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Base Line for Monitoring and  
Evaluation of Health Sector  
Reform in Latin America and  
the Caribbean



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**I. METHODOLOGY FOR ESTABLISHING A BASE LINE FOR THE  
MONITORING AND EVALUATION OF HEALTH SECTOR REFORM**



## INTRODUCTION

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At the Special Meeting on Health Sector Reform (HRS) organized by PAHO, the following definition of HSR was adopted: “It is a process aimed at introducing substantive changes in the different structures and functions of the sector with a view to increasing the equity of its benefits, the efficiency in its management, and the effectiveness of its actions; and through this to achieve the satisfaction of the health needs of the population. It is an intense phase of transformation of the health systems based on situations that justify and make it viable.”

This document attempts to define the characteristics of the process of monitoring and evaluating of the HSR.

The purpose of the monitoring process of HSR is to both define and to analyze the process. Identifying which countries are pursuing this process, what stage of the reform they are at, and what this means in terms of content. For the monitoring of the processes of reform, the document proposes to consider two levels: i) dynamics of the process and, ii) contents of the process. The first one has to do mainly with the stages of HSR and the key actors in the HSR process. The second has to do with the strategies and actions taken.

The purpose of evaluating HSR is to determine at what point the reforms are effective in helping to improve the levels of equity, effectiveness and quality, efficiency, financing sustainability and community participation of the health systems and services. These five basic categories function as bench marks for achievement in the medium and long term. It also constitutes the conceptual framework for a series of variables and indicators selected to measure, in the short term, the results of the process.

In both cases, monitoring of the process, and evaluation of results, the variables to consider should be consistent, easily understood and in small number so that the total number of indicators are manageable. In addition, the indicators will be selected in accordance with criteria of:

- relevance
- availability
- reliability
- simplicity
- possibility of updating

In many cases it will be necessary to obtain the data in a disaggregated format by level of income, by geographic region or territory, and by ethnic group. When it is considered

absolutely necessary, data collection will be initiated for the construction of indicators currently not available for the present proposal.

The utilized sources of information were:

- Country reports prepared for the Special Meeting on HSR
- Indicators contained in the Core Data base of PAHO
- The Health Conditions in the Americas (HCA) 1998
- Evaluation of the application of the Strategy of Health for All in the Region.



# 1. MONITORING THE PROCESSES

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## 1.1 MONITORING THE DYNAMICS OF HSR

### 1.1.1 The design

Does the Health Sector Reform form an integral part of the plans and programs for modernization of the state, social development, and of the health sector itself?

Is there a national body responsible for the design of the HSR? Do they have sufficient political support and technical capability? How has this body acted in the process of HSR?

### 1.1.2 The negotiation

Does the Ministry of Health assume the leadership for negotiating the HSR process?

Which other institutions have participated in this process of negotiation? In which stage and in which matters?

### 1.1.3 The implementation

Is there a Plan of Action detailing the goals, dates and those responsible for the implementation of HSR?

Who will/has finance the studies, the pilot plans and the implementation of HSR?

### 1.1.4 The evaluation

Was there a defined set of criteria for evaluating HSR from its inception?.

If yes, what is the basis for the selection of criteria? If no, why has there been no selection criteria developed?

## **1.2 MONITORING OF THE CONTENTS**

### **1.2.1 Legal framework**

Has the Constitution and the basic health regulation (such as the Health Laws, Sanitary Codes and Regulations), been modified, or are to be modified? If yes, how was this achieved. If no, how do you propose to do it?

Has the Ministry of Health been reorganized? Have new structures/institutions been created which affect the sector? (e.g., authorities).

### **1.2.2 Righth to the health. Insurance**

What percentage of the population is covered by

- national health system
- social security system
- private insurance
- other

Are there specific, evaluated programs for increasing coverage, or are they being designed? If yes, what is the design and content of such programs?

Is there a basic set of benefits? For which groups?

### **1.2.3 Leadership**

Is the same unit responsible for leadership and design? If not, please explain.

Does the health information system deliver timely relevant reports to facilitate priority setting, decision making, and resource allocation?

Does the unit responsible for HSR have authority for both human and financial resources?

Is there an association or relationship between the unit responsible for HSR and environment policy formulation and monitoring ?

### **1.2.4 Separation of functions**

Are there separate agencies responsible for financing, insurance and delivery of services? Please list the agencies and briefly describe their operations.

### **1.2.5 Decentralization**

Have the roles been clearly defined for the different levels of authority- national, intermediate and local- in the management of the health systems and services?

### **1.2.6 Social participation and control**

Are there national and/or local boards? How do they function?

### **1.2.7 Financing and expenditure**

Are the information systems on financing are reliable and uniform among regions and territorial units?

What is the main source of health financing income? What method is being proposed for the future?

How are the public resources on health allocated by, levels: national, intermediate and local, and by services:

- Health Promotion and prevention.
- Hospitals
- Outpatient care.
- Human resources
- Goods and services,
- Drugs
- Investments?

### **1.2.8 Services provided**

What is the trend in hospital beds and outpatient care? (Data to be separate for public and private sector and territorial units)

Have new strategies, programs or new modalities of health care been developed to diversify the services offered, such as: same day procedures, pre-hospital care, home care, etc.? Yes, please explain.

### **1.2.9 Vulnerable groups**

Is there policy or programs directed toward the provision of care of vulnerable groups by income, specific risk, gender, or ethnic group?

### **1.2.10 Model of care**

What are the systems in place for the referral and counter referral of clients between the different levels of care?

### **1.2.11 Management model**

Are there development contracts or contract management in use in the public health delivery system?

Is there the legal possibility that the public establishments will purchase and/or sell services to third parties? If yes, what is the mechanism? If no, please explain the reasons.

### **1.2.12 Human resources**

Has HSR improved or increased the flexibility to plan, recruit, select, discipline, and discharge the human resource functions? If yes, how is it expressed?

Are there incentives to improve the productivity and quality of output of health care providers?

### **1.2.13 Accreditation, certification, quality and health technology assessment**

What institution has the responsibility for the accreditation of hospitals and health centers? What institution has the responsibility for the certification of health professionals? How do they function? Have their functions changed since HSR?

Has there been an increase in the availability of choice for the users between different providers of a single type of service? Specify.

How are new health technology and new treatment modalities evaluated and approved? By whom?

## 2. EVALUATION OF RESULTS

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### 2.1 EQUITY

#### 2.1.1 Equity in health status

Comparison of infant mortality by geographic region and by groups according to specific risk (maternal education), gender, ethnic group and urban/rural. To present trends. [BI '97, 19]

Comparison of maternal mortality by geographic regions and by groups according to specific risk (education, chronic disease, age, parity, pre natal control, birth care), ethnic group and urban/rural. To present trends. [BI'97, 23]

#### 2.1.2 Equity in coverage

Comparative analysis of the coverage of the 'Expanded Program on Immunization' in children less than one year by geographic regions and by groups according to specific risk, gender, ethnic group and urban/rural. To present by trends. [BI '97, 52-55]

Comparative analysis of the coverage of the Prenatal Control carried out by trained health personnel by geographic regions and by groups according to ethnic group and urban/rural. To present by trends. [BI '97, 50]

#### 2.1.3 Equity in access

Is there information available by levels of care and by geographic regions on:

- Rural population more than 1 hour from a health center.
- Urban population more than 30 minutes from a health center.
- Percentage of the most frequent surgical procedure requested that should wait unacceptable time before resolution according to local criterion.

The information should be disaggregated by ethnic groups, and should be presented by trends.

### **2.1.4 Equity in distribution of the resources**

Is there information by levels of care and by geographic regions on:

- Total expenditure per-capita health (BI '97, 48)
- Public expenditure per-capita health
- Physicians by 10,000 pop..(BI '97, 44)
- ICU Beds by 100,000 pop..
- Registered nurses per 1,000 pop..(BI '97, 45)

The information should be disaggregated by ethnic groups, and should be presented by trends.

### **2.1.5 Equity in the use of the resources**

Is there information by levels of care and by territorial units on:

- Outpatient consultations per 1,000 pop..
- Discharges per 1,000 pop..
- Surgical interventions per 100,000
- Percent Deliveries by trained personnel [BI '97, 51].
- ICU Discharges by 100,000 pop..

The information should be disaggregated by ethnic groups, and should be presented by trends.

### **2.1.6 Finance equity**

Are there barriers of access to basic and effective benefits? If yes, what steps are being taken to overcome this?

## **2.2 EFFECTIVENESS AND QUALITY**

### **2.2.1 Effectiveness and technical quality**

Percentage of health centers and hospitals with established and evaluated quality programs.

Percentage of health centers and hospitals with established and evaluated programs for client centered service

### **2.2.2 Effectiveness and perceived quality**

Percentage of health centers and hospitals with established Consumer Services.

Percentage of health centers and hospitals where patients' perception surveys are performed.

## **2.3 EFFICIENCY**

### **2.3.1 Efficiency in the allocation of resources**

Percentage of population with access to drinking water services. Trends and future plans. Information disaggregated by territorial unit and rural urban origin are requested. [BI '97, 13]

Percentage of population with access to sewerage services. Trends and future plans. Information disaggregated by territorial unit and rural urban origin are requested. [BI '97, 14]

Percentage of population with access to solid waste collection. Trends and future plans. Information disaggregated by territorial unit and rural urban origin are requested. [BI '97, 14]

Which intersectoral programs has been approved? (e.g. promotion of the self-care of health, education and control in order to prevent traffic accidents, education to prevent toxification from pesticides etc.) Please specify.

Have strategies and programs and relevant personnel been assigned to intervene in specific problems such as: eradication of diseases (e.g. acute respiratory infection), prevalent disease (e.g. the pre hospital care for traffic accidents), emergent diseases (e.g. AIDS)?. If yes, please explain.

### **2.3.2 Efficiency in the management of the resources**

Percentage reduction in infant mortality attributable to specific programs (e.g.: rooms of hospitalization equipped and staffed with personnel trained to handle acute respiratory infections).

Percentage of health centers and hospitals with standardized measures of activity.

Percentage of health centers and hospitals with the capacity to collect to third party payers, and that in turn, can expand the framework for income and expenditure utilizing revenue from this source.

Percentage of health centers and hospitals that have negotiated contract management to other.

Comparative analysis of:

- Average length of stay.
- Number of discharges by bed.
- Percentage of cesarean section / the total # of deliveries.
- Utilization of operating room.

Information disaggregated by unit which is territorial and expressed in trends.

## **2.4 FINANCING SUSTAINABILITY**

Is there information by levels of care and by territorial units on:

- Total health expenditure per capita and as proportion of the GDP. [BI '97, 48-49]
- Public health expenditure per capita and as proportion of the public expenditure and of the total expenditure on health.
- Fiscal health expenditure per capita and as proportion of the public expenditure in health, of the total health expenditure, of the public expenditure and of the GDP.
- Per capita expenditure on drugs

The information should be presented by trends.



## **2.5 COMMUNITY PARTICIPATION**

Percentage of health centers and hospitals with health advisory committees functioning.



**II. METHODOLOGY APPLICATION TO THE COUNTRIES**



# **BOLIVIA**

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# 1. MONITORING THE PROCESSES

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## 1.1 DYNAMICS OF THE PROCESS

The 1993-97 legislature reformed the Bolivian Political Constitution. Subsequently, several laws were promulgated and some of these affected the health sector.

The Law of Popular Participation transferred to the cities ownership of the infrastructure for the services networks in their territories and the financial resources (transferred with the population base) necessary to invest in, maintain and administer that infrastructure. The ownership of the resources generated by the sale of services was also transferred, with the requirement that they be used to operate the municipal health care network. Centralized financing of Human Resources and national programs was retained.

The National Health Secretariat (SNS)<sup>1</sup> was incorporated within the Ministry of Human Development by the Ministries Law of 1993. The SNS proposed a New National Health Model (NMS) aimed at adapting the health sector to the new legal framework.

The NMS was promulgated by Supreme Decree of 8 February 1996 and became the legal instrument for reorganizing the health sector. The NMS described the Public Health System (SPS) as decentralized and participatory, and as a political, technical, administrative, and popular instrument for the sector in combating existing poverty and health problems. It proposed that health policies and plans be framed as part of Human Development and that Health should coordinate its actions with Education, incorporating the variables of Gender, Ethnic Group, Generation, Urbanism, and the fight against poverty, as well as other variables. It established the structure and organization of the health system, management methods and the responsibilities of the various actors. It defined the National Health System as the set of public and private agencies governed by the SNS that carry out activities related to health, including the public health system, health services provided by social security, by private profit and non-profit agencies, by religious organizations and by traditional medicine. It also emphasized the concept of Shared Management with Popular Participation in Health.<sup>2</sup>

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1 Law No. 1788 of 16 September 1997, on Organization of the Executive Branch, has restructured the composition and function of the Ministries. Ministerial Resolution No. 83 adopts the new organic structure of the Ministry of Health and Social Welfare (former National Health Secretariat).

2 The 1997-2002 Action Plan of the new Government includes the Health fund, with policies on Basic Health Insurance, Policies on the Bolivian Epidemiological Shield and Strengthening of Short-Term Social Security. The agency responsible for management and coordination of the process of Sectoral Reform is the Manager of the Reform Project.

In addition, a Strategic Action Program (PAE) was established that included National Maternity and Childhood Insurance, Old Age Health Insurance, and Programs to

Eradicate Chagas' Disease, Control Malaria and Tuberculosis. There was no explicit mention of evaluation.

## 1.2 THE CONTENTS OF HEALTH SECTOR REFORM

As part of the reform of the Bolivian Political Constitution, various laws affecting the health sector were promulgated. These include the Administrative Decentralization Law (LDA), the Law on Popular Participation (LPP), the Pensions Law, the Law on Medications, Blood, Disability and Domestic Violence, and the New Model Health Law. The Ministries Law integrated the SNS within the Ministry of Human Development.

The Bolivian public health sector regularly serves 40% of the population. Thirty percent of the population has regular access to private care. The remaining 30% lacks regular access due to lack of supply, cultural factors, and economic, geographic, and functional inaccessibility. To a great extent, this population resorts to traditional medicine. Forty-two percent of the rural population does not use formal health services. Ten percent of the population is served mainly by NGOs at the primary care level.

Social security (SS) health coverage (SS) consists of eight Health Funds and two comprehensive insurance plans with a special program. The principal plan is the National Health Fund (85% of Social Security coverage), financed primarily by the Bolivian government. Benefits and the quality of care vary from one fund to another. In some cases (e.g., in the provision of services covered by maternity-childhood insurance), there is coordination with services provided by the SNS. Social Security health services are directed to medical treatment, cure and rehabilitation, and are concentrated in urban areas (only 4% of these services are in rural areas). The new Pensions Law produced changes in the workers' health subsector: Pension Fund Administrators (AFPs) were created to manage the professional risks (until the year 2001, when the Law anticipates the existence of specific Pension Funds to manage these risks).

Seventy percent of Bolivia's population is indigenous. The *Aymaras* represent 23.5% of the population. Ten percent of the indigenous population routinely seeks traditional medicine; 11% to 65% use western medicine. The *Quechua* represent 34% of the population, and have the worst health status. Among the *Quechua*, access to western medicine varies from 11% to 70% depending on the province (in some areas up to 85%). There are two provinces where 14% and 20% of the people respectively do not have access to any type of services, not even traditional medicine. The *Guarani* represent 2.8% of the population; only 9% has drinking water and 51.2% does not use health services.

The SNS was established as the regulatory agency of the health sector in technical and scientific matters. The formation of the Social Council and of the National Development Council created units for inter-secretarial coordination at the level of the Ministry of Human Development. An effort was made to strengthen Information Systems by creating the



National Health Information System (SNIS), an integrated and decentralized information system with several subsystems, incorporating appropriate technology, standardizing the data collection records and establishing data analysis committees. The implementation of this system has progressed, particularly within Social Security institutions.

The Administrative Decentralization Law (LDA) transferred the administration of human resources to the prefectural governments of each department, keeping financing centralized. In practice, decentralization occurred at the local level due to factors of production, so that health workers are centrally managed and financed and infrastructure and operating expenses are both local, intermediate, and controlled by users and the population.

The SNS has three administrative levels: i) national or central, producing policies, technical and regulatory standards in health matters; ii) regional, monitoring compliance with policies, strategies, and health programs at the departmental level and, iii) local, putting health actions into practice. Two types of management were defined: sectoral and shared.

Sectoral management has two agencies: the SNS (regulation, health system monitoring, guarantor of the right to health, runs national programs) and the Departmental Health Divisions (DIDES, nine of these throughout the country), answering administratively to the Departmental Secretariat of Human Development and the departmental prefecture, and technically to the SNS (implementation of policies, plans and programs, management of the departmental health system, adaptation of central standards to departmental specifics, preparation of departmental health plans and monitoring of equity, safety, quality, effectiveness, efficiency and universality in health care). The DIDES may have decentralized units for supervision, epidemiological monitoring, and direct support for the services network, the cities and the Local Health Divisions (DILOS). In some departments, these are called UGES (Sectoral Management Units). They are also known as Health Districts, inter-city coordinators, health subregions, etc.

Shared Management is conducted through the DILOS. It is geared to consensus-building, negotiation, and coordination for management and appropriate development of a city's health system. The DILOS are formed by the local government, a sectoral health representative (from the departmental prefecture) and a representative from the users or organized community. The management of each facility in the network is guided by the DILOS and supervised administratively by the city and technically by the UGES. The DILOS have autonomy to incorporate providers of traditional medicine within the public health care network and to establish framework agreements with NGOs and the Church (they must also do so with the Ministry of Finance and the SNS).

