisticians to be trained

Sufficient information was not obtained to determine the extent to which this goal was attained.

IV. DEVELOPMENT OF THE INFRASTRUCTURE
4. DEVELOPMENT OF HUMAN RESOURCES

	4.3 Personnel education and training goals (Cont.)									
	4.3.7 MEDICAL RECORDS SPECIALISTS					4.3.8 HEALTH PLANNERS				
	Number available			Educated or trained during period 1971-1980		Number available			Educated or trained during period 1971-1980	
	1971	1978	Estimated for 1980	Estimated number	National goal	1971	1978	Estimated for 1980	Estimated number	National goal
Argentina										
Bahamas		1 [a]	1	2	3	-	-	-	-	1
Barbados					1 [b]	-	2	2	2	2
Bolivia										
Brazil					50 [b]					1500 [b]
Canada										
Chile										
Colombia						283 [b]	100	120	120	200 [b]
Costa Rica	1		3		2	16		26		10
Cuba										
Ecuador		1			24 [b]					
El Salvador	1	1 [a]	1			7	3		10	
United States										
Guatemala	7	62	62	45		4	14	14	10	
Guyana										1 [b]
Haiti									2	
Honduras							8	10	8 [c]	
Jamaica	1	1	2	4	2		6	7	6	7
Mexico						3 [b]				200 [b]
Panama						5	7	7	2	70 [b]
Paraguay										
Peru						84	255	280	196	56 [b]
Dominican Rep.										
Suriname	-	1	1	1		-	-	-	-	-
Uruguay								40	25	
Venezuela			542	225	200					

a/ 1979 figure. b/ From the First Evaluation of the Ten-Year Plan. c/ 1973-1978 period.

4.3 Personnel education and training goals (Continued)

4.3.7 Medical records specialists

REGIONAL GOAL: 100 specialists to be trained.

As a whole, this goal was attained, since some countries assigned high priority to this field of specialization. Only 5 countries reported the number trained between 1971 and 1980, and only one country (Venezuela) trained 225.

4.3.8 Health Planners

REGIONAL GOAL: 3,000 planners to be trained.

The information available is not sufficient to determine the extent to which this goal was attained; however, as a result of the disappearance of the Pan American Health Planning Center in 1976, the possibility of training persons of this type was reduced by almost 50% during the decade. Therefore, the regional goal probably has not been attained.

	4.3 Personnel education and training goals (Cont.)									
	4.3.9 ADMINISTRATORS					4.3.10 INFORMATION SPECIALISTS				
	Number available			Educated or trained during period 1971-1980		Number available			Educated or trained during period 1971-1980	
	1971	1978	Estimated for 1980	Estimated number	National goal	1971	1978	Estimated for 1980	Estimated number	National goal
Argentina										
Bahamas				10						
Barbados	1	3	4	8	4 [a]					
Bolivia										
Brazil					1450 [a]					500 [a]
Canada										
Chile										
Colombia	312	886	1066	754	750 [a]					
Costa Rica	45		69		24					
Cuba				300	300					
Ecuador				100			4			38 [a]
El Salvador	5	75	22	102						
United States										
Guatemala	3	14	14	14						
Guyana										
Haiti				30						
Honduras		19	21	19						
Jamaica		5	7	7			1	1		2
Mexico										
Panama										
Paraguay										
Peru	369	712	752	383	60 [a]					
Dominican Rep.										
Suriname							1		1	
Uruguay			8	8						
Venezuela										

a/ 1979 figure.

4.3 Personnel education and training goals (Continued)

4.3.9 Administrators

REGIONAL GOAL: 3,000 administrators to be trained.

Only 12 countries provided information on the number of administrators trained during the decade, which amounts to more than 1,700. If it is assumed that the number of personnel trained in the remaining countries is more or less the same, the regional goal would have been attained; especially if Brazil, which did not provide information, achieved its national goal of 1,450, which it proposed to train according to what was stated in the First Evaluation of the Ten-Year Plan.

4.3.10 Information specialists

REGIONAL GOAL: 1,000 information specialists to be trained.

The information available does not make it possible to evaluate the extent to which this goal was attained.

IV. DEVELOPMENT OF THE INFRASTRUCTURE
4. DEVELOPMENT OF HUMAN RESOURCES

4.3 Personnel education and training goals (Cont.)

4.3.11 OTHER PROFESSIONAL SPECIALTIES

	SPECIALTY	Number available			Educated or trained during period 1971-1980	
		1971	1978	Estimated for 1980	Estimated number	National goal
Argentina	Biochemists	5000	8500 [a]			
Barbados	Radiologists	14	18	-	3	
	Laboratory personnel	36	45	-	2	
	Physiotherapists	4	6		7	
	Occupational therapists		2		1	
Chile	Midwives ("matronas")	1.6 [b]	2.3a,b			
Ecuador	Pharmacists		17			11 [c]
	Laboratory personnel					
	Nutritionists		10			
	Midwives		380			
El Salvador	Medical rehabilitation		51	108 [d]	25	184
Guatemala	Social worker	350	900	1000	650	
Jamaica	Nurse practitioner	0	25	50	50	75
Peru	Chemist-pharmacists	2588	3160	3400	881	
	Midwives	1606	1992	2203	682	
Suriname	Pharmacists	15	13	20		
Uruguay	Health educators			4	4	

a/ 1977 figure. b/ Number per 10,000 inhabitants. c/ Medical doctors to be trained in the first course of postgraduate studies. d/ 1979 figure.

4.3 Personnel education and training goals (Continued)

4.3.11 Other specialties: professionals

No regional goals were established for this type of personnel.

	4.3 Personnel education and training goals (Cont.)									
	4.3.12 Intermediate Level MEDICAL RECORDS					4.3.13 Intermediate Level STATISTICIANS				
	Number available			Educated or trained during period 1971-1980		Number available			Educated or trained during period 1971-1980	
	1971	1978	Estimated for 1980	Estimated number	National goal	1971	1978	Estimated for 1980	Estimated number	National goal
Argentina										
Bahamas	2	2 [a]	3	5	10		3 [a]	3		3
Barbados	22	42	42	22		-	-	-	-	
Bolivia										
Brazil					2000 [b]					125 [b]
Canada										
Chile										
Colombia		620	730	730	1500 [b]	180	397	467	287	454 [b]
Costa Rica	44		108		64					
Cuba							1.0 [d]	1.3 [d]	940	1300
Ecuador	180 [b]				400 [b]	51 [b]			28	200 [b]
El Salvador	1	1	1	1				22	22	
United States										
Guatemala	37	44	44	44		4	4	4	4	
Guyana		1	1							
Haiti										
Honduras						8	27	45	19	
Jamaica		18	20	18	20	2 [b]	3	7	3	7
Mexico	e				c	400 [bc]				360 [be]
Panama	7	43	43	36	20 [b]	9	19	21	12	26 [b]
Paraguay						27 [e]		43	18	
Peru	c	c	c	c	c	149 c	251 c	289 c	140 c	75 [bc]
Dominican Rep.						33 [b]	0.1 [d]	0.2 [d]		
Suriname		1	1	1		1	1	1	1	
Uruguay										
Venezuela	978		2553	1575	4000					

a/ 1979 figure. b/ Data from the First Evaluation of the Ten-Year Plan. c/ Specialists in medical records incorporated with intermediate level statisticians. d/ Per 10,000 inhabitants. e/ 1974 figure.

4.3 Personnel education and training goals (Continued)

4.3.12 Medical records: middle-level personnel

REGIONAL GOAL: 4,000 middle-level technicians to be trained.

Insufficient information is available to determine the extent to which this goal was attained. Of the data supplied by nine countries, it appears that if Brazil had attained its national goal of training 2,000 medical record technicians, as proposed according to the information provided in the First Evaluation of the Ten-Year Plan--together with Venezuela and Colombia, the regional goal would have been surpassed.

4.3.13 Statistics: middle-level personnel

REGIONAL GOAL: 250 statistical technicians to be trained.

The number of health statistics technicians trained in the Region largely surpasses the regional goal proposed.

	4.3 Personnel education and training goals (Cont.)					
	4.3.14 OTHER INTERMEDIATE LEVEL TECHNICAL PERSONNEL	Number available			Educated or trained during period 1971-1980	
	Specialty	1971	1978	Estimated for 1980	Estimated number	National goal
Argentina	Radiology, Hemotherapy, Laboratory, etc.		7420			
Colombia	Administrative assistants	207	498	578	371	
	Sanitation promoters	290	1330	1730	1440	
	Hospital maintenance technicians	-	30			
	Experts in hospital maintenance		74			
Costa Rica	Laboratory technicians	234		549		315
Cuba	Dentistry		1.1*	1.2*	1150	1400
	Laboratory		4.8*	5.0*	5000	5500
	Radiology		1.3*	1.4*	1400	1500
Ecuador	Sanitation				500	
Guatemala	(Unspecified specialties)		324	400	400	
Honduras	Laboratory technicians	128	211	242	83	
	X-ray technicians	49	71	86	22	
	Maintenance technicians		26	26	26	
	Technicians in anaesthesia	28	75	97	47	
Jamaica	Veterinary public health	0	2	4	4	9
Paraguay	(Various unspecified specialties)		398			
Peru	Sanitation technicians	281	382	420	139	
	Laboratory technicians	101	650	750	649	
	Radiology technicians	29	287	331	302	
Dominican Rep.	X-ray technicians		0.15*	0.11*		
	Technicians in anaesthesia		0.10*	0.13*		
	Bachelors in nursing			0.25*		
Suriname	Veterinary assistants			24		
	Midwives	42	50	40		

* Per 10,000 inhabitants

4.3 Personnel education and training goals (Continued)

4.3.14 Other middle-level technical personnel

No specific goals were established for the training of this type of personnel.

	4.3 Personnel education and training goals (Cont.)									
	4.3.15 Nursing auxiliaries					4.3.16 Statistical auxiliaries				
	Number available (per 10,000 inhabitants)			Trained during period 1971-1980		Number available			Trained during period 1971-1980	
	1971	1978	Estimated for 1980	Estimated number	National goal	1971	1978	Estimated for 1980	Estimated number	National goal
Argentina	4.5	9.2[a]	11.2							
Bahamas		2.2[b]	10.0							
Barbados	13.1	15.1		223						
Bolivia										
Brazil	8.1[c]		14.5[c]							
Canada										
Chile	12.8	18.6[d]	22.0[c]							
Colombia	1.8	8.9	10.1	20815	9500[c]		620	730	730	
Costa Rica	13.0	16.4	23.1		2800	36[e]		431[e]		395[e]
Cuba		14.2	13.4	15000	13300					
Ecuador		4.8	7.3	806	5000	...	161	...	45	
El Salvador	4.6	5.7	5.9	1126			226	250	250	
United States										
Guatemala	2.0	5.8	6.6	1993	5321 c	37	70	70	70	
Guyana	5.1[c]					-	-	-	-	
Haiti	1.6	1.2	1.6	700					86	
Honduras	5.6	7.8	8.1	1181	5352	42	65	87	40[f]	
Jamaica							19	19	2	19
Mexico	4.8[c]				71280[c]					
Panama	12.7	15.8	20.0[c]	835		28	130	148	120	
Paraguay	7.1[d]		7.8	650		234[d]		370	165	
Peru	2.9	4.4	4.7	4293	2400 c	223	639	745	522	
Dominican Rep.	6.8 c	8.4			4200 c		0.2 g	0.3g		
Suriname	3.2	14.0	36.0							
Uruguay			54.3							
Venezuela	14.7		14.7	5655	3874					

a/ 1977 figure. b/ Source: First Evaluation carried out in 1974, of the Ten-Year Health Plan for the Americas, 1971-1980. d/ 1974 figure. e/ Medical records. f/ 1973-1978 period. g/ Per 10,000 inhabitants.

4.3 Personnel education and training goals (Continued)

4.3.15 Nursing auxiliaries

REGIONAL GOAL: 14.5 auxiliaries per 10,000 inhabitants.

Only 19 countries provided adequate information for the evaluation. Eight of them may have attained or surpassed the regional goal proposed, while the remainder are still very far below it, despite the fact that in some cases it appears that the national goals for the training of nursing auxiliaries were surpassed.

4.3.16 Statistical auxiliaries

REGIONAL GOAL: 40,000 auxiliaries to be trained.

This goal is very far from being attained. Probably only a tenth of it has been attained.

IV. DEVELOPMENT OF THE INFRASTRUCTURE
4. DEVELOPMENT OF HUMAN RESOURCES

	4.3 Personnel Education and Training Goals (Cont.)									
	4.3.17 Dental Auxiliaries					4.3.18 Other Auxiliary Personnel				
	Number available (per 10,000 inhabitants)			Trained during the period 1971-1980		Number available			Trained during the period 1971-1980	
	1971	1978	Estimated for 1980	Estimated number	National goal	1971	1978	Estimated for 1980	Estimated number	National goal
Argentina							3000			
Bahamas				1	10					
Barbados		0.3		6						
Bolivia										
Brazil										
Canada										
Chile	1.9	2.0								
Colombia	0.02	0.6	0.4	1390		1.76[a]	4.57[b]	5.23[b]	8911	
Costa Rica	0.16		0.6		105	582		943		361
Cuba		4.0		4000	4100					
Ecuador	0.01	0.61		360			590			
El Salvador										
United States										
Guatemala										
Guyana		0.14 [a]	0.35				10			
Haiti										
Honduras										
Jamaica		0.6	0.7	93	105	10	1169	2003	1172	2006
Mexico										
Panama										
Paraguay		0.1	0.4	80		745				
Peru										
Dominican Rep.		0.1	0.1				0.4[b]	0.9[b]		
Suriname		0.8	2.1							
Uruguay			0.7							
Venezuela	1.6									

a/ 1977 figure. b/ Per 10,000 inhabitants.

4.3 Personnel education and training goals (Continued)

4.3.17 Dental auxiliaries

REGIONAL GOAL: 2.2 auxiliaries per 100,000 inhabitants.

Only one of the 9 countries that reported had achieved this goal in 1978, and one other country was close to it. No further information was available for evaluating the regional goal.

4.3.18 Other auxiliary personnel

No specific regional goals were established.

	5. DEVELOPMENT OF PHYSICAL RESOURCES												
	Were goals established for the development of physical resources?						5.1 Inventory of premises and facilities for care of the public				5.2 Plan for development of installed capacity		
								Exists					
	Yes	No	Being installed	Being maintained	Being replaced	Being converted	Does not exist	Not updated	Updated	Being prepared	Exists	Does not exist	Being prepared
Argentina	x							x				x	
Bahamas	x		x			x				x		x	
Barbados	x		x	x		x			x				
Bolivia													
Brazil	x[a]							x					x
Canada													
Chile		x[b]							x		x		
Colombia	x[b]	x						x					x
Costa Rica	x[b]	x							x		x		
Cuba	x								x		x		
Ecuador	x		x						x		x		
El Salvador	x		x						x		x		
United States	x[b]												
Guatemala	x								x		x		
Guyana	x								x		x		
Haiti	x								x		x		
Honduras	x		x	x		x			x		x		
Jamaica	x[b]												x
Mexico	x								x		x		
Panama	x[b]	x						x			x		
Paraguay		x					x				x		
Peru	x[b]	x								x			x
Dominican Rep.	x[b]	x						x				x	
Suriname	x		x						x		x		
Uruguay		x								x			x
Venezuela	x							x			x		

a/ Financial and non-physical goals, in accordance with the demand of the Social Development Support Fund.
b/ Source: First Evaluation made in 1974 of the Ten-Year Health Plan for the Americas, 1971-1980.

5. DEVELOPMENT OF PHYSICAL RESOURCES

REGIONAL GOALS: To create within the regionalization systems comprehensive minimum health service units to reach a coverage of one unit per 5,000 inhabitants in communities with less than 2,000 inhabitants; health centers, with comprehensive minimum and basic services for communities of between 2,000 and 20,000 inhabitants; and institutions with integrated comprehensive basic and specialized services in communities with more than 20,000 inhabitants.

To increase the installed capacity by 106,000 beds in general hospitals by remodeling and converting long-stay beds whenever possible.

To gradually incorporate specialized medical care services into general hospitals according to the levels of care and within a regionalization scheme.

To create systems for the maintenance of facilities and equipments.

These goals for the development of physical resources are closely bound up with the goals set by the countries at the beginning of the decade for the extension of coverage, especially those that are linked to the establishment of basic health services to serve the vast rural areas that are unprotected, which constitute what is considered to be most of the population without access to health services.

On the occasion of the First Evaluation of the Ten-Year Health Plan in 1974, 16 out of 20 countries (4 out of 5) stated that they had established goals for the development of physical resources during the decade. In contrast, in the present evaluation, 14 out of 21 countries (2 out of 3) stated that they had fixed those goals; it is worthwhile noting that 5 out of the 7 countries which on this occasion declared that they had no set goals, in the first evaluation declared that they had set them.

This apparent uncertainty only serves to demonstrate the concern of the countries in accelerating their programs for the development of physical resources, despite their limitations in operating capacity and the serious financial constraints that prevailed during the decade.

The established goals seemed to affect, for the most part, the installation of new care units, although some concern is shown for the establishment of goals for maintenance and transformation of the facilities actually available.

5.1 Inventory of premises and facilities

More than half (12 out of 22) countries of Latin America and the Caribbean have an updated inventory of their premises and facilities for the care of the population; in another 8 countries (almost one third), this inventory is not updated, although 2 of them were updating it at the time of the evaluation. Only 2 countries do not have such an inventory, and one of them is preparing it.

The availability of the inventories of premises and facilities for medical care is a prerequisite for the programming of physical resources; therefore, the data obtained show the need to improve information systems for the programming of the establishment and use of care units.

5.2 Plan for the development of installed capacity

In 14 out of 22 countries in Latin America and the Caribbean (almost two thirds), there is a plan for the development of installed capacity; in another five countries, this plan is being prepared. Because of the dynamics of the plans for the development of physical resources, all the countries of the Region probably will have in a short time a properly structured plan for the development of its installed capacity.

IV. DEVELOPMENT OF THE INFRASTRUCTURE
5. DEVELOPMENT OF PHYSICAL RESOURCES

	5.2.1 Investment plan										
	Exists	Does not exist	Set of isolated projects	In preparation	Derived from a service plan: Yes	Derived from a service plan: In part	Derived from a service plan: No	Content: New buildings	Content: Rehabilitation of installed capacity	Content: Expansions and Conversion	Content: Equipment	Content: Maintenance
Argentina			x		x			x	x	x	x	x
Bahamas		x				x		x				
Barbados	x				x			x	x	x	x	x
Bolivia												
Brazil			x		x			x	x	x		x
Canada												
Chile	x						x	x	x	x		
Colombia			x			x		x	x	x	x	x
Costa Rica	x				x			x	x	x	x	x
Cuba	x					x		x		x	x	x
Ecuador	x				x			x	x	x	x	x
El Salvador	x				x			x		x	x	x
United States												
Guatemala			x			x		x		x	x	
Guyana	x				x			x			x	x
Haiti	x				x			x	x	x	x	x
Honduras	x				x			x	x	x	x	x
Jamaica			x			x				x		
Mexico	x				x			x	x	x	x	x
Panama	x					x			x			
Paraguay			x		x			x		x	x	
Peru	x					x		x	x	x	x	x
Dominican Rep.			x			x		x		x		
Suriname	x					x		x	x	x	x	x
Uruguay			x			x			x		x	x
Venezuela	x				x			x	x	x	x	x

5.2 Plan for the development of installed capacity (Continued)

5.2.1 Investment plan

Fourteen out of 23 countries in Latin America have an investment plan for the development of their physical resources. Thirteen of these plans have been derived from the programming of services either in whole or in part. Eight countries only have a set of isolated projects, which takes the place of an investment plan; these projects are also derived from a service program.

