EXTENSION OF HEALTH SERVICE COVERAGE IN COSTA RICA[1]

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Costa Rica's National Health Plan for 1971-1980 has given top priority to extension of health coverage—focusing especially on marginal rural and periurban areas. By June 1977 implementation of this plan had provided coverage for over 80 per cent of Costa Rica's scattered rural population. Community participation was being encouraged, together with an integrated approach to the problems of these marginal regions.

Introduction

Situated on the Central American Isthmus, Costa Rica is bounded by Nicaragua to the north, Panama to the south, and the Atlantic and Pacific Oceans to the east and west. In 1977 the population totaled 2,061,054, the average population density being 40 inhabitants per square kilometer. Eighty-nine per cent of those over 10 years old were literate. Average life expectancy for the period 1975-1980 was estimated at 70.23 years. The Gross Domestic Income for 1975 was estimated at US$1,080 per capita.

The population is distributed as follows: 47 per cent of the people live in 67 urban communities with populations of 2,000 or more; 22 per cent live in 494 communities with populations of 500 to 2,000; and 31 per cent live in 3,684 villages with populations of under 500. Although the country is developing an extensive highway system, many localities remain isolated in the rainy season that lasts about two-thirds of the year.

Until the early 1970s, health services were distributed along the principal highways—in cities with relatively large populations and advanced economic structures. As a result, approximately 650,000 people residing in villages with populations under 500 had no access to health services, or else had great difficulty obtaining such services. A mobile unit program for rural areas, some volunteer groups, and personnel with the malaria eradication program provided the only means of extending health services to a population suffering from severe socioeconomic problems.

Programs for Extension of Health Coverage

Costa Rica's Economic and Social Development Plan for 1974-1978 assigned priority to "closing the social gap" and to improving both the levels of production and the general health level. Similarly, the

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National Health Plan for 1971-1980 accorded top priority to extending health service coverage, especially to marginal populations in rural and periurban zones, through preventive work, outpatient care, and improvement of the environment (*1*).

Under the Social Development and Family Appropriations Law approved by the Costa Rican Congress toward the end of 1974, financial resources have been provided for programs designed to achieve greater social justice through the following actions: adequate income distribution, organization of nutrition and health services for marginal populations, and integration of the organized community into the process of creating conditions beneficial to those with limited resources—all of which is directed at promoting progress toward integrated national development. Within this general framework, actions to extend health coverage which have a permanent impact on communities contribute to the infrastructure of information and support activities which strengthen the social development and family appropriations program (*2*).

The national government provides some 97 per cent of the resources needed to carry out these extended coverage programs, and local communities provide 3 per cent of the required funds. Per capita, the total amount involved is about US$3.70 per year, this figure being based on the total received from both sources.

In accord with this policy of increased coverage, health services provided by the social security agency are to become universally available. This is being accomplished, first, by transferring the entire hospital system over to this agency. The agency, in turn, is performing various concurrent tasks: modernization of hospital facilities, construction of more hospitals and health centers to increase current capacity, preparation of additional manpower, and provision of maternity and general health care to people of modest means—who are being incorporated progressively into the system as state-insured individuals.

The legal foundation for universal social security coverage has been laid by four pieces of 1973-1974 legislation. These are the General Health Law (1973), the Organic Law of the Health Ministry (1973), the Hospital Transfer Law (1973), and the Social Development and Family Appropriations Law (1974).

PAHO, UNICEF, USAID, and CARE have been participating in this program since its initial phases. All in all, the international cooperation involved has taken many forms—including technical assistance; fellowship grants; provision of clinical equipment, refrigerators, and vehicles; and provision of funds for construction of health posts, auxiliary personnel training, and preparation of community development leaders. However, the agreements upon which this assistance was based terminated in 1976, with Costa Rica assuming total responsibility for funding and support of the program in January 1977.