In addition, the LPP required the city to work with the population in preparing its economic and social development plans, including health care, and creates a popularly and independently elected agency to monitor implementation of the plan and the correct use of resources. This is known as the Monitoring Committee.

The Bolivian health system has six sources of financing: The General National Treasury (TGN), Cities, , Companies, Households, International Cooperation Agencies and

NGOs. In 1996, 4.1% of the public budget was allocated to health. Cities with fewer than 5,000 inhabitants must form a Municipal Pool to receive resources. Of total joint participation resources in 1994, 2.7% was allocated to health. For 1996, between 6% and 10% of municipal income is invested in health, although there are some cities spending up to 30%. The contribution from the TGN was allocated 85% to payment of wages and the remaining 15% to operating expenses. Families pay a fee in the decentralized public sector that basically finances drugs and supplies needed for diagnosis, treatment, and support of the services. A 1990 family budget survey revealed that health expenses represented 4% of total family expenses (ranging from 2.4% to 4.9%). Forty percent was used to buy medications.

In 1996, there were 2,279 health facilities (2,007 belonging to SNS, NGOs and the Church and 272 to SS) with 1.6 beds for every 1,000 people. Their distribution varies widely by Departments, Cities, rural or urban areas. In the for-profit private sector, 50% of laboratories do not have regular quality controls and a third have neither a license to operate or skilled personnel. The hospitals have organizational difficulties (only one of the hospitals in La Paz has achieved accreditation with minimum standards of care) and they are not incorporated within the planning and organization of the health system. Part of this supply is used by health insurances.

The Supreme Decree establishing Maternity and Childhood Insurance, in effect since 1996, specifies that pregnant women will be granted the required medical, surgical, and pharmaceutical care, basic laboratory tests and hospitalization during pregnancy, childbirth, the postpartum and in obstetric emergencies. Newborns and children under five will receive the corresponding medical, pharmaceutical, and hospital care, in cases of ADD and ARI with or without pneumonia. To provide this insurance, the city where they live should sign up for the Insurance through an agreement signed between the Municipal Government and the Departmental Secretariat of Human Development through the Departmental Health Bureau, standardized by the SNS. Financing for this insurance comes from the 3% tax-related joint participation granted to municipal governments.

National Old Age Insurance was created by ministerial Resolution in 1997. It is directed to those over 65 years of age, who will be provided the health care established in the SS Code, and priority and selective care is available in ambulatory and hospital services. This insurance is financed by the national welfare agency lottery.

In Bolivia, the health services are organized by levels of care. There are three levels: the first level includes the response capability of the individual, family, community, health posts, health centers, and polyclinics, including temporary hospitalization. The health center is the axis of this level and includes traditional medicine. The second level includes basic hospitalization and specialized consultation in district or basic hospitals. The third level is highly specialized medicine, either for medical visits or hospitalization (general hospitals, specialized and national reference institutes and technical support). In total, there are 29 specialized hospitals, and 81 general hospitals including social security and psychiatric hospitals.

The public subsector has fee schedules as a mechanism for cost recovery and self-sustainability of the system. Prevention, promotion and education activities, control and

surveillance of disease are free as are most primary care services. There are subsidized national programs for tuberculosis, malaria, immunization, diarrheal diseases, cholera, supplementary feeding with vitamin A and ferrous sulfate; the scope of these programs is limited due to problems of physical access to services.

Since the Decentralization Law, personnel have been transferred to the Departmental Prefectures and standards have been published for reorganization of the Departments. However, the phase of reorganizing health services networks by cities and staffing them continues. Professionals are sent to poorer or remote rural areas under a temporary hire system or in “one year in the provinces” arrangements; these involve much instability, high turnover and high training costs. There is a shortage of basic and mid-level technicians in rural areas, as there are no mechanisms or policies for human resource management. Due to the high turnover, more than 50% of trained staff is lost in less than two years. During the first half of 1997, a draft Supreme Decree was developed on reorganizing the national personnel administration system, defining the Basic Standards for Human Resources management at both the national and departmental levels. The supply of training for health workers in private universities has grown.

The accreditation of educational institutions is in development. The agencies for regulation of the professional practice of most health workers are being redefined. There is no information on accreditation of health centers, quality or assessment of health technologies. Since 1990, the Essential Drugs Program is operating and Good Manufacturing Practices Standards and an Inspections Guide are being developed.



## 2. EVALUATION OF RESULTS

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### 2.1 EQUITY

*In health status.* Payments are made to record births and deaths, and it is believed that they are significantly under-reported. It is estimated that barely 20% of deaths are certified at the national level. The only available data are those relating to reportable diseases or health problems targeted by treatment and control programs.

In the 1976 census, the Infant Mortality Rate (IMR) was estimated at 151 per 1,000 live births. In 1992, this fell to 75 per 1,000. The National Demography and Health Survey (1994) confirmed this trend and for 1996 a figure of 68 per 1,000 was estimated. The IMR is higher in rural areas (94 per 1,000) than in urban areas (58 per 1,000), and higher for boys than for girls. Rates vary from one department to another. In 1992, the IMR ranged from 52 in Santa Cruz to 118 in Potosí, and all departments show large differences between rural and urban environments (rural, between 74 in Tarija and 129 in Potosí, and urban, between 46 in Santa Cruz and Tarija and 103 in Oruro). The gap was accentuated in the period 1976-1992. In general, the IMR is higher among indigenous children. Diarrheal diseases and ARI occupy first and second place as causes of infant mortality.

The *Maternal Mortality Rate* was 390 per 100,000 live births for the period 1990-1994 (ENDSA 94). The differences persist between rural areas (524) and urban areas (274) and between regions (602 in the high plateau, 293 in the valleys, and 110 in the plains). In rural areas of the high plateau, the rate reaches 887. The leading causes of mortality are hemorrhages, toxemia, infections, obstructed labor, and abortion (27-35%).

*In coverage.* In 1996 the coverage of the Expanded Program on Immunization for children under one year was 82% for DPT3, 82% for polio and 98% for measles. The differences between departments persist, with generally less coverage in La Paz and Beni. Indigenous children have lower coverage rates.

In 1996, Prenatal Care provided by trained health personnel is available to 53% of pregnant women (in 1994 it was available to 26.9%, with an average of 1.97 visits per pregnancy).

*In access.* There is no information on how far the population is from health resources.

*In distribution of resources.* In the public sector there are 4.1 physicians for every 10,000 people (ranging from 2.4 to 6.8). In the SS sector, there are 9.6. There are 1.7 nurses for every 10,000 people. Most resources are in the center of greater economic development. About 80% of the specialists are concentrated in urban areas of the country and the tertiary level.

Around 20% of the country's cities do not have skilled health workers (care there is provided by community personnel). For the last 20 years, training has been provided for midwives, health workers and other community resources. A large number of these staff has been lost, although more than 5,000 midwives and extension workers are considered to be active in the system. With the implementation of universal insurance, the figures are changing in 1997. For example, institutional care for delivery has increased by more than 20% in the second half of 1996, and there are 1.5 beds per 1,000 inhabitants in the public sector and 1.87 beds per 1,000 insureds in the social security subsector.

*In the use of resources.* On average there were 0.63 visits/inhabitant per year in 1995 (including private sector institutions reporting) and 3.4 hospital discharges per 100 people (ranging from 1.5 to 5.4 depending on the department). The occupancy rate was 41% in 1996. Coverage for delivery with trained personnel was 28% (although other figures indicate 40% of deliveries without professional care and 57% of deliveries occurring at home).

*Financial equity.* The programs for free care (woman, child, the elderly) are programs to overcome financial barriers.

## 2.2 EFFECTIVENESS AND QUALITY

*Effectiveness and technical quality.* No information on health centers and hospitals with programs for quality control and sensitivity training?.

*Effectiveness and perceived quality.* No information on health centers and hospitals with patient care services and surveys of user perception.

## 2.3 EFFICIENCY

*In the allocation of resources.* The figures for drinking water coverage are very contradictory. According to the 1992 census, in the cities the water supply served 84% of homes, reaching 92% in some cities. The availability of health services was about 50%. In rural areas, access to water varied from 4% in the department of Beni to 33.6% in the department of Santa Cruz, with an average of 24% for the country. Population coverage, according to some sources, is 71% (58.2% according to others) with 88% urban and 43% rural (24% according to others). Only four of the major cities have wastewater treatment facilities. Industrial and mining wastes are not controlled.

The figures are also contradictory for the population covered by sewer and waste disposal systems: 62% (44.5%) nationally, with 77% in urban areas and 39% [text missing] (17% in rural areas).

Seven of the nine major cities have effective solid waste collection and disposal services with 60% coverage nationally. Currently being implemented is a second phase that

will cover seven medium-sized cities, improving coverage to 70% of the national population. The group with most problems is the dispersed rural population, or some

25,000 people. It is hoped that considerable coverage will be achieved for them by 2010 through self-sustainable micro-business trained in solid waste management.

With regard to inter-sectoral programs, inter-institutional work is being done on preparation of a National Profile of Chemical Substances. At the level of decentralized cities, coordinated intersectoral work is being done.

As for structural reforms and transformation of the SNS, excess staff have been transferred from the central level to the regions and growth in the number of health workers was achieved through negotiation with the Ministry of Finance.

*In the management of resources.* There is no information on reduced mortality attributable to specific programs. No information is available on health centers and hospitals with standardized measures of activity, although health information seems to be improving. There is no information on health centers and hospitals with third party collection capacity. There is no information on management commitments. Based on the latest available information, the average hospital stay is 5.8 days and occupancy is 41%.

## **2.4 FINANCIAL SUSTAINABILITY**

Total health expenditure per capita is US\$ 44 (4.3% of GDP), 30% of which is allocated to the local level. If international cooperation were not counted, per capita expenditure would be US \$ 37.5 or 4% of GDP. Public spending in health (TGN, cities, and SS) is US\$ 23 (2.5% of GDP). Financing of health expenditures is distributed as follows: SS 35%, households 32%, TGN 15%, international cooperation 15%, and cities 3%. Spending on medications is US\$ 8.5 per inhabitant per year (0.9% of GDP). The SS has very broad ranges of per capita expenditure, from 121 Bs in the National Health Fund to 1,009 in Cordecruz comprehensive insurance. They give an national average of 163 Bs (US\$ 40 per capita).

## **2.5 COMMUNITY PARTICIPATION**

No information on health centers and hospitals with functioning health councils.





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# **BRASIL**

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# **1. MONITORING THE PROCESSES**

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## **1.1 DYNAMICS OF THE PROCESS**

The process of Health Sector Reform (HSR) in Brazil was unleashed in the mid-1980s, has more to do with a political-ideological conceptualizations than to economic ones. The demands of the unsatisfied population were also evident. Its orientation, originated within the health sector, is the product of reflexive participation process between users and providers.

The great vocalization reached by the health sector involving the Ministry of Health (MOH), professionals, and representatives of civil society. The formation of privileged forums of discussion, negotiation, participation, and social control, has permitted constant enhancement and consistency despite the changes occurred in the management of various sectorial institutions.

In 1995, the proposal of State Reform by the Government incorporates the health sector in improvement plans of management efficiency and its regulation capacity.

In 1997, principal policy objectives for the biennium 1997-1998 were expressed in the Actions and Goals Plan. Its main points are to stabilize finance, decentralization and restructuring of the system, and control expenditures. These actions are oriented towards the prevention (with emphasis on basic care), improvement of the quality services, and to increase citizen participation (strengthening of the Health Councils).

The MOH assumes the leadership in the process of reform, whose operations rests with the Federal, State, and County managing levels, under the evaluation of the respective Health Councils.

In order to strengthen the development of the sector, a finance agreement between MOH, Inter American Development Bank (IDB), and the World Bank (WB) was signed. It incorporates a project (REFORSUS) which purpose is for physical and technological recovery of the network of services, and the development of management's capacity (at various levels) of the system.

Although the goals and term proposed is explicit, the corresponding evaluation mechanisms are not developed.

## **1.2 THE CONTENTS OF HEALTH SECTOR REFORM**

The Federal Constitution of 1988 and its consequences in the State Constitutions (1989) and Municipal Organic Laws (1990), as well as Organic Health Laws N°s 8.080/90

and 8.142/90, shape the legal framework for the current Unified Health System (SUS). It specifies the right to health as a duty of the State but incorporating what corresponds to each of its citizens and social organizations.

The State ensures universal coverage, the comprehensive nature of the assistance, and the equity in care, through mixed sectorial development. Its State services (in federal, state and municipalities areas) form the SUS and can be supported by private profit or non-profit institutions. The municipal level is in charge of meeting the demand of care for the population, having the technical and financial support of the state and federal levels.

The SUS is responsible for covering the promotional aspects and specific protection, as well as medical care of high complexity for all the population. In general, coverage in the area of recuperative actions at the primary, secondary and tertiary level reaches 75-80% of the population.

The private system is responsible for primary and secondary medical care coverage for approximately 20-25% of the population, with models of care like direct payment and institutions providing private insurance plans (group medicine and medical cooperatives with prepayment systems, health plans of companies and traditional health insurance).

The Ministry of Health, central managing body of the SUS, exercises the steering role of the health sector, sharing with the states and counties its decisions. The Ministry has defined operational strategies of the SUS:

- expand the process of decentralization of actions and services
- coordinate integrated network systems of high complexity assistance with regulation of the technological incorporation of laboratory networks of public health and health epidemiological surveillance
- coordinate the technical evaluation and financing of the SUS
- induce state and local managers to organize the system in their respective areas, respecting SUS autonomy.

A project to generate an Integrated Information Network for the Health (RIPSA) exists, to make it possible to improve the quality and opportunity of the information, which currently lacks updating and credibility.

The Ministry of Health participates in the National Board of the Environment, multi-sectorial and advisory instrument of the National System of the Environment, whose function is determined by the respective legislation.

The decentralization starts in 1987, with the implementation of the Unified and Decentralized System for Health, characterized by the division of the network into regions and the ranking of services. At present, the MOH leads the SUS at the federal level and the state and county levels are lead by the State and Health County Secretaries that are associated with:

- a) *Health Conferences*, with representation of all the professionals of the sector and the users, in order to evaluate the health situation and propose policy formulation directives at the corresponding levels.
- b) *Health Councils*, that act in the strategy formulation and execution of the policies, composed evenly by users and health services providers.
- c) *Tripartite and Bipartite “Intergestoras” Commissions*

The financing of the SUS integrates Social Security (which includes Health, Welfare and Social Assistance). The resources come from the budgets of the Union, of the States, of the Federal District and of the Municipalities, in addition to social contributions. All the resources transferred by the Union and by the State to the Municipality should be identified in the local health fund and utilized in the activities executed in the respective health plans. Between January 1997 and December 1998 an extraordinary social contribution will be carried out (CPMF) in order to increase the federal health budget approximately 30%. It is expected that this level of financing can be maintained after the extinction of the CPMF, through the identification of alternative sources of resources for the health.

In 1994 the equivalent to US\$ 53.02 per capita was spent on hospitalizations and ambulatory procedures. If vaccination and sanitation are taken into account, the value amounts to US\$67,7 per capita. The joint use of federal, state and county resources cause the value to increase to US\$98,00 per capita. At the county level, the health expenditure share with respect to the total was 8.5% for the same year. Up-to-date information on health expenditure by the user has not been available. In 1986 it was estimated that 36% of the respondents paid directly for medical care services making the percentage of rent groups greater by two minimum wages.

There are different types of services provided. 55% of the delivery services are public and 45% private. 65% of ambulatory services are public property. Hospitals are mainly private (72%) and selling its services to the SUS. External resources of the REFORSUS project will be applied towards the delivery of services infrastructure.

The comprehensive women, child and adolescent health care (with emphasis on the educational and preventive aspects) has been defined as a priority program. Other vulnerable groups identified are the elderly, the indigenous population and black population. The goal is to increase the coverage, improve the information systems, carry out death audits, and improve of the quality of care.

Since 1994 a family health program has been implemented as a basis for the model of care with health teams centered on family group care and great emphasis on health promotion.

The management model is governed by the Basic Operational Standards (NOB) of 1991, 1993 and 1996. State and local management conditions based on these standards are established and allows them to administer directly the resources transferred by the MOH. In addition to those mechanisms, two forums were instituted for interinstitutional negotiation: i) the Commission “Intergestora” Tripartite integrated on an equal basis by

representatives from the MOH and the representative body of the Assembly of State Health Secretaries (CONASS) and Municipal Health Secretaries (CONASEMS) negotiates the implementation and operations of the SUS proposals, and ii) the Commission "Intergestora" Bipartite, made up partly by representatives of the State Health Secretariat and the Assembly of Municipal Secretaries of State negotiates and makes decisions on the operational aspects of the SUS at State level.

The implementation of the new management model established by the NOB-96 has a significant progress with the approval of the minimum and maximum values per capita for the Basic Care Program (BCP). Those values correspond to \$ 8.93 for the minimum and \$ 16.07 for the maximum and will be transferred automatically to the States and Municipalities, in relation to five applicable criteria in the assessment index (infant mortality rate, vaccination coverage in children under 1 year, maternal mortality rate, implementation of National Information Systems and State or local budget for health).