A total of 20 out of 23 countries have physical investment plans, that is, plans that provide for new construction; 15 cover the recovery of installed capacity; 19, expansions and transformation of premises, and 17, equipping of premises. Sixteen of the countries also include the maintenance of installations in their physical investment plans.

The countries are more frequently using external financing from international or bilateral agencies for their investment plans.

	5.3 Installation of premises for operation of basic units					5.4 Beds for general care				
	Number of premises in operation each year and percentage of increase 1971-1980					Number of beds available each year and percentage of increase 1971-1980				
	1971	1974	1978	Estimated for 1980	Percentage of increase 1971-1980	1971	1974	1978	Estimated for 1980	Percentage of increase 1971-1980
Argentina						91370				
Bahamas				114		512		561 g	561	10
Barbados	10	10	10	10	0	545	451	541	541	- 1
Bolivia										
Brazil							232266 h			
Canada										
Chile		668	866	971	45 a	32763	33763	32887	32927	- 3
Colombia	1530 b	1563 c	2772 d		81 e	31582	33065	31068		- 2
Costa Rica	49 b	310	1018	...	328 f	4970 b	4652	4322 d	4671	0
Cuba	932	971	1083		16 e	24460	34336	36364		49 e
Ecuador	225 b		993 g	1343	500					
El Salvador	95	102	145	172	81	1964	2034	1936		- 1 e
United States										
Guatemala	150	227	472	625	317	7761	7834	8645	8848	14
Guyana	35 b		130 d					2277 d		
Haiti										
Honduras	148	236	383	517	249	3326	3648	3414	3794	14
Jamaica	49 b					3215	3505	3661	3661	14
Mexico	2031 b						76413			
Panama	190	224	323		70 e	4661	5357	6335		36 e
Paraguay	127	133	147 d	313	146	3314	3356	3740	4632	40
Peru	1568	1686	1786	1836	17	28405	28505	28668	29268	3
Dominican Rep.	208	262	377		81	8393		8563		2 e
Suriname	-	140	168	170	21 a	889	907	1139	1145	29
Uruguay	834					9850			10131	3
Venezuela			444			9888	11722	16709		69 e

a/ 1974-1980. b/ Source: First Evaluation carried out in 1974, of the Ten-Year Health Plan for the Americas, 1971-1980. c/ 1973 figure. d/ 1977 figure. e/ 1971-1978 period. f/ 1974-1978 period. g/ 1979 figure. h/ 1975 figure.

5.3 Basic care units

Only 18 countries provided information for this evaluation of the number of basic care units in operation. Despite the importance of this type of unit in the extension of coverage in the countries of the Region, the scanty response obtained for this section of the evaluation shows that the national information systems are not operating as efficiently as they should. Indeed, in 1974, information was obtained for the First Evaluation of the Ten-Year Plan which shows considerable differences from that provided by the countries for the present evaluation.

These basic care units were identified as units of minimum complexity within the formal system of health services and in accordance with the particular definition of each of the countries. These units are known by different names such as health posts, sanitary posts, etc. and are usually health units located in small rural localities and manned by nursing personnel, although in some circumstances they may be staffed by physicians, as is the case in certain countries where basic care is provided by this professional personnel.

By and large there has been an increase in the number of units for this type of care. The change between 1970 and 1980 or in years near the beginning and end of the decade, ranges between 0% and 500% in 14 countries for which this type of information is available, with a mean of 81%. There are countries that have made outstanding advances and have increased the number of their basic care units, thanks to the national effort and the use in some cases of loans from external financing agencies. In 13 countries, shown in the table with information both for 1974 and 1978, the total number of basic units increased from 6,532 to 10,543, that is to say, an increase of 61.4% during a period of 4 years. These national efforts, which have made services available to a large number of the population, have not fulfilled yet however the expectations for the regional goal as a whole.

5.4 General care beds

In accordance with the data available around 1971, there were in Latin America and the Caribbean about 622,000 beds in general hospitals; this represents an average of 1 bed per 1,000 inhabitants. In North America the number of general beds was 1,134,000 or 4.9 beds per 1,000 inhabitants. As an average for the decade, the number of beds in Latin America and the Caribbean increased to 635,000, that is to say, an increase of 2%, which did not offset the population increase that was 3%. In North America, the number of general beds fell to 1,116,000 and, since then, the ratio per 1,000 inhabitants has also fallen.

The information provided by the countries for this evaluation is far from being complete; however, some indicators may be emphasized: for example, 16 countries reported that the number of beds in operation for general care in the years 1971 and 1978 were 167,864 and 188,587, respectively; in other words, a net increase of 12% in the seven years or 1.8% annually during that period. If this increase occurred in the remaining countries in Latin America and the Caribbean which did not report for this evaluation (in particular, Brazil and Mexico), the total number of beds that would have been added during the 10-year period would have exceeded the 106,000 mentioned as a goal for the Ten-Year Plan. It is noted that there are countries that have increased the number of beds, while there are others in which the number of beds has fallen slightly during the decade.

IV. DEVELOPMENT OF THE INFRASTRUCTURE
5. DEVELOPMENT OF PHYSICAL RESOURCES

	5.5 Specialized beds					5.6 Beds for chronic patients converted to beds for acute patients			5.7 Maintenance system		
	Number of beds available each year and percentage of comparison between 1971-1980								Personnel specialized in maintenance per 100 beds in hospitals with more than 100 beds		
	1971	1974	1978	Estimated for 1980	Comparison 1971-1980 %	Beds for chronic patients 1971	Converted for acute patients as of 1980 No.	%	1971	1978	1980
Argentina	42477										
Bahamas	407		360	360	-12	407				4	
Barbados	707	673	665	665	- 6	898			0.6	1	1
Bolivia											
Brazil		168516[a]									
Canada											
Chile											
Colombia	14597	11659	9338		-36[b]						5
Costa Rica		2732	2542	2542	- 7[c]						
Cuba	11203	10043	10105		-10[b]	2404	1745	73	4000	1200	1200
Ecuador		513	835	859	+67[c]	2866	672	23	48	96	240
El Salvador	3885	3704	3985		+ 3[b]	2001	1633	82			
United States											
Guatemala	2188	2237	1979	1987	- 9				90	125	150
Guyana			1165								
Haiti											
Honduras	1112	1127	1182	1272	-14	475	70	15	-	1	1
Jamaica	4029	3976	4008	4008	- 1						
Mexico											
Panama	2772	3146	3720		+34				0	0	0
Paraguay	500	520	523		+ 5[b]	-	-	-	-	-	-
Peru	4244	4549	4854	4854	+14	3110			3	4	4
Dominican Rep.											
Suriname	+692	744	685	660	- 5	92	51	55	122	143	153
Uruguay	5829			4529	-22	5829	1300	22		50	
Venezuela			9159			6073	916	15			

a/ 1975 figure. b/ 1971-1978 period. c/ 1974-1980 period.

5.5 Beds for specialized care

At the beginning of the decade, there were more than 856,000 beds in hospitals for chronic patients and specialized care in the Region; 31.6 of which were located in Latin America and the Caribbean (217,000 beds). Of these 856,000 beds, 73% were devoted to the care of mental patients (81% in North America and 54% in Latin America and the Caribbean), and 8% were used for tuberculosis patients (3.5% in North America and 17.7% in Latin America).

As an average for the decade, around 1975 the number of beds in hospitals for chronic patients and for specialized care in the Region had fallen by 24% to a total of 650,000 beds; 41% of these were located in Latin America and the Caribbean (266,000 beds).

The decrease in the number of beds for the care of chronic patients is shown in North America, where during the first half of the decade this number fell by 36% (from 586,000 to 383,000). In Latin America and the Caribbean, in contrast, during that period the reduction was only 4,600 beds, wich represents less than 2% of those formerly existing. The greatest reduction in North America was in the number of beds for mental patients, which fell by about 185,000; or 39% of the 476,000 that existed at the beginning of the decade. Beds for tuberculosis patients were reduced in North America from 20,700 to 3,900, that is to say, a net reduction of 16,800 beds or 81%. In Latin America, 2,000 beds for the care of mental patients were added during the first half of the decade to bring the total to 149,000 around 1975; in contrast, there was a reduction of 2,450 beds for the care of tuberculosis patients, that is to say, a net reduction of 5% compared with those at the beginning of the decade.

No reliable information is available about what happened in the countries during the decade as regards availability of beds for specialized care; however, from the replies obtained in the form for the evaluation of the Ten-Year Plan, it appears that in 11 countries which in 1971 had 52,165 beds for specialized care, there had been a reduction of more than 20% by 1978 and therefore the downward trend in the number of these beds continues.

5.6 Transformation of beds for chronic patients into beds for acute patients

Very few countries provided information for the evaluation of this aspect; however, it is known that the countries are transforming beds for the care of chronic patients, especially tuberculosis beds, into beds for the care of acute patients.

5.7 Maintenance system

The information obtained is scanty and no conclusions can be derived from it. Other sources of information, however, indicate that the interest in the establishment of hospital maintenance systems in the countries has increased, especially in those countries that have investment plans in execution which envisage the establishment of maintenance services among their activities.

	6. FINANCING															
	6.1 Programs for analysis of financing & expenditure			6.2 Analysis of productive functions			6.3 Budget of current expenditures allocated to health sector									
	In operation	Do not exist	Planned	Of the sector	Of some institutions	Of some establishments being planned	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980
Argentina	x		x			x x									5.1	
Bahamas	x			x			14	12	15	14	13	14	14	14	14	14
Barbados	x			x			18	19	18	16	17	17	15	15	15	
Bolivia																
Brazil	x			x				3	3	2	12	9	10	11	9	8
Canada																
Chile	x					x	8	8	7	10	7	8	7	7	7	7
Colombia	x		x		x		1.5	1.5	2	2.7	2.8	5.1	5.3	6.4	7.4	10.3
Costa Rica	x		x		x	x x	6	6	5	6	5	6	5	5	4	
Cuba	x			x												
Ecuador	x					x			95	86	91	77	84	81	74	
El Salvador	x					x	15	12	14	13	14	13	14	14	13	13
United States	x			x	x											
Guatemala	x				x				14	13	14	10	11	11		
Guyana			x			x	6	6	6	5	5	4	6	5	5	5
Haiti	x					x			13.2	13.3	13.0	14.1	11.0	10.7	9.7	
Honduras	x			x			9	9	9	9	8	7	8	9	9	10
Jamaica	x				x		10	8	7	8	7	6	6	6	4	
Mexico	x			x			12	12	10	12	9	10				8
Panama										12	11	11	10	10	10	11
Paraguay			x			x	11	11	11	12	12	12	13	12	11	12
Peru		x			x		8	8	8	8	5	5	6	4	3	
Dominican Rep.	x		x				10	10	9	9	5	7	7	8		
Suriname								8	7	7	7	7	7	7	8	9
Uruguay											7	8	8	7		
Venezuela																

6. FINANCING

REGIONAL GOAL: To develop systems of financing that obtain new sources of funds for the sector and ensure the broadest collaboration of the community and the participation of the health sector in key projects of national development.

One of the most important problems faced by many countries in Latin America and the Caribbean in their efforts to expand coverage and the structure of the services in order to satisfy the basic needs of the population, is the relative limited nature of the revenue of the Government and consequently, its limited capacity to finance these programs.

The average national expenditure on consumer sectors within which the national accounts include health expenditures has been increasing at about the same rate as the gross domestic product; however, this increase was not sufficient during the decade to finance the effort required for the launching of the programs designed to achieve coverage extension goals.

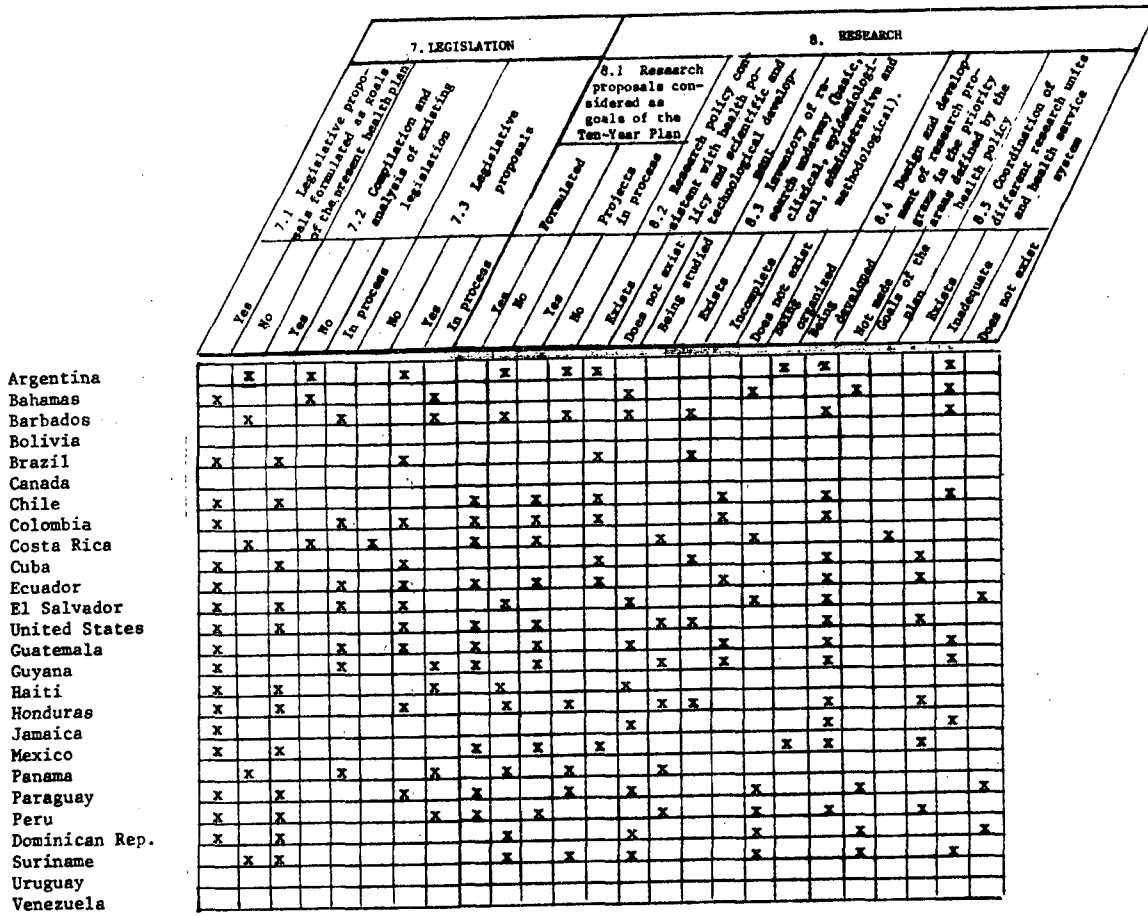
The countries are expressing increasing interest in the analysis of financing and expenditure and in the study of new sources that can provide the health sector with funds. In almost all the countries financing studies are being made, or a project exists for making them; in addition, the production function of the sector is being analyzed either as a whole or for the most important institutions that make up the sector, with a view to determining the optimum combination between the levels of financing required and the technology of resource combination for the production of services. In addition, research is being carried out on how communities can participate in these new service production technologies. However, the financing aspect continues to be emphasized as one of the most critical factors, especially if the relatively small proportion of the gross domestic product assigned to satisfying the needs of the public sector in Latin America is borne in mind, as well as the series of constraints which consequently face programs of social development, including health sector programs.

In many countries some of the financial problems that determine the rapid expansion of health service coverage could have been solved in part through the allocation of the income of social security institutes to finance health objectives. However, only a few countries have succeeded in recent years in associating social security with the national enterprise of extending coverage.

The percentage of the budget of current expenditure assigned to the health sector has varied considerably during the decade or at least during the second half of it. These percentages, which vary according to the greater or lesser participation of the public sector in the health sector, ranged in 1971 between 1.5% and 18% with a mean of 10% in 13 countries for which this information is available. As an average for the decade, in 1975 the percentages varied between 2.8% and 17% with a mean of 10% in 20 countries that provided information for that year. In 1980, information from 11 countries ranged between 5% and 14%, with a mean again of 10%.

SUMMARY: During the decade the countries showed considerable concern about identifying and using sources of financing for meeting the cost of their investments and the expenditure involved in the extension of service coverage. They have resorted to external financing and have made very considerable internal efforts, which, however, have not been clearly reflected in the allocation of resources for operating expenditures of the sector, whose participation within the national budget has not undergone substantial changes. The end of the decade still shows the countries discussing how to overcome the constraints imposed by the lack of viable solutions to the problems of financing their health services and the greater exigencies of their own coverage extension goals.

IV. DEVELOPMENT OF THE INFRASTRUCTURE



7. LEGISLATION

The Ten-Year Health Plan formulated a series of recommendations concerning the legal institutional system. Thus, for example, it recommended that the characteristics of the problem in each country be studied in order to systematically identify the demands of the technical groups of the sector on the legal system and to identify the elements or levels of the system toward which such demands should be directed. The Ten-Year Plan also recommended the definition of health problems that require compulsory regulation or legal institutionalization; the systematization of current legislation and the complete regulation of legal provisions; and, the recognition and standardization of relations with social control agencies responsible for enforcing health actions, and with other agencies for applying the law and the corresponding penalties.

In 1971 the countries expressed concern about the legal aspects, and most of them made proposals for legislation to be included as goals in their health plans. The situation in 1980 is similar: the interest persists and 17 out of 22 countries have proposed legislation as goals in their national health plan. Almost all the countries have made proposals or are in the process of making legal proposals.

SUMMARY: The countries have shown and are showing interest in giving legal form to a series of activities and situations compatible with the needs of the development of health and of the sector.

8. RESEARCH

REGIONAL GOAL: To develop and use health methods geared to the conditions of each country for increasing service coverage and productivity. To organize multinational scientific and technological research programs.

The Ten-Year Plan recognizes that each country should establish its own research infrastructure and cooperate fully in regional programs in order to select, use and control the breakthroughs made in science and technology for the benefit of the country. To that end, it was also proposed that each country formulate its own national health research policy, promote this type of research in the universities and other institutions, and provide services for fostering, encouraging, and coordinating national health research activities.

According to the information available for this evaluation, 5 out of 9 countries had incorporated proposals regarding research as goals in their national plan and almost half of the research projects had been carried out or were being carried out.

Only one third of the countries has a health research policy consistent with the health policy and policy of technological and scientific development. In most of the countries, this policy does not exist, although 5 of them are studying it.

There are very few countries that have an inventory of research in the health sector; this situation has not changed since the beginning of the decade. More than two-thirds of the countries state that a research program in areas defined as priorities in the health policy is going on. This situation is an advance compared with that existing at the beginning of the decade.

There are very few countries in which there is adequate coordination between the various research units and the health service system; therefore, the situation has not varied substantially during the decade.

SUMMARY: A slow advance is to be noted in the research field, especially as regards the design and development of programs in priority areas defined by health policy, which usually are bound up with the infrastructure of the systems and the use of adequate technology for the various care levels of those systems.