The Rural Community Health Programs

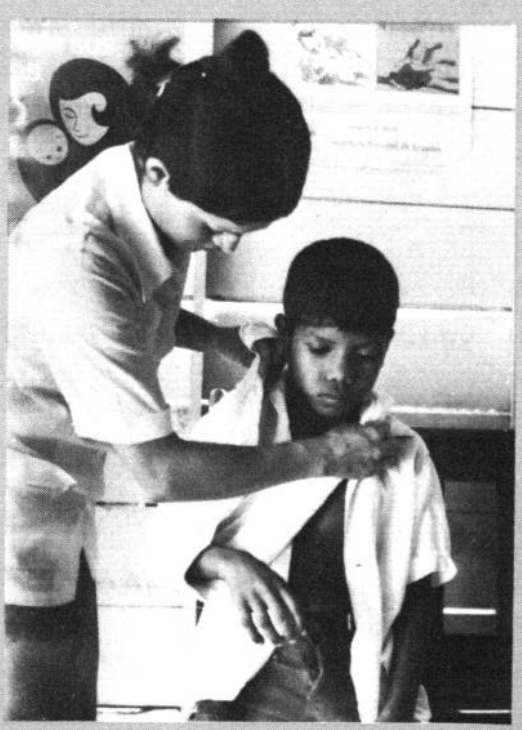
Until the 1970s, Costa Rica's rural population was served by mobile units working out of health centers located at county seats. Although this was a major effort and was supported by an adequate organization, it did not cover more than 20 per cent of the rural population. In all, there were 240 operating health centers where people could go for medical care. These were visited monthly by a physician, who would remain in the area from one to three days. Though great numbers of consultations were carried out, they were insufficient to fully satisfy the inhabitants' needs. At present the mobile units serve as support elements for the health posts—where people are referred by staff members

A FEW EXAMPLES OF RURAL HEALTH AREA ACTIVITIES IN COSTA RICA.

Feeding of preschool children

Health education

A home visit



First aid

Epidemiologic surveillance for malaria

Periodic medical consultation

(Photos: Courtesy of Dr. Hugo Villegas)

permanently stationed in rural health areas. Priority is given to caring for children and pregnant women.

These activities, together with many others, are now brought together under the Rural Community Health Program, which has been operating since 1973. Organizationally the rural program belongs to the Sub-Program of Basic Care, which in turn forms part of the Medical Care Program established by the National Health Plan. When the rural program begins operating in an area, the national Department of Rural Health coordinates the health activities involved with regional and local agencies. At the end of this initial phase, however, full responsibility for operating the services established will be transferred to these agencies.

The aim of the Rural Community Health Program is to extend health coverage to all marginal populations in Costa Rica, giving priority to rural dwellers living in scattered communities with less than 500 inhabitants. To achieve this objective, the program relies on properly prepared and trained auxiliaries for carrying out the planned activities. These workers are in turn supported by professional personnel from the health centers located in towns with 2,000 inhabitants or more. The latter personnel visit the rural health posts periodically to provide supervision, in-service training, and outpatient consultations; and they in turn receive patients referred to them by the auxiliaries (*3*).

The rural health posts are organizationally dependent on the health centers that provide them with equipment and supplies. (There are five to seven rural posts for each center.) Accordingly, programming of activities and periodic review of the work programmed is done jointly. To facilitate this process, an information system provides data on the monthly production of services and also guides supervisors in analyzing work progress, reprogramming activities when necessary, and evaluating results in terms of specific goals. Likewise, this system permits determination of the impact of health activities at the level of more complex and highly structured services, in terms of numbers of hospital discharges and outpatient consultations.

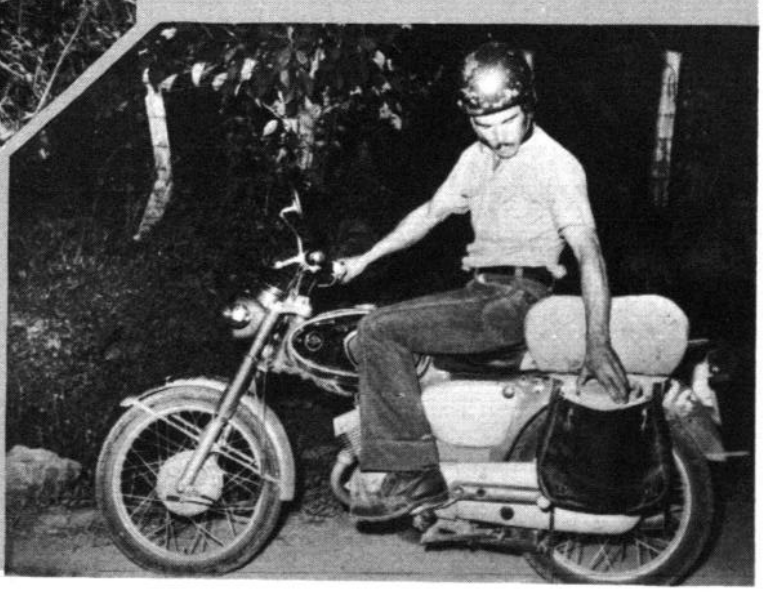
In areas where the program has been operating for over three years, it is already possible to observe a decline in the numbers of consultations and hospital discharges. Some services, such as pediatrics, are less fully utilized than they were, a trend resulting especially from a reduced incidence of communicable diseases.