In some States, a health inter-municipal consortium has been developed. Its objective is to bring together institutional resources existing in those municipalities in order to implement referral services that ensure hospital and specialized care to all the population.

The States can sign management commitments with institutions, transferring all the human resources and financial functions. In exchange, the institution commits to providing health promotion actions, to continually improve the quality of care and to report usage of the transferred resources.

The MOH has developed a series of projects aimed at training the health professionals and technicians regarding the Family Health Program and Management (managers for the various units of the SUS). This process is in full development and is coordinated with the training centers and the CONASS AND CONASEMS.

Through a negotiation between the different levels of management two payment systems are defined to providers: the Hospital Information System (SIH/SUS) and the Ambulatory Information System (SIA/SUS).

The performance assessment indexes exists as incentive mechanisms for efficient services.

The Brazilian program for 1996-98 for promotion of quality and productivity have the evaluation and certification of health services as one of its components. Some initiatives have been developed in order to improve the quality of services, especially in the hospital units management areas. The "Brazilian Institute of Hospital Accreditation" (1995) and the "Paranaense Institute of Hospital Accreditation" (1996) are the entities responsible for services accreditation.

Mechanisms exist for control and evaluation of high complexity and cost procedures for the SUS. The REFORSUS contains a broader view of these subjects.

The respective professional bodies are in charge of the authorization for professional practice. They have national coverage.

The Health Surveillance Secretary for the Ministry of Health regulates anything referred to drugs, equipment, cosmetic and cleaning products. In addition, the National Institute of Health Quality Control is the national reference laboratory and network made up by state and university institutions.

Health Technology Assessment strategies are being studied.





## 2. EVALUATION OF RESULTS

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### 2.1 EQUITY

*In the health status.* In accordance with the information available in the MOH, around 20% of the deaths are not registered, figure that increases to 50% in the Northern and Northeastern regions. On the other hand, in the South and Southeast the registry is close to 90% and almost 100% in the urban areas. In addition, 17.8% of the causes of death are ill defined (20.6% in the North and 42.1% in the Northeast). Use of demographic projections are made in order to define the specific trends of the total death rates and by age.

The infant mortality rate presents a downward trend in the last decade: 56 per thousand births in 1986 to 39 per thousand births in 1996. In the urban area, this variation was 51 to 32 per thousand births, while in the rural area it was 69 to 61 per thousand births in the same period. The maximum values were confirmed in the Northeast (64 per thousand births) and the minimums in the South (25 per thousand births) in 1996.

In accordance with the level of maternal schooling, infant mortality related to mothers with less than a year of study is of 93 per thousand births; for the mothers with four years of study, it is 42; for those with 5 to 8 years, it is 38; for those with 9 to 11 years, it is 28; and with 12 years of study, the rate declines to 9 per thousand births.

Post-neonatal mortality has been diminishing its relative importance in the urban area, but still represents two-thirds of the deaths in the rural area.

*Maternal mortality* has presented a downward trend between the years 1982 and 1991, to 156 to 114.2 per each 100 thousand births. Of these deaths, 44.5% were associated with a high reproductive risk due to deficiencies in the quality of care, percentage that amounts to 59.1 in the rural area. In 1989 the distribution of this indicator among the regions shows that the North presents a rate of 380 per 100,000 births; the Northeast 153; the Center - West 134; the Southeast 97 and the South 96, being the national average in that year with 124 per 100,000 births.

*In coverage.* In 1996, in accordance with PAHO data, the coverage of the `Expanded Program on Immunization` in children under a year reached 75% for the third dose DPT, to 79% for the third dose Polio and 100% for Measles.

In the decade 86-96 the coverage of Prenatal Check-up by physician or nurse increased from 74% to 85.6%.

No released information is available from territorial unit, ethnic group or levels of poverty.

*In access.* There is no available information regarding commuting times towards health care centers or waiting periods for the resolution of surgical interventions.

*In distribution of resources.* In 1993, the total per capita health expenditure reached US\$ 110.83. For 1997, the per capita expenditure was US\$258 (although the methodology of calculation and sources are very different). In 1989 the public health spending came to US\$95.6 per capita, with a great decline in 1992 of US\$ 62.71 per capita. Information with regard to the distribution is not available by territorial units, levels of care and ethnic group. For 1997 it is estimated 13.1 physicians per 10,000 people and 4.2 of *nurses*. In general, the professionals of all categories concentrate on the most developed regions and on the capitals of the states, being the North the most deprived region (5% of all professionals work there). In addition, the intra-regional distribution is very unequal. There is no available information regarding ICU beds.

*In the use of the resources.* There is no available information on the number of outpatient consultations per thousand people. With regard to the number of discharges per 1.000 inhabitants, in 1995 there were: for the group from 0 to 14 years 52.6; from 15 to 59 years 97.2; 60 or more 197.2. There is no available information regarding surgical interventions. In 1996, 95.9% of deliveries in the urban area were attended by trained personnel and in health institutions, reaching 78.2% in rural area. The general average for 1995 reaches 92%. There is no available information with regard to discharges of ICU.

*Financing equity.* The SUS guarantees, by constitutional mandate, universal coverage and the equity in the access to health care. However, concern exists with obtaining new sources of financing that will reduce the possibility of the population assuming the cost of health care.

## **2.2 EFFECTIVENESS AND QUALITY**

*Effectiveness and technical quality.* Numerous initiatives exist aimed at the improvement of quality maternal and infant care, as the "Hospital Amigo del Niño" (80 to date) and the project "Safe Maternity" (maternity accreditation). However there is no information concerning its coverage or evaluation status. Neither with regard to medical-patient personalized relationships programs.

*Effectiveness and perceived quality.* There is no available information with respect to the percentage of health centers or hospitals with information services to patients or surveys of user perceptions.

## **2.3 Efficiency**

*In the allocation of resources.* In 1995, the drinking water supply network covered 76.2% of the population (90.4% in urban area and 16.6% in rural area). The regional distribution shows greater coverage is available in the Southeastern region (95.5%),

followed by the South (93.1%), Northeast (83.5%), Center - West (81.9%) and North (69.8%).

59.9% of the population is connected to the *sewerage system* or to a septic tank (70.9% in urban area and 13.8% in rural area). In accordance with the regions, the greater coverage is present in the Southeastern region (87.1%), followed by the South (72%), Northeast (46.7%), North (45.5%) and Center - West (41.8%).

72% of the Brazilian municipalities carry out regular collection of *solid waste* (in urban area 86.7% and in rural areas 10.4%). Of the material collected, only 5.5% of the waste collected are subject to some type of treatment (composting, recycling, incineration).

A series of inter-sectorial programs geared to improve the health of the population have been defined: health community agents (45 thousand agents trained up to December 1996); Healthy cities; massive education for specific disease prevention such as AIDS; Solidarity Community Programs, whose final objective is the reduction of infant mortality (it coordinates the efforts of the health sectors, education, agriculture, sanitation and other governmental programs such as feeding and environment); educational campaigns directed at school children, with regard to basic sanitation and eradication of the Dengue vector; inter-sectorial work with the employers aimed at promoting breast-feeding; Program for Comprehensive Assistance of Women (PAISM), where organized groups of women, the Ministry of Justice and the National Cancer Institute are intervening.

Specific programs are being developed with reassignment of resources with externally financed support directed to: health of the indigenous populations of the Amazonas; drug abuse prevention; zoonosis control (Dengue, Malaria, Chagas, Yellow Fever); the elimination of Leprosy; the control of acute diarrheal disease and ARI through the Program of Comprehensive Assistance of the Child (that incorporates improvements of ambulatory treatment, the strengthening of breast-feeding and the training of community agents).

The mental health sector is promoting the expansion of comprehensive network of psychiatric primary care and implementation of social psychology assistance services at local level.

A program exists focusing on the management of sickle cell anemia in the black population and specific changes have been planned in the area of the disabled.

*In the management of the resources.* Information is not available regarding the health impact of some specific programs due to its recent implementation. An interest exists in promoting the use of standardized activity measurements but quantitative information is not available regarding the percentage of centers with purchasing power from third parties or to negotiate management agreements.

In accordance with a study conducted in 1995, the average days of stay was 5.5 for the children under 15; 5 for those from 15 to 59 years and 7.1 for 60 or older. The information on turnover of beds is not available. The percentage of cesarean sections has increased by 31.6% in 1986 to 36.4% in 1996, the maximum percentage is in Sao Paulo (52%), which has been related to the increase in the sterilization (4 of every 5 sterilization

are performed during the cesarean section). Information is not available regarding usage of the operating rooms.

## **2.4 FINANCIAL SUSTAINABILITY**

In 1994, the total per capita health expenditure amounted to US\$258, representing 7.4% of the GDP. The public health spending has been reduced from US\$ 96.5 per capita in 1989 to US\$ 62.71 per capita in 1992. No figures are available representing the total public spending percentage.

Figures are not available regarding per capita spending on drugs.

## **2.5 COMMUNITY PARTICIPATION**

The Health Councils are established in each government levels. The Federal level functions since 1990, State level are implemented in 26 States and Federal District and in the local level nearly 3,000 counties have active Health Councils.

**DOMINICAN  
REPUBLIC**

Revised 30 March 1998

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# 1. MONITORING THE PROCESSES

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## 1.1 DYNAMICS OF THE PROCESS

In January 1995, by presidential Decree, a National Health Commission (CNS) that is broadly inter-institutional in nature (33 public institutions, private, NGOs and union) was established with the express mandate to prepare in one year the proposals for modernization and sectoral reform (HSR). A Technical Coordination Office (OCT) was created with the mission of conducting studies for the design of such reforms. They produced a final document known as "Health, A Vision for the Future. Elements for a National Agreement," that did not succeed in creating the necessary consensus nor an operational proposal.

In September 1996, the Presidential Commission for Government Reform and Modernization was created and undertook numerous sectoral reform actions, including HSR.

In November 1996, a presidential Decree appointed a Project Preparation Administration (GPP), redefined the role of the CNS and the OCT by giving them an advisory capacity, and gave the GPP the responsibility for formulating projects for sectoral reform and for negotiating with financial cooperation agencies. The GPP obtained more consensus from the social actors, but did not succeed in leading all of them.

At the same time, a Commission appointed by the President in September, 1996 prepared a proposal for reform of social security.

In July 1997, a new presidential decree appointed an Executive Commission on Health Reform under the office of the President, eliminated the existing commissions, offices, and management, and appointed an Executive Secretary for the new Commission, with the express mandate to implement HSR actions. This commission is jointly presided over by the Technical Secretariat of the Presidency and the Ministry of Health (SESPAS). The appointment of this Commission makes joint reform of the health and social security sectors feasible. The Minister of Health has defined strategic lines and priorities and a program to develop some aspects of the reform has been established.

Resources are available from World Bank (IBRD) and IDB (IDB) loans to support reform process and plans for implementing them are being prepared.

In 1996, the Drinking Water and Sanitation Sector and, in 1997, the Solid Waste subsector began a process of reform and modernization following the outlines of the National Commission for the Government Reform and Modernization. In addition, the Dominican Social Security Institute (IDSS) has a reform and modernization commission and

is in the process of separating short-term (health services) and long-term (pensions) programs.

In addition, the National Food and Nutrition Plan was approved in 1995 and is now being implemented.

## **1.2 CONTENTS OF HEALTH SECTOR REFORM**

In 1995, the Congressional Health Commission prepared and discussed a draft General Health Law that had been developed in collaboration with broad sectors of civilian society. This draft has been ratified by the House of Representatives but not by the Senate as yet.

The Social Security Law is being submitted for national discussion although agreement has still not been reached with the private sector.

SESPAS is, as stipulated by the current Public Health Code the directing agency for health services as well as the agency responsible for applying the code. It provides advisory, health promotion and prevention services.

It is very difficult to obtain reliable information on coverage. Theoretically, coverage of the SESPAS is 80%, but it is actually 35% and varies by area, population and type of service. According to the survey on Health Services Utilization and User Satisfaction (ESU 96), more than 85% of the population utilizing child vaccination services, 60% of those utilizing prenatal check-ups and nearly 60% of those utilizing healthy child check-up program do so in services that are agencies of SESPAS.

Other institutions providing health insurance to the population are: a) the Dominican Social Security Institute (IDSS) covering 6.5% of the general population; b) the Armed Forces Health Services (ISSFAPOL), the Hotel Social Fund, the Assistance and Housing Institute for civil servants with wages below a ceiling and the self-administered Health Insurances (such as Teachers' Health Insurance) each of which cover 2% of the population; c) the private medical agreements covering 3.24% of the population (although all agreements and private health insurance together cover about 12.4% of women of childbearing age); d) the insurance companies at 2.51%; and e) Private Services.

Twenty-nine percent of the population has no access to public or private services. In 1992, the Legislative Branch endorsed a proposal on universal health services aimed at extending coverage, especially for the population entitled to social security, but this has not materialized. There is no consensus on priority treatments to be ensured for the entire population.

There is information on medical care and the health situation, but it does not meet the fundamental conditions to support decision-making. There is estimated under-reporting of about 40%.



All institutions, in varying degrees, have production and financing functions.

Since the end of 1996, the technical-administrative decentralization of institutions has been presented, with broad participation from organized communities being one of the fundamental elements in developing Modernization of the State. In 1997, the principal level of decentralization has been defined as the provincial level (Health Areas), strengthening coordination and linkage among the different state health entities, with greater administrative autonomy in hospitals and transforming the central level to a normative role.

There has been increased participation from community organizations and non-governmental organizations in the planning and direction of projects and programs at the national and local level. There is increased training for health workers and community leaders in local health system management and development. The healthy city initiative has been restarted. Since 1997, the Provincial Development Councils (CDP) have been promoted with the participation of the citizenry and provincial and municipal authorities. A system allocating the cities 4% of tax revenues has been started in order to increase their participation and strengthen their capacity for local government.

There is no information on financing by territorial unit and facility. SESPAS and ISSFAPOL are financed primarily through government contributions and user payments, donations, and international loans represent between 2% and 16% of operating funds (in 1988). The IDSS is financed by the government and by employer and employee contributions.

For SESPAS, the ratio between spending on tertiary and primary health services went from 8.7 in 1988 to 11.0 in 1992. In 1991, total spending, and direct spending per visit, bed, and discharge were between 60% and 70% lower than in 1980. Spending on Preventive Medicine fell from 18% to 16% and curative spending rose from 82.1% to 84%. Spending fell more in mental health, child protection, disease control, and drug programs.

In 1996, the number of hospital beds was 15,236, and 47.47% of these belonged to SESPAS, 11.20% to the IDSS, 38.04% to the private sector and 3.28% to ISSFAPOL. Of total health facilities, 54.7% belong to SESPAS, 13.8% to the IDSS, 31.25% to the private sector, and 0.22% to ISSFAPOL. In the private sector, the supply of beds increased by 24.8% between 1983 and 1990. The poorer regions have only 15% of the hospitals and 23% of the beds under SESPAS. In the private sector, 50.7% of the facilities and 69.5% of the beds are concentrated in just two provinces.

There are no criteria for targeting the most vulnerable populations. There is no efficient system of referral and back-referral.

There is no explicit policy on health spending and financing. The process of cost recovery by charging patients (recovery fees) in public facilities continues to be notable, as does the expansion of private plans (medical and insurance plans). A study of national accounts is being developed and is expected to improve capabilities for analyzing health spending.

SESPAS has no performance evaluation system to determine the quality of the work done by health workers. Proposals for reorganization and development of human resources include continuing education, the implementation of an information subsystem, and strategic analysis and planning.

The health professions are certified by guild-like entities. The National Medical Residence Board has recently been created to set up a single residence program and a system for accreditation, regulation and dissemination.

In 1996, SESPAS, along with the Private Clinics Association, began a participatory process for accreditation of hospitals and private clinics. However, they only have established some definitions and basic instruments and the process has not started. It also began in 1997 to review the legal and regulatory instruments available for the regulation and accreditation of public and private laboratories. The Drugs and Pharmacy Division is responsible for evaluating and registering medications as well as for inspecting manufacturing laboratories and pharmacies.

Appropriate technologies in basic sanitation have been achieved at the local level using participatory organizational models but such actions have not been institutionalized. There is no control or assessment of whether they are producing any impact. There is no information on evaluation of health technologies.

## 2. EVALUATION OF RESULTS

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### 2.1 EQUITY

*In health status.* Mortality figures vary according to the source, due primarily to under-reporting of mortality estimated to be 43.9% for the period 1990-95, which means that there are official figures and estimated figures.

The *infant mortality rate* (IMR) recorded officially for 1994 was 11.5 per 1,000 live births, without significant differences according to sex. However, the estimated figures were 47 per 1,000 live births according to ENDESA 96, and 42 per 1,000 live births according to CELADE/PAHO for 1995 (47.3 for males and 36.39 for females). For 1996, it was 35 per 1,000 live births, with 72% - 75% of deaths in children unrecorded. The rate would have fallen to from 66.2 per 1,000 in the period 1976-81 to 46.6 per 1,000 in the period 91-96. Regional variations lie between 45 per 1,000 in the National District and 67 per 1,000 in region VII. Depending on the mother's educational level, they may be still higher: 85 per 1,000 live births in mothers without education and 20 per 1,000 live births in women with higher education. The highest infant mortality rates are for mothers under age 20 (68 per 1,000).