V. TABLES OF ANALYSIS OF COVERAGE

Bahamas
Chile
Colombia
Costa Rica
Ecuador
Guatemala
Guyana
Honduras
Paraguay
Peru
Venezuela

TABLE No. 1

TYPES OF CARE UNITS, ASSIGNED POPULATION, FUNCTIONS AND PROGRAMS, TYPES AND NUMBERS OF PERSONNEL IN ACCORDANCE WITH NATIONAL STANDARDS (*)

COUNTRY: BAHAMAS

YEAR: 1979

NAME AND TYPE OF CARE UNIT	LEVELS OF CARE PROVIDED	PERSONNEL		POPULATION SERVED		FUNCTIONS AND PROGRAMS CARRIED OUT	REFERRAL SCHEMES AND ARTICULATION BETWEEN UNITS
		TYPE	NUMBER	GENERAL CHARACTERISTICS	AVERAGE NUMBER OF PERSONS		
SATELITE CLINICS (13)	I	Trained Technical Nurses (enrolled) Nursing Auxiliaries M. W. Visiting nurses	3 3 1	Rural population. No specific population is assigned population of area indicated at next column.	6,700	First aid care.	Main clinics or Hospital.
MAIN CLINICS (33)	II	Doctors Nursing Officer (R) Staff Nurses Trained Clinical Nurses M. W. Visiting doctors and Nurses	7 4 18 9 6	Rural population. No specific population is assigned. Population of area indicated at next column.	42,000 plus population of satellite clinic	First Aid Care and Basic nursing care with basic maternal child health and ambulatory care	Health Centres or Hospitals.
HEALTH CENTRES (10)	III	Doctors Nursing officer (R) Staff Nurses (R) Trained Clinical Nurses (enrolled) Visiting nurses	10 6 7 2	Rural population; no specific population is assigned. Population of area indicated at next column.	30,200 plus population of satellite clinic	Maternal and child health; ambulatory care and limited inpatient bed care.	Hospital
RURAL HOSPITAL	V	Doctors Nursing officer (R) Staff Nurses (R) Trained Clinical Nurses (enrolled) Nursing auxiliaries Paramedicals	10 7 12 37 14	Rural population; population served indicated at next column.	15,100	Ambulatory care; in-patient care, including maternity, general surgery provided, ENT and radiology on a visiting basic; laboratory services provided.	National Hospital
SATELLITE CLINICS	II	Visiting doctors and nurses		Urban population	137,000	First aid care, basic nursing care; maternal and child health care; domiciliary services; school of health and immunizations.	National Hospital

(*) Ministry of Health.

(R) Registered

TABLE No. 1

TYPES OF CARE UNITS, ASSIGNED POPULATION, FUNCTIONS AND PROGRAMS, TYPES AND NUMBERS OF PERSONNEL IN ACCORDANCE WITH NATIONAL STANDARDS (*)

COUNTRY: BAHAMAS

YEAR: 1979

NAME AND TYPE OF CARE UNIT	LEVELS OF CARE PROVIDED	PERSONNEL		POPULATION SERVED		FUNCTIONS AND PROGRAMS CARRIED OUT	REFERRAL SCHEMES AND ARTICULATION BETWEEN UNITS
		TYPE	NUMBER	GENERAL CHARACTERISTICS	AVERAGE NUMBER OF PERSONS		
MAIN CLINICS (3)	III	Doctors Nursing Officer (R) Staff Nurses (R) Trained Clinical Nurses (enrolled) Nursing Auxiliaries Visiting Obst.	3 9 9 4 3	Urban population	137,000	Nursing care, maternal and child health care, domiciliary services; schoold health and immunizations.	National Hospitals.
PRIVATE DISPENSARIES (48)	IV	Doctors Nurses Pharmacists	57 na na	Rural population Urban population Population of area covered indicated at next column.	152,000	Ambulatory care, including prenatal and post-natal care.	National Hospital
SPECIAL HOSPITAL (1)	V	Doctors Nurses Therapists Pharmacists Phisiotherapists Nursing auxiliaries	9 115 12 1 3 39	Urban and rural population of Bahamas. Population of area covered indicated at next column.	231,000	Psychiatric inpatient and outpatient care. Geriatric inpatient care.	National Hospital
NATIONAL HOSPITAL (1)	VI	Doctors Nursing officers Staff Nurses Trained Clinical Nurses Nursing Auxiliaries and M.W. Radiographers Physiotherapists ECG Technicians Pharmacists Dentists Lab. technologists Orthopaedic Asst. Eye Technicians	98 60 188 179 102 12 14 2 11 4 12 2 2	Urban and rural population of Bahamas. Population of area indicated at next column.	231,000	Ambulatory care, inpatient care including maternity, eye and chest surgery, radiology and laboratory facilities are provided.	U.S. Hospital

(*) Ministry of Health

na = not available

TABLE No. 2

RESOURCES, PRODUCTION AND PRODUCTIVITY BY LEVEL OF COMPLEXITY

COUNTRY: BAHAMAS

YEAR: 1979

LEVEL OF COMPLEXITY	SERVICE UNITS: TYPES OF CARE UNITS	SERVICE UNITS: LEVEL OF CARE	LOCALITIES WITH SERVICE: NUMBER OF LOCALITIES	LOCALITIES WITH SERVICE: POPULATION OF THESE LOCALITIES	RESOURCES: NUMBER OF CARE UNITS	RESOURCES: ANNUAL PERSONNEL HOURS	RESOURCES: NUMBER OF BEDS	RESOURCES: TOTAL ANNUAL COSTS	PRODUCTION: CARE SERVICES	PRODUCTION: DISCHARGES	PRODUCTION: DAYS OF STAY OF PATIENTS	PRODUCTION: CARE SERVICES PER DISCHARGE	PRODUCTION: CARE SERVICES PERSONNEL HOUR	PRODUCTIVITY: BED OCCUPANCY	PRODUCTIVITY: AVERAGE DAYS OF STAY	PRODUCTIVITY: ANNUAL CHARGES PER BED
	FAMILY ISLANDS																
I	Satellite Clinics	I	15	6,700	13	-	-	NA	-	-	-	-	-	-	-	-	
II	Main Clinics	II	91	42,000	33	-	-	NA	-	-	-	-	-	-	-	-	
III	Health Centres	III	39	30,200	10	-	-	NA	-	-	-	-	-	-	-	-	
V	Rural Hospital	V	14	33,500	1	-	58	1,352	29,574	4,426	12,134	6.7	-	57.3	2.7	76.3	
	NEW PROVIDENCE																
I	Satellite Clinics	II	138	137,000	4	-	-	1,806	-	-	-	-	-	-	-	-	
III	Main Clinics	III	-	-	3	-	-	-	-	-	-	-	-	-	-	-	
IV	Private Dispensaries	IV	172	152,000	48	-	-	-	-	-	-	-	-	-	-	-	
VI	Special Hospitals	V	470	231,000	1	NA	360	2,658	273	1,003	76,859	0.3	-	58.5	76.6	2.8	
VII	National Hospitals	VI			1	NA	455	10,902	218,720	15,793	115,029	13.9	-	69.3	7.3	34.7	

TABLE No. 3

RESOURCES, PRODUCTION, COVERAGE AND UNIT COSTS BY LEVEL OF COMPLEXITY

COUNTRY: BAHAMAS

YEAR: 1979

LEVEL OF COMPLEXITY	LOCALITIES WITH SERVICES		RESOURCES				PRODUCTION				INDICATORS OF COVERAGE					UNIT COST		
	NUMBER OF LOCALITIES	POPULATION OF THESE LOCALITIES	NUMBER OF CARE UNITS	ANNUAL PERSONNEL HOURS	NUMBER OF BEDS	TOTAL ANNUAL COSTS	CARE SERVICES	DISCHARGES	DAYS OF BED OCCUPANCY	CARE SERVICES/ DISCHARGES	INHABITANTS/ EFFECTOR	PERSONNEL HOURS/ INHABITANT	BEDS PER 1000 INHABITANTS	ANNUAL CARE SERV. PER INHABITANT	ANNUAL DISCHARGES PER 1000 INHABIT.	OF THE CARE SERVICE	OF THE DISCHARGE	OF THE PATIENT DAY
AT EACH LEVEL																		
I	15	6,700	13	-	-	-	-	-	-	-	515	-	-	-	-	-	-	-
II	229	179,000	37	-	-	1,806	-	-	-	-	4,838	-	-	-	-	-	-	-
III	177	167,200	13	-	-	-	-	-	-	-	12,861	-	-	-	-	-	-	-
IV	172	152,000	48	-	-	NA	-	-	-	-	3,167	-	-	-	-	-	-	-
V	14	33,500	1	-	58	1,352	29,574	4,426	12,134	6.7	33,500	-	1.7	882.9	132.1	NA	89.04	32.48
VI	470	231,000	1	-	360	2,568	273	1,003	76,859	0.3	231,000	-	1.6	1.2	4.3	-	329.47	17.35
VII	470	231,000	1	-	455	10,902	218,720	15,793	115,029	13.9	231,000	-	2.0	946.8	68.4	12.20	187.57	25.75
AT EACH LEVEL PLUS PRECEDING LEVEL																		
I	15	6,700	13	-	-	-	-	-	-	-	515	-	-	-	-	-	-	-
II)	-	215,900	50	-	-	1,806	-	-	-	-	3,427	-	-	-	-	-	-	-
III)	-		63	-	-		-	-	-	-		-	-	-	-	-	-	-
IV	-	-	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
V	-	-	112	-	58	3,158	29,574	4,426	12,134	6.7	-	-	-	-	-	-	89.04	32.48
VI	-	-	113	-	418	5,126	29,847	5,429	88,993	5.5	2,044	-	-	-	-	-	318.21	19.41
VII	470	231,000	114	-	873	16,628	248,567	21,222	204,022	11.7	2,026	-	3.8	1.1	91.9	-	220.99	2.03

NA = Not available.

CUADRO No. 1

TIPO DE EFECTORES, POBLACION ASIGNADA, FUNCIONES Y PROGRAMAS, TIPO Y NUMERO DE PERSONAL SEGUN NORMAS NACIONALES

PAIS: C H I L E

AÑO: 1979

NOMBRE Y TIPO DE UNIDAD DE ATENCION (ESTAELECIMIENTO O EFECTOR) (1)	NIVELES DE ATENCION QUE BRINDA (2)	PERSONAL		POBLACION A LA QUE SIRVE		FUNCIONES Y PROGRAMAS QUE REALIZA (7)	ESQUEMA DE REFERENCIA Y ARTICULACION ENTRE EFECTORES (8)
		TIPO (3)	No. (4)	CARACTERISTICAS GENERALES (5)	NUMERO PROMEDIO DE PERSONAS (6)		
SERVICIOS DE SANIDAD FUERZAS ARMADAS Y DE ORDEN	-	-	-	-	-	Intervención; servicios al individuo.	
UNIVERSIDADES	-	-	-	-	-	Intervención; servicios al individuo; organización comunitaria; investigación.	
SERVICIOS MEDICOS DE BANCOS (CAJA BANCARIA DE PENSIONES)	-	-	-	-	-	Intervención; servicios al individuo.	
MINISTERIO DE OBRAS PUBLICAS	-	-	-	-	-	Acueductos y alcantarillado.	
SERVICIO SEGURO SOCIAL	-	-	-	-	-	Asistencia financiera; asistencia social. 1/ 2/	

1/ Reintegro de cotizaciones de asegurados para salud.
2/ Pensiones de vejez y otras.

CUADRO No. 3

RECURSOS, PRODUCCION, COBERTURA Y COSTOS UNITARIOS POR ESCALONES DE COMPLEJIDAD

PAIS: COLOMBIA ANO: 1977

ESCALON DE COMPLEJIDAD	LOCALIDADES CON SERVICIOS		RECURSOS				PRODUCCION				INDICADORES DE COBERTURA						COSTOS UNITARIOS		
	NUMERO DE LOCALIDADES	POBLACION DE ESTAS LOCALIDADES	NUMERO DE EFECTORES	HORAS ANUALES DE PERSONAL **	NUMERO DE CAMAS	GASTO TOTAL ANUAL ***	ATENCIONES **	EGRESOS **	DIAS-CAMA OCUPADOS **	ATENCIONES POR EGRESO	HABITANTES POR EFECTOR ****	HORAS DE PERSONAL POR HABIT.	CAMAS POR 1000 HABITANTES	ATENCIONES ANUALES POR HABIT.	EGRESOS ANUALES POR MIL HABIT.	DE LA ATENCION	DEL EGRESO	DEL PACIENTE-DIA	DE LA HORA DE ATENCION
EN CADA ESCALON																			
* I-III	5,729	11,519	5,729	2,600	11,078	1,566	9,468	354	1,826	26.8	2,010	0.2	1.0	0.8	30.7	62	2,756	562	225
IV	89	5,616	89	1,400	8,278	1,775	3,718	306	2,049	12.1	63,100	0.2	1.5	0.7	54.6	90	4,700	687	238
V	59	2,390	62	560	10,883	3,829	1,388	440	4,576	3.1	38,500	0.2	4.5	0.6	184.1	100	8,382	720	250
EN CADA ESCALON Y ESCALONES ANTERIORES																			
* I-III	5,729	11,519	5,729	2,600	11,078	1,566	9,468	354	1,826	26.8	2,010	0.2	1.0	0.8	30.7	ND	ND	ND	ND
IV	5,818	17,135	5,818	4,000	19,350	3,341	13,186	660	3,875	20.0	2,945	0.2	1.1	0.8	38.5	ND	ND	ND	ND
V	5,877	19,525	5,880	4,560	30,233	7,170	14,574	1,100	8,451	13.2	3,320	0.2	1.5	0.7	56.3	ND	ND	ND	ND

ND = No disponible.
* Incluye escalones I, II y III.
** Cifras en miles
*** En millones de Bolívares.
**** No incluye poblac ión no cubierta.

TIPO DE EFECTORES, POBLACION ASIGNADA, FUNCIONES Y PROGRAMAS, TIPO Y NUMERO DE PERSONAL SEGUN NORMAS NACIONALES

PAIS: COSTA RICA

AÑO: 1978

NOMBRE Y TIPO DE UNIDAD DE ATENCION (ESTABLECIMIENTO O EFECTOR) (1)	NIVELES DE ATENCION QUE BRINDA (2)	PERSONAL		POBLACION A LA QUE SIRVE		FUNCIONES Y PROGRAMAS QUE REALIZA (7)	ESQUEMA DE REFERENCIA Y ARTICULACION ENTRE EFECTORES (8)
		TIPO (3)	No. (4)	CARACTERISTICAS GENERALES (5)	NUMERO PROMEDIO DE PERSONAS (6)		
PUESTO DE SALUD	I Básico	Supervisores Auxiliar Enfermería Asistentes de Salud		Rural Dispersa	2,400	Servicios integrales de salud a la población brindados por personal auxiliar a través de la visita domiciliaria.	Refieren a puestos de salud y en casos de emergencia debidamente calificados al establecimiento de la CCSS más cercano.
UNIDADES MOVILES	II Atención Médica General	Médicos Auxiliares Enfermería Choferes		Rural		Atención médica general.	Refieren a Centros de de Salud o al establecimiento de la CCSS más cercano.
CENTRO DE SALUD	II Atención Médica General	Médicos Odontólogos Farmacéuticos Microbiólogos Enfermeras Aux. Enfermería Otro personal paramédico:Asist. salud comunitaria;Trab. Sociales; Insp.Sanit.; Pers.Administrativo; Pers.Misceláneo.		Urb. y Periurb. (preferentemente) además de casos referidos de áreas rurales	2,500 a 25,000	Servicio de consulta externa en medicina general	Refieren al establecimiento superior más cercano
CENTRO RURAL DE ASISTENCIA	II Atención Médica General	Médicos Odontólogos Enfermeras Aux. Enfermería Otro Pers.Paramédico Insp.Saneamiento Asist.Salud Comunitaria; Personal Administrativo; Personal Misceláneo.		Urbana de cuatro cabeceras de cantón.	16,000	Servicio de consulta externa en medicina general y servicio de hospitalización para maternidad y urgencias.	Refieren al establecimiento superior más cercano.

TIPO DE EFECTORES, POBLACION ASIGNADA, FUNCIONES Y PROGRAMAS, TIPO
Y NUMERO DE PERSONAL SEGUN NORMAS NACIONALES

PAIS: COSTA RICA

AÑO: 1978

NOMBRE Y TIPO DE UNIDAD DE ATENCION (ESTABLECIMIENTO O EFECTOR) (1)	NIVELES DE ATENCION QUE BRINDA (2)	PERSONAL		POBLACION A LA QUE SIRVE		FUNCIONES Y PROGRAMAS QUE REALIZA (7)	ESQUEMA DE REFERENCIA Y ARTICULACION ENTRE EFECTORES (8)
		TIPO (3)	No. (4)	CARACTERISTICAS GENERALES (5)	NUMERO PROMEDIO DE PERSONAS (6)		
CLINICA PERIFERICA DE CONSULTA EXTERNA	III Atenc. Médica General y Espec.	Médicos Odontólogos Microbiólogos Farmacéuticos Enfermeras Aux. Enfermería Otro personal paramédico Personal Administ. Personal Misceláneo	166 23 16 11 18 130 291 213 198	Urbana de gran magnitud.	85,207	Atención exclusivamente ambulatoria en especialidades y sub-especialidades. Cuenta con servicios de ayuda diagnóstica (laboratorio, Rayos X y otros).	Refieren a hospitales de área, regionales o nacionales.
INSTITUTO SOBRE ALCOHOLISMO	Recuperación enfermos Alcohólicos	Médicos Enfermeras Aux. Enfermería Trab.Soc.y Asist. Sicólogos y Asist. Investigadores Educadores	12 2 21 33 5 3 9	Población del país		Consulta externa y hospitalización de enfermos alcohólicos para su recuperación y programas preventivos, especialmente los educativos, así como los de rehabilitación.	Reciben referencia de un Centro de Salud, Clínica u Hospital y pueden referir a un Hospital Nacional.
INCIENSA	Investigación, educac. y recuperación niños desnutridos.	Médicos Enfermeras	5 2	Población infantil		Investigación y educación en Nutrición y Salud, con hospitalización para niños desnutridos de tercer grado.	Reciben referencia de Centros de Salud, Clínicas u hospitales y pueden referir a un Hospital Nacional.
HOSPITAL PERIFERICO	II Atenc. médica General y de algunas especialidades y servicios de apoyo.	Médicos Microbiólogos Enfermeras Otro personal paramédico Personal Administ. Personal Misc.	3 1 3 5 9 15	Urbano Rural	15,418	Servicios de consulta y hospitalización materno-infantil y medicina general.	Refieren a hospitales de área, regionales o nacionales.