The main features of the Rural Community Health Program are as follows: (*4*)

• The work is organized by health areas. These areas contain an average of 14 communities, 550 dwellings, 2,400 inhabitants, and 130 square kilometers of territory. A health post with the necessary equipment is set up in one of these communities. A nursing auxiliary and a rural health assistant are in charge of health activities in each area. The nursing auxiliary is responsible for the post and the communities nearby. The health assistant travels a circuit that enables him to cover all the dwellings of the remaining communities in the health area. The two workers are jointly responsible for the results of their endeavors.

• Criteria for selecting these auxiliary personnel are residence in the rural area, acceptance by the community, and a proven capacity to coordinate multiple efforts for the benefit of that community. The training provided for these personnel consists of an 11-month course for the nursing auxiliaries and a 5-month course for the rural health assistants. Thereafter, these personnel are observed for their dedication to the work, belief in the job's value, and satisfaction with their own contribution.

VARIOUS MODES OF TRANSPORTATION USED IN COSTA RICA RURAL HEALTH PROGRAM



(Photos: Courtesy of Dr. Hugo Villegas)

• Levels of greater technical complexity within the health system provide continuing support—in the form of periodic visits to the posts by physicians, nurses, nutritionists, environmental health inspectors, and promoters of community organization for integrated development.

• There is a continued movement of personnel designed to assure four to six annual visits to every family unit within the communities served. It has been found that the workers do in fact complete a very high percentage of the scheduled home visits on their itineraries. It is of course essential that they should go to the people in this way, since the program is based on the principle that no human settlement is inaccessible.

• The program involves full and continuing participation by the organized community in health activities, within a much broader framework of integrated development. The staff members therefore seek to stimulate community activity and to facilitate coordination with various state and private agencies intervening in the community setting.

Results and Future Plans

By mid-1977, 222 health stations were serving 533,430 people in 2,960 communities of less than 500 inhabitants. Altogether, these communities accounted for 80.6 per cent of the scattered population residing in 120,622 dwellings that were not previously served by any regular health service. It is expected that by the end of 1977 coverage will have been extended to over 90 per cent of this scattered population. Therefore, plans for 1978-1980 call for expanding the health coverage provided to people in the more densely inhabited population centers.

As this timetable implies, a centripetal movement—from rural to urban areas—is envisaged for the expansion of services. The rapid progress made to date is the result of a policy decision granting top priority to increased health coverage, for which purpose the Legislative Assembly has approved the necessary funds and the Ministry of Health has provided ongoing support.

Extended Coverage Services

Within the context of this overall plan, extension of coverage has been operationally defined as provision of services to all family groups in all population centers pertaining to the country's marginal rural and urban zones. These services include: vaccination (BCG, DPT, measles-rubella, Td, and polio vaccines, and tetanus toxoid), first aid measures; epidemiologic surveillance for malaria; control of intestinal parasitoses, tuberculosis, and other communicable diseases; basic maternal and child health, nutrition, and family planning services; and environmental sanitation measures (provision of piped water, hand pumps, sanitary latrines, and improved housing).

Simultaneously, to support delivery of these services, health education is provided and vital statistics and other data are recorded which have an important bearing on the information, control, and decision-making process. Moreover, recognizing that health stimulates development and is a vital part of it, community participation is encouraged in order that residents may be effectively organized for integrated development.

The Urban Program

In accord with the National Health Plan for 1971-1980, a program for extending health coverage to the marginal population in periurban areas has been underway since mid-1974. This program has produced good results where implemented, and it is

expected that it will be operating in principal cities outside the capital city of San José by 1978.

It is felt that the task in these areas consists primarily of coordinating the work of the multiple agencies responsible for urban progress, welfare, and social services. Therefore, a group of personnel from the health sector and such other social sectors as community organization, housing, social security, family welfare, education, and community groups is now seeking to formulate a series of techniques and procedures that will help solve the problems of these periurban zones.

Concluding Remarks

Pursuant to existing policies—some of whose actions and effects have already been noted—Costa Rica's health sector now confronts the task of maximizing health coverage through activities that will succeed in substantially and permanently modifying the nation's level of health and health structure, so that all of the people can exercise their right to health.