In 1990, communicable diseases represented 30% of the IMR (14.8% intestinal infections and 7.1% acute respiratory infections). However, in 1994 a diminishing trend in deaths from diarrheal symptoms and vaccine-preventable diseases became evident. A broad "National Mobilization" has been decided on, improving care and establishing epidemiological monitoring and close monitoring of potentially high-risk live births. Thus, it is estimated that the IMR could be reduced to 25 per 1,000 live births by the year 2000.

The *maternal mortality rate* recorded in 1994 was 30.7 per 100,000 live births. However, 1990 estimates (last available data) put it at 110 per 100,000 live births. More recent estimates based on ENDESA 96 indicate that live births might be about 200 per 1,000 for the period 1983/94. Toxemia represents 29% of deaths, direct obstetric causes 21% and hemorrhages 20%.

*In coverage.* The Expanded Program on Immunization shows coverage for children under one year of 85% for DPT3, 84% for polio and 85% for measles in 1996. The private sector does not report the vaccinations it administers, but these are estimated at 10-20%. Geographical variations, considering municipal jurisdictions, do not show great variation and have not been analyzed by income level.

The coverage for Prenatal Check-ups is high: more than 97% of pregnancies receive two or more prenatal care check-up from physicians and 55% had some check-up by specialists in gynecology and obstetrics. Eighty-eight percent of pregnancies had 4 or more prenatal check-ups. Ninety-four percent of prenatal check-ups started in the first semester of the pregnancy.

*In access.* There is no information on how far the population is from health care centers in urban and rural areas. According to ESU 96, 73% of the population receives services whenever needed and more than 60% obtains them the same day, although they feel the waiting period for outpatient care, hospitalization and surgery is excessive.

*In the distribution of the resources.* Total health expenditure in the country was US\$76 in 1994 but the data are not broken down by territory.

In 1993, there were 16.86 physicians per 10,000 inhabitants. In late 1996, SESPAS had eight physicians per 10,000 inhabitants. The total number of graduate nurses is 1.62 per 10,000 inhabitants and 15.3 per 10,000 inhabitants for graduates and assistants (11.8 per 10,000 working in SESPAS). There has been a gradual reduction in enrollment for the nursing degree and actions are being taken to correct this situation (free enrollments). An upward trend is continuing in terms of the ratio between specialists and general practitioners. There is a strong imbalance in the distribution of professionals, who are concentrated in the major cities. To improve the geographical distribution of resources, an incentive payment policy for remote areas is being promoted in both SESPAS and IDSS.

*Equity in the use of resources.* In 1996, there were 0.8 outpatient visits per inhabitant and 0.3 emergency visits per inhabitant. The number of hospital discharges was 50 per 1,000 inhabitants (SESPAS data). Up-to-date data on the production of the IDSS and other public institutions are not available.

Ninety-five percent of deliveries in 1990-95 occurred in medical establishments, with variations among regions (84% in poorer regions and 98% in the most favored regions) and according to the mother's educational level (99% of women with university level and 82% of illiterate women). Of total births, 24.5% occur in private centers.

*Financial equity.* There are no concrete plans to overcome financial barriers hindering access to basic health services.

## **2.2 EFFECTIVENESS AND QUALITY**

*Effectiveness and technical quality.* There is no information on programs for quality control and sensitivity-training in health centers and hospitals.

*Effectiveness and perceived quality.* ESU 96 shows a negative appraisal of SESPAS hospitals and very good perception of private clinics in terms of waiting times and quality of care. The same survey revealed that 73% of the population interviewed solved their health problem when needed.

## 2.3 EFFICIENCY

*In the allocation of resources.* Solid waste collection presents problems of minimum coverage, irregular collection, and final disposal in the open air.

There are intersectoral programs such as the control of environmental health hazards, which is the responsibility of several institutions. In 1997, the Healthy Cities Department was created in SESPAS to coordinate local development actions, strengthen the Provincial Development Councils, and set up healthy cities to improve the general condition of the population. Another intersectoral program is the National Food and Nutrition Plan that integrates Agriculture, Education, INAPA, and the National Price Stabilization Institute.

Programs for *reallocation of resources* have not been developed for specific problems.

*In the management of resources.* There are no data on reduced infant mortality attributable to specific programs, on centers with standardized and operational measures of activity, centers with the ability to collect from third parties, or on the negotiation of management commitments among levels.

The only information in this area relates to occupancy of hospital beds at 49.6%.

## 2.4 FINANCIAL SUSTAINABILITY

Total per capita health spending was US\$ 76 in 1994, or 5.8% of GDP. Sixteen percent was allocated to the local level. Per capita spending on drugs was US\$30, adding up figures from the government's Essential Drugs Program (PROMESE based on a list of products), spending by IDSS and spending by ISSFAPOL.

There are no recent and reliable estimates on private health spending, which is about 70% of total spending. It is the poorer families that have higher increases in spending for medical care.

Although public spending in health increased in nominal terms, it fell in real and per capita terms in 1991 to below 1980 levels. There was a slight recovery between 1992 and 1995. As a percentage of GDP it has remained at between 1.1% and 1.9% of GDP, and according to the study of national accounts in 1996, amounts to 2.0%. As a percentage of overall public spending, it went from 7% in 1985 to 9.5% in 1990, fell to 7.8% in 1991-1992, and up to 1995 remained at about this last figure.

In the first half of 1997, there was an increase in social public spending and in health as a percentage of GDP, at the expense of the percentage allocated to infrastructure.

In 1994, current public health spending as a percentage of total public health spending was 52% and current public health spending for salaries was 59%.

## **2.5 COMMUNITY PARTICIPATION**

There are no data on the operation of health councils.

# **ECUADOR**

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# **1. MONITORING THE PROCESSES**

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## **1.1 DYNAMICS OF THE PROCESS**

The first Health Reform proposal (RS) was carried out by the National Modernization Board (CONAM), within the framework of the Modernization Law that included the proposed reform of Social Security for the period 1992-1996. The proposal established competition between public and private providers, eliminating compulsory subscription to public insurance (IESS) by formal workers.

The National Health Council (CNS), led by the Ministry of Health, prepared an alternative proposal, incorporating the opinion of all institutions in the public and private sector and civilian society, from the central to the local level. This proposal was directed toward organization of a Health System, wherein the Ministry of Public Health (MPH) would fulfill the functions of a regulatory and leadership agency responsible for public health actions. Also suggested was the need to develop health insurance to expand medical care coverage based on the principles of equity and solidarity, and decentralized management.

In June 1993, the Project to Strengthen and Expand Basic Health Services in Ecuador (FASBASE) began in 41 areas defined as having priority. This project is based on the Primary Health Care strategy, promoted by the MPH since 1988. In 1995, a component directed to improving emergency services was included in the project in urban areas. In mid-1997, design work began on a new project for the Modernization and Development of Comprehensive Health Services Networks (MODERSA), as part of the HSR proposal. Both FASBASE and MODERSA have financing from the World Bank.

The suspension of CNS operations hindered health sector reform. Due to budget constraints, the idea of recovering costs in public hospitals was taken up again and the attempt was made to transfer hospital services to the cities, a measure that was suspended due to widespread rejection by the society.

In February 1997, the transition government attempted to take up the HSR process again but faced conflicts arising from wage demands that were resolved in July of that year.

In May 1997, there was a referendum that resulted in the resolution to call a Constitutional Assembly at the end of the year. One of its purposes was to make state reform viable, including reform of the health sector.

## **1.2 THE CONTENTS OF HEALTH SECTOR REFORM**

Since late 1996, the Special Health Commission of the National Congress has been analyzing proposals regarding the health sector. Draft legislation is being studied with

respect to regulation of private enterprises in health and prepaid medicine, and decentralization and popular participation, establishing the participation of cities, professional boards, and community organizations in health actions.

As a whole, the public sector covers about 59% of the population, primarily in hospital care. It is estimated that the MPH covers 30%; Social security 18%; the Welfare Board (JBG), the Society to Combat Cancer (SOLCA) and other private nonprofit agencies 10%; the Armed Forces and the police 1%; several for-profit private agencies 10%. The remaining 30% of the population receives no regular formal medical care.

The official government agency responsible for formulating policies and standards in the area of health is the MPH. However, each agency in the sector operates independently and without coordination, formulates its own health policies, handles its own financing, defines its modality of care and its beneficiary population. This has prevented the MPH from performing a regulatory role in the sector. In fact, up to July 1997 there was no national health policy applicable to the sector. The Ministry of Health has policies and plans that guide institutional action, but their consistency with epidemiological realities and the distribution of resources is debatable and most decisions have been precarious due to the governmental instability.

The MPH is the oldest provider of comprehensive health services and has the broadest service network, with more than 50% of the total installed infrastructure in the country.

Social security is headed by the IESS, which serves formal workers through individual affiliation (28% of the country's Active Employed Population) under what is known as General Insurance. Family affiliation of rural workers is handled by Rural Social Security. The coverage under this insurance includes social benefits (death, disability, old age) and primary medical care.

The Armed Forces and the Police have ambulatory and hospitalization services for members and their families, and operates under the health insurance modality.

The JBG and the Children's Protective Society of Guayaquil care for the health of the population with medium and limited resources in the coastal region. SOLCA provides specialized diagnostic and treatment services in the country's major cities. The Red Cross handles emergencies and regulates the blood banks.

For-profit private organizations have hospital facilities of varied complexity, physician's offices, and auxiliary diagnostic and treatment services for those who are able to pay. There are private insurers and prepaid medical organizations. A significant percentage of the population, mainly those with limited resources, especially in rural areas, resorts to traditional medicine.

Attempts have been made to promote decentralization through the "health areas" that are the basic unit of organization and local management of MPH health services. The 180 areas in the country include health centers and subcenters, and cantonal hospitals that are the first reference level for the Local Health Systems (SILOS). It is a scheme for technical decentralization and deconcentration of some administrative actions, programming, and

budget implementation. The health areas carry out their intervention plans according to their response capability, based on PHC, and with a strong community participation component.

In addition, the IESS has a scheme for decentralization of administrative aspects in large regions.

Each institution has its own particular source of financing, depending on the population it serves. The MPH is financed with resources from general taxes, income from oil exploitation, rates and special contributions and contributions from international cooperation agencies. The primary source of funding for IESS medical care is employee and employer contributions which are equal to 3.4% of payroll. Economic constraints have led to a proposal to increase contributions to 6% or 8%. This would increase current income by 50% and make it possible to guarantee financing for the health services.

General Social Security is financed in three parts with 1% of payroll. This system is subsidized by the IESS General Program and by the government. The other public institutions receive state contributions and contributions from various other sources. The private system is financed through direct payment from families, the primary source of financing in the sector.

In 1993, 65% of health spending was carried out by the private sector and 37% was carried out by the public sector (17% by IESS, 15% by MPH and about 4% by other institutions).<sup>3</sup>

In 1995, of the 3,462 health facilities, 86.3% were ambulatory. Of these, 51.4% belonged to the MPH; 32.6% to the IESS and Rural Social Security; and the remaining 16% to other institutions in the sector. Of the total of 474 hospitals, 26% belong to the MPH and 62.7% to the private sector. Modifications in the services provided are not made explicit.

Health services provider institutions follow their own policy guidelines, without coordination among them. The model of care is “medicalized,” directed to curative medicine and with a growing trend toward the use of high-cost technologies. It is expected that this will change as a result of the FASBASE proposals on primary level benefits, and that an integrated services network will be achieved as proposed by the MODERSA project.

With respect to resource management, it should be pointed out that Executive Decree 915 (Official Record No. 391 of 5 March 1981) now in effect establishes that basic health services in the MPH facilities are free. In 1994, a Decree on Hospital Co- and Self-management was issued authorizing charges in MPH hospitals. During the current administration, the Minister of Public Health has issued a provision prohibiting any type of cost recovery in MPH health units until there are Regulations for the above-mentioned

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<sup>3</sup> Echeverría, R. El Proceso de la Reforma del Sector Salud en el Ecuador 1992-1997: Aportes para el debate. Document prepared for CEPAR-Project Analysis and Promotion of Health Policies, under the auspices of USAID. Quito, July 1997.

Decree. In practice, however, the hospitals collect on the basis of rates established by their administrations.

With the support of foreign agencies, an effort is being made to organize a program to Improve the Quality of care in the health services and to plan training in the area of management. The National University of Loja is developing a continuing education plan in coordination with the health and education sector. The MPH conducts training for personnel in the application of technical standards and systematic activities.

The Health Control Bureau, which answers to the MPH, is in charge of regulating health services in general, recording degrees and controlling the practice of university professionals in the health sciences.

The National Program to Improve Quality in the Health Services has since 1995 developed activities aimed at improving the quality of care. Currently, interventions have been targeted in seven provinces, on a priority basis. Within the process of Strengthening the provincial level, the accreditation process will start in two hospitals in the city of Guayaquil, as actions aimed at improving health conditions in large cities.

There is no efficient regulation of the drug and health technology markets.

## 2. EVALUATION OF RESULTS

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### 2.1 EQUITY

*In health status.* For 1995, under-reporting of total mortality was estimated to be 13.5%--15.2% for men and 11,25% for women. The figures provided by the Ecuadorian Statistics Institute (INEC) are higher for 1990-95, indicating under-reporting of 25.8% in mortality for men and 23.7% for women. This would explain the paradox that provinces with higher levels of poverty and unmet needs have lower mortality rates.

*Infant mortality* recorded by the INEC and corrected with late reporting of births was 20.4 per 1,000 live births in 1995, with a downward trend observed since it was 28.1 and 37.4 per 1000 live births in 1990 and 1987 respectively. For 1994, mortality estimated by the ENDEMAIN-94 was 44 per 1000 live births. For the period 1984-94, the ENDEMAIN-94 estimate in the mountain and coastal provinces was 49.8--45.5 in the mountains and 50.8 on the coast. The leading causes of death were respiratory and diarrheal diseases.

*Maternal mortality* recorded by the INEC in 1995, and corrected for late reporting of births, was 62.7 per 100,000 live births, while the ENDEMAIN-94 estimate was 159 per 100,000 live births. The average for the 5-year period from 1991 to 1995 was 101.1, with broad regional differences. In three provinces the rate exceeds 200 and in two provinces the rate is about 75. Among adolescents, mortality from maternal causes, although it has declined as compared to 1990, is 76.8 per 100 thousand live births (1995).

*In coverage.* The coverage of the Expanded Program on Immunization has increased since 1990. The coverage of DPT3 immunization increased from 75% to 88% in 1996; the coverage of the third Sabin dose rose from 77% to 89%, and coverage for measles immunization rose from 67 to 79%.

Information on the coverage of Prenatal Check-ups carried out by trained health personnel is not available.

*In access.* There is no information on travel times or waiting lists for surgical treatment.

*In the distribution of resources.* For 1995, the number of physicians per 10,000 people was 13.3. This was higher in the island and mountain regions (16.6 and 16.0 respectively) than along the coast (11.5) and in the Amazon (8.1 physicians per 10,000 population).

The national availability of nurses per 10 thousand people is 4.6. Of these, 68.5% are concentrated in the country's most developed provinces.

Total availability of beds amounts to 1.6 per 1000 people, and has remained stable since 1988. There is no information on ICU beds.

*Equity in the use of resources.* At the national level, there is a recorded rate of payments of 50.9 per 1,000 people in 1995, with variations between regions and provinces ranging from 78.0 in Pastaza to 21.3 in Sucumbíos (both provinces are in the Amazon region). The variation between regions is 53.9 in the mountains, 49.6 along the coast, 43.8 in the Amazon, and 55.0 in the island region.

The percentage of deliveries attended by trained personnel was 66.5% in 1995, but with differences ranging from 81.4% in the urban area to 34.6% in the rural area. These differences are even more marked if Guayaquil (96.6%) or Quito (95.2%) are compared to the rural sector along the coast (41.1%) and in the mountains (33.1%).

Information on ICU payments and surgical interventions is not available.

*Financial equity.* No information is available on efforts to overcome the economic barriers impeding access to health services.

## **2.2 EFFECTIVENESS AND QUALITY**

*Effectiveness and technical quality.* There is no information on health facilities with established quality control programs or sensitivity training.

*Effectiveness and perceived quality.* There is no information on health facilities with patient care services or facilities that conduct surveys of user perception.

## **2.3 EFFICIENCY**

*Efficiency in the allocation of resources.* In 1996, the coverage of drinking water services was 69.7% but was higher in urban areas (80.6%) than in rural areas (50.9%).

Sewer services were available to 41.7% of the population in 1996. This and this was higher in urban areas (61.4%) than in rural areas (10.4%).

The national average for solid waste collection is 51.6%, with 69.6% in urban areas and 7.5% in rural areas. Wastes are usually deposited without conditions for health safety.

The National Basic Rural Sanitation Plan (SANEBAR) was established and is expected to achieve universal rural coverage by the year 2005.

Inter-sectoral actions are being carried out in the field of domestic violence. In 1995 the Law against Violence to Women and the Family was approved and the first Women's Commissariat was created. Five Commissariats are currently operating and in 1998 12 more Commissariats will be created in various cantonal seats in the country. Violence against women and the family has still not been recognized as a public health problem.

In 1997, seven of the 205 cities are participating in the Healthy Cities Strategy. In addition, in Cuenca there is a participatory proposal to convert Azuay into a “healthy province.” Specifically, the cities of Riobamba and Tena have undertaken actions to become healthy cities. In five cantons of the province of Loja, a “Healthy Spaces” project is being developed with financial support from the Embassy of the Netherlands and technical management from PAHO.