CUADRO No. 2

RECURSOS, PRODUCCION Y PRODUCTIVIDAD POR ESCALONES DE COMPLEJIDAD

PAIS: COSTA RICA — ANO: 1978

ESCALON DE COMPLEJIDAD	TIPO DE EFECTORES	UNIDADES DE SERVICIOS (EFECTORES): NIVELES DE ATENCION	LOCALIDADES CON SERVICIOS: NUMERO DE LOCALIDADES	LOCALIDADES CON SERVICIOS: POBLACION DE ESTAS LOCALIDADES	RECURSOS: NUMERO DE EFECTORES	RECURSOS: HORAS ANUALES DE PERSONAL	RECURSOS: NUMERO DE CAMAS	RECURSOS: GASTO TOTAL ANUAL *	PRODUCCION: ATENCIONES	PRODUCCION: EGRESOS	PRODUCCION: DIAS DE INTERNACION DE LOS EGRESADOS	PRODUCCION: ATENCIONES POR EGRESO	PRODUCTIVIDAD: ATENCIONES POR HORA DE PERSONAL	PRODUCTIVIDAD: % DE OCUPACION DE LAS CAMAS	PRODUCTIVIDAD: PROMEDIO DE DIAS DE INTERNACION	PRODUCTIVIDAD: EGRESOS ANUALES POR CAMA
I	PUESTO DE SALUD	I	298	710,643	298	386,000	-	15,589,481	390,066	-	-	-	1.0	-	-	-
II	UNIDAD MOVIL	I	-	-	11	22,000	-	1,666,194	31,254	-	-	-	1.4	-	-	-
III	CENTRO DE SALUD	II	76	2,008,711	128	436,000	-	91,043,575	1,411,795	-	-	-	3.2	-	-	-
IV	CENTRO RURAL ASISTENCIAL	II	4	61,849	4	10,000	71	2,484,557	25,464	2,010	5,036	12.7	4.2	19.4	2.5	28.3
V	CLINICA PERIFERICA CONSULTA EXTERNA	III	12	631,936	7	211,306	-	72,299,828	1,203,895	-	-	-	5.7	-	-	-
VI	INSTITUTO NACIONAL SOBRE ALCOHOLISMO	IV	80	2,070,560	1	10,000	154	20,172,993	12,790	3,152	47,466	4.1	3.2	84.4	15.1	20.5
VII	INCIFESA	IV	80	723,685	1	10,000	40	4,904,715	-	134	9,806	-	-	67.2	73.2	3.4
VIII	HOSPITAL PERIFERICO	II	2	29,082	2	17,115	47	7,150,915	60,342	4,396	11,887	13.7	5.4	69.3	2.7	93.5
II	HOSPITAL DE AREA	III	13	310,715	8	262,860	714	100,475,626	447,960	30,302	177,306	14.8	4.8	68.0	5.9	42.4
I	HOSPITAL REGIONAL	III	46	1,010,873	9	738,705	1,523	252,735,504	1,294,707	75,908	417,431	17.1	4.5	75.1	5.5	49.8
II	HOSPITAL NACIONAL	IV	80	2,070,560	9	2,063,470	4,579	542,342,235	1,029,117	116,901	1,392,285	8.8	3.3	83.3	11.9	25.5

(*) En el caso de los Puestos de Salud, Unidades Móviles y Centros de Salud, se estimó el dato con base en el gasto de personal.

CUADRO No. 3

RECURSOS, PRODUCCION, COBERTURA Y COSTOS UNITARIOS POR ESCALONES DE COMPLEJIDAD

PAIS: COSTA RICA — AÑO: 1978

ESCALON DE COMPLEJIDAD	LOCALIDADES CON SERVICIOS		RECURSOS				PRODUCCION				INDICADORES DE COBERTURA					COSTOS UNITARIOS			
	NUMERO DE LOCALIDADES	POBLACION DE ESTAS LOCALIDADES	NUMERO DE EFECTORES	HORAS ANUALES DE PERSONAL	NUMERO DE CAMAS	GASTO TOTAL ANUAL *	ATENCIONES	EGRESOS	DIAS-CAMA OCUPADOS	ATENCIONES POR EGRESO	HABITANTES POR EFECTOR	HORAS DE PERSONAL POR HABIT.	CAMAS POR 1000 HABITANTES	ATENCIONES ANUALES POR HABIT.	EGRESOS ANUALES POR MIL HABIT.	DE LA ATENCION	DEL EGRESO	DEL PACIENTE-DIA	DE LA HORA DE ATENCION
EN CADA ESCALON																			
I	298	710,843	298	386,000	-	15.6	390,066	-	-	-	2,385	0.5	-	0.5	-	39.97	-	-	40.4
II	-	-	11	22,000	-	1.7	31,254	-	-	-	-	-	-	-	-	53.31	-	-	75.7
III	76	2,008,711	128	436,000	-	91.0	1,411,795	-	-	-	15,693	0.2	-	0.7	-	64.49	-	-	208.8
IV	4	61,849	4	10,000	71	2.5	25,464	2,010	5,036	12.7	15,462	0.2	1.1	0.4	32.5	57.98	501.6	200.19	246.1
V	12	631,936	7	211,306	-	72.3	1,203,895	-	-	-	90,277	0.3	-	1.9	-	60.05	-	-	342.2
VI	80	2,070,560	1	10,000	154	20.2	12,790	3,152	47,466	4.1	2,070,560	0.004	0.1	0.01	1.5	-	-	-	-
VII	80	723,685	1	10,000	40	4.9	-	134	9,806	-	723,685	0.01	0.1	-	-.2	-	-	-	-
VIII	2	29,082	2	17,115	47	7.2	60,342	4,396	11,887	13.7	14,541	0.6	1.6	2.1	151.2	66.43	780.4	376.36	330.0
IX	13	310,715	8	262,860	714	100.5	447,960	30,302	177,306	14.8	38,839	0.8	2.3	1.4	97.5	76.38	1970.2	336.72	436.1
X	46	1,010,873	9	738,705	1,523	252.7	1,294,707	75,908	417,431	17.1	112,319	0.7	1.5	1.3	75.1	72.45	1750.1	322.34	414.8
XI	80	2,070,560	9	2,063,470	4,579	542.3	1,029,117	116,901	1,392,265	8.8	230,062	1.0	2.2	0.5	56.5	97.24	3307.7	289.72	504.5
EN CADA ESCALON Y ESCALONES ANTERIORES																			
I			298	386,000	-	15.6	390,066	-	-	-						39.97	-	-	40.39
II			309	408,000	-	17.3	421,320	-	-	-						40.96	-	-	42.29
III			437	844,000	-	108.3	1,833,115	-	-	-						59.08	-	-	128.32
IV			441	854,000	71	110.8	1,858,579	2,010	5,036	924.7						59.06	501.6	200.19	129.15
V			448	1,065,306	-	183.1	3,062,474	-	-	-						59.45	-	-	171.72
VI			449	1,075,306	225	203.3	3,075,264	5,162	52,502	595.8									
VII			450	1,085,306	265	208.2	-	5,296	62,308	-									
VIII			452	1,102,421	312	215.4	3,135,606	9,692	74,195	323.5									
IX			460	1,365,281	1,026	315.9	3,835,566	39,994	251,501	89.6									
X			469	2,103,986	2,549	568.6	4,878,273	115,902	668,932	42.1									
XI			478	4,167,456	7,128	1,110.9	5,907,390	232,803	2,061,217	25.4									

(*) En millones de colones costarricenses.

CUADRO No. 1

TIPO DE EFECTORES, POBLACION ASIGNADA, FUNCIONES Y PROGRAMAS, TIPO Y NUMERO DE PERSONAL SEGUN NORMAS NACIONALES

PAIS: ECUADOR

AÑO: 1979

NOMBRE Y TIPO DE UNIDAD DE ATENCION (ESTABLECIMIENTO O EFECTOR) (1)	NIVELES DE ATENCION QUE BRINDA (2)	PERSONAL		POBLACION A LA QUE SIRVE		FUNCIONES Y PROGRAMAS QUE REALIZA (7)	ESQUEMA DE REFERENCIA Y ARTICULACION ENTRE EFECTORES (8)
		TIPO (3)	No. (4)	CARACTERISTICAS GENERALES (5)	(*) NUMERO PROMEDIO DE PERSONAS (6)		
PUESTO DE SALUD	I	Auxiliar Enfermería	1	Población rural agrupada y dispersa.	1,000	Acciones primarias de salud, principalmente promoción y prevención	Refiere a nivel II y III
CENTRO DE SALUD	II	Médico Rural Odontólogo Aux. Odontología Insp.Sanitaria Auxiliar Enfermería	1 1 1 1 1	Incluye población rural nucleada en la cabecera parroquial y aproximadamente 25% población dispersa.	3,500	Atención médica ambulatoria con énfasis en maternoinfantil. Acciones de mejoramiento del medio.	Refiere a nivel III y IV. Contrareferencia del nivel III y IV.
CENTRO DE SALUD/ HOSPITAL	III	Médicos Odontólogo Enfermera Obstetriz Asist.Nutrición Insp.Sanitario Aux.Enfermería Aux. Odontología	3 1 1 1 1 1 13 1	Ubicado en cabecera cantonal. Incluye el núcleo urbano y más del 25% de población periférica.	15,000	Atención médica integral de tipo ambulatoria y y hospitalización de corta duración, con énfasis en maternoinfantil. Acciones de mejoramiento del medio.	Refiere al nivel IV. Contrareferencia del nivel IV y V.
CENTRO DE SALUD URBANO	III	Médicos Enfermeras Odontólogos Obstetriz Aux. Enfermería Insp.Sanitario Aux. Odontología	3 2 2 1 6 2 2	Cabeceras provinciales.	28,000	Constituye una extensión de los servicios del hospital base, atención ambulatoria, énfasis en materno infantil, inmunizaciones, nutrición y mejoramiento del medio.	Refiere a nivel IV y V. Contrareferencia de nivel IV y V.
HOSPITAL BASE (más de 100 camas)	IV	Médicos Enfermeras Obstetrices Odontólogos Trabajador Social Auxiliar Enfermería	11 4 2 1 37	Cabecera provincial o localidades que sirven de base para la organización de áreas programáticas. También incluye hospitales especiales en otras localidades.	30,000	Acciones de salud integral con énfasis en recuperación de las cuatro especialidades básicas, incluye siquiatría de agudos.	Refiere a nivel V. Contrareferencia de III.

CUADRO No. 1

TIPO DE EFECTORES, POBLACION ASIGNADA, FUNCIONES Y PROGRAMAS, TIPO Y NUMERO DE PERSONAL SEGUN NORMAS NACIONALES

PAIS: ECUADOR

AÑO: 1978

NOMBRE Y TIPO DE UNIDAD DE ATENCION (ESTABLECIMIENTO O EFECTOR) (1)	NIVELES DE ATENCION QUE BRINDA (2)	PERSONAL		POBLACION A LA QUE SIRVE		FUNCIONES Y PROGRAMAS QUE REALIZA (7)	ESQUEMA DE REFERENCIA Y ARTICULACION ENTRE EFECTORES (8)
		TIPO (3)	No. (4)	CARACTERISTICAS GENERALES (5)	NUMERO PROMEDIO DE PERSONAS (6)		
HOSPITAL DE CRONICOS	IV	Médicos Enfermeras Odontólogo Sicólogos Trabajadora Social Terapista ocupac. Auxiliar Enfermería Siquiátrico Auxiliar Odontología Asist.Sicólogo	9 4 1 2 1 2 52 1 3	Cabecera provincial. Incluye hospitales crónicos ubicados en otras localidades.	---	Acciones de salud especializada en una categoría.	Recibe de todos los niveles. Contrarefiere niveles II y III (CSU).
HOSPITAL DE ESPECIALIDAD	V	Médicos Enfermeras Odontólogos Trabajadoras Sociales Nutricionistas Auxiliar Enfermería Auxiliar Odontología Aux.Trabajador Social	72 42 3 5 2 159 3 1	Ciudades en las que existen facultades de Ciencias de Salud.	70,000	Acciones de salud integral, con énfasis en recuperación en las cuatro especialidades básicas y de alta complejidad clínico quirúrgico. Se extienden acciones de salud hacia domicilio. Enseñanza e investigación.	Por referencia de los niveles III y IV para demanda de todos los niveles.

CUADRO No. 2

RECURSOS, PRODUCCION Y PRODUCTIVIDAD POR ESCALONES DE COMPLEJIDAD

PAIS: ECUADOR

ANO: 1979

ESCALON DE COMPLEJIDAD	TIPO DE EFECTORES	NIVELES DE ATENCION	UNIDADES DE SERVICIOS (EFECTORES) NUMERO DE LOCALIDADES	LOCALIDADES CON SERVICIOS POBLACION DE ESTAS LOCALIDADES	RECURSOS NUMERO DE EFECTORES	RECURSOS HORAS ANUALES DE PERSONAL	RECURSOS NUMERO DE CAMAS	RECURSOS GASTO TOTAL ANUAL *	PRODUCCION ATENCIONES	PRODUCCION EGRESOS	PRODUCCION DIAS DE INTERNACION DE LOS EGRESADOS	PRODUCCION ATENCIONES POR EGRESO	PRODUCTIVIDAD ATENCIONES POR HORA DE PERSONAL	PRODUCTIVIDAD % DE OCUPACION DE LAS CAMAS	PRODUCTIVIDAD PROMEDIO DE DIAS DE INTERNACION	PRODUCTIVIDAD EGRESOS ANUALES POR CAMA
	PUESTO DE SALUD	I	203	203,000	203	357,280	-	16,910	26,051	-	-	-	13.7	-	-	-
	SUBCENTRO DE SALUD	II	547	1,914,500 1/	547	5,076,160	(**) 14	2,876,126	791,380	58	179	-	6.4	-	-	4.1
	CENTRO DE SALUD	II y III	48	1,344,000 1/	48	1,248,000	-	90,526	697,335	-	-	-	1.8	-	-	-
	CENTRO DE SALUD HOSPITALARIA	II y IV	75	1,065,000 2/	75	2,862,000	2,041	401,170	530,615	62,239	311,739	8.5	5.4	52.4	5	30.5
	HOSPITAL BASE	IV	14	2,444,053 2/	16	1,534,720	2,364	276,690	204,617	62,946	499,377	3.25	7.5	71.8	7.9	26.6
	HOSPITAL CRONICOS	IV	6	133,770 3/	15	1,861,200	1,786	57,053	11,064	2,712	329,293	0.4	168.2	88.5	533	1.5
	HOSPITAL ESPECIAL	V	4	2,033,986 3/	6	3,484,800	1,574	148,407	182,308	41,406	355,212	4.4	19.10	79.0	8.6	26.3

(*) En miles de Sucres.
(**) Corresponde a camas de emergencia (SCS es unidad de atención).
1/ Población calculada según norma.
2/ Población urbana de la cabecera cantonal.
3/ Población urbana de la cabecera provincial.

CUADRO No. 3

RECURSOS, PRODUCCION, COBERTURA Y COSTOS UNITARIOS POR ESCALONES DE COMPLEJIDAD

PAIS: ECUADOR ANO: 1979

ESCALON DE COMPLEJIDAD	LOCALIDADES CON SERVICIOS		RECURSOS				PRODUCCION				INDICADORES DE COBERTURA					COSTOS UNITARIOS			
	NUMERO DE LOCALIDADES	POBLACION DE ESTAS LOCALIDADES	NUMERO DE EFECTORES	HORAS ANUALES DE PERSONAL *	NUMERO DE CAMAS	GASTO TOTAL ANUAL *	ATENCIONES	EGRESOS	DIAS-CAMA OCUPADOS	ATENCIONES POR EGRESO	HABITANTES POR EFECTOR	HORAS DE PERSONAL POR HABIT.	CAMAS POR 1000 HABITANTES	ATENCIONES ANUALES POR HABIT.	EGRESOS ANUALES POR MIL HABIT.	DE LA ATENCION	DEL EGRESO	DEL PACIENTE-DIA	DE LA HORA DE ATENCION
EN CADA ESCALON																			
I	203	203,000	203	357,780	-	16,910	26,051	-	-	-	1,000	1.8	-	0.1	-	649.1	-	-	47.33
II	547	1,514,500	547	5,076,160	14	2,876,126	791,830	(58)	(179)	13.6	2,769	3.4	-	0.5	0.03	3.6	-	-	566.6
III	48	1,344,000	48	1,248,000	-	90,526	697,335	-	-	-	28,000	0.1	-	0.5	-	129.8	-	-	72.5
**IV	71	1,065,000	75	2,862,000	2,041	406,170	520,615	62,239	311,739	8.5	14,200	2.7	18.8	0.5	59	532	2,610	521	141.9
V	14	2,444,053	16	1,534,720	2,364	276,690	204,617	62,946	499,377	3.2	152,753	0.6	0.1	0.1	25.8	1.2	4,396	554	180.3
VI	6	133,770	15	1,861,200	1,786	57,053	11,064	2,712	329,293	(0.4)	-	-	-	-	-	-	-	-	-
VII	4	2,033,986	6	3,484,800	1,574	148,407	182,308	41,406	355,212	4.4	338,998	1.7	0.8	0.1	20.3	814	3,584	418	42.58
EN CADA ESCALON Y ESCALONES ANTERIORES																			
I	203	2203,000	203	357	-	16,910	26	-	-	-	1,000	0.1	-	0.1	-	649.1	-	-	610.5
II	750	1,717,500	750	5,433	14	2,893	817	-	-	-	3,769	-	-	-	-	-	-	-	-
III	798	3,061,500	798	6,681	14	2,983	1,515	-	-	-	31,769	-	-	-	-	-	-	-	-
IV	869	4,126,500	873	9,543	2,055	3,389	2,035	62,739	311,739	-	45,969	-	0.5	-	-	-	-	-	-
V	863	6,750,553	889	11,078	4,419	3,666	2,240	125,185	811,116	-	198,722	-	0.7	-	-	-	-	-	-
VI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VII	887	8,604,539	895	14,562	5,993	3,814	2,422	166,591	1,166,328	-	537,720	-	0.7	-	-	-	-	-	-

(*) En miles de Sucres.
(**) 40% de las acciones corresponden aproximadamente a internacion.

CUADRO No. 1

TIPO DE EFECTORES, POBLACION ASIGNADA, FUNCIONES Y PROGRAMAS, TIPO Y NUMERO DE PERSONAL SEGUN NORMAS NACIONALES

PAIS: GUATEMALA AÑO: 1979

NOMBRE Y TIPO DE UNIDAD DE ATENCION (ESTABLECIMIENTO O EFECTOR) (1)	NIVELES DE ATENCION QUE BRINDA (2)	PERSONAL		POBLACION A LA QUE SIRVE		FUNCIONES Y PROGRAMAS QUE REALIZA (7)	ESQUEMA DE REFERENCIA Y ARTICULACION ENTRE EFECTORES (8)
		TIPO (3)	No. (4)	CARACTERISTICAS GENERALES (5)	NUMERO PROMEDIO DE PERSONAS (6)		
PUESTO DE SALUD	Primaria	Auxiliar de Enf. E.P.S.	1 1	Rural	2,000	Materno-infantil;consultas--Salud Bucal; Detección y referencia--atención del adulto; consulta y referencia--atención anti-TBC;detección, consulta, toma y envío de muestras T_4 y control Venéreas: detección y referencia--vacunación--adiestramiento--organización comunitaria--saneamiento del medio ambiente. Alimentación y nutrición: entrega de alimentos, educación nutricional.	Recibe de T.S.R. y Comadrona. Refiere a: centro y hospital.
CENTRO DE SALUD TIPO "B"	Primaria	Médico Enfermera Aux. Enfermería Laboratorista	1 1 3 1	Urbana - Rural	2,000 a 2,500	Materno-infantil: consulta y referencia, alto riego--Consulta odontológica: consulta, tratamiento aplicación tópica de flúor. Inmunizaciones : aplicación de vacunas=-alimentación complementaria: entrega de alimentos--educación nutricional; charlas y demostraciones--atención antituberculosa; toma y envío de muestras: esputo--Vigilancia y control de brotes. Investigación epidemiológica; saneamiento y preservación del medio ambiente, dotación agua comunidades con menos de 500 habitantes trabajando con la comunidad. Coordinación.	Recibe de: Puestos de Salud. Refiere a Centro A., hospital general y especializado.
CENTRO DE SALUD TIPO "A"	Primaria Secundaria	Médico Enfermera Auxiliar Enfermería Inspector Saneamiento Administrador	2 1 4 1 1	Urbana - Rural	5,000 a 10,000	Las mismas que el anterior pero además cuentan con servicio de maternidad donde se atienden partos.	Recibe de: Puestos y y Centros B. Refiere a Hospital General y especializado.
HOSPITAL GENERAL	Primaria Secundaria	Médico Enfermera Auxiliar Técnicos Administradores		Total	10,000 a 99,000	Consulta de emergencias. Hospitalización de pacientes en servicios básicos: Medicina, cirugía, pediatría, ginecología.	Recibe de: Puestos de Salud, Centros A y B.
HOSPITAL ESPECIALIZADO	Primaria Secundaria Terciaria	Médico Especializado Enfermera Auxiliar Enfermería Técnicos Administradores		Total General de la República.	100,000 y	Consulta externa especializada. Hospitalización especializada.	Recibe de: Puestos de Salud, Centros A y B, Hospitales Generales.