In this regard, it is worth noting that important changes have occurred in Costa Rican health levels over the past decade, as indicated by the following information:

- Life expectancy at birth has risen to nearly 70 years.
- General mortality has declined from 8.6 deaths per 1,000 in 1965 to 5 per 1,000 in 1975.
- Infant mortality has declined from 76 deaths per 1,000 live births in 1965 to 37 in 1975.
- Childhood mortality has also declined, as indicated by comparison of 1969 mortality in the 1-4 age group (6 deaths per 1,000) and 1975 mortality in the preschool group (2 deaths per 1,000).
- Recorded deaths from communicable diseases declined from 3,920 in 1969 to 1,895 in 1975.
- Malaria incidence has declined to levels compatible with eradication.
- There have been no reported deaths caused by diphtheria, poliomyelitis, or typhoid since 1973, and there have been very significant declines in mortality from other diseases preventable by vaccination.
- There have been important shifts in the share of overall mortality attributed to different age groups. Specifically, children under 5 years of age and adults over 50 accounted, respectively, for 48.5 and 31.8 per cent of all deaths in 1965. As of 1975 these respective figures had changed to 27.6 and 51.9 per cent.
- Childbirths at health facilities accounted for 83 per cent of all childbirths in 1975, a year in which recorded maternal mortality was limited to 6 deaths per 10,000 births.
- As previously noted, before 1973 rural health coverage was provided by mobile units that made monthly visits to 240 communities and covered a total of 90,000 persons. As of mid-1977, free health services were being provided by permanent staff members at health posts serving 2,960 communities and over half-a-million beneficiaries.

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As these figures suggest, the alterations being made are not limited to extension of health coverage to rural populations; they also include activities supporting full participation by health system users, overall community development, and coordination of field activities with various national and local agencies—including the Costa Rican Social Security Fund, the National Training Institute, the General Social Welfare Institute, the Ministry of Agriculture and Livestock, the Ministry of the Interior, the Ministry of Education, the Costa Rican Demographic Association, and many others.

For the future, Costa Rica's health sector is developing a plan of action that seeks to provide complete health services to the entire population, regardless of where people are living and irrespective of their economic and social status. This is in accord with the National Health Plan, which has given priority to primary care. At present, therefore, the government is seeking the funds required to assure achievement of this basic goal, so that every citizen of Costa Rica may fully exercise his right to health.

SUMMARY

Costa Rica has approved plans and enacted laws aimed at integrated development of the country. With specific regard to the health sector, these measures envision extension of health coverage to the entire population. Ongoing activities directed at this goal obtain most (97 per cent) of their funds from the government, the remainder being provided by local communities.

As part of this process, a program for universalizing social security by gradually placing the entire hospital system under the Social Security Agency is now in progress. This is expected to pave the way for incorporating those people with low incomes into the social security system as government-insured beneficiaries.

In seeking extended coverage, maximum priority has been given to marginal population groups in both rural and peripheral urban areas. In accord with this decision, a rural health program is now being directed at those living in villages with fewer than 500 inhabitants. This program's basic unit is the rural health area, a region containing an average of some 130 square kilometers, 14 communities, 550 dwellings, and 2,400 inhabitants. The program's principal personnel are specially trained auxiliaries—nursing auxiliaries and rural health assistants. Their work, which includes periodic visits to every dwelling and encouragement of organized community participation, is supported through periodic visits by physicians, nurses, nutritionists, and other members of the health team.

By mid-1977 there were 222 rural health posts serving 80.6 per cent of the dispersed rural population. It was anticipated that by the end of 1977 coverage would be extended to over 90 per cent of that population, so that in 1978-1980 efforts could be focused on providing fuller coverage for people in more densely settled areas. Among the services currently provided through this program are vaccinations; first aid measures; epidemiologic surveillance for malaria; control of intestinal parasitoses, tuberculosis, and other communicable diseases; basic maternal and child health, nutrition, and family planning services; and environmental sanitation measures.

Complementing the rural program—and in accord with the National Health Plan for 1971-1980—a program to extend health coverage to marginal populations of peripheral urban zones began in 1974. It is expected that as of 1978 this program will be operating both in the capital city of San José and in other principal Costa Rican cities.

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(*2*) Costa Rica, Ministerio de Salud. *Programa Nacional de Desarrollo Social y Asignaciones Familiares.* San José, 1975.

(*3*) Costa Rica, Ministerio de Salud. *Plan Nacional de Salud, 1971-1980.* San José, 1973.

(*4*) Villegas, H. "Generalidades de la programación de la extensión de servicios de salud a las comunidades rurales de Costa Rica." PAHO/WHO Document No. D-HS/AMRO-5401-SI-No. 11, Lima, Peru, March 1976.