There are programs in development for eradication of disease by the MPH: tuberculosis, skin diseases (leprosy, leishmaniasis), tropical diseases (malaria), Chagas, dengue, onchocerciasis, rabies, AIDS, and STDs. The program for control of hypertension has been continued.

The Integrated Management of Childhood Illness (IMCI) strategy focuses on the management of children with ARI and diarrhea.

There are food assistance programs: “Promotion of dairy development modules in the area of integrated rural development;” “Primary health care and improvement of basic sanitation” for a series of provinces, directed to pregnant women, infants, and children; “School placement to improve teaching in priority areas;” “Comprehensive support for the urban fringe sector of Quito,” directed to women.

*In the management of resources.* There are no data on the percentage reduction in infant mortality attributable to specific programs or on health centers and hospitals with standardized measures of activity.

There are no quantitative data on cost recovery by public hospitals. Nor is there information on negotiation of management commitments at other levels.

In 1995, the average hospital stay recorded was 5.9 days. In 1996 the percentage of cesarean sections compared to total deliveries was 34%; this figure is a third higher than in the previous year (although the figures are partial and incomplete due to recording problems).

The performance or turnover of beds in 1995 was 33, with the highest figure in the province of Sucumbíos (66) and the lowest in the island region (24). This figure was 32 in the mountains, 33 along the coast and 39 in the Amazon region. Information on the use of operating rooms is not available.

## 2.4 FINANCIAL SUSTAINABILITY

The evolution of health spending as a percentage of GDP between 1985 and 1993 is shown in the following table:

subsector	% of GDP		
	1985	1990	1993
public	1.9	1.89	1.86

private	2.5	3.3	3.3
total	4.4	5.19	5.16

Source: Echeverría, R. El proceso de reforma del sector salud en Ecuador 1992-1997: Aportes para el debate. Quito, 1997.

The studies conducted on health spending indicate that poorer homes spend the most on health in percentage terms, although in absolute values health spending increases with income.

## 2.5 COMMUNITY PARTICIPATION

No information is available on the percentage of health centers and hospitals with operating health councils.



# **EL SALVADOR**

Revised 30 March 1998

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# 1. MONITORING THE PROCESSES

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## 1.1 DYNAMICS OF THE PROCESS

In the context of the Program for Public Modernization of the Government, the Development Plan for the 5-year period 1994-1999 attempts to carry out a thorough reorganization and modernization of the governmental sector.

From this perspective, the Ministry of Public Health and Social Welfare (MSPAS) has defined as a General Health Policy the need for a modern health system responsive to the needs of the population on a comprehensive basis. To carry this out, the following strategic components have been established:

- Reorganization and restructuring of Health Sector institutions: including a functional restructuring of the MSPAS allowing it to adopt a normative, regulatory, facilitating, and financing role.
- Decentralization of health programming and administrative systems: with the transfer of planning, administration, purchasing, and resource allocation functions for health services delivery from the central level to other public or to private entities.
- New modalities for health services delivery: designed to guarantee access to a basic package of free health services for the entire population.
- Adaptation of the legal framework: to permit effective fulfillment of the regulatory role by the MSPAS, and guarantee health protection for people and the environment.
- Social participation: understood not only as a passive agent contributing to the reduction of spending on benefits, but as an essential strategy for production in health.

These actions are aimed at structuring a National Health System, conceived as all public and private actors, under the directing role of the MSPAS, delivering comprehensive health services to the entire population.

The coordination and management of the Sectoral Reform process is assigned to a division attached to the Planning Department of the Ministry of Health.

Short- and long-term plans have been designed, as well as pilot programs and studies. Phases have been proposed for the implementation of HSR, starting with implementation of the Basic Health Care Package at the primary level, the Expanded Basket of Health

Services at the secondary level, and the development of an information campaign on the process of reform.

Financial support and technical cooperation come from a sizable number of international agencies and governments. The principal contributions come from Sweden and the Netherlands, from the World Bank and the FCI.

From the beginning of the HSR process, criteria and indicators for evaluation and monitoring were defined in terms of both process and impact.

## **1.2 THE CONTENTS OF HEALTH SECTOR REFORM**

The legal framework in which the HSR is being carried out is provided by the General Health Policy. In the health code, regulatory functions in health are assigned, with responsibility shared between the Ministry of Health and the Senior Public Health Council, but there is no adequate regulation to make the legal provisions effective.

The Ministry of Health covers 80% of the population but not everyone uses these services, primarily due to geographical barriers.

Social security covers 15% of the population (public and private workers and their beneficiaries). Some institutions or companies have their own mechanisms to provide coverage to workers and their beneficiaries, for example, the National Telecommunications Association (ANTEL), the National Electric Lighting Company (CEL), Welfare, and Military Health.

The private subsector, through its establishments at the three levels of care, covers close to 5% of the population.

New modalities of health services delivery designed to ensure access to a free basic package of health services for the entire population have been implemented. These are primarily preventive and basically curative, and involve active community participation. These actions at the primary care level are supplemented by a package of essential clinical services, with access guaranteed by the MSPAS, including secondary health care services: deliveries, general surgery, ambulatory treatment and hospitalization in the four basic specialties, treatment of emergencies due to injuries and poisoning, treatment of tuberculosis and other acute infectious diseases referred by the primary care level.

Access to these benefits will be through state subsidies for the indigent and through direct fee for service and payment for a compulsory minimum health insurance by the rest of the population. It is expected that the costs of the basic and expanded health baskets and financial requirements to achieve equity in benefits and subsidies to the poorer will be updated and established.

The MSPAS is responsible for assuming the guiding role in the sector.

With regard to information management, the Data Collection System has been set up at the departmental level, automating the Epidemiological Surveillance System and providing support with the development of a training strategy in data analysis. The Report Network incorporates the penal centers, the NGOs, Social Security, and private hospitals. In addition, the Management Information System has been implemented at the primary (Health Units and Posts) and secondary levels in most departments, in the expectation that it will become a tool for timely and appropriate decision-making.

The unit responsible for HSR does not have authority regarding human or financial resources. Since 1995, the MSPAS, through the Human Resources Administrative Division, has been performing the role of regulating personnel actions. In addition, a ministerial representative participates in the Inter-institutional Human Resources Development Group (GIDRHUS) made up of the universities.

The MSPAS coordinates with other institutions to share in proposals for National Plans on Ecology and Health, and the unit responsible for sectoral reform is involved in the formulation and monitoring of environmental policies.

In an attempt to separate functions, it is hoped that it will be possible to transform the social welfare system into a private and decentralized entity, allowing the Salvadorian Social Security Institute (HSSR) to devote itself entirely to providing health coverages.

As a part of the process of sectoral decentralization, the five old Regional Administrations of the Ministry of Health were turned into 18 Departmental Bureaus, and 15 Health Centers were turned into hospitals.

A technical pilot plan is under way to promote the strategy of technical-administrative delegation of the primary care facilities by awarding these facilities to NGOs and private organizations. In the Health Unit of the City of San Julián, services delivery is the responsibility of the Salvadorian Health Foundation (FUSAL).

The aim of promoting local development of the cities is to decentralize the sources of production and decentralize basic services using social participation modalities. In that context, health committees at the cantonal and municipal levels prepare and carry out activities under the guidance of health workers, lay midwives or other health agents. They also participate in healthy market strategies, health in the community, and “health fairs.”

At the local level, inter-sectoral committees are being strengthened and participate in local programming of activities in the health units.

At the hospital level, Boards of Trustees have been developed.

Information systems in the area of financing are reliable and homogeneous. The MSPAS has as its sources of financing: i) the governmental contribution, which in 1994 was 76.1% of total admissions (72.4% in 1989.4 and in 54% in 1992); ii) international cooperation, with 19.1% (42.5% in 1992) and, iii) the funds generated by Health Facilities (Boards of Trustees and Special Activities Funds) with 4.8% participation (had been 3.3% in 1989 and 3.5% in 1992).

Thirty-three percent of the Ministry of Health's budget is allocated to preventive services (including drugs and supplies); 59% to ambulatory and hospital services (including drugs and supplies); 6% to the secretariat, and 2% to investments.

Social security allocates 20% of its budget to drugs; 2.4% to surgical and laboratory medical equipment; and 76.6% to salaries and other expenditures.

As a way to improve the services provided, the number of Health Units has increased, and the number of health posts has decreased. The response capacity of hospitals has been increased by incorporating physicians from the four basic specializations and providing high-tech biomedical equipment. Changes have also been made in the procedures for delivery of services in hospitals and health units with greater demand: for example, stepped appointments and more hours open to the public.

The HSSR has promoted the establishment of Community Clinics trying to fulfill a front line function similar to that offered by the MSPAS.

The newly developed modalities of care include ambulatory surgery, bronchial health, and a wounds and ulcers clinic, among others.

Impetus is being provided for government sector measures to protect adolescents and the elderly, supported by the non-governmental sector. At the same time, child care has been strengthened, especially in the area of vaccine-preventable pathologies, and pregnant woman (in an effort to reduce maternal mortality, emphasis is being placed on training lay midwives and on the importance of institutional delivery).

Financial functions have been decentralized to the departmental levels through allocation of funds. Budgetary autonomy has been granted to 15 former health centers, now hospitals, and the design is being proposed for cost recovery mechanisms as alternative financing for the sector.

An effort is being made to propose internal competition mechanisms for the allocation of financial resources in order to "reward efficiency and penalize inefficiency."

Consideration is being given to designing mechanisms making it possible to involve the private sector in the purchase and sale of direct or indirect health services. In this area, agreements on the purchase and sale of hospital and diagnostic-therapeutic services have been signed between the MSPAS and the ISSS, a service provider agency under the Ministry of Labor.

In the area of human resources, training has been provided in local Management and Strategic Planning for more than 500 health professionals at the local, departmental and central levels in terms of improving management. As a measure to decentralize the training of nursing resources, the National School of Nursing was transferred to the Nursing Professionals Society.

A coordinating process among the training units of the RRHH and MSPAS is being carried out to define the profile of professionals suitable for the model of health care.

The Human Resources areas in each hospital and department already have the ability to administer the resources under their jurisdiction.

Policies on performance analysis and incentive wage increases (3% for seniority and 5% for performance) and human resources evaluation systems have been developed.

The Senior Public Health Council is the agency in charge of certifying health professionals.

In recent years, a variety of service provider institutions have arisen ; this has increased the user's ability to choose, but access is restricted by economics.

The Ministry of Health is the agency in charge of evaluating technologies and procedures before they are introduced.

The Senior Public Health Council is the agency responsible for regulating drugs.





## 2. EVALUATION OF RESULTS

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### 2.1 EQUITY

*In health status.* In 1994 under-reporting of deaths was estimated at 21%.

The *infant mortality* rate closest to reality is the estimate provided by the National Family Health Survey in 1993 (FESAL-93), with a figure of 41 per 1,000 live births. According to another source, this would have fallen to 36 per 1,000 live births in 1996. In that same year, infant mortality was 38 for males and 31 for females for every 1,000 live births of the same sex.

The highest rates in the 5-year period 1990-1995 were in Morazán (53.4), San Vicente (52.2), Cabañas (51), and Chalatenango (48.7 per 1,000 live births).

According to FESAL-93 data, postnatal mortality reached a rate of 22 per 1,000 live births in rural areas and fell to 13 per 1,000 live births in urban areas.

The leading causes of death in children under one year of age were perinatal disorders, intestinal infectious diseases, and respiratory infections.

Estimated *maternal mortality* for 1993 was 119 per 100 thousand live births (PAHO). The leading causes in 1995 were hemorrhage, toxemia, and sepsis. According to one study (Jarquín), the trend would have been a decline from a rate of 147 per 100 thousand live births in 1990 to 99 per 100 thousand live births in 1995.

*In coverage.* For the Expanded Program on Immunization in those under one year, coverage for the third DPT dose has been 100% since 1995; the third dose of Sabin increased from 94% in 1995 to 100% in 1996 and measles coverage was 93% in 1995 and 97% in 1996.

The coverage of prenatal check-ups in MSPAS facilities increased from 44.6% in 1992 to 55.5% in 1996. In the HSSR this reached 98% in 1995 and was estimated at between 95 and 100% in the private subsector. The population without coverage lives mostly in rural or peripheral urban areas.

*In access.* There is no information on travel times to health centers or on waiting periods for surgical treatment.

*In distribution of resources.* There are 9.1 physicians for every 10 thousand people and 3.8 nurses for every 10,000 people. About 60% are concentrated in the country's capital.

*In the use of resources.* Hospital care of delivery in the MSPAS increased from 37.1% in 1992 to 42.1% in 1996, while in the HSSR it went from 10.9% to 14% in the same period.

As the private subsector attended about 10% of total deliveries, the coverage total came to 66.3% (64.5% according to another source) in 1996. In terms of the type of professional attending the birth, in the MSPAS in 1992, 67.7% of births were handled by physicians, 16.2% by nurses and 16.2% by nursing assistants. These percentages changed in 1995: 92.6%, 3.2% and 4.2%, respectively. Both in the HSSR and in the private subsector, 100% of deliveries are attended by physicians.

There is no information on outpatient consultations, hospital discharges or ICU bed discharges.

*Financial equity.* According to the current political framework, free access to a basic package of benefits is ensured for the population as a mechanism for overcoming financial barriers impeding access to health services.

## 2.2 EFFECTIVENESS AND QUALITY

*Effectiveness and technical quality.* Information is not available on the percentage of centers or hospitals with established and evaluated programs for quality control or sensitivity-training.

*Effectiveness and perceived quality.* There is no information available on the percentage of centers or hospitals with patient care services or the percentage that conduct surveys of user perception.

## 2.3 EFFICIENCY

*In the allocation of resources.* The coverage of drinking water services in 1995 was 53%, with 86.6% in urban areas and 17.6% in rural areas.

The population with access to sewerage services in 1995 was 69.0%. In urban areas, 57.3% had a sewer connection and 24.5% had latrines. In rural areas, 56.3% of the population has latrines.

In the Metropolitan Area, the coverage of solid waste collection is 60%.

Programs to build latrines have been developed in rural areas as well as the distribution of equipment producing dip-cell chlorine to improve drinking water coverage.

The MSPAS has coordinated with the National Family Affairs Department to promote programs among different ministries: Education, Justice, Work, Interior, etc. These programs include healthy schools; healthy markets, in coordination with cities; healthy prisons, with Justice. With the National Water Supply Systems and Sewerage Systems Administration, it was possible to decentralize the basic rural sanitation and water supply system.

In 1997, implementation began for a program on Occupational and Environmental Aspects of Exposure to Pesticides in the Central American Isthmus (PLAGSALUD). This program is conducted in coordination with PAHO and support from the government of Denmark.

Management of the symptoms of diarrheal diseases and intestinal infections has been carried out by training volunteer health agents in subjects such as oral rehydration and hygiene, supplementing the work of MSPAS health workers. The Program for Nutritional Surveillance and Monitoring of Growth has been established, and is carried out at the community level by the health worker. The training of volunteer counselors in nutrition and food fortification have been implemented with essential micronutrients (iodized salt, sugar supplemented with vitamin A, wheat flour strengthened with iron). Food supplements are also distributed to vulnerable families. These initiatives have legislative support and are strengthened through health education campaigns.

*In the management of resources.* Although the contributions of preventive actions and community participation are recognized in the reduction of intestinal infectious pathologies, their impact has not been quantified.

Currently, all hospitals are able to collect from third parties. They are not negotiating management commitments with other levels.

In the maternity services of the MSPAS, the percentage of cesarean sections has increased from 20% to 22.9% between 1992 and 1996. In that year, the percentage in the Maternity Hospital (most important) was 26.8% and in HSSR 21.4%.

## **2.4 FINANCIAL SUSTAINABILITY:**

In 1996, 4% of the GDP was allocated to health.

Public spending in health represents 8.9% of total public spending. Ninety-six percent of public spending in health is for current public health spending.

## **2.5 COMMUNITY PARTICIPATION**

Information is not available on the percentage of health centers and hospitals with operating health councils.



# **GUATEMALA**

Revised 30 March 1998

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# 1. MONITORING THE PROCESSES

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## 1.1 DYNAMICS OF THE PROCESS

The signing of the Peace Agreement in late 1996 was the culmination of the negotiating process begun in 1994 between the government and guerrilla forces. Conditions were laid down for the design and implementation of a state modernization process and formulation of the Program for Economic Modernization of the Government. Health Sector Reform was included in that process. Its objectives are to improve management capacity, promote efficiency, control the fiscal deficit, and set up social programs that sustain peace and economic development.

These guidelines were strengthened with reform implemented in allocations to cities, in such a way that 90% of transfers (8% of the national budget) is allocated to programs and projects in education, preventive health, and infrastructure works and public services that improve the quality of life.

The 1996-2000 Health Policies were formulated as part of the 1996-2000 Social Development Plan. The policies incorporated, directed, and supported aspects of the reform and the commitments to peace. These are based on reorganization, integration, and modernization of the health sector; increased coverage and improved quality of care; improved managerial capacity; health promotion and healthy environments; increased supply and quality of drinking water and basic rural sanitation; social participation and control in public management and coordination with international cooperation.