CUADRO No. 2

RECURSOS, PRODUCCION Y PRODUCTIVIDAD POR TAMAÑO DE LAS LOCALIDADES

PAIS: GUATEMALA — AÑO: 1979

TAMAÑO DE LAS LOCALIDADES	UNIDADES DE SERVICIOS (EFECTORES)				LOCALIDADES CON SERVICIOS		RECURSOS				PRODUCCION				PRODUCTIVIDAD			
	TIPO DE EFECTORES				NIVELES DE ATENCION	NUMERO DE LOCALIDADES	POBLACION DE ESTAS LOCALIDADES	NUMERO DE EFECTORES	HORAS ANUALES DE PERSONAL	NUMERO DE CAMAS	GASTO TOTAL ANUAL	ATENCIONES	EGRESOS	DIAS DE INTERNACION DE LOS EGRESADOS	ATENCIONES POR EGRESO	ATENCIONES POR HORA DE PERSONAL	% DE OCUPACION DE LAS CAMAS	PROMEDIO DE DIAS DE INTERNACION	EGRESOS ANUALES POR CAMA
(*)	PS	CS	HG	HE															
A	86	1			I-II	16647	2,489,550	87	119,564	-	462,128	327,630				2.74			
B	133	8			I-II	1292	1,186,285	141	200,207	-	785,274	642,305				3.21			
C	144	16	1		I-II III	476	864,487	161	244,134	60	1,384,865	785,330	746	9,004	1,052.7	3.22	33.79	12.07	10.22
D	96	64	1		I-II III	162	637,917	161	351,964	45	2,778,804	1,455,028	739	5,787	1,968.9	4.13	36.87	7.83	17.19
E	23	36	1		I-II III	44	406,184	60	190,584	106	1.975,950	746,943	4,680	16,218	159.6	3.92	42.72	15.79	45.00
F	8	35	1		I-II III	24	581,632	44	271,575	180	2,168,278	814,390	5,026	32,816	162.0	3.00	50.22	6.53	28.08
G	-	11	26	8	I-II III	1	1,329,201	44	783,551	8,028	28,470,847	2,677,115	177,391	1,951,571	15.1	3.42	66.10	10.68	21.93
Total	490	171	30	8	I-II	18646	7,505,258	699	2,161,580	8,419	38,026,146	7,448,741	188,582	2,015,396	39.5	3.45	65.59	10.69	22.22

(*) A = Menos de 500 habitantes.
B = De 500 a 999 habitantes.
C = De 1000 a 1999 habitantes.
D = De 2000 a 4999 habitantes.
E = De 5000 a 9999 habitantes.
F = De 10,000 a 99,999 habitantes.
G = 100,000 y más habitantes.
NOTA: Todas las acciones directas en salud a nivel de consultorio para las personas.

CUADRO No. 3

RECURSOS, PRODUCCION, COBERTURA Y COSTOS UNITARIOS POR TAMAÑO DE LAS LOCALIDADES (**)

PAIS: GUATEMALA — AÑO: 1979

(*) TAMAÑO DE LAS LOCALIDADES	LOCALIDADES CON SERVICIOS		RECURSOS				PRODUCCION				INDICADORES DE COBERTURA						COSTOS UNITARIOS		
	NUMERO DE LOCALIDADES	POBLACION DE ESTAS LOCALIDADES	NUMERO DE EFECTORES	HORAS ANUALES DE PERSONAL	NUMERO DE CAMAS	GASTO TOTAL ANUAL	ATENCIONES	EGRESOS	DIAS-CAMA OCUPADOS	ATENCIONES POR EGRESO	HABITANTES POR EFECTOR	HORAS DE PERSONAL POR HABIT.	CAMAS POR 1000 HABITANTES	ATENCIONES ANUALES POR HABIT.	EGRESOS ANUALES POR MIL HABIT.	DE LA ATENCION	DEL EGRESO	DEL PACIENTE-DIA	DE LA HORA DE ATENCION
POR CADA TRAMO DE POBLACION																			
A	16,647	2,489,550	87	119,564	-	467,128	327,630	-	-	-	28,615	2.88	-	0.13	-	1.41	-	-	3.86
B	1,292	1,186,285	141	200,207	-	785,274	642,305	-	-	-	8,413	10.12	-	0.54	-	1.22	-	-	3.92
C	476	864,487	161	244,134	-	1,384,865	785,330	746	9,004	1052.7	5,369	16.94	0.08	0.91	0.86	1.76	171.87	14.24	5.67
D	162	637,917	161	351,964	45	2,778,804	1,455,028	739	5,787	1968.9	3,962	33.10	0.07	2.28	1.16	1.91	218.42	27.89	7.89
E	44	406,184	60	190,584	106	1,975,950	746,943	4,680	16,218	159.6	6,770	28.15	0.26	1.84	11.52	2.65	68.16	19.67	10.36
F	24	581,632	44	271,576	180	2,168,278	814,390	5,026	32,816	162.0	12,925	28.02	0.31	1.40	8.64	3.04	89.33	13.68	7.98
G	1	1,329,201	44	783,551	8,028	28,470,847	2,677,115	177,391	1,951,571	15.1	30,436	35.10	6.04	2.00	14.19	10.63	134.47	12.22	36.34
TOTAL	18,646	7,505,258	699	2,161,580	8,419	88,026,146	7,448,741	188,582	2,015,396	39.5	10,737	17.28	1.12	0.99	25.13	5.11	126.49	11.84	17.59
EN CADA TRAMO Y TRAMOS ANTERIORES DE POBLACION																			
A	16,647	2,489,550	87	119,564	-	462,128	327,630	-	-	-	28,615	2.88	-	0.13	-	1.41	-	-	3.86
B	17,939	3,675,835	228	319,771	-	1,247,402	969,935	-	-	-	16,122	5.22	-	0.26	-	1.28	-	-	3.90
C	18,415	4,540,322	389	563,905	60	2,632,267	1,755,265	746	9,004	96186.7	11,672	7.45	0.08	0.39	0.16	1.50	171.87	14.24	4.68
D	18,577	5,178,239	550	915,869	105	5,411,071	3,210,293	1,485	14,791	2161.8	9,415	10.61	0.02	0.62	0.29	1.69	108.70	10.95	5.91
E	18,621	5,584,423	610	1,100,453	211	7,387,021	3,957,236	6,165	31,009	641.9	9,155	11.89	0.04	0.71	1.10	1.87	51.74	10.29	6.68
F	18,645	6,166,057	655	1,378,029	391	9,555,299	4,771,626	11,191	63,825	426.4	9,414	13.41	0.06	0.77	1.81	2.00	40.12	7.03	6.93

(*) A = Menos de 500 habitantes
B = De 500 a 999 habitantes
C = De 1000 a 1999 habitantes
D = De 2000 a 4999 habitantes
E = De 5000 a 9999 habitantes
F = De 10,000 a 99,000 habitantes
G = 100,000 y más habitantes

(**) Unicamente datos del Ministerio de Salud Pública.

TABLE No. 1

TYPES OF CARE UNITS, ASSIGNED POPULATION, FUNCTIONS AND PROGRAMS, TYPES AND NUMBERS OF PERSONNEL IN ACCORDANCE WITH NATIONAL STANDARDS

COUNTRY: GUYANA

YEAR: 1977

NAME AND TYPE OF CARE UNIT	LEVELS OF CARE PROVIDED	PERSONNEL		POPULATION SERVED		FUNCTIONS AND PROGRAMS CARRIED OUT	REFERRAL SCHEMES AND ARTICULATION BETWEEN UNITS
		TYPE	NUMBER	GENERAL CHARACTERISTICS	AVERAGE NUMBER OF PERSONS		
HEALTH POST: The operational base providing simple health care, sanitation, community education and selected disease surveillance.	I	Community Health Worker	1	Scattered Population who at present have no directoaccess to services.	3,000	Linking community and providers in understanding and solving basic health needs. Health education. Basic environmental health. Immunization programs. First aid. Basic Assessment. Referral. Collection of simple statistics.	
HEALTH STATION: A facility providing integrated	I & II	Community Health Worker Nurse Care Taker Health Station II: Community Health Worker Nurse Assistant Medex (Public health nurse) Care Taker	1 1 1 1 2 1 1		5,000	Preventive care, health education, emergency services, diagnosis and treatment of common illnesses, obstetric ser ices (low risk deliveries), dental care, referral, supervision of level I, management and information systems.	
DISTRICT HOSPITAL A facility providing general medical, surgical and preventive care on an outpatient and inpatient basis for a given geographic area and administrative supervision of the Regional Level.	I, II & III	Nurse (I) Nurse Assistant GMO Medex/Pub.Health N. Dental auxiliary Multipurpose Techn. Pharmacist Com.Health Worker Public Health Insp. Administrator Others Nurse/Nurse M.W. (II) Nurse Assistant GMO Medex/Pub.Health N. Dentist Dental Aide Dental Auxiliary Multipurpose Tech. Pharmacist Food Serv. Supery.	3 5 1 2 2 1 1 1 1 1 8 4 15 3 5 1 1 2 3 1 1	Interior and Coastal Areas	25,000	Emergency services, general medicine, surgery and obstetric services, dental care, laboratory, X-rays, pharmacy and dietetic services, preventive care, environmental sanitation, supervision of levels I and II, management and information system, referral.	

TABLE No. 1

TYPES OF CARE UNITS, ASSIGNED POPULATION, FUNCTIONS AND PROGRAMS, TYPES AND NUMBERS OF PERSONNEL IN ACCORDANCE WITH NATIONAL STANDARDS

COUNTRY: GUYANA

YEAR: 1977

NAME AND TYPE OF CARE UNIT	LEVELS OF CARE PROVIDED	PERSONNEL		POPULATION SERVED		FUNCTIONS AND PROGRAMS CARRIED OUT	REFERRAL SCHEMES AND ARTICULATION BETWEEN UNITS
		TYPE	NUMBER	GENERAL CHARACTERISTICS	AVERAGE NUMBER OF PERSONS		
DISTRIC HOSPITAL (Cont.)		Community Health W. Pub. Health Insp. Statistical Tech. Administrator Others	2 1 1 1 30				
REGIONAL HOSPITAL Offering the highest level of care in a region for hospital services, inclusive of basis specialties, on a permanent basis and orthopaedic, I.N.T., and ofthalmology on a periodic basis, and preventive services, for both in and out patients and community functioning, technically and administratively under the supervision of the Regional Level.	I, II, III and IV	C.H. Worker Nurse H. Assistant Consultants Registrars GMO Dentist Dental Aide Med. Technologist Pharmacist Radiographer X-Ray Technician Dietitian Food Serv. Sup. Disp. Assistant Statist. Assistant Administ. Others	3 63 189 8 8 8 2 2 5 5 2 4 2 2 4 2 2 378	Population with direct access and referrals from the District Hospitals of its Region.		Emergency services, medicine, surgery, paediatrics, obstetrics, gynecology, dental care, laboratory, X-rays, pharmacy, dietetic services preventive care, management and information systems, supervision of its area out patient facilities, referral.	
HEALTH CENTRE	I, II & III	Com. Health Worker Medex Nurse Nurse Assistant Dental Auxiliary Multipurpose Techn. Pharmacist Statistical Techn. Public Health Insp. Others	1 1 1 2 1 2 1 1 2 3		20,000	This facility provides general medicine, surgical, obstetrics, ambulatory care, preventive care, emergency services, dental care, laboratory, X-Rays, Pharmacy, environmental sanitation, management and information systems, referral.	

TABLE No. 1

TYPES OF CARE UNITS, ASSIGNED POPULATION, FUNCTIONS AND PROGRAMS, TYPES AND NUMBERS OF PERSONNEL IN ACCORDANCE WITH NATIONAL STANDARDS

COUNTRY: GUYANA

YEAR: 1977

NAME AND TYPE OF CARE UNIT	LEVELS OF CARE PROVIDED	PERSONNEL		POPULATION SERVED		FUNCTIONS AND PROGRAMS CARRIED OUT	REFERRAL SCHEMES AND ARTICULATION BETWEEN UNITS
		TYPE	NUMBER	GENERAL CHARACTERISTICS	AVERAGE NUMBER OF PERSONS		
G.T. DISTRICT HOSPITAL	I, II and III	Community H. Worker Nurse/Nurse M.W. Nurse Assistant Medex/Pub.H. Nurse Consultant GMO Dentist Dental Aide Dental Auxiliary Medical Technologist Radiographer X-Ray Technician Pharmacist Dietitian Food Serv. Supervisor Dispensary Assistant Public Health Insp. Statistical Techn. Administrator Others	4 27 87 4 4 6 2 2 4 3 1 3 3 1 2 3 2 2 2 80		100,000	General medicine, surgical and obstetric services, intermediate services for in and out patients, emergency services, dental care, laboratory services, pharmacy, dietetic services, preventive care, environmental sanitarion, management and information systems, referral.	
REGIONAL REFERRAL HOSPITAL	I, II, III, IV and V	Community H. Worker Nurse assistant Nurse Medical doctor Dental auxiliary Dental aide Dentist Multipurpose Techn. Medical Technologist Pharmacist Radiographer Food Service Superv. Dietitian Statistical Techn. Administrator Others	6 534 186 62 2 4 4 26 16 8 8 6 6 4 1 460	General out-patients, out-patients of specialties. Referrals of highly specialized cases		Technically developed intermediate and general services for in and out patients, emergency services, basic, minor and major specialties, dental care, laboratories, X-Rays, pharmacy, dietetic and other intermediate services, preventive care, supervision of its area outpatient facilities, management and information system.	

TABLE No. 2

RESOURCES, PRODUCTION AND PRODUCTIVITY BY LEVEL OF COMPLEXITY

COUNTRY: GUYANA

YEAR: 1977

LEVEL OF COMPLEXITY	SERVICE UNITS: TYPES OF CARE UNITS	SERVICE UNITS: LEVEL OF CARE	LOCALITIES WITH SERVICE: NUMBER OF LOCALITIES	LOCALITIES WITH SERVICE: POPULATION OF THESE LOCALITIES	RESOURCES: NUMBER OF CARE UNITS	RESOURCES: ANNUAL PERSONNEL HOURS	RESOURCES: NUMBER OF BEDS	RESOURCES: TOTAL ANNUAL COSTS	PRODUCTION: CARE SERVICES	PRODUCTION: DISCHARGES	PRODUCTION: DAYS OF STAY OF PATIENTS	PRODUCTION: CARE SERVICES PER DISCHARGE	PRODUCTIVITY: CARE SERVICES PERSONNEL HOUR	PRODUCTIVITY: BED OCCUPANCY	PRODUCTIVITY: AVERAGE DAYS OF STAY	PRODUCTIVITY: ANNUAL CHARGES PER BED
I	MH; HS; D; HC.	-	-	362,803	123	394,241	-	3,008.9	672,818	-	-	-	1.09	-	-	-
II	MH; HS; D; DH.	-	-	476,247	33	625,109	477	3,222.8	311,222	23.2	6	23.2	1.31	75	6	28
III	HS; HC; RH	-	-	510,424	8	1,144,608	381	4,319.3	106,989	7.0	6	7.0	2.24	85	6	40
IV	HS; D; HC; DH; RRH	-	-	826,014	29	2,636,631	1,041	10,084.9	569,239	10.9	7	10.9	3.19	84.5	7	98
Total		-	-	826,014	193	4,800,589	1,899	19,735.9	1,660,268	20.6	6.6	20.6	581.0	82	6.5	43

TABLE No. 2

RESOURCES, PRODUCTION AND PRODUCTIVITY BY LEVEL OF COMPLEXITY

COUNTRY: GUYANA

año: 1987

LEVEL OF COMPLEXITY	SERVICE UNITS: TYPES OF CARE UNITS	SERVICE UNITS: LEVEL OF CARE	LOCALITIES WITH SERVICE: NUMBER OF LOCALITIES	LOCALITIES WITH SERVICE: POPULATION OF THESE LOCALITIES	RESOURCES: NUMBER OF CARE UNITS	RESOURCES: ANNUAL PERSONNEL HOURS	RESOURCES: NUMBER OF BEDS	RESOURCES: TOTAL ANNUAL COSTS	PRODUCTION: CARE SERVICES	PRODUCTION: DISCHARGES	PRODUCTION: DAYS OF STAY OF PATIENTS	PRODUCTION: CARE SERVICES PER DISCHARGE	PRODUCTIVITY: CARE SERVICES PERSONNEL HOUR	PRODUCTIVITY: BED OCCUPANCY	PRODUCTIVITY: AVERAGE DAYS OF STAY	PRODUCTIVITY: ANNUAL CHARGES PER BED
I	MH; HS.	1 a 2		437,820	140	691,232	-	2,368.8	1,976,544	-	-	-	1.58	-	-	-
II	MH; HS; DH.	1 a 3		596,526	45	1,308,592	599	6,443.2	858,835	27,329	6	33	2.19	75	6	46
III	HS; RH.	1 a 4		647,060	6	1,212,240	560	5,491.5	534,192	28,957	6	18	1.87	85	6	52
IV	HS; HC; DH; RH; RRH.	1 a 5		1,047,124	31	2,530,416	1,050	11,081.4	1,598,131	46,132	7	35	2.42	84.5	7	44
Total				1,047,124	222	5,742,480	2,209	25,541.3	4,967,702	102,418	6.5	48.5	5.48	82	6.5	46

