and inter-American systems, the bilateral agencies of developed countries, and the bilateral agencies in the countries of Latin America and the Caribbean is critical.

At the PAHO/WHO Level

The Governing Bodies of PAHO/WHO will guide and oversee the implementation of the plan and the preinvestment fund at the regional level, particularly in regard to the Organization's participation therein. The frame of reference for that participation is provided by the strategic orientations and program priorities for PAHO during the quadrennium 1991–1994 and by those resolutions relating to the plan or the fund that have been or may be approved.

The Director will adopt the measures necessary to fulfill the Governing Bodies' mandates. These measures will relate to the roles to be played by the PAHO/WHO Country Representations, the Regional Programs, the coordinations, and other Headquarters units in the implementation of the plan and administration of the fund. An Executive Secretariat and a Coordinating Group for the plan have been formed, made up of staff from various Headquarters units and reporting directly to the Director. To the extent possible, programming, monitoring, and evaluation of the process as a whole will be carried out through the mechanisms already available in PAHO's planning, programming, monitoring, and evaluation system (AMPES).

Health Services System in Dominica

Each year the Governments of the countries of the Americas, acting through their representatives in the meetings of PAHO's Governing Bodies, confer the PAHO Award for Administration in recognition of an outstanding contribution in the field of health services administration. The names of candidates are submitted by the Member Governments and the winner is selected by a three-member award committee at the first yearly meeting of the Executive Committee. The 1992 award committee, composed of representatives of Barbados, Cuba, and Honduras, unanimously selected Dr. Desmond O.N. McIntyre, former Chief Medical Officer, Ministry of Health of Dominica, as the 18th recipient of this award, which was presented on 23 September 1992 during the XXXVI Meeting of the Directing Council. The following is part of the text of Dr. McIntyre's remarks on that occasion, describing recent innovations in his country's health services system.

.... The Ministry of Health in Dominica has made significant progress, particularly since Hurricane David in 1979, in improving and expanding its primary health care services. In the aftermath of the hurricane, the government commissioned a task force (led by me) to prepare a health plan for the next 10 years. The approach adopted focused on development of an increasingly decentralized four-tier health system and community involvement in health services, training and placement of primary care nurses, development of local programming and a health information system, implementation of an islandwide immunization program, and a revolving drug fund for the provision of essential drugs throughout the country.

DECENTRALIZATION

Much innovation has occurred in the health services during the past decade. The first major step taken by the Ministry of Health [was] a decentralization of the health care system. The key strategy in the reorganization was a decentralization of personnel to enable functional health teams at the district level to respond to community needs.

In the old system inherited from the metropolitan country, each health professional in the district worked independently of his colleagues and reported directly to a supervisor at headquarters. The reorganization removed the vertical lines of command along which programs had previously been organized and managed and substituted a team approach at all stages and levels.

Seven health districts have been created, each one headed by a resident medical officer. The District Medical Officer is professionally and administratively in charge of all regular health services within the district and supervises the District Health Team. The district is the key level in Dominica's primary care system and serves as the base for local programming, management, supervision, and financial control.

A network of some 42 clinics existed around the island. It was thought that some of these clinics could be upgraded to act as a focus of primary care activities in the area they served. One health clinic in each district was upgraded and classed as a Type III Center, mainly [on the basis of] the activities carried out there, the category of staff at the center, and the population to be served by that facility. The remaining clinics were classed as Type I and II facilities. [Therefore, several small clinics were linked] up with a Type III center as the main referral center within the district. This was a new feature. Previously, patients were being referred directly to the Princess Margaret Hospital in the capital, Roseau. Now a system [existed within the district to handle nonemergency cases].

DISTRICT HEALTH TEAM

Effective primary health care delivery and integration of services at the community level in Dominica is being achieved by a team approach. [Early on] it was realized that additional in-service training would be needed to mold persons from different professional backgrounds into cohesive teams. Team-building exercises were conducted in all health districts. Members were trained to function together with a high degree of horizontal communication, understanding each other's role. [Despite the challenges involved in the process,] the decentralization of the services is now well established and multidisciplinary health teams well developed, with responsibility and authority for program execution.