In addition, the Sectoral Reform begun in 1994 seeks to: a) extend the coverage of basic health services, targeting those who are poorest; b) increase public spending and expand the sources of financing for the sector, ensuring its sustainability; c) redirect the allocation of resources; d) increase the efficiency of the public sector in performing its functions and producing services; and e) generate an organized social response, with broad a basis of social and community participation. The Reform is the core of the health policies of the Ministry of Public Health and Social Welfare (MSPAS) and of the Guatemalan Social Security Institute (IGSS).

The Health Sector Reform Unit is assigned to the MSPAS (IGSS forms part of its action plans). It has basic administrative and technical capability reinforced by national and international consultants in specific areas and it works basically with government funds through an IDB loan, and with financial support and specific cooperation from other bilateral and international agencies (PAHO, European Union, USAID, GTZ and others).

The MSPAS assumes--and is recognized by the other institutions in the sector - the lead in the process of negotiating the reform, with the legal backing of the new Health Code that assigns it that role and of the new Executive Agency Law. Both laws have been issued

and become effective in 1997. The regulation and monitoring of health are also functions of the MSPAS, following the principles of solidarity, complementarity, and equity.

Other agencies that have participated in the negotiation process are the Congress of the Republic, the Congressional Health Commission, the Guatemalan Social Security Institute and the Cities (through the Municipal Promotion Institute - INFOM).

Sectoral Reform includes execution of an Action Plan facilitating execution of MSPAS programs and allowing for transferring resource administration functions to the health areas.

There is a three-year plan called the Program for Improvement in the Health Services with annual operational programs and a clear definition of technical and financial cooperation goals to achieve change. This plan includes changes in the MSPAS and support for the IGSS.

In the initial stage of implementation, three of the 22 existing areas in the country benefit from the Immediate Action Program to guarantee efficiency in the execution of resources provided, as well as to strengthen the processes of local strategic administration and participatory local programming, directing resources according to criteria of equity and quality.

Sectoral Reform also aims to improve the managerial level of workers to increase their capacity for administrative management, analysis, execution, and evaluation.

The criteria for evaluation are defined in the plans of each institution. There is a specific evaluation plan for pilot areas in the departments of Alta Verapaz, Escuintla, and Chiquimula.

## **1.2 THE CONTENTS OF HEALTH SECTOR REFORM**

To ensure the viability and implementation of the sectoral reform process, a new Health Code was approved (in effect since 7 February 1998) defining the concept of a "Health Sector" and creating the National Health Council, an agency advising the Government and the MSPAS in health matters. The Health Code regulates the development of health services in terms of infrastructure, human resources and service networks and incorporates health promotion and protection as priorities. Currently being prepared are the general and specific regulations that will allow for administrative and technical reorganization of the MSPAS.

The reorganization of the Ministry will be effective in May 1998, with fundamental changes in its functions and structure. This will make it possible to implement the new model of care nationwide. No regulatory agency outside the Ministry has been created, as responsibility for this function is assigned to the new Bureau of Regulation, Surveillance and Control as part of the new reorganization of the MSPAS.



In November 1996, the Law on the Prevention of Domestic Violence was approved, at the initiative of the Commission for Women, Children, and the Family, followed in that same year by the Law for Protection of the Elderly for human development with quality.

Twenty-five percent of the population is covered by the National Health System (MSPAS), 15% by the Social Security System (IGSS), 2.5% by Military Health, 4% by NGOs, 10% by the private sector. Forty-four percent of the population had no formal health coverage of any type in 1995.

There is a specific program to extend basic health services, directed to the population without services, primarily in rural areas. It started in three priority departments in 1997 and will extend to nine more in 1998. It consists of providing basic health services to the population through a basic team of personnel with two options for delivery: i) by the official services themselves and, ii) by health providers contracted specifically, most of them NGOs. In 1997, coverage with these basic services extended to more than 150,000 people. For 1997, it is hoped that coverage for 900,000 people will be achieved.

This set of basic services consists of maternal-child care, nutrition, communicable disease control, promotion, and health education, and improved basic sanitation in coordination with other agencies.

This package is directed to marginalized people in rural and urban area who as of now have no services of any type. It is part of the Comprehensive Health Care System (SIAS) that includes improving secondary and tertiary care in priority areas.

The SIAS presents a series of programming axes such as: the basic health team, information systems and epidemiological surveillance, administration of resources, planning, programming, and evaluation and, in particular, Personal Health Care through: a) Minimum Health Services with national coverage and flexibility in formulation depending on local epidemiological reality. They are directed to pregnant women (pre- and postnatal and delivery care; tetanus immunization; administration of ferrous sulfate); to children (EPI immunization; control of prevalent pathologies--ARI, diarrhea, cholera-; evaluation and nutritional care of children under two); and to resolving acute or chronic morbidity (diarrhea, cholera, ARI, malaria, dengue, tuberculosis, rabies, FBD, HIV/AIDS) in accordance with the local profile. b) Expanded Health Services, directed to the population already covered. These benefits are provided by institutional personnel and include, in addition to the minimum services, for women: care during child-bearing years with early cancer detection and family planning; for children, care up to age 5; care for acute and chronic morbidity; and actions related to the environment, the formulation of standards, and project development and management.

The regulatory entity (MSPAS) drew up the design proposal for Sectoral Reform within the Health Code, but it was the Council of the Republic with participation from representatives of other institutions in the discussion stage that ultimately approved it.

The Unit responsible for Sectoral Reform only has control of the human and financial resources for technical support of the SR process and each institution manages its own resources. Nor is the unit associated with the formulation and monitoring of environmental

policies; for the time being, it focuses on the administrative, financial and technical aspects of delivering services to the people.

To strengthen the capacity for sectoral analysis at the different levels of management, and to support decision-making, in 1996 the MSPAS implemented the Management Information System in Health (SIGSA). The system incorporated the community information from the SIAS. However, information systems are still weak in the country, although they are being improved so they can fulfill their function.

At the national level, there is no separation of the financing, insurance, and provision functions. At the level of priority areas, there are experiments in the MSPAS and IGSS network: they contract out the delivery of basic services at the primary care level and in some cases hospitalization. In some cases (for example Escuintla), the extension of basic service coverage to 100% of the population will be financed by the MSPAS and the IGSS, and resources and the contracting of services delivery will be handled by an administrative entity.

In the MSPAS, the roles of intermediate and local authority in the management of health systems are being reviewed, but no decentralized services have been implemented as yet. The IGSS still has a centralized system, but it is expected that over the course of two years the panorama will have changed considerably since current authorities are studying and planning these changes (administrative and functional decentralization plan).

In accordance with the new Code, a National Board should be implemented and it is expected that this will be done during 1998. At the local level, there were some experiments with unsystematized Local Boards.

In 1996 a reorientation of national health spending was carried out, with 43.8% allocated to Primary Health Care (local services) and 24.6% to the hospital network.

The MSPAS has a network of different establishments according to levels of care: hospitals, type "A" and "B" health centers, health posts and establishments for the sale of drugs. The public system has 47.7% of the total number of facilities, and the private sector has the rest.

Among the policies directed to vulnerable groups, it is noteworthy that March 1997 saw the beginning of the Plan for Care of ex-combatants [who had served] for two months. The Plan consists of a comprehensive medical care, dentistry, mental health, and epidemiological surveillance program. The health team responsible for the benefits consists of a physician from the URNG (ex-guerrilla forces), a physician from Physicians of the World, four dental students, a health worker from the Missionary University of the Poor, a health worker from the URNG and a dental extension worker from the URNG. Mass programs are included like removal of parasites, tetanus and measles vaccination, and administration of ferrous sulfate, folic acid, and vitamin A.

Nonetheless, health conditions indicate that the subject of the principal health initiatives is the maternal and child group.

The health posts, both in the MSPAS and the IGSS, are served by auxiliary personnel and the Health Centers have professional care with a restricted schedule. Their response capability is limited and the referral and back-referral systems with centers with greater response capability (concentrated in the large cities) are not very effective or functional, although the standards of the three levels of care and the criteria for referral/back-referral are defined within the SIAS.

Starting in 1998, management commitments are being developed between the central level of the Ministry and the health areas, among the areas and different primary care facilities, and between the Ministry, the areas, and the hospitals. The new Health Code provides the legal basis for the purchase and sale of services to third parties. Both in the IGSS and the Ministry of Health there is financing and budgetary capacity to do this. Since 1997, the Ministry has been contracting private groups (NGOs and others) for delivery of services at the community level. Social Security purchases maternal care services from private groups and also purchases services from the Ministry of Health.

In 1993, 26% of the personnel in the sector was community and voluntary in nature and 57% belonged to the public sector.

The concentration of health professionals in urban areas required that rural health services be provided by nursing assistants, rural health technicians, midwives and volunteer community health promoters. The implementation of the new SIAS has required the training of voluntary human resources to assume responsibility for providing primary care to the population through the Minimum Health Services. In 1989, it was estimated that there were approximately 36 volunteer health workers for every 10,000 inhabitants.

There are still serious problems in recruitment, control, and dismissal, when necessary, of human resources in the Ministry. Legal problems due to the current civil service law limit the ability to handle these processes adequately. Efforts are being made to improve administrative systems, also a problem at present.

In 1997, the MSPAS approved a special bond for all workers at all levels, recognizing that wage levels were very low. Management commitments have included the bases for giving productivity incentives; these commitments are beginning to be implemented in 1998.

The legal bases for carrying out these functions are in the new Health Code, but the mechanisms for applying them are still not defined. There is still no ability to choose suppliers for resources. There is no evaluation of new technologies or regulated procedures for introducing them.



## 2. EVALUATION OF RESULTS

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### 2.1 EQUITY

*In health status.* Deaths are under-reported by 2.8% (1993) and only 57% of deaths are certified by a physician. In 1994, 66.2% of deaths occurred at home and 8.5% on public thoroughfares.

Estimated *infant mortality* for the period 1985-1995 was 51.0 per 1,000 live births. In 1994, the leading causes of death were perinatal disorders, ARI, intestinal infections, and malnutrition. Large differences between urban and rural areas continue to exist.

The *maternal mortality* rate for the period 1990-95 was estimated at 190 per 100,000 live births. In 1994, the rate was 96 per 100,000 live births but with under-reporting of about 60%; when corrected, this rate rises to 138 per 100,000 live births.

*In coverage.* Since 1992 to 1995, the Expanded Program on Immunization has had increasing coverage for all vaccines in children under one year. The coverage for the third dose of polio vaccine has been 70%, 73% and 80.5% (1992, 1994 and 1995, respectively). The third DPT dose during the same years had coverage of 66%, 71.1% and 80%; and coverage for measles vaccine was 59.3%, 66% and 83%. Although the traditional situation of areas with low coverage continues, it is expected that at the end 1998 this will change with application of the new methodology for implementing basic health services in marginal areas.

The percentage of pregnant women who receive prenatal check-ups from trained staff has increased from 34% in 1992 to 54% in 1995. In this last year, 44.6% of the check-ups were handled by a physician, 7.9% by a nurse and 26.1% by midwives. Among the indigenous population, these percentages were 24.9%, 10.6%, and 35.7% respectively.

*In access.* There is no information available on travel times, although the access of rural populations to health services in priority departments increased during 1997 and the first quarter of 1998. There is no information on surgical waiting lists.

*In the distribution of resources.* In 1995, the country had 11 physicians for every 10,000 inhabitants and these were concentrated in the Metropolitan Region (80% work there) with a ratio of 28 physicians for every 10,000 inhabitants.

There are 3 nurses for every 10,000 inhabitants. Fifty-six percent work in the Metropolitan Region, increasing the ratio there to 4.9 for every 10,000 inhabitants. The majority of health workers are concentrated in hospitals and only 24.4% of those used by the MSPAS and 15% of the personnel of the IGSS work in ambulatory services. For 1995, there was an average of 1.1 beds for 1,000 inhabitants, but there is no information on ICU beds.

*Equity in the use of resources.* National coverage for childbirth attended by a trained professional was 34.8%, reaching 59.9% in the urban area and only 17.7% in the rural area. Midwives attended 52.9% of deliveries in the rural area and 57.2% among the indigenous populations. No information is available on outpatient visits, payments, or surgical interventions

*Financial equity.* The implementation of the SIAS is an example of a mechanism to overcome financial barriers impeding access to benefits.

## **2.2 EFFECTIVENESS AND QUALITY**

*Effectiveness and technical quality.* There is no information on health facilities with established programs for quality control or sensitivity-training.

*Effectiveness and perceived quality.* Patient health care services are being implemented at the hospitals in the capital, so that they will begin to function in the second half of 1998. In 1997, patient surveys were conducted, although only in the Outpatient Clinics and Emergency Rooms at the Roosevelt and General San Juan de Dios Hospitals in the capital, which were the basis for establishing health care services for patients. A study was also carried out in the Escuintla area, the results of which were considered in the programming for 1998 and in the management commitments in that area. The Ministry has considered conducting a national survey of demand in order to obtain broader results.

## **2.3 EFFICIENCY**

*In the allocation of resources.* In 1994, the water supply coverage was 92% in urban areas and 54% in rural areas.

Coverage of sewerage systems for the same year was 72% in urban areas and 52% in rural areas. Only 15 of the 286 cities with sewer systems carry out wastewater treatment.

In 1996, the MSPAS transferred the rural area water and basic sanitation programs to the Institute of Municipal Promotion and Municipality. Starting in 1996, the number of new water projects has increased in rural areas from fewer than 100 per year to 260 in 1997, with projections of 700 per year by the year 2000.

The country has no mechanisms for final treatment of solid waste. The coverage of solid waste collection comes to 46.7% in urban areas and 3.5% in rural areas. Most solid waste is directed to spillways without later treatment. A process of reorganization and strengthening of the solid waste collection subsector is being carried out.

Since 1991, and as a result of the cholera epidemic, there are measures being carried out in the country for promotion and prevention and greater investment of resources for increased coverage and monitoring of water quality which has led to reduced morbidity from diarrhea.

A program was launched in 1994 to train monitors for proper pesticide management, and managed to reach 226,000 farmers. Participants included the MSPAS, the Ministry of Agriculture and Livestock, and AREQUIMA (Agricultural Chemical Guild). There are no other specific programs for accident and poisoning prevention. However, the IGSS does have some programs along the southern coast for rescue teams during special periods and mass communication programs are being developed on accident protection at times of greater risk (holidays, etc.).

Starting in 1997, the National Program for Control of HIV/AIDS was created, with a specific organization that is directed to education, improved quality of Blood Banks, treatment of HIV positive pregnant women, and epidemiological monitoring of AIDS patients.

*In the management of resources.* There is no information available on reduced infant mortality due to specific programs, nor on health centers and hospitals with standardized measures of activity and the ability to collect from third parties.

There is no information on average days of hospitalization, the number of discharges per bed, percentage of cesarean section compared to total deliveries and the level of operating room use.

## **2.4 FINANCIAL SUSTAINABILITY:**

In 1995, public spending in health came to 1.2% of GDP, increasing from 0.86% in 1990 and 1991 and 0.9% in 1992.

For 1996, increased public spending in health at 13% of total public spending was established. It had been 7.1% in 1990, 60.5% in 1991 and 6.6% in 1992.

## **2.5 COMMUNITY PARTICIPATION**

There is no information available on health centers with health councils. Starting in 1998, a specific program to promote community participation is being launched.





# **HAITI**

Revised 17 April 1998

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# **1. MONITORING THE PROCESSES**

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## **1.1 DYNAMICS OF THE PROCESS**

After the return to democratic government, the Ministry of Health prepared a New Health Policy in March 1996 recognizing the fundamental right to Health and the government's obligation to ensure access to health for all. Health Sector Reform (HSR) is being designed as a part of the effort to decentralize the government so as to ensure equal access to a minimum package of quality services and greater profitability of health actions.

The priorities of HSR are to strengthen the Ministry at the central and departmental level, including developing human resources and managerial capacity; alternative financing formulas; updating health legislation; hospital reform; essential drug policy; health information systems; intersectoral coordination and implementation of community health units based on decentralization and community participation; and providing a minimum package of care to the population. There is still no concrete HSR plan (although there is the 1996-2000 Health Plan) or explicitly identified agency in charge. It is thus logical that evaluation processes have not been initiated.

## **1.2 THE CONTENTS OF HEALTH SECTOR REFORM**

While the Ministry of Health is preparing a legal framework, the 1983 health legislation remains in effect. The new health care policy (in the form of a new organic Law) should soon go to Parliament. Other legislative drafts are being prepared. For example, a draft pharmaceutical law has been prepared, updating the Law that has been in effect for 40 years (the new articles refer mainly to manufacturing practices, advertising, imports and inspections); and work is being done to update the National Public Health Code and the National Food Safety Plan. Both should be available in late 1997.

Forty percent of the population has no regular access to health services. For 1996-2000, there are plans to extend coverage, but there are no explicit measures. Health care comes from four sectors: the public sector; social security (covering 60,000 workers); the non-profit and mixed private sector (whose workers are paid in whole or in part by the public sector but are managed by the private sector); and the private sector primarily in Port-au-Prince and other cities, but with accessibility limited by cost.

The purpose of developing Primary Health Care is to provide a minimum health package to the population that includes comprehensive care for children, with emphasis on childhood illnesses; comprehensive health care for women, with special emphasis on pregnancy and reduced maternal mortality; vaccinations; access to essential drugs; prevention and control of communicable diseases, with emphasis on meningococcal

infections and vector-borne illnesses, measles, neonatal tetanus, and leprosy, and on emerging and reemerging illnesses (such as tuberculosis, sexually transmitted diseases and AIDS); medical-surgical emergencies; dental care; participatory health education; environmental clean-up and provision of drinking water; and availability of essential drugs.