TABLE No. 3

RESOURCES, PRODUCTION, COVERAGE AND UNIT COSTS BY LEVEL OF COMPLEXITY

COUNTRY: GUYANA

YEAR: 1977

LEVEL OF COMPLEXITY	LOCALITIES WITH SERVICES		RESOURCES				PRODUCTION				INDICATORS OF COVERAGE					UNIT COST			
	NUMBER OF LOCALITIES	POPULATION OF THESE LOCALITIES	NUMBER OF CARE UNITS	ANNUAL PERSONNEL HOURS	NUMBER OF BEDS	TOTAL ANNUAL COSTS	CARE SERVICES	DISCHARGES	DAYS OF BED OCCUPANCY	CARE SERVICES/ DISCHARGES	INHABITANTS/ EFFECTOR	PERSONNEL HOURS/ INHABITANT	BEDS PER 1000 INHABITANTS	ANNUAL CARE SERV. PER INHABITANT	ANNUAL DISCHARGES PER 1000 INHABIT.	OF THE CARE SERVICE	OF THE DISCHARGE	OF THE PATIENT DAY	OF THE HOUR OF CARE SERVICE
AT EACH LEVEL																			
I	-	362,803	123	394,241	-	2,008.9	1.85	-	-	-	2,950	1.09	-	-	-	2.99	-	-	-
II	-	476,247	33	625,109	477	3,322.8	0.65	46	6	23.2	14,432	1.31	1.00	-	0.03	1.62	2.01	-	-
III	-	510,424	8	1,144,608	381	4,319.3	0.21	64	6	7.0	63,803	2.24	0.75	-	0.03	5.00	2.48		
IV	-	826,014	29	2,636,631	1,041	10,084.9	0.69	95.5	7	10.9	28,483	3.19	1.26	-	0.06	2.87	1.62	-	-
Total	-	826,014	193	4,800,589	1,899	19,735.9	2.00	76.7	6.6	20.6	4,280	5.81	2.30	-	0.10	2.82	186.5	-	-
AT EACH LEVEL PLUS PRECEDING LEVEL																			

TABLE No. 3

RESOURCES, PRODUCTION, COVERAGE AND UNIT COSTS BY LEVEL OF COMPLEXITY

COUNTRY: GUYANA

YEAR: 1987

LEVEL OF COMPLEXITY	LOCALITIES WITH SERVICES		RESOURCES				PRODUCTION				INDICATORS OF COVERAGE					UNIT COST			
	NUMBER OF LOCALITIES	POPULATION OF THESE LOCALITIES	NUMBER OF CARE UNITS	ANNUAL PERSONNEL HOURS	NUMBER OF BEDS	TOTAL ANNUAL COSTS	CARE SERVICES	DISCHARGES	DAYS OF BED OCCUPANCY	CARE SERVICES/ DISCHARGES	INHABITANTS/ EFFECTOR	PERSONNEL HOURS/ INHABITANT	BEDS PER 1000 INHABITANTS	ANNUAL CARE SERV./ PER INHABITANT	ANNUAL DISCHARGES PER 1000 INHABIT.	OF THE CARE SERVICE	OF THE DISCHARGE	OF THE PATIENT DAY	OF THE HOUR OF CARE SERVICE
AT EACH LEVEL																			
I	-	437,820	140	691,232	-	2,368.8	4.51	-	-	-	3,127	1.58	-	4.51	-	1.20	-	5.41	1.58
II	-	596,526	45	1,308,592	599	6,443.2	1.44	27,329	6	33	13,526	2.19	1.00	1.44	0.05	1.25	210	10.80	2.19
III	-	647,060	6	1,212,240	560	5,491.5	0.82	28.957	6	18	107,834	1.87	0.87	0.82	0.04	1.14	169	8.49	1.87
IV	-	1,047,124	31	2,530,416	1,050	11,081.4	1.53	46,132	7	35	33,778	2.42	1.00	1.53	0.04	1.37	194	10.58	2.47
Total	-	1,047,124	222	5,742,480	2,209	25,541.3	4.74	102,418	6.5	485	4,717	5.48	2.11	4.74	0.10	1.26	188.5	24.24	5.48
AT EACH LEVEL PLUS PRECEDING LEVEL																			

TIPO DE EFECTORES, POBLACION ASIGNADA, FUNCIONES Y PROGRAMAS, TIPO Y NUMERO DE PERSONAL SEGUN NORMAS NACIONALES

PAIS: HONDURAS AÑO: 1978

NOMBRE Y TIPO DE UNIDAD DE ATENCION (ESTABLECIMIENTO O EFECTOR) (1)	NIVELES DE ATENCION QUE BRINDA (2)	PERSONAL		POBLACION A LA QUE SIRVE		FUNCIONES Y PROGRAMAS QUE REALIZA (7)	ESQUEMA DE REFERENCIA Y ARTICULACION ENTRE EFECTORES (8)
		TIPO (3)	No. (4)	CARACTERISTICAS GENERALES (5)	NUMERO PROMEDIO DE PERSONAS (6)		
COMUNIDAD (*) (Agentes Voluntarios)	I	Guardián de Salud Partera Emp. Adiestrada Representante Salud Rociador Voluntario Voluntario de Malaria	1,702 2,307 1,700 - -	Rural Dispersa Urbana Marginada	200 **17 200 100	Educación Sanitaria, atención directa a pacientes. Referencia control embarazada, parto, puerperio y R. N. Referencia educación sanitaria. Organización comunitaria. Saneamiento Básico, Rociamiento de Viviendas contra malaria. Toma muestras sanguíneas a pacientes febriles.	Refiere a: Centro de Salud Rural Centro de Salud con médico
CENTRO DE SALUD RURAL (*)	II	Auxiliar de Salud Auxiliar de Control de Vectores (ACV) Promotor de Salud I	315 95 100	Rural Dispersa Urbana Marginada	3,000	Atención a las personas: preventiva, control, curativa. Programas: materno-infantil, adultos, epidemiología, organización y control comunitario. Apoyo técnico a voluntarios de malaria o de rociadores voluntarios. Apoyo técnico a programas de saneamiento básico (agua, etc.).	Refiere a: Centro de Salud con médico (CESAMO). Hospital de área. Recibe de: Comunidad.
CENTRO DE SALUD CON MEDICO (*)	III	Médico Enfermera Auxiliar Enfermería Laboratorista Técnico de Rayos X Odontólogo	209 71 357 50 50 51	Rural. Urbana.	4,999	Atención integral a las personas (ambulatoria) y al medio ambiente. Responsable del área de salud donde aun no existe hospital de área.	Refiere a: Hospital de área, hospital regional. Recibe de: Centro de Salud R., comunidad.
HOSPITAL DE AREA (*)	IV	Jefe de Area Médico Enfermeras Auxiliar Enfermería Promotor II Otros ***	7 27 17 219 21 -	Rural. Urbana	9,999	Atención integral a las personas (con hospitalización) de cuadros clínicos básicos y al medio ambiente, responsable de la conducción de un área de salud.	Refiere a: Hospital Regional; Hospital Nacional. Recibe de: CESAR, CESAMO y Comunidad.
HOSPITAL REGIONAL (*)	V	Jefe Regional Equipo Regional**** Médicos Enfermeras Promotor III Otros ***	7 7 146 49 7 -	Rural. Urbana	99,999	Atención integral a las personas (con hospitalización) de cuadro clínico básico y cuatro subespecialidades, y atención al medio ambiente. Responsable de una región de salud y de su área de influencia.	Refiere a: Hospital Nacional. Recibe de: Hospital de área, CESAMO, CESAR y comunidad.

(*) Ministerio de Salud Pública y Asistencia Social.
(**) Embarazadas.
(***) Personal técnico y auxiliar: Rayos-X; laboratorio; mantenimiento.
(****) Equipo Regional: Jefe, enfermera, administrador, epidemiólogo, odontólogo, inspector saneamiento, microbiólogo, etc.

TIPO DE EFECTORES, POBLACION ASIGNADA, FUNCIONES Y PROGRAMAS, TIPO Y NUMERO DE PERSONAL SEGUN NORMAS NACIONALES

PAIS: HONDURAS

AÑO: 1978

NOMBRE Y TIPO DE UNIDAD DE ATENCION (ESTABLECIMIENTO O EFECTOR) (1)	NIVELES DE ATENCION QUE BRINDA (2)	PERSONAL		POBLACION A LA QUE SIRVE		FUNCIONES Y PROGRAMAS QUE REALIZA (7)	ESQUEMA DE REFERENCIA Y ARTICULACION ENTRE EFECTORES (8)
		TIPO (3)	No. (4)	CARACTERISTICAS GENERALES (5)	NUMERO PROMEDIO DE PERSONAS (6)		
HOSPITAL NACIONAL (*)	VI	Jefe Regional (metropolitana) Médicos Enfermera Auxiliar Enfermería Promotor III Otros **	1 307 125 809 1 -	Rural. Urbana	Más de 20,000	Atención integral a las personas con hospitalización de alta complejidad). Responsable de la Región metropolitana y de actividades de atención al medio ambiente.	Recibe de: Hospital regional; hospital de área, CESAMO, Instituto Hondureño de Seguridad Social IHSS.
CLINICAS PERIFERICAS (***)	III	Médico Enfermera Auxiliar Enfermería Laboratorio Rayos X		Beneficiaria Trabajadores Familiares derechohabientes (Urbana)		Atención médica básica integrada. Ambulatoria. Inmunizaciones.	Refiere a hospitales.
HOSPITALES REGIONALES (***)	V	Médicos Generales Médicos Especialistas		Idem.		Atención médica integrada. Ambulatoria - hospitalización. Inmunizaciones. Emergencias.	Refiere a Hospital Nacional.

(*) Ministerio de Salud Pública y Asistencia Social.
(**) Personal técnico y auxiliar: Rayos-X, laboratorio, mantenimiento.
(***) Instituto Hondureño de Seguridad Social.

CUADRO No. 2

RECURSOS, PRODUCCION Y PRODUCTIVIDAD POR ESCALONES DE COMPLEJIDAD (*)

PAIS: HONDURAS

ANO: 1978

ESCALON DE COMPLEJIDAD	TIPO DE EFECTORES	NIVELES DE ATENCION	UNIDADES DE SERVICIOS (EFECTORES) NUMERO DE LOCALIDADES	LOCALIDADES CON SERVICIOS POBLACION DE ESTAS LOCALIDADES	RECURSOS NUMERO DE EFECTORES	RECURSOS HORAS ANUALES DE PERSONAL	RECURSOS NUMERO DE CAMAS	RECURSOS GASTO TOTAL ANUAL	PRODUCCION ATENCIONES	PRODUCCION EGRESOS	PRODUCCION DIAS DE INTERNACION DE LOS EGRESADOS	PRODUCCION ATENCIONES POR EGRESO	PRODUCTIVIDAD ATENCIONES POR HORA DE PERSONAL	PRODUCTIVIDAD % DE OCUPACION DE LAS CAMAS	PRODUCTIVIDAD PROMEDIO DE DIAS DE INTERNACION	PRODUCTIVIDAD EGRESOS ANUALES POR CAMA
I	GUARDIAN DE SALUD	I	1702	340,400	1,702	-	-	21.2	114,247	-	-	-	300	-	-	-
	PEA	I	-	-	2,307	-	-	21.8	42,869	-	-	-	81	-	-	-
	SUBTOTAL	I	1702	340,400	4,009	-	-	43.0	157,116	-	-	-	172			
II	CESAR	II	273	819,680	589 273	589,680	-	1,226.5	421,176	-	-	-	0.7	-	-	-
	CESAMO	II-III	30	150,000	30	608,580	-	755.3	113,303	-	-	-	0.2	-	-	-
	HOSPITAL DE AREA	II-III-IV	1	3,000	1	64,260	20	220.1	7,443	705	1,410	10.6	0.1	20	2	35
	SUBTOTAL		304	972,000	304	1,262.520	20	2,199.9	541,922	705	1,410	768.7	0.4	20	2	35
III	CESAR	II	13	39,000	13	28,080	-	104.3	35,820	-	-	-	1.3	-	-	-
	CESAMO	II-III	17	85,000	17	138,650	-	487.2	73,078	-	-	-	0.1	-	-	-
	HOSPITAL DE AREA	II-III IV	2	20,000	2	164,430	72	797.5	30,369	2,238	11,190	13.6	0.2	42	5	31
	SUBTOTAL		32	144,000	32	731,160	72	1,389.0	139,267	2,238	11,190	62.2	0.2	42	5	31
IV	CESAR	II	7	21,000	7	15,120	-	43.4	14,912	-	-	-	1.0	-	-	-
	CESAMO	II-III	11	55,000	11	347,760	-	567.9	85,197	-	-	-	0.2	-	-	-
	HOSPITAL DE AREA	II-III-IV	2	20,000	2	353,430	163	1,535.5	57,793	4,381	30,667	13.2	0.2	52	7	27
	SUBTOTAL		20	96,000	20	716,310	163	2,146.8	157,902	4,381	30,667	36.0	0.2	52	7	27
V	CESAR	II	7	21,000	7	15,120	-	33.9	11,643	-	-	-	0.8	-	-	-
	CESAMO	II-III	10	50,000	10	315,630	-	880.0	132,005	-	-	-	0.4	-	-	-
	HOSPITAL DE AREA	II-III IV	2	20,000	2	398,790	122	1,769.0	69,700	4,823	24,115	14.5	0.2	54	5	40
	HOSPITAL REGIONAL	II-III-IV-V	6	326,460	6	2,492,910	871	9,704.3	317,291	41,144	246,864	7.7	0.1	78	6	47
	SUBTOTAL		25	417,460	25	5,222,450	933	12,387.2	530,639	45,967	270,979	11.5	0.2	75	6	46

(*) Ministerio de Salud Pública y Asistencia Social.

CUADRO No. 2

RECURSOS, PRODUCCION Y PRODUCTIVIDAD POR ESCALONES DE COMPLEJIDAD (*)

PAIS: HONDURAS

ANO: 1978

ESCALON DE COMPLEJIDAD	UNIDADES DE SERVICIOS (EFECTORES)		LOCALIDADES CON SERVICIOS		RECURSOS			PRODUCCION				PRODUCTIVIDAD			
	TIPO DE EFECTORES	NIVELES DE ATENCION	NUMERO DE LOCALIDADES	POBLACION DE ESTAS LOCALIDADES	NUMERO DE EFECTORES	HORAS ANUALES DE PERSONAL	NUMERO DE CAMAS	GASTO TOTAL ANUAL	ATENCIONES	EGRESOS	DIAS DE INTERNACION DE LOS EGRESADOS	ATENCIONES POR EGRESO	ATENCIONES POR HORA DE PERSONAL	% DE OCUPACION DE LAS CAMAS	PROMEDIO DE DIAS DE INTERNACION	EGRESOS ANUALES POR CAMA
VI	CESAR	II	-	27,000	9	19,440	-	37.4	12,855	-	-	-	0.7	-	-	-
	CESAMO	II-III	-	30,000	6	415,800	-	1,273.8	191,089	-	-	-	0.5	-	-	-
	HOSPITAL NACIONAL	VI	1	198,953	5	5,548,320	1,863	23,227.2	354,553	35,561	568,976	10.0	0.1	84	16	19
	SUBTOTAL		1	255,953	20	5,983,560	1,863	24,538.4	558,497	35,561	568.976	15.7	0.1	84	16	19
	T O T A L		2084	2,225,813	401	11,916,000	3,111	42,706.0	2,085,343	88,852	883,222	23.5	0.2	78	10	29

(*) Ministerio de Salud Pública y Asistencia Social.

CUADRO No. 2

RECURSOS, PRODUCCION Y PRODUCTIVIDAD POR ESCALONES DE COMPLEJIDAD (*)

PAIS: HONDURAS

ANO: 1978

ESCALON DE COMPLEJIDAD	UNIDADES DE SERVICIOS (EFECTORES)		LOCALIDADES CON SERVICIOS		RECURSOS				PRODUCCION				PRODUCTIVIDAD			
	TIPO DE EFECTORES	NIVELES DE ATENCION	NUMERO DE LOCALIDADES	POBLACION DE ESTAS LOCALIDADES	NUMERO DE EFECTORES	HORAS ANUALES DE PERSONAL	NUMERO DE CAMAS	GASTO TOTAL ANUAL	ATENCIONES	EGRESOS	DIAS DE INTERNACION DE LOS EGRESADOS	ATENCIONES POR EGRESO	ATENCIONES POR HORA DE PERSONAL	% DE OCUPACION DE LAS CAMAS	PROMEDIO DE DIAS DE INTERNACION	EGRESOS ANUALES POR CAMA
V	HOSPITAL REGIONAL	V	1	75,362	1	408,240	154	5,501.3	290,769	9,148	49,071	31.8	0.7	87.3	5.4	59
	Clínicas Periféricas	III	1	250,671	2	194,099		1,548.6	252,363	-	-	-	1.3	-	-	-
VI	HOSPITAL REGIONAL	V			1	730,080	322	11,300.5	420,731	18,240	90,616	23.1	0.6	77.1	5.0	57
	T O T A L		2	326,033	4	1,332.414	476	18,350.4	936,863	27,388	139,687	34.2	0.7	80.4	5.1	58

(*) Instituto Hondureño de Seguridad Social (IHSS).

CUADRO No. 3

RECURSOS, PRODUCCION, COBERTURA Y COSTOS UNITARIOS POR ESCALONES DE COMPLEJIDAD (*)

PAIS: HONDURAS ANO: 1978

ESCALON DE COMPLEJIDAD	LOCALIDADES CON SERVICIOS		RECURSOS				PRODUCCION				INDICADORES DE COBERTURA						COSTOS UNITARIOS		
	NUMERO DE LOCALIDADES	POBLACION DE ESTAS LOCALIDADES	NUMERO DE EFECTORES	HORAS ANUALES DE PERSONAL	NUMERO DE CAMAS	GASTO TOTAL ANUAL	ATENCIONES	EGRESOS	DIAS-CAMA OCUPADOS	ATENCIONES POR EGRESO	HABITANTES POR EFECTOR	HORAS DE PERSONAL POR HABIT.	CAMAS POR 1000 HABITANTES	ATENCIONES ANUALES POR HABIT.	EGRESOS ANUALES POR MIL HABIT.	DE LA ATENCION	DEL EGRESO	DEL PACIENTE-DIA	DE LA HORA DE ATENCION
EN CADA ESCALON																			
I	1,702	340,400	4,009	-	-	43,000	678,956	-	-	-	85	-	-	2	-	0.06	-	-	-
II	304	972,000	304	1,262,520	20	2,199,900	541,922	705	1,410	769	3,197	1.3	0.02	0.6	0.7	3.81	195.6	97.8	19.0
III	32	144,000	32	731,160	72	1,389,000	139,267	2,330	11,190	62	4,500	5.0	0.5	1.0	15.4	6.83	195.6	39.1	27.3
IV	20	96,000	20	716,310	163	2,146,800	157,902	4,381	30,667	36	4,800	7.5	1.7	1.6	45.6	8.2	194.2	27.7	32.8
V	25	417,460	25	3,222,450	993	2.146,800	530,639	45,967	270,979	12	16,698	7.7	2.4	1.3	110.1	10.2	152.1	25.8	40.7
VI	1	255,953	20	5,983,560	1,863	24,538,400	558,497	35,561	568,976	16	12,798	23.4	7.3	2.2	138.9	15.3	449.6	28.1	61.2
EN CADA ESCALON Y ESCALONES ANTERIORES																			
I	1,702	340,400	4,009	-	-	43,000	678,956	-	-	-	85	-	-	2	-	0.06	-	-	-
II	2,006	1,312,400	304	1,262,520	20	2,242,900	1,220,878	705	1,410	1,732	4,317	1.0	0.02	0.9	0.5	1.7	195.6	97.8	1.7
III	2,038	1,456,400	336	1,993,680	92	3,361,900	1,360,145	2,943	12,600	462	4,334	1.4	0.06	0.9	2.0	2.2	195.6	45.7	2.2
IV	2,058	1,552,400	356	2,709,990	255	5,778,700	1,518,047	7,324	43,267	207	4,361	1.7	0.16	1.0	4.7	9.2	194.8	33.0	2.9
V	2,083	1,969,860	381	5,932,440	1,248	18,165,900	2,048,686	53,291	314,246	38	5,170	3.0	0.63	1.0	27.0	4.8	158.0	26.8	4.8
VI	2,084	2,225,813	401	11,916,000	3,111	42,704,300	2,607,183	88,852	883,222	29	5,551	5.4	1.40	1.2	39.9	7.0	274.7	27.6	7.0

(*) Ministerio de Salud Pública y Asistencia Social.