This administrative innovation was buttressed by a number of village health committees. These committees, working in close collaboration with the health professional, became a dynamic framework for change in people's awareness about their health problems and appropriate measures to solve them. It has become a tradition in Dominica to have an annual consultation of district health teams with their village committees. At the consultation, district health teams review the progress in primary health care programs and set targets for the following year. [The consultation affords] community health workers the opportunity to discuss and share experiences in the implementation of primary health programs, [and its success is] due in part to the feeling of importance [and the motivation engendered in] the health teams and community members ... during this full day of activities.

PRIMARY CARE NURSE PROGRAM

One major obstacle to the government's policy to extend health service coverage to the rural population through primary care was the shortage of nurses. Health manpower development was, therefore, seen as a crucial factor. However, the Ministry of Health also was aware of the many constraints faced in bringing about such manpower development. For example, merely retaining health personnel can be a problem. Further, training and supporting vast manpower resources was impractical given government's financial difficulties at the time, and securing highly trained nurses to live and work in remote rural areas was virtually impossible.

As a deliberate effort to ensure that health personnel were available to provide adequate coverage in all health districts, a new nursing staff category—the primary care nurse—has been trained and introduced.... The program commenced in 1981 and was designed to prepare a second level nurse within a 2-year period. Traditional nurse education and training, which focused on disease-oriented care, has been replaced by a new program specially designed to prepare the primary care nurse to deal with health problems and needs of the community, particularly the rural population. The training program consists of 1 year general and community nursing, 9 months midwifery exposure, and 3 months internship period.

The program, which is unique to Dominica, can be viewed as a reflection of the commitment needed to achieve, within economic reality, effective health coverage of underserved population groups. Implementation of this program has encountered several challenges, including acceptance of this new category of nursing personnel by local and regional health workers, but the program is now well integrated into the health care system of Dominica. The 65 graduates of this program have been well received in the communities they serve, and patients as well as senior officials are satisfied with their performance and record of service.

LOCAL PROGRAMMING AND THE HEALTH INFORMATION SYSTEM

By 1983, with the nursing staff situation well under control, attention could be directed to improving district health service delivery through local programming coupled with the development of a health information system (HIS) to support it. The HIS developed had particular relevance to health services programming. Rather than [merely recording] health activities, the system was designed to be a managerial tool and supports the functions of planning, programming, monitoring, and evaluation.

To facilitate district programming, a catchment area was defined for each health clinic within a district. As a first step, in each village mapping, identification, and numbering of houses and individuals was completed by the local health team collaborating with local village councils and with assistance from members of the community. As a result, sketch maps now exist for each village, delineating boundaries for blocks (50–90 buildings within each block) and existing tracks and roads.

At the district level, the planning process is effected through local programming exercises conducted by the district health team. The programming exercises quantify the work to be done, using existing norms, goals, and standards, and reprogramming is conducted annually based on existing district data and staff experiences.

Material derived from this catchment area-based information system can be integrated into all activities by the health teams. In this way the health information system can provide support to the various health functions—for example, programming of services, management of the individual receiving care, epidemiological surveillance, monitoring extent of service delivery coverage, as well as management, monitoring, and control of health programs.

One outstanding feature of the existing health information system is an up-to-date population register of households and individuals maintained by household cards, identification numbers, and regular home visits. This permits very useful knowledge of all relevant target populations. It ensures that the health service maintains a constant barometer on the clientele it is designed to serve.

REVOLVING DRUG FUND

As part of the strategy to provide primary health care services to the total population, we were constrained by an inadequate system for the distribution of pharmaceuticals. There were shortages at central medical stores and in peripheral facilities. We were forced to make frequent small emergency purchases, paying very high prices. When supplies did arrive at the port it sometimes took six weeks to clear them because of cash flow problems, and the Ministry of Health owed a substantial amount of money to pharmaceutical suppliers.