The economic accessibility of services is guaranteed by: i) certain free services such as vaccination, family planning, and health education; ii) implementation of a cost recovery system that considers economic potential by geographical area; and iii) sustainability of health care actions, through progressive inclusion of communities in the management of health programs.

The Ministry of Public Health is responsible for steering the HSR process.

The information system usually produces incomplete or inconsistent data. This limits the leadership of the responsible central structure. There are reinforced systems for surveillance of specific diseases. In September 1996, the Ministry of Public Health created CASIS (Committee to Support the Health Information System) to design and support implementation of a new National Health Information System; this make it possible to reactivate a sentinel system for seven diseases in January 1997. Other components of the information system were left for the future.

The process of administrative decentralization and de-concentration of resources is under way. Nine departmental health offices and a departmental Assistant Director's Office have already been established. It is expected that sixty community health units will be operational within the next four years. In each unit, health establishments will work as a network to ensure that basic care is available and accessible in their area.

The current government bases its program of economic and social action on community participation. Different agencies (departmental, community, communal section councils, interdepartmental councils, judges) will have to defend the interests of territorial groups. At the popular level, different structures in support of health (health committees, health clubs, mothers' clubs, parents' clubs) are operating throughout the country. Community participation in health activities (mobile clinics, meeting sites, specific campaigns for vaccination and breast-feeding) is already a reality. The Ministry of Health, within the framework of its New Policy, intends to involve communities in the management of local health systems. Thus, each Community Health Unit will be managed by a mixed management council.

There are three sources of financing: i) the public treasury, ii) international assistance and, iii) individuals. There are no official figures on private spending, although it is estimated to be equal to or higher than public spending. Fifty percent of public health spending comes from international assistance.

The budget of the government University Hospital in Port-au-Prince absorbs a significant amount of public health spending (17%), although this has fallen over the last three years. Another 28% is spent on other public hospitals, 3% on drugs and 4%-5% on equipment. In 1996, 80% of public health spending was allocated to pay wages. This percentage will decline to 70% in upcoming years. Fees are used in both the public and

private sectors, although the amounts cannot cover all the costs of services. As of July 1997, the rules for setting fees, managing funds, and control have not been established.

Haiti has 49 hospitals and 61 centers with beds, for a total of 6,473 hospital beds unevenly distributed throughout the country, and a 52% concentration in the metropolitan area. Between 1992 and 1996, the number of hospitals, health centers with and without beds, dispensaries, and asylums increased. A third of the institutions belong to the public sector. In 1993 a pilot emergency medicine project was implemented (emergency medicine-surgery is an integral part of the minimum health package defined by the Ministry).

The primary health care strategy is a priority for the social return on investment. Care for vulnerable groups is not made explicit beyond what is indicated in the strategy to increase coverage and the basic package.

There is no linkage (referral and back-referral systems) among different suppliers and different levels of care. Patients go directly to one or another level depending on convenience and their reasons for seeking out the system. The primary level is the level that works best, but it cannot cover more than 60% of the population.

In the field of human resources, the major concerns are planning and management, education, and service delivery. A Bureau for Development of Human Resources and Control of Health Professionals has been created in the Ministry of Health to ensure that education and skills are suitable to needs, to update data on geographical distribution of personnel, and to deal with limited professional career prospects. Training is being strengthened at all levels, from midwives to managers, and a second phase includes plans to extend training to community health agents.

Certificates and degrees conferred by private training facilities are not always recognized. The Ministry established operational criteria for accrediting medical and paramedical education centers. To date, two private nursing schools and ten schools for nursing assistants have obtained educational licenses. The Haitian Medical Association has developed a code of medical ethics and is making an effort to involve private physicians in public health.

The Pharmacy Service of the Ministry plays a regulatory authority role in all matters related to drugs and inspection of private pharmacies. In 1997, the government initiated the drug registration process. It has also begun to apply the Quality Certification Program for Pharmaceutical Products in International Trade that must be followed by all importers. There is no National Quality Control Laboratory and samples must be sent outside the country for analysis. There are only two dialysis units in a private hospital and they have not been operating since January 1997. Modern diagnostic imaging exists only in the private sector.



## 2. EVALUATION OF RESULTS

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### 2.1 EQUITY

*Equity in health status.* Administrative, legal, and cultural factors affect the quality and thoroughness of birth and death records. The lack of methodology in data collection causes a lack of reliable data on the causes of death. Many data are collected in hospitals, but are not systematically processed or disseminated.

The *Infant Mortality Rate* is 74 per 1,000 live births according to EMMUS II (Survey on Morbidity, Mortality and Use of Services) carried out in 1994-95. In 1988, EMMUS I indicated a rate of 101 per 1,000 live births. The principal causes of death are diarrhea, acute respiratory infections and malnutrition. There are large variations depending on place of residence and the mother's educational level (although the figure is available).

In 1990-91, a national survey indicated a maternal mortality rate of 456 per 100,000 live births. The primary causes of death are obstructed labor (8.3%), toxemia (16.7%) and hemorrhage (8.3%). There are differences depending on place of residence (although this figure is not available).

*Equity in coverage.* The coverage of the Expanded Program on Immunization for children under one year is 34% for DPT3, 32% for polio and 32% for measles according to 1996 data (although other sources indicate measles that coverage is 75% and that after the measles vaccination campaign in 1994-1995, coverage of 98% of the population between 9 months and 14 years was achieved). There are no data on geographical distribution.

According to EMMUS II, 68% of pregnant women had at least one prenatal examination provided by a health professional. There are large variations depending on the woman's education. Thus, 94% of women with at least primary education received prenatal care, but only 53% of women without education received it. Thirty-six percent of pregnant women had four prenatal examinations, 27% only had two or three and 8% had only one. Twenty-nine percent of women gave birth without any prenatal care.

*Equity in access.* Most women in urban areas live near health centers (EMMUS II): 79%-98% in Port-au-Prince and 62-87% in other cities. The situation in rural areas is entirely different: most patients do not see a health professional due to transportation problems (one must walk many hours to reach a health center). In 1991, 40% of the population had no access to primary care services. There are waiting lists in health care institutions but there are no data on average waiting periods for admission.

*Equity in the distribution of resources.* The country has 1.6 physicians and 1.3 nurses per 10,000 inhabitants (1997). Approximately 73% of physicians, 67% of nurses, 35% of all health centers, and 52% of the hospital beds are concentrated in the Western Department

and serve a third of the total population. Traditional medicine, more accessible than modern medicine, is widely used by the general population. Once again, there are great disparities within the country (although data are not available).

*Equity in the use of resources.* Seventy-one percent of women (EMMUS II) were attended by a professional or a traditional midwife during delivery. In total, only 46% were attended by trained personnel. Eighty percent had their most recent child at home. There are large disparities between rural and urban areas: 50% of women in Port-au-Prince usually go to a hospital, compared with only 31% in other urban areas and 9% in rural areas.

*Financial equity.* Essential drugs are available almost at cost in most public centers and private non-profit organizations. Recovery mechanisms exist and are presumed to generate a small amount to maintain a social fund designed to cover the costs of care for patients without money.

## **2.2 EFFECTIVENESS AND QUALITY**

*Effectiveness and technical quality.* There are no data on health centers and hospitals with established and evaluated programs for quality control and sensitivity-training.

*Effectiveness and perceived quality.* There are no data on health centers and hospitals with patient health care services or surveys of user perception.

## **2.3 EFFICIENCY**

*Efficiency in the allocation of resources.* Water and basic sanitation services are still very deficient in terms of quantity and quality. Thirty-nine percent of the population had water supply services in 1995 (35% in the capital, 45% in small cities and 39% in rural areas). The population with basic sanitation services was 24% (42% in urban areas and 16% in rural areas). No city has a public sewer system; there are only individual waste water treatment units. Incorrect waste disposal practices are polluting almost all of the 18 water sources that supply Port-au-Prince. Although still deficient, a surveillance system and quality control of the sources of the drinking water supply have been established. Projects to improve sanitation, which had been suspended, were restarted in October 1994.

Almost 30% of the daily volume of solid waste produced in Port-au-Prince is collected by the Ministry of Public Works and the City. The autonomous governmental agency (SMCMS) that was in charge of its management has been closed since 1993. The service is more reliable in small cities, where collection is the responsibility of local government services of the Ministry of Public Works and the Ministry of Health.

Since 1996, plans and programs are being prepared in intersectoral committees. For example: the committee for surveillance of maternal mortality; the interagency advisory



health committee on reproduction; the National Committee to Combat AIDS; the national IEC committee; the committee to support the health information system; the National Commission on hospital reform; the committee for implementation of a national reference laboratory network; etc. Other agencies that participate in health-related matters are: the Institute of Social Welfare and Research (STD programs for prostitutes, prenatal care, welfare of street children, physicians for orphans); the Ministry of Agriculture (control of zoonoses, water supply for rural areas and food and work program); the Ministry of Education (school health); the Ministry of Women's Issues (rights of women: woman in prison, shelters for women, reproductive health education for women's groups); the Ministry of the Environment (campaign to protect nature and strategies for control of deforestation); the Ministry of Justice (health of prisoners); the Ministry of Public Works (water supply and sanitation).

There are no strategies to reallocate resources for specific problems. In June 1995, an attempt was made to move physicians from Port-au-Prince to rural areas, but needs at the departmental level remain unmet.

*Efficiency in the management of resources.* There are no data on reductions in infant mortality due to specific programs. Data on measurements of activity and management in health centers are not available. At the central level, information on occupancy rates is not available. Investments are being made in the health structure and equipment and an inventory is being conducted.

## **2.4 FINANCIAL SUSTAINABILITY:**

Total health expenditure per capita is unknown. It has been estimated at about \$ 27 for 1996-1997. In prior years it was probably \$ 26 and \$ 24, or 8% and 6% of GDP, respectively. The private sector provides more than 50% of the total: users contribute 35%-40% of expenditures while the NGOs probably contribute 20%. The difference is covered by donor agencies and the government (60% and 40% respectively). The government contributes approximately 10% of total health expenditures.

Public spending in health is 10.7% of total public spending, and represents 1% of GDP. Data on the percentage of public health spending allocated to the local level and territorial distribution are unavailable. Public health spending per inhabitant was \$ 3.9 in 1995, a figure that is 63% of the 1990 figure due to the combination of inflation and population growth.

## **2.5 COMMUNITY PARTICIPATION**

There are no data on the percentage of Mixed Management Councils in operation.



# **HONDURAS**

Revised 30 March 1998

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# 1. MONITORING THE PROCESSES

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## 1.1 DYNAMICS OF THE PROCESS

In 1994 the State reform process started. The National Commission for the modernization of the State, the Ministry of Finance, the Governing Office, other governmental bodies and international credit organizations initiated the incorporation of the health sector in this modernization process. In addition to this, changes of the epidemiological profile and the growing demand of the population for health services with better quality and opportunity were evident around the country.

The Ministry of Health (MOH) assumes the steering role and regulation of the Sectorial Reform through the "National Process of Access"(PNA). Its basic strategies are oriented toward the adaptation of the local health networks (with emphasis on the health areas), the social control of the health systems, and the development and recovery of the human resources of the system.

The MOH has exercised the leadership of the process, negotiating with other governmental bodies (Mayor's Office, IHSS, SANAA) and with ONG's. The increase in its convocation capacity has strengthened the intra and intersectorial coordination and has made it possible for improvement in its capacity for negotiation with the multilateral credit institutions, as the IDB and World Bank.

In 1995 under the leadership of the MOH Services Network Department, the coordination of cooperation between PAHO, the Swedish Agency for the Development International (SIDA), USAID and UNICEF was started. National technicians, who integrate the Technical Support Group (GAT), and foreign cooperation are accompanying the PNA.

One of the focal points of the PNA is the decentralization of management attributes and the planning, jointly with foreign cooperating organizations, especially in those more postponed health areas. Its purpose to achieve a greater impact on the equity, efficiency, effectiveness, and social participation, fundamental principles of the Honduran health policy.

The process has shown achievements to date, whose commitments are made explicit in the regional and municipal area plans.

## 1.2 THE CONTENTS OF HEALTH SECTOR REFORM

The *legal framework* of the HSR stems from the approval of the Sanitary Code in 1991. Already in 1990 sanitary aspects were incorporated in the Law of Municipalities, strengthening the decentralization.

In 1992 the Law of Modernization and Development of the agricultural sector was approved and it incorporated aspects relating to the management of the environmental risks involved.

In 1993 a Law that grants social and health benefits to the people of the old age, retirees, and pensioners was passed. The General Law on Environment that created the corresponding Ministry and its dependent agencies was approved.

The National Congress has reviewed ILO Convention 169 what represented the creation, in 1995, of the Department of Care for the Ethnic Groups in the MOH in order to prioritize care to these groups.

There also exists in the National Congress a Health Commission, in charge of sectorial matters at the legislative level, and that participates in the international forums as the Parliament Central American (PARLACEN) and Latin American (PARLATINO).

Around 80% of the population have *regular access to the public health services*, of which 60% is covered by the MOH and approximately 11% by Honduran Social Security Institute (IHSS) (with coverage in Tegucigalpa, San Pedro Sula and Ceiba). Of the total of insured by the IHSS only 8% are directly insured.

Nearly 15% of the population is covered by the private sector through profit and non-profit institutions (religious, ONG's). It becomes necessary to develop new research in order to estimate the coverage more precisely.

As a way of increasing the access to the services and improving the response capacity at the level of the communities, a basic package of benefits, universal access, and strategies to increase coverage (such as mobile surgery projects, mobile laboratory equipment and dentistry) have been formulated. In order to strengthen the service network `maternal and child` clinics, maternity homes, and houses of community clean delivery care (financed by local governments and MOH) have been setup. In addition, the reorganization of the unit and network of blood banks has been started.

In order to support the decision-making on the part of the normative programs the Financing Information System and the System of Supervision, Monitoring and Evaluation of the MOH are being reviewed and adapted.

The Health Plan implemented by the MOH incorporates the *environmental policy* aspects and performs a regulatory action on the National Autonomous Service of Water Supply Systems and Sewerage Systems (SANAA).

As central part the HSR, emphasis has been made on the development of local level capacities, through local planning tools. They part from a health situation analysis according to living conditions measured through unsatisfied basic needs. The intersectorial approach and community participation are translated into municipal health plans, of whose formulation, execution and evaluation are the responsibility of the municipal governments. This has been favored with the greater possibility of handling of resources on the part of the municipalities.

There have been open council meetings for the analysis and participatory discussion of the health problems of the people and the environment, as well as conditioning factors. In addition, the MOH has made efforts to strengthen community participation through the training of volunteers (traditional midwives, guardians of health, health representatives, volunteers, and vaccination teachers), whose attendance has not been sufficient to date.

The sources of financing are 78% of national origin and 22% of foreign contributions. The participation of the agencies of the United Nations (PAHO/WHO, WB) stands out with 19.5%, the contributions of the IDB of 3.1% and the bilateral agreements, especially with USA (45.2%) and Japan (8.2%).

The public health resources (1995) are allocated in 22.4% to preventive type actions; 28.5% to hospital services; 31% to salaries and 10.3% to infrastructure. What is aimed at purchase of goods and services has increased 20% between 1990 and 1995.

The services provided have been increased thanks to the construction of 200 establishments or Productive Health Units-UPS (22% of which correspond to Rural Health Centers) in 1996. This represents a 20.5% increase of health facilities.

Care strategies have been developed that have made it possible to improve the access and bring closer the response capacity to the population: mobile surgery projects for the most inaccessible areas and oriented towards pediatric surgery, and mobile laboratory equipment and dentistry.

The health conditions of the country demand priority for maternal-child care and the strengthening of the actions toward the areas with a greater poverty line, geographical boundaries and special care to the ethnic groups.

The public service of the MOH is organized in six *levels of care*, that go from the community level up to that of the national hospitals of maximum complexity. The system of referral and cross-reference of the network is quite weak.

Shared care agreements have been established between the Surgical Medical Hospital of the IHSS and the National Hospitals of the MOH in Psychiatry, Ophthalmology, Oncology, Nephrology, Intensive Care, and Cardiology with the objective of reducing the duplication of efforts. However, the economic relationship among them has not been explicit. An agreement between the IHSS and the Hospital of Juticalpa in the Health Region No. 7 exists related to the purchase and sale of services to third parties.

Medical human resources are regulated through a Statute of the Employed Physician, as well as dentists, and measures are underway for the rest of the health sector professionals (pharmacists, microbiologists). The public sector uses 69% of the health professionals. However, its geographical distribution is unequal because of lack of positions or vacancies for them (especially in the areas with less accessibility). Although a national development plan of the human resources for health has not been defined, there are attempts to improve their distribution and set up programs for permanent training (considering the profile of morbidity and mortality of the country) both of clinical personnel

and administrative. Only partial analysis of the performance of human resources has been realized.

Through the Division of Hospitals steps have been developed accreditation of hospitals. Although Honduras is part of the Health with Quality for Central America project supported by the European Union and the Central American Institute of Health (ICAS), there is no information that shows that the functions of *evaluation of quality* and of assessment of the *health technologies* are developed.