CUADRO No. 3

RECURSOS, PRODUCCION, COBERTURA Y COSTOS UNITARIOS POR ESCALONES DE COMPLEJIDAD (*)

PAIS: HONDURAS

ANO: 1978

ESCALON DE COMPLEJIDAD	LOCALIDADES CON SERVICIOS		RECURSOS				PRODUCCION				INDICADORES DE COBERTURA						COSTOS UNITARIOS		
	NUMERO DE LOCALIDADES	POBLACION DE ESTAS LOCALIDADES	NUMERO DE EFECTORES	HORAS ANUALES DE PERSONAL	NUMERO DE CAMAS	GASTO TOTAL ANUAL	ATENCIONES	EGRESOS	DIAS-CAMA OCUPADOS	ATENCIONES POR EGRESO	HABITANTES POR EFECTOR	HORAS DE PERSONAL POR HABIT.	CAMAS POR 1000 HABITANTES	ATENCIONES ANUALES POR HABIT.	EGRESOS ANUALES POR MIL HABIT.	DE LA ATENCION	DEL EGRESO	DEL PACIENTE-DIA	DE LA HORA DE ATENCION
EN CADA ESCALON																			
I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
IV	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
V	1	75,362	1	40 ,240	154	5,501.3	290,769	9,148	49,071	31.8	75,362	5.4	2.04	3.9	121.4	3.8	503.5	93.9	15.2
VI	1	250,671	3	924,174	322	12,849.1	673,094	18,240	90,616	36.9	83,557	3.7	1.3	2.7	72.8	5.1	503.9	101.4	20.4
EN CADA ESCALON Y ESCALONES ANTERIORES																			
I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
IV	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
V	1	75,362	1	408,240	154	5,501.3	290,769	9,148	49,071	31.8	75,362	5.4	2.04	3.9	121.4	3.8	503.5	93.9	15.2
VI	2	326,033	4	1,322,414	476	18,350.4	963,863	27,388	139,687	34.2	81,508	4.1	1.5	2.9	84.0	4.9	503.8	98.8	19.6

(*) Instituto Hondureño de Seguridad Social.

TIPO DE EFECTORES, POBLACION ASIGNADA, FUNCIONES Y PROGRAMAS, TIPO Y NUMERO DE PERSONAL SEGUN NORMAS NACIONALES (*)

PAIS: PARAGUAY AÑO: 1979

NOMBRE Y TIPO DE UNIDAD DE ATENCION (ESTABLECIMIENTO O EFECTOR) (1)	NIVELES DE ATENCION QUE BRINDA (2)	PERSONAL		POBLACION A LA QUE SIRVE		FUNCIONES Y PROGRAMAS QUE REALIZA (7)	ESQUEMA DE REFERENCIA Y ARTICULACION ENTRE EFECTORES (8)
		TIPO (3)	No. (4)	CARACTERISTICAS GENERALES (5)	NUMERO PROMEDIO DE PERSONAS (6)		
COLABORADOR VOLUNTARIO DE SALUD	I	Voluntario de la comunidad	1	Población Rural Dispersa	Hasta 500	Funciones: fomento y protección de la salud; atención de primeros auxilios de la patología local más frecuente y de los accidentes más comunes; y educación para la salud. Programas: De promoción, protección y atención, de enfermos y de apoyo.	Referencia de pacientes al PS y al nivel II. Apoyo técnico y logístico del PS y del niño II.
PUESTO DE SALUD	I	Auxiliar	1	Población Rural	Hasta 2,000	Funciones: Fomento y protección de la salud; atención elementar de la patología más frecuentes y de los accidentes más comunes; y educación para la salud. Programas: 1) de promoción de la participación comunitaria; 2) de control de enfermedades transmisibles y zoonosis; 3) de materno-infantil y nutrición; 4) de saneamiento ambiental; 5) de atención médica y odontológica simplificadas; y 6) de apoyo.	Referencia de pacientes a los niveles II y III. Apoyo técnico y logístico de los niveles II y III.
CENTRO DE SALUD	II y I	Profesional Técnico Auxiliar De servicio		Población Rural y Urbana.	De 2,000 a 20,000	Funciones: Fomento y protección de la salud; atención médica ambulatoria, atención odontológica y hospitalización de agudos, y educación para la salud. Programas: 1) de promoción de la participación comunitaria; 2) de control de enfermedades transmisibles y zoonosis; 3) de materno infantil y nutrición; 4) de saneamiento ambiental; 5) de atención médica y odontológica, y 6) de apoyo.	Referencia de pacientes a los niveles III y IV. Apoyo técnico y logístico del nivel III.
CENTRO DE SALUD REGIONAL	III y I	Profesional Técnico Auxiliar De servicio		Población Urbana y Rural	De 20,000 a 100,000	Funciones: Fomento y protección de la salud; atención médica ambulatoria, atención odontológica y hospitalización general con especialización general, con especialidades básicas; y educación para la salud y docencia. Programas de: 1) promoción de la participación comunitaria; 2) de control de enfermedades transmisibles y zoonosis; 3) de materno infantil y nutrición; 4) de saneamiento ambiental;	Referencia de pacientes al nivel IV. Apoyo técnico y logístico del nivel central

TIPO DE EFECTORES, POBLACION ASIGNADA, FUNCIONES Y PROGRAMAS, TIPO Y NUMERO DE PERSONAL SEGUN NORMAS NACIONALES (*)

PAIS: PARAGUAY AÑO: 1979

NOMBRE Y TIPO DE UNIDAD DE ATENCION (ESTABLECIMIENTO O EFECTOR) (1)	NIVELES DE ATENCION QUE BRINDA (2)	PERSONAL		POBLACION A LA QUE SIRVE		FUNCIONES Y PROGRAMAS QUE REALIZA (7)	ESQUEMA DE REFERENCIA Y ARTICULACION ENTRE EFECTORES (8)
		TIPO (3)	No. (4)	CARACTERISTICAS GENERALES (5)	NUMERO PROMEDIO DE PERSONAS (6)		
HOSPITAL ESPECIALIZADO	IV	Profesional Especializado Técnico Auxiliar De servicio		Población Urbana	100,000 y más	Funciones: Fomento y protección de la salud; atención médica ambulatoria y hospitalización especializadas; docencia e investigación.	Apoyo técnico y logístico del nivel central.

(*) Ministerio de Salud Pública y Bienestar Social.

TIPO DE EFECTORES, POBLACION ASIGNADA, FUNCIONES Y PROGRAMAS, TIPO Y NUMERO DE PERSONAL SEGUN NORMAS NACIONALES (*)

PAIS: PARAGUAY

AÑO: 1979

NOMBRE Y TIPO DE UNIDAD DE ATENCION (ESTABLECIMIENTO O EFECTOR) (1)	NIVELES DE ATENCION QUE BRINDA (2)	PERSONAL		POBLACION A LA QUE SIRVE		FUNCIONES Y PROGRAMAS QUE REALIZA (7)	ESQUEMA DE REFERENCIA Y ARTICULACION ENTRE EFECTORES (8)
		TIPO (3)	No. (4)	CARACTERISTICAS GENERALES (5)	NUMERO PROMEDIO DE PERSONAS (6)		
PUESTO SANITARIO	I	Profesional y/o Auxiliar.	2	Población asegurada, rural y urbana.	200 a 500	Recuperación de salud: atención ambulatoria a enfermos; atención odontológica; atención del parto en domicilio.	Referencia de pacientes a los niveles II III. Apoyo técnico y logístico de los niveles II y III.
UNIDAD SANITARIA	II y I	Profesional Técnico Auxiliar De servicio		Población asegurada, rural y urbana.	500 a 2,000	Recuperación de salud: atención médica ambulatoria, atención odontológica y hospitalización de agudos.	Referencia de pacientes a los niveles III y IV. Apoyo técnico y logístico del nivel III.
UNIDAD SANITARIA SANATORIO	III y I	Profesional Técnico Auxiliar De servicio		Población asegurada, rural y urbana.	2,000 a 10,000	Recuperación de salud: atención médica ambulatoria, atención odontológica y hospitalización general con especialidades básicas.	Referencia de pacientes al nivel IV. Apoyo técnico y logístico del nivel IV.
HOSPITAL CENTRAL	IV	Profesional especializado Técnico Auxiliar De servicio		Población asegurada urbana (es centro de referencia nacional).	10,000 a 120,000	Recuperación de salud: atención médica ambulatoria especializada, atención odontológica y hospitalización especializada.	Apoyo logístico del nivel central.

(*) Instituto de Previsión Social.

TIPO DE EFECTORES, POBLACION ASIGNADA, FUNCIONES Y PROGRAMAS, TIPO Y NUMERO DE PERSONAL SEGUN NORMAS NACIONALES (*)

PAIS: PARAGUAY AÑO: 1979

NOMBRE Y TIPO DE UNIDAD DE ATENCION (ESTABLECIMIENTO O EFECTOR) (1)	NIVELES DE ATENCION QUE BRINDA (2)	PERSONAL		POBLACION A LA QUE SIRVE		FUNCIONES Y PROGRAMAS QUE REALIZA (7)	ESQUEMA DE REFERENCIA Y ARTICULACION ENTRE EFECTORES (8)
		TIPO (3)	No. (4)	CARACTERISTICAS GENERALES (5)	NUMERO PROMEDIO DE PERSONAS (6)		
ENFERMERIA	I	Enfermero	1	Militares en servicio activo y en situación de retiro y familiares. Lisiados de guerra y familiares. Población civil (acción cívica).	800	Recuperación de salud: atención mabulatoria a enfermos, hospitalización de emergentes.	Referencia de pacientes a los niveles II, III y IV. Apoyo técnico y logístico del nivel IV.
UNIDAD SANITARIA	II	Profesional Técnico Auxiliar De servicio		Militares en servicio activo y en situación de retiro y familiares. Lisiados de guerra y familiares. Población civil (acción cívica).	5,000	Recuperación de salud: atención ambulatoria a enfermos, atención odontológica y hospitalización de agudos.	Referencia de pacientes a los niveles III y IV. Apoyo logístico y técnico del nivel IV.
HOSPITAL DIVISIONARIO	III	Profesional Técnico Auxiliar De servicio		Militares en servicio activo y en situación de retiro y familiares. Lisiados de guerra y familiares. Población civil (acción cívica)	10,000	Recuperación de salud: atención ambulatoria a enfermos, atención odontológica y hospitalización general.	Referencia de pacientes al nivel IV. Apoyo técnico y logístico del nivel IV.
HOSPITAL CENTRAL	IV	Profesional Especializado Técnico Auxiliar De servicio		Militares en servicio activo y en situación de retiro y familiares. Lisiados de guerra y familiares. Población civil (acción cívica)	40,000 a 80,000	Recuperación de salud: atención ambulatoria general y especializada, atención odontológica y hospitalización general y especializada.	Apoyo logístico del nivel central.

(*) Sanidad Militar.

TIPO DE EFECTORES, POBLACION ASIGNADA, FUNCIONES Y PROGRAMAS, TIPO Y NUMERO DE PERSONAL SEGUN NORMAS NACIONALES (*)

PAIS: PARAGUAY

AÑO: 1978

NOMBRE Y TIPO DE UNIDAD DE ATENCION (ESTABLECIMIENTO O EFECTOR) (1)	NIVELES DE ATENCION QUE BRINDA (2)	PERSONAL		POBLACION A LA QUE SIRVE		FUNCIONES Y PROGRAMAS QUE REALIZA (7)	ESQUEMA DE REFERENCIA Y ARTICULACION ENTRE EFECTORES (8)
		TIPO (3)	No. (4)	CARACTERISTICAS GENERALES (5)	NUMERO PROMEDIO DE PERSONAS (6)		
ENFERMERIA	I	Enfermero	1	Personal policial y familiares. Funcionarios del Ministerio del Interior y de la Junta de Gobierno. Personal Civil.	500	Recuperación de salud: atención ambulatoria a enfermos.	Referencia de pacientes al nivel IV. Apoyo técnico y logístico del Nivel IV.
HOSPITAL DE POLICIA "POLICLINICO RIGOBERTO CABALLERO".	IV y I	Profesional Especializado Profesional Técnico Auxiliar De servicio		Personal policial y familiares. Funcionarios del Ministerio del Interior y de la Junta de Gobierno. Personal civil.	30,000	Recuperación de salud: atención ambulatoria general y especializada, atención odontológica y hospitalización general y especializada.	Apoyo logístico del nivel central.

(*) Sanidad Policial.

TIPO DE EFECTORES, POBLACION ASIGNADA, FUNCIONES Y PROGRAMAS, TIPO Y NUMERO DE PERSONAL SEGUN NORMAS NACIONALES (*)

PAIS: PARAGUAY AÑO: 1979

NOMBRE Y TIPO DE UNIDAD DE ATENCION (ESTABLECIMIENTO O EFECTOR) (1)	NIVELES DE ATENCION QUE BRINDA (2)	PERSONAL		POBLACION A LA QUE SIRVE		FUNCIONES Y PROGRAMAS QUE REALIZA (7)	ESQUEMA DE REFERENCIA Y ARTICULACION ENTRE EFECTORES (8)
		TIPO (3)	No. (4)	CARACTERISTICAS GENERALES (5)	NUMERO PROMEDIO DE PERSONAS (6)		
HOSPITAL DE CLINICAS (Hospital Escuela)		Profesional Especializado Técnico Auxiliar De servicio		Población general	60,000	Docencia, investigación y atención médica general y especializada, atención odontológica, hospitalización general y especializada.	

(*) Universidad Nacional de Asunción.

TIPO DE EFECTORES, POBLACION ASIGNADA, FUNCIONES Y PROGRAMAS, TIPO Y NUMERO DE PERSONAL SEGUN NORMAS NACIONALES (*)

PAIS: PARAGUAY

AÑO: 1979

NOMBRE Y TIPO DE UNIDAD DE ATENCION (ESTABLECIMIENTO O EFECTOR) (1)	NIVELES DE ATENCION QUE BRINDA (2)	PERSONAL		POBLACION A LA QUE SIRVE		FUNCIONES Y PROGRAMAS QUE REALIZA (7)	ESQUEMA DE REFERENCIA Y ARTICULACION ENTRE EFECTORES (8)
		TIPO (3)	No. (4)	CARACTERISTICAS GENERALES (5)	NUMERO PROMEDIO DE PERSONAS (6)		
POLICLINICO MUNICIPAL	IV y I	Profesional Técnico Auxiliar De servicio		Población general	5,000	Recuperación de salud: atención ambulatoria a enfermos y atención odontológica.	

(*) Salud Municipal.

CUADRO No. 2

RECURSOS, PRODUCCION Y PRODUCTIVIDAD POR ESCALONES DE COMPLEJIDAD

PAIS: PARAGUAY — ANO: 1978

ESCALON DE COMPLEJIDAD	UNIDADES DE SERVICIOS (EFECTORES)		LOCALIDADES CON SERVICIOS		RECURSOS				PRODUCCION				PRODUCTIVIDAD			
	TIPO DE EFECTORES	NIVELES DE ATENCION	NUMERO DE LOCALIDADES	POBLACION DE ESTAS LOCALIDADES	NUMERO DE EFECTORES	HORAS ANUALES DE PERSONAL	NUMERO DE CAMAS	GASTO TOTAL ANUAL *	ATENCIONES	EGRESOS	DIAS DE INTERNACION DE LOS EGRESADOS	ATENCIONES POR EGRESO	ATENCIONES POR HORA DE PERSONAL	% DE OCUPACION DE LAS CAMAS	PROMEDIO DE DIAS DE INTERNACION	EGRESOS ANUALES POR CAMA
I	Puesto de Salud y CVS	I			280	257,250	28	25,660	168,982	311	736	543.4	0.7	8.6	2.4	11.0
	Puesto Sanitario	I			74	115,000	53	307,122	341,704	328	1,268	1,041.8	3.3	5.4	3.8	6.2
	Enfermería SM	I			48	84,000	142	7,649	56,563	785	3,035	72.1	0.8	5.9	4.0	5.5
	Enfermería SP	I			25	18,750	-	3,283	7,500	-	-	-	0.4	-	-	-
	T O T A L		343	*486,460	427	475,000	223	343,714	574,749	1,424	5,039	403.6	1.3	6.2	3.5	6.4
II	Centro de Salud	I y II			105	1,785,000	499	287,700	1,041,155	18,099	48,912	57.5	1.2	33.9	2.7	36.3
	Unidad Sanitaria	I y II			17	356,250	245	361,887	402,729	4,009	20,073	100.5	2.2	12.9	3.0	16.4
	Unidad Sanitaria SM	II			20	140,000	244	10,198	96,965	3,927	21,599	24.7	1.4	24.3	5.5	16.1
	Policlínica Municipal	II			1	36,000	-	550	27,380	-	-	-	0.8	-	-	-
	T O T A L		98	*314,585	143	2,317,250	988	660,335	1,568,229	26,035	90,584	60.2	1.3	25.1	3.5	26.4
III	Centro de Salud Regional	III y I			9	560,000	218	109,592	258,732	8,770	43,240	29.5	1.0	54.3	4.9	40.2
	Unidad Sanitaria-Sanatorio	III y I			7	183,750	207	286,620	318,898	4,095	15,224	77.9	3.9	11.8	3.7	28.4
	Hospital Divisionario	III			5	87,500	140	10,198	48,482	3,142	25,136	15.4	1.2	49.2	8.0	22.4
	T O T A L		13	*261,162	21	831,250	565	406,410	626,112	16,007	83,600	39.1	1.7	40.5	5.2	28.3
IV	Hospitales Especializados	IV			6	892,500	574	164,388	129,237	9,460	138,501	13.7	0.4	83.1	14.6	16.5
	Hospital Central IPS	IV			1	1,276,700	467	420,367	467,739	13,242	126,202	35.3	1.1	79.1	9.5	28.4
	Hospital Central SM	IV			1	737,500	250	29,947	132,988	4,343	56,590	30.6	0.5	85.0	9.8	17.4
	Hospital de Policía	IV y I			1	241,500	93	7,493	31,095	2,038	14,527	15.3	0.4	42.8	7.1	21.9
	Hospital de Clínicas	IV y I			1	3,060,000	580	12,516	73,153	10,749	142,578	6.8	0.1	72.4	13.2	18.5
	T O T A L		1	*574,940	10	6,258,200	1,964	627,711	834,212	39,832	478,398	20.9	0.4	66.7	12.0	20.3

(*) Población cabecera de distrito, más rural adyacente.
(**) En millones de Guaraníes.
CVS = Colaborador Voluntario de Salud; SM = Sanidad Militar; SP= Sanidad Policial; IPS= Instituto de Previsión Social.