A financial assessment of the health care system in Dominica during 1982 predicted that the new primary health care strategy would increase the demand for services and in particular for pharmaceuticals, thereby placing a greater burden on the government's financial resources unless new initiatives were explored. In this context the Ministry decided to establish a revolving drug fund (RDF) ... with a U.S. nonprofit agency providing technical assistance.

Management improvements to support the RDF were initiated. Financial and material accounting procedures were established to maintain control over the assets of the fund and to provide information to management for more cost-effective procurements, inventory, and distribution decisions.

The achievements in the management of the drug supply system have been impressive. Larger orders have been placed with generic suppliers, reducing unit cost and resulting in substantial savings. Improved procurement procedures and inventory control and better long-term planning have resulted in improved service delivery. Stockouts at central medical stores have dropped significantly. This system has served as a model for the development of an Eastern Caribbean Drug Service, now well established and serving the entire Eastern Caribbean.

We in Dominica have been faced with many problems in building and maintaining the services, and the solutions that have emerged sound plausible to us. Some of the results may be illustrated by the following facts and figures:

- In 1980 immunization coverages for DPT and polio were 32% and 30%, respectively. With development of our local health systems, coverage has gone up to over 95%.
- Coverage in antenatal care has reached 95% for all pregnant women, and 75% of mothers who delivered had postnatal examinations.
- The infant mortality rate has averaged 16 per 1 000 live births, a decrease from 28.1 in 1974.
- There was a dramatic reduction, at

minimal cost, in typhoid incidence: from 76.3 per 100 000 in 1981 (the highest in the Americas) to less than 10 per 100 000 over a period of three years.

Time will tell whether or not our experience is worth emulating. We do not claim to be a model for everybody but we think there is much to be learned by studying our example....

Declaration of Olympia on Nutrition and Fitness

The Second International Conference on Nutrition and Fitness met at the Olympic Athletic Center of Athens, Greece, from 23 to 25 May 1992. The conference was organized by the Center for Genetics, Nutrition, and Health (U.S.A.), the Hellenic Sports Research Institute (Greece), and the Spyros Louis Olympic Athletic Center of Athens; its sponsors included numerous private-sector companies, governmental agencies, and nongovernmental organizations. The conference was under the patronage of the Pan American Health Organization/World Health Organization, the Food and Agriculture Organization of the United Nations, and the International Olympic Academy/General Secretariat of Athletics of Greece. Some 780 registrants attended the conference, which featured the presentation of 32 scientific papers and 46 posters displaying results of recent investigations.[1]

On 26–27 May 1992, a group of program participants[2] met at the International Olympic Academy, Ancient Olympia, to develop a declaration of aims and objectives resulting from the conference. The following is a condensed version of their report and is published with the permission of the Executive Committee of the conference, which holds the copyright for this material.[3]

BACKGROUND

The 20th century has brought unprecedented changes in life-style and health patterns. Increases in the availability of wide varieties of food and reduction in the physical effort required for daily activities are prominent features of life in industrialized societies and among affluent groups in developing countries. These

[1]The proceedings of the Second International Conference on Nutrition and Fitness will be published in two volumes in the series *World Review of Nutrition and Dietetics* under the titles "Nutrition and Fitness for Athletes" (vol. 71) and "Nutrition and Fitness in Health and Disease" (vol. 72).

[2]Present were: Alexander Leaf (Co-chairman)—United States of America, Per-Olof Astrand (Co-chairman)—Sweden, Derek Prinsley (Secretary)—Australia, Nicholas T. Christakos—United States, Carlos Hernán Daza—PAHO/WHO, Uri Goldbourt—Israel, Demetre Labadarios—South Africa, Eleazar Lara-Pantin—Venezuela, Meke Mukeshi—Kenya, J. E. Dutra de Oliveira—Brazil, York Onnen—United States, Konstantin N. Pavlou—Greece, Eric Ravussin—United States (NIH), Victor Rogozkin—Russia, Artemis P. Simopoulos—United States, Stewart Truswell—Australia, and Clyde Williams—United Kingdom.

[3]For further information, contact Artemis P. Simopoulos, M.D., President, The Center for Genetics, Nutrition, and Health, 2001 S Street, N.W., Suite 530, Washington, D.C. 20009.