CUADRO No. 3

RECURSOS, PRODUCCION, COBERTURA Y COSTOS UNITARIOS POR ESCALONES DE COMPLEJIDAD

PAIS: PARAGUAY ANO: 1978

ESCALON DE COMPLEJIDAD	LOCALIDADES CON SERVICIOS		RECURSOS				PRODUCCION				INDICADORES DE COBERTURA						COSTOS UNITARIOS		
	NUMERO DE LOCALIDADES	POBLACION DE ESTAS LOCALIDADES	NUMERO DE EFECTORES	HORAS ANUALES DE PERSONAL	NUMERO DE CAMAS	GASTO TOTAL ANUAL *	ATENCIONES	EGRESOS	DIAS-CAMA OCUPADOS	ATENCIONES POR EGRESO	HABITANTES POR EFECTOR	HORAS DE PERSONAL POR HABIT.	CAMAS POR 1000 HABITANTES	ATENCIONES ANUALES POR HABIT.	EGRESOS ANUALES POR MIL HABIT.	DE LA ATENCION	DEL EGRESO	DEL PACIENTE-DIA	DE LA HORA DE ATENCION
EN CADA ESCALON																			
I	343	486,460	427	475,000	223	343,714	754,749	1,424	5,039	403.6	1,139	0.9	0.5	1.2	2.9	571	10,620	3,001	765
II	98	314,585	143	2,317,250	988	660,335	1,568,229	26,035	90,584	60.2	2,200	7.4	3.1	5.0	82.8	192	13,798	3,966	253
III	13	261,162	21	831,250	565	406,410	626,410	16,007	83,600	39.1	12,436	3.2	2.2	2.4	61.3	649	16,351	3,131	387
IV	1	574,940		6,258,200	1,964	627,711	834,212	39,832	478,398	20.9	57,494	10.9	3.4	1.5	69.3	193	11,725	976	73
EN CADA ESCALON Y ESCALONES ANTERIORES																			
I	343	486,460	427	475,000	223	343,714	754,749	1,424	5,039	403.6	1,139	0.9	0.5	1.2	2.9	571	10,620	3,001	765
II	441	801,045	570	2,792,250	1,211	1,004,049	2,142,978	27,459	95,623	78.0	1,405	3.5	1.5	2.7	34.3	294	13,633	3,915	388
III	454	1,062,207	591	3,623,500	1,776	1,410,459	2,769,090	43,466	179,223	63.7	1,797	3.4	1.7	2.6	40.9	280	14,634	3,459	388
IV	455	1,637,147	601	9,881,700	3,740	2,038,170	3,603,302	83,298	657,621	43.3	2,724	6.0	2.3	2.2	50.9	260	13,243	1,677	223

(*) En Millones de Guaraníes.

TIPO DE EFECTORES, POBLACION ASIGNADA, FUNCIONES Y PROGRAMAS, TIPO Y NUMERO DE PERSONAL SEGUN NORMAS NACIONALES

PAIS: PERU

AÑO: 1978

NOMBRE Y TIPO DE UNIDAD DE ATENCION (ESTABLECIMIENTO O EFECTOR) (1)	NIVELES DE ATENCION QUE BRINDA (2)	PERSONAL		POBLACION A LA QUE SIRVE		FUNCIONES Y PROGRAMAS QUE REALIZA (7)	ESQUEMA DE REFERENCIA Y ARTICULACION ENTRE EFECTORES (8)
		TIPO (3)	No. (4)	CARACTERISTICAS GENERALES (5)	NUMERO PROMEDIO DE PERSONAS (6)		
AGENTE COMUNITARIO	1er. Nivel o Nivel inicial de atención.	Promotor Partera Tradicional	1 1	Rural	500 500	Promoción integral de la salud; primeros auxilios; participación activa de vacunaciones; educación sanitaria; atención del parto.	Puestos sanitarios; centros de salud "A" y "B". Apoyo: Capacitación Biológica, Equipos e instrumentos, mínimo y supervisión; educación contínua.
PUESTO SANITARIO O CENTRO BASE DE SALUD	2o. Nivel	Auxiliar Sanitario	1	Rural	2,000	Atención sanitaria; primeros auxilios; vacunaciones; transferencia de pacientes.	Centro de Salud "A" y "B"; hospital general, hospital general base. Apoyo: Capacitación; materiales y suministros; supervisión.
CENTRO DE SALUD "A" (Rural L)	2o. Nivel	Médico Enfermera SP Auxiliar Enfermería	1 1 1	Urbano	5,000	Atención médica general; control de enfermedades T; notificación de casos; vacunaciones TBC; malaria, etc.; actividades de saneamiento ambiental; letrina sanitaria; educación para la salud; transferencia de pacientes y atención del parto.	Hospital general; hospital general base. Apoyo: Capacitación, materiales y suministros y supervisión.
CENTRO DE SALUD "B" (Urbano)	2o. Nivel	Médico Odontólogo Asist. Social Obstetra Enfermera SP Enfermeras Auxiliar Enfermería	1 1 1 1 1 1 1	Urbano	10,000	Atención médica integral; control de enfermedades T.; notificación de casos; vacunaciones TBC; detección cáncer uterino; alimentación complementaria; control establecimientos públicos; referencia de pacientes.	Hospital General; hospital general base. Apoyo: capacitación; materiales y suministros y supervisión.
HOSPITAL GENERAL	2o. Nivel	Médico General, Pediatra, Cirujano y Obstetra Odontólogo Asist. S. Obst. Enfermera SP-Enf. Insp. Saneamiento Auxiliar Enfermería	4 1 1-1 1-1 1 1	Urbano (Población asegurada y no asegurada)	50,000	Atención médica integral; control de enfermedades T.; programa materno infantil; programa de saneamiento ambiental; programa de nutrición; programa de extensión de cobertura (atención primaria); referencia de pacientes.	Hospital general base; hospital regional. Apoyo: material y suministros.

TIPO DE EFECTORES, POBLACION ASIGNADA, FUNCIONES Y PROGRAMAS, TIPO Y NUMERO DE PERSONAL SEGUN NORMAS NACIONALES

PAIS: PERU

AÑO: 1978

NOMBRE Y TIPO DE UNIDAD DE ATENCION (ESTABLECIMIENTO O EFECTOR) (1)	NIVELES DE ATENCION QUE BRINDA (2)	PERSONAL		POBLACION A LA QUE SIRVE		FUNCIONES Y PROGRAMAS QUE REALIZA (7)	ESQUEMA DE REFERENCIA Y ARTICULACION ENTRE EFECTORES (8)
		TIPO (3)	No. (4)	CARACTERISTICAS GENERALES (5)	NUMERO PROMEDIO DE PERSONAS (6)		
HOSPITAL GENERAL BASE	2o. Nivel	Médicos: cirujanos, ginecólogos, obstetras y pediatras Odontólogo Farmacéutico Asist. Social Obst. Enfermera SP Enfermera General Auxiliar Enfermería	4 1-2 1 1 1-2 1-2 6-10 18-30	Urbano y Rural (Población asegurada y no asegurada)	100,000	Atención médica integral; atención médica especializada; control enfermedades transmisibles; programa madre y niño; programa saneamiento ambiental; programa nutrición; programa extensión cobertura (atención primaria de salud), apoyo a establecimientos subordinados.	Hospital Regional. Apoyo: mantenimiento y suministros.
HOSPITAL REGIONAL DOCENTE/ESPECIALIDADES	3er. Nivel	Todos los anteriores		Urbano y Rural	500,000	Todos los anteriores y diferencia atención especializada.	Transferencia

CUADRO No. 2

RECURSOS, PRODUCCION Y PRODUCTIVIDAD POR ESCALONES DE COMPLEJIDAD

PAIS: PERU — ANO: 1978

ESCALON DE COMPLEJIDAD	TIPO DE EFECTORES	UNIDADES DE SERVICIOS (EFECTORES)		LOCALIDADES CON SERVICIOS		RECURSOS				PRODUCCION				PRODUCTIVIDAD			
		NIVELES DE ATENCION	NUMERO DE LOCALIDADES	POBLACION DE ESTAS LOCALIDADES	NUMERO DE EFECTORES	HORAS ANUALES DE PERSONAL	NUMERO DE CAMAS	GASTO TOTAL ANUAL	ATENCIONES	EGRESOS	DIAS DE INTERNACION DE LOS EGRESADOS	ATENCIONES POR EGRESO	ATENCIONES POR HORA DE PERSONAL	% DE OCUPACION DE LAS CAMAS	PROMEDIO DE DIAS DE INTERNACION	EGRESOS ANUALES POR CAMA
I	AGENTE COMUNITARIO	I															
	PUESTO SANITARIO	II	1,154	2,308,000	1,154	1,994,100	-	218,971,500	1,552,902	-	-	-	0.81	-	-	-	-
II	CENTRO DE SALUD "A"	II	306	1,530,000	306	2,130,200	617	1,022,496	1,596,995	6,458	29,061	247.2	0.99	13.3	4.5	10.5	
II	CENTRO DE SALUD "B"	II	17	170,000	17	953,800	8	1,049,180	335,054	84	116	3,988	0.46	4.0	1.4	10.5	
II	HOSPITAL GENERAL	II	24	1,200,000	24	4,951,700	1,336	689 689,246	458,139	30,728	331,862	14.9	0.12	65.4	10.8	23.0	
II	HOSPITAL GENERAL BASE	II	65	2,804,000	65	19,437,700	5,921	3,056,896	1,139,536	136,183	1,470,776	8.0	0.07	65.4	10.8	23.0	
III	HOSPITAL REGIONAL (Docente y/o especializado)	III	18	8,250,000	18	26,908,300	8,070	4,167,128	1,680,516	185,160	2,004,588	9.7	0.08	65.4	10.8	23.0	

CUADRO No. 3

RECURSOS, PRODUCCION, COBERTURA Y COSTOS UNITARIOS POR ESCALONES DE COMPLEJIDAD

PAIS: PERU

ANO: 1978

ESCALON DE COMPLEJIDAD	LOCALIDADES CON SERVICIOS		RECURSOS				PRODUCCION				INDICADORES DE COBERTURA					COSTOS UNITARIOS			
	NUMERO DE LOCALIDADES	POBLACION DE ESTAS LOCALIDADES	NUMERO DE EFECTORES	HORAS ANUALES DE PERSONAL	NUMERO DE CAMAS	GASTO TOTAL ANUAL *	ATENCIONES	EGRESOS	DIAS-CAMA OCUPADOS	ATENCIONES POR EGRESO	HABITANTES POR EFECTOR	HORAS DE PERSONAL POR HABIT.	CAMAS POR 1000 HABITANTES	ATENCIONES ANUALES POR HABIT.	EGRESOS ANUALES POR MIL HABIT.	DE LA ATENCION	DEL EGRESO	DEL PACIENTE-DIA	DE LA HORA DE ATENCION
EN CADA ESCALON																			
I	1,154	2,308,000	1,154	1,904,100	-	219.7	1,552,902	-	-	-	2,000	0.8	-	0.7	-	141			175
II	306	1,530,000	306	2,130,200	617	1,022.5	1,596,995	6,458	29,061	24.7	4,250	1.3	0.4	1.0	4.2	480	39582.5	8796.1	480
III	17	170,000	17	953,800	8	1,049.2	335,054	84	116	3988	10,000	5.6	0.04	1.9	0.5	**	**	**	**
IV	24	1,200,000	24	4,951,700	1,336	689.2	458,139	30,278	331,862	14.9	50,000	4.1	1.1	0.4	25.6	1,128	5607.6	519.2	139
V	65	2,804,000	65	19,437,700	5,921	3,056.9	1,139,536	136,183	1,470,776	8.0	43,139	6.9	2.1	0.4	48.6	2,011	5611.7	519.6	157
VI	18	8,250,000	18	26,908,300	8,070	4,167.1	1,680,516	185,610	2,004,588	9.7	458,333	3.3	0.9	0.2	22.5	1,859	5612.7	519.6	155
EN CADA ESCALON Y ESCALONES ANTERIORES																			
I	1,154	2,308,000	1,154	1,904,100	-	219.7	1,552,902	-	-	-	227	0.8	-	0.7	-	141	-	-	116
II	1,460	3,838,000	1,460	4,039,300	617	1,241.5	3,149,904	6,458	29,061	487.7	2,629	1.0	0.2	0.8	1.7	197	96076.0	21468	205
III	1,477	4,008,000	1,477	4,993,100	625	2,290.6	3,484,958	6,452	29,177	532.7	2,714	1.2	0.1	0.9	1.6	**	**	**	**
IV	1,501	5,208,000	1,501	9,944,800	1,961	2,979.8	3,943,017	32,270	361,039	105.8	3,469	1.9	0.4	0.7	7.1	377	39886.0	4117	199
V	1,566	8,012,000	1,566	29,382,500	7,882	6,036.7	5,082,633	173,453	1,831,815	29.3	5,116	3.7	0.9	0.6	21.6	593	17634.0	1645	136
VI	1,584	16,262,000	1,584	56,290,800	15,952	10,203.9	6,763,149	359,063	3,836,343	18.8	10,266	3.5	0.9	0.4	22.1	755	14212.0	1330	120

(**) Estas cifras sujetas a revisión.

CUADRO No. 1

TIPO DE EFECTORES, POBLACION ASIGNADA, FUNCIONES Y PROGRAMAS, TIPO Y NUMERO DE PERSONAL SEGUN NORMAS NACIONALES

PAIS: VENEZUELA

AÑO: 1979

NOMBRE Y TIPO DE UNIDAD DE ATENCION (ESTAELECIMIENTO O EFECTOR) (1)	NIVELES DE ATENCION QUE BRINDA (2)	PERSONAL		POBLACION A LA QUE SIRVE		FUNCIONES Y PROGRAMAS QUE REALIZA (7)	ESQUEMA DE REFERENCIA Y ARTICULACION ENTRE EFECTORES (8)
		TIPO (3)	No. (4)	CARACTERISTICAS GENERALES (5)	NUMERO PROMEDIO DE PERSONAS (6)		
UNIDADES SANITARIAS						Prevención de las enfermedades transmisibles agudas y crónicas y el control sanitario general, así como también las acciones de despistaje. Diagnóstico precoz.	Reciben: Derivan: Resto, efectores.
MEDICATURAS RURALES				Población Rural	Hasta 5,000	Atención médico ambulatoria dentro del medio rural organizado.	Reciben: Derivan: Centros de Salud, Hospitales Generales, Hospitales Especializados.
CENTROS DE SALUD					20,000 a 60,000	Se realizan las cuatro actividades básicas de de atención médica, así como las funciones preventivas más importantes.	Reciben: Med. S. Derivan: Hospitales Generales, Hospitales Especializado.
HOSPITALES GENERALES				Población en General.		Se da atención médico-quirúrgica y rehabilitación a pacientes agudos y crónicos, comprendiendo las cuatro actividades básicas de medicina general, cirugía, pediatría y gineco-obstetricia.	Reciben: Centros de Salud. Derivan: Hospitales Especializados
HOSPITALES ESPECIALES				Población en General		Atención médico quirúrgica a pacientes tuberculosos, leprosos y enfermos mentales, oncológicos, geriátricos.	Reciben: Med., Hospitales Generales. Derivan: Hospitales Generales.

CUADRO No. 2

RECURSOS, PRODUCCION Y PRODUCTIVIDAD POR ESCALONES DE COMPLEJIDAD

PAIS: VENEZUELA

ANO: 1979

ESCALON DE COMPLEJIDAD	TIPO DE EFECTORES	UNIDADES DE SERVICIOS (EFECTORES)		LOCALIDADES CON SERVICIOS		RECURSOS			PRODUCCION				PRODUCTIVIDAD			
		NIVELES DE ATENCION	NUMERO DE LOCALIDADES	POBLACION DE ESTAS LOCALIDADES	NUMERO DE EFECTORES	HORAS ANUALES DE PERSONAL	NUMERO DE CAMAS	GASTO TOTAL ANUAL	ATENCIONES	EGRESOS	DIAS DE INTERNACION DE LOS EGRESADOS	ATENCIONES POR EGRESO	ATENCIONES POR HORA DE PERSONAL	% DE OCUPACION DE LAS CAMAS	PROMEDIO DE DIAS DE INTERNACION *	EGRESOS ANUALES POR CAMA
I	UNIDADES SANITARIAS Y MEDICATURAS RURALES	-	-	-	1,124	-	-	44,187,390	1,930,114	-	-	-	-	-	-	-
II	CENTROS DE SALUD	-	-	-	77	-	3,033	93,624,153	4,626,071	126,259	620,028	7.46	-	56.0	4.91	41.6
III	HOSPITALES GENERALES	-	-	-	47	-	13,676	396,476,287	8,013,527	482,987	3,534,473	2.26	-	70.8	7.32	35.3
**IV	HOSPITALES ESPECIALES	-	-	-	21	-	4,519	42,220,104	306,113	14,364	1,202,225	21.31	-	72.9	83.70	3.2
	TOTAL	-	-	-	707	-	21,228	576,507,934	32,246,825	623,610	5,356,726	31.03	-	69.1	6.8	29.4

CUADRO No. 3

RECURSOS, PRODUCCION, COBERTURA Y COSTOS UNITARIOS POR ESCALONES DE COMPLEJIDAD

PAIS: VENEZUELA

ANO: 1979

ESCALON DE COMPLEJIDAD	LOCALIDADES CON SERVICIOS		RECURSOS				PRODUCCION				INDICADORES DE COBERTURA						COSTOS UNITARIOS		
	NUMERO DE LOCALIDADES	POBLACION DE ESTAS LOCALIDADES	NUMERO DE EFECTORES	HORAS ANUALES DE PERSONAL	NUMERO DE CAMAS	GASTO TOTAL ANUAL	ATENCIONES	EGRESOS	DIAS-CAMA OCUPADOS	ATENCIONES POR EGRESO	HABITANTES POR EFECTOR	HORAS DE PERSONAL POR HABIT.	CAMAS POR 1000 HABITANTES	ATENCIONES ANUALES POR HABIT.	EGRESOS ANUALES POR MIL HABIT.	DE LA ATENCION	DEL EGRESO	DEL PACIENTE-DIA	DE LA HORA DE ATENCION
EN CADA ESCALON																			
I	-	-	562	-	3,033	44,187,390	19,301,114	-	-	-	-	-	-	-	-	-	-	-	-
II	-	-	77	-	3.033	93,624,153	4,626,071	126,259	620,028	7.46	-	-	-	-	-	-	-	-	-
III	-	-	47	-	13,676	396,476,287	8,013,527	482,987	3,534,473	2.26	-	-	-	-	-	-	-	-	-
IV	-	-	21	-	4,519	42,220,104	306,113	14,364	1,202,225	21.31	-	-	-	-	-	-	-	-	-
EN CADA ESCALON Y ESCALONES ANTERIORES																			
I	-	-	562	-		44,187,390	19,301,114	-	-	-	-	-	-	-	-	-	-	-	-
II	-	-	639	-	3,033	137,811,543	23,927,165	126,259	620,028	7.46	-	-	-	-	-	-	-	-	-
III	-	-	686	-	16,709	534,287,830	31,940,712	609,246	4,154,501	9.72	-	-	-	-	-	-	-	-	-
IV	-	-	707	-	21,228	576,507,934	32,246,825	623,610	5,356,726	31.03	-	-	-	-	-	-	-	-	-