## 2. EVALUATION OF RESULTS

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### 2.1 EQUITY

*In the Health Status.* The sources of information with regard to available indicators of morbidity and mortality are the regular MOH information system, the national surveys provided in regard to specific subjects and the population censuses for certain geographical areas. The subregistry of deaths reaches 44.2%. Of the total of registered deaths, 15% corresponds to information delivered by the hospitals. This situation is reflected more in the areas with greater geographical and socioeconomic boundaries.

*Infant mortality* presents a decline from a rate of 50 per 1,000 births in 1990 to 42 in 1994. Estimated figures indicated an infant mortality rate of 36 per 1,000 births for the period 91-95 that amounted to 37 in the rural area. In the predominantly indigenous populations, it is estimated that of 100 newborns only 32 survive. The leading causes of death are the intestinal and respiratory tract infections.

Research on *Mortality of Women* of childbearing age in 1990 (IMMER90) provides the available information on maternal mortality, whose rate reaches to 221 per 100 thousand births, and is still higher in the areas that present a greater percentages of poverty and smaller access to health. However, it is estimated that the trend is in decline. The leading causes of maternal death are hemorrhages and infections.

*In coverage.* For 1996, the *EPI* presented a global coverage, for children under 1 year, of 91%; for the DPT3 dose, of 93%; for the third oral polio, 94%; and for measles, 91%. This distribution is not homogeneous, coverage of 80% reaching in some municipalities, especially in those with a majority of indigenous population. Vaccination programs have been designed with community participation.

83.9% of the pregnant women receive at least one medical check up during her pregnancy 4% of those check-ups are offered by trained traditional midwives, 56.2% in Units of the MOH, 16% at the private level, and 6.2% in the IHSS facilities. Information with regard to geographical distribution or by other variables is not available.

*In access.* The percentage of dwellings within 500 meters of an assistance center has increased by 25.9% in 1992 to 28.2% in 1993. The increase in the rural area is greater (from 29.8 to 33.4%).

The ENESF 1991/1992 results indicates that 60 percent of families arrive in less than a hour at the closest health facility, 28% between one and three hours, and 8% three hours or more (using the most common means of transportation). According to the EISE-93, the percentage of families that takes them less than 1 hour in arriving to the closest

establishment increased to 68.5% and the following ranges are reduced to 27% and 3.5% respectively.

Information with regard to lists of surgical waiting is not available.

*In the distribution of the resources.* The per capita health expenditure has increased by US\$ 18.9 in 1990 to US\$ 21.5 in 1995. It is estimated that a rate of 6.5 physicians per 10 thousand people, with a distribution in the department with more availability 42 times higher than with the least availability. The availability of physicians in the public sector is of 2.6 per 10 thousand people. In case of the university nurses, 1.4 nurses per each 10 thousand people, with a maximum/minimum relation of 199 exists. There is no available information with regard to ICU beds.

*In the use of the resources.* In 1995 the dependent hospital institutions on the MOH presented a rate of discharges of 35.1 per 1,000 people. The private sector produced 30% of the discharges. In the period 1991/92 to 1996 institutional delivery care rose from 45 to 53.8%. Information on outpatient care, surgical interventions or ICU discharge is not available.

*Financing equity.* Plans of overcoming financing barriers of access to the health are not mentioned.

## **2.2 EFFECTIVENESS AND QUALITY**

*Effectiveness and technical quality.* There is no information available regarding the evaluation of quality or medical-patient personalized relationships programs.

*Effectiveness and perceived quality.* There is no information on the service implementation of health care to patients or surveys of user perception. The external hospital evaluation, carried out in 9 of the 28 existing with society participation, includes quality opinion surveys of the community.

## **2.3 EFFICIENCY**

*In the allocation of resources.* In 1995 the drinking water services covered 77% (61 % in 1985). At the urban level, they increased from 34 to 40% and in the rural area, from 27 to 37% in the same period. With regard to the solid waste disposal systems, (sewerage, septic tank or sanitary latrine) is estimated that 82% of the population is covered, higher than 59% in 1985. At the urban level, the variation has been from 35 to 42%, and in the rural area, from 24 to 40%. In approximately 20 to 50% of the medium-size municipals and 50 to 80% of the large-size municipals some type of solid waste management is provided (1996). Consideration has been taken to increase the coverage of these services, especially in those areas with greater epidemiological risks.

The intersectorial approach is one of the development strategies. It exists at the national level a Master Health Plan with support from Japanese Cooperation, and at the municipal level it is reflected in the municipal health plans. There is a series of projects formulated with regard to domestic violence and child abuse, older adult and mental health, healthy lifestyles promotion and physical exercise, that are being supported by legal bodies and the creation of coordinating institutions.

The program for "Community Management of Pneumonia" has been developed, through the training of volunteers. Food support actions for children and mothers are carried out at food and nutrition centers and at public schools through the Board National of Social Well-being (Plan of Nutrition and Food Security 1995-2000).

*In the management of the resources.* The mentioned program for community management of pneumonia assumes the responsibility for the significant reduction of case-fatality of these illnesses. It is equally responsible for the success in the reduction of deaths from diarrhea. This due to the implementation of oral hydration techniques, training of the community agents, the promotion of breast-feeding, the coverage of vaccination higher than 90% and the emphasis on comprehensive care programs to childhood and to the woman.

For 1996 the average of days of stay was of 5.26; the turnover of beds was 46.8; the percentage of cesarean sections was 10,52% of all deliveries; and the average hospital occupancy rate of 69,54%.

There is no available information regarding the management aspects such as the use of standardized care measures, or cost recovery on the part of the hospitals or the negotiation of commitments of management, although there is standards of care from each individual program.

## **2.4 FINANCIAL SUSTAINABILITY:**

At the national level (without segregation by territorial unit or level of care) the health expenditure, as percentage of the GDP, has increased from 2.7% in 1990 to 3.0% in 1995. The health expenditure, as percentage of the public spending was 8.1% in 1990, diminished to 6.0% in 1993 and amounted to 9.2% in 1995. It represented, for those same years, a percentage of social spending of 34.1, 30.4, and 38.4% respectively.

Information on the per capita spending on drugs is not available.

## **2.5 COMMUNITY PARTICIPATION**

100% of the Services Productive Units (UPS) - Rural Health Centers, Oral Medical Health Centers, Clinical Maternal-child have local health committees. Some public hospitals have support committees with citizen participation for fund management. It is unknown if the private hospitals have funds committees.



# **JAMAICA**

Revised 30 October 1997

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# 1. MONITORING THE PROCESSES

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## 1.1 DYNAMICS OF THE PROCESS

In an effort to address the issues of declining levels of service and the inability to finance the health care system, the Jamaican Government embarked on a health restructuring program and established a Health Reform Unit in 1995 to oversee the design and implementation of a number of policy reforms, cost recovery mechanisms and partnership with the private sector and the community. This unit has the overall responsibility for overseeing and implementing the elements of Health Sector Reform (HSR).

The major elements of the reform were: Decentralization; Integration of Services; Promotion of Quality Assurance Standards; Rational Resource Allocation; Human Resource Development; Cost Sharing; Increased Efficiency; Public/Private Partnership; Equity; National Health Insurance Program (NHIP)

Although the Jamaican Government has entered into formal negotiation with the Inter-American Development Bank (IDB), data on the details of this negotiation were not available. So, the details of the HSR plan in terms of specific activities, responsibilities and delivery time frames, were not available.

## 1.2 CONTENTS OF HEALTH SECTOR REFORM

During 1977 new **legislation** has been drafted and introduced to facilitate the decentralization of the health services. Namely, National Health Services Act (February 1997); Green Paper on the National Health Insurance Plan of Jamaica (April 1997); National Health Services Act (October 1997).

In August 1997 the Ministry of Health's structure was re-engineered to reflect service integration and **decentralization** of decision making. In its new capacity the Ministry of Health (MOH) will function in a more regulatory capacity to the entire health care system, rather than its traditional role as the centralized manager of the public system. Service delivery and management responsibilities will be delegated to three levels: four Regions, fourteen Parishes and 130 Health Districts.

Salaries and secondary care continue to absorb the largest part of the MOH's **budget**. In 1996 Primary Care was allocated 18% of the recurrent budget. In recent years the MOH has placed a greater emphasis on cost recovery with respect to hospital services. The Health Sector Initiative Program (HSIP), part of the HSR initiative, has implemented new management systems that have led to significant increases in money recovered from

hospital patients. The charges bear no relationship to the economic cost of providing the service and represents on average 7% of total hospital costs.

The availability of drugs at an affordable cost is critical to the diagnosis and management of illness and disease. The Pharmaceutical division uses a Vital, Essential and Necessary (VEN) list of drugs to guide the procurement of pharmaceuticals. The third edition of the National Drug Formulary was revised and launched in 1997. It is also hoped that this practice will help improve access and availability of drugs. This coupled with more training in Rational Drug Use and rational prescribing for doctors.

A **National Health Insurance Plan (NHIP)** is being proposed to address the issues of both the financing of the health services and equity and access to health services. A contract has been entered into with a US consulting company for the development of a Feasibility Study on a National Health Insurance System. The study undertaken was to develop a financial model to determine the overall viability of the proposed National Health Insurance Plan. Under the NHIP a benefits package of health services will be provided to all Jamaican nationals and eligible residents. This package of services will cover secondary and some tertiary care, diagnostic and pharmaceuticals. Suggested exclusions from the package are mainly ones that are high cost, high intensity and generally elective. The NHIP will be the primary method for financing inpatient services, pharmaceuticals, lab tests and X-rays.

An analysis of the **four scenarios** of National Health Insurance presented show a number of costs and benefits to the Jamaican society resulting from the implementation of the NHIP:

- a) All Jamaicans nationals will have access to quality care provided through the Standard Benefit Package, regardless of their ability to pay
- b) The hospital sector will have a reliable source of revenue through timely and adequate payment for services
- c) Market forces will drive the health care delivery system to increased levels of efficiency and consequently improve quality of service. This includes the effects of increased consumer expectations now that a true "health care consumer" will be created through the charging and collection of premiums. New jobs will be created to support this new industry
- d) The role of Government will change vis-à-vis health care, as well as its method of financing. Although the Government will control the number of beds, at least in the short term, it will no longer act as the subsidizing entity to the hospitals through general tax revenues.

In terms of **decentralization**, the National Health Services Act of 1997 (Section 3) allows for the establishment and management of Regional Health Authorities (RHA). The role and function of the RHA has been clearly defined in the said Act detailing its management, reporting structure, powers and responsibilities. As at October 1997 four RHAs have become operational.



The Government is committed to inclusion of the wider community in the process of Health Sector Reform. Toward this end they have, through the Health Reform Unit (HRU), embarked on a Social Marketing and Information Sharing campaign throughout the island. Frequent media releases on the progress of the reform are featured in both the press and television media. Public Forums on the National Health Plan have been held and the comments included in the drafting of recommendations to the Cabinet.

Also, through the introduction of legislation there is the opportunity for the community to participate in the direct management of the delivery of health care services as the National Health Services Act 1997 mandates that the composition of the Regional Health Authority Board should consist of "not less than six nor more than eight community members, resident in the region, selected by the Minister..."

The Boards of the RHA function in accordance with the said Act and to any directions of the Minister. The functions of the Board shall be to plan, administer and control the services of the Authority so as to ensure that the best interests of the region, in the delivery of public health, are served. The Board shall have power to do all such things as are, in its opinion, necessary for/or conducive to the proper discharge of its functions.

Through the proposed NHIP there is the further opportunity for social participation through small business and private sector involvement in the provision of health services.

**Vulnerable groups** have been identified for specific health needs assessment and targeting. They include: the "working poor" (22% of the employed fall below the poverty line), young males (violence), women and women of child bearing age, street children and working children, school youths, the elderly and the mentally ill.

Details on the specifics of the programs were not available.

With the establishment of the RHA and the consequent integration and rationalization of the health services, new linkages and referral systems between the primary and secondary care systems are being developed to facilitate the free and easy movement of clients between the two system. There is a move to integrate Ambulatory Care Services at the Regional level.

In terms of **human resources**, chronic shortages of trained personnel in several categories affect the delivery of health care in terms of accessibility, effectiveness and quality of health care. Government remains the primary sponsor and trainer of health workers. There is need to strengthen and create greater capacity for health management training.

The National Health Services Act allows for the delegation of powers from the Public Service Commission to the Regional Health Authorities Boards', to appoint persons to staff the public health facilities in the region and to exercise disciplinary control over such persons. The Act also allows that an Authority may appoint and employ at such remuneration and subject to such conditions as it thinks fit, such other officers, employees and agents as it thinks necessary for the proper execution of its functions, provided that no salary exceeds the prescribed rate approved by the Minister.

The Health Reform Unit has also embarked on a major Job Evaluation exercise. The purpose of the exercise is to facilitate the reclassification of positions currently in the public service. This too should have impact on pay scales, qualifications, certification requirements, as well as productivity.

Part of the reform effort is a Hospital Auditing and Accreditation process and the establishment of a Quality Directorate at the level of the Ministry of Health in its new role of policy maker and regulator. **Quality Assurance** administrative manuals for a number of disciplines are in various stages of development.

## **2. EVALUATION OF RESULTS**

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The process of HSR has formally just begun in Jamaica with the promulgation and introduction of the new health legislation, the National Health Services Act, 1997. No data has yet been generated to begin any type of evaluation of the HSR effort in Jamaica other than presented in terms of its design and proposed activities. It is clear from the objective of the reform, and the magnitude of the reform design, that the expectation, in terms of results and expected changes, in the delivery and financing of the health services, are great.

A number of systems and structures have been put in place for the eventual evaluation of the reform. The fact that communities will be directly involved in the direction, decision making and management of their health will be yet another area to evaluate the effectiveness and efficacy of the health reform effort.



# **MEXICO**

Revised 2 April 1998

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# 1. MONITORING THE PROCESSES

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## 1.1 DYNAMICS OF THE PROCESS

In late 1995, the Mexican government defined a National Development Plan for 1995-2000 (PND), in which health is a line of action that is part of social development. The PND declares the struggle for equity so that economic progress will be translated into social progress for all. The 1995-2000 program for Reform of the Health Sector was launched to attain the principal health objectives of the PND. It proposes expanding Social Security coverage; avoiding duplication in the operation of services; introducing incentives to promote the quality of care; increasing the efficiency of care for the "open" (uninsured) population by passing to the states the responsibility for managing public health resources intended for the state; and granting essential health services to the population not covered.

The program was the product of a consultation process both at the popular (as part of the National Referendum Forums) and technical level (more than 200 working meetings of the different commissions comprising the National Health Council). Also included were proposals from the Health Cabinet and the Inter-ministry Commission that supports it, under the coordination of the Office of the Presidency of the Republic.

## 1.2 THE CONTENTS OF HEALTH SECTOR REFORM

The legal framework is based primarily on two general Laws that are revised and updated periodically: the General Health Law and the Social Security Law. In 1996, the Congress approved a series of amendments to the Social Security Law that became effective in July 1997. The General Health Law lays the groundwork for carrying out decentralization and establishing the distribution of powers among the Federal Government, the States, and the Cities. In 1997, the introduction of 52 amendments to the General Health Law was approved to make deregulation more effective in health-related matters, to introduce a new classification of drugs and to develop the use of generics, as well as to stipulate the authority of the Ministry of Health (SSA) primarily with respect to human cell control and biotechnological products.

It is estimated that 90.7% of population has access to health services.<sup>4</sup>

Salaried workers in the formal economy receive health care from the Mexican Social Security Institute (IMSS); federal or state civil service workers are covered by several Social Security institutes, the major one being the Institute for Social Security and Health of State

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<sup>4</sup> Organización para la Cooperación y el Desarrollo Económico (OCDE). Estudios económicos de la OCDE. Mexico. Special Chapter on health sector reform. 1998.

Workers (ISSSTE). In addition, there are the health services of *Petróleos Mexicanos* (PEMEX) for workers in that semipublic company, and the health services of the National Defense Secretariat (SEDENA) and the Navy Secretariat (SEMAR). The population outside of Social Security (SS) and the handicapped receive care in SSA facilities and benefit from the IMSS-Solidarity program operating in certain regions.

Slightly more than 50% of the population is covered by insurance, most of them by the SS. The rest of the population is uninsured and depends on care in public services; only about 37% actually have access to regular care. Private medicine provides health care to the population covered by the SS or by private insurance.

Nearly 10 million people do not have regular access to health services,<sup>5</sup> although vaccinations and some other public health services, as well as health measures in cases of emergency, do have national coverage.

The Program for Expanded Coverage (PAC) is directed primarily to the indigenous and rural population. Its objective is to increase primary care coverage and in its first year of operation it reached 4 million people living in 11 States. In 1997, it is expanding to cover 6 million people in 18 states. PAC consists of providing a Basic Health Services Package (PABSS) financed with federal funds allocated from a World Bank loans for the social sector. The 12 interventions of the PABSS are: basic sanitation at the family level; effective standard case management of diarrhea in the home; parasite treatments for families; identification of the warning signs of acute respiratory infections and referral to medical care units; prevention and control of pulmonary tuberculosis; prevention and control of hypertension and diabetes mellitus; immunization; monitoring of the nutrition and growth of children; distribution of contraceptive methods; prenatal care, childbirth and postpartum care; first aid; and formation of health committees.

To expand coverage in urban areas, the incorporation of families without formal economic resources within the IMSS is being promoted. This is being done through payment of a modest fee that purchases the right to health care for the entire family. Also, the IMSS has decided to open up the possibility that affiliated workers, if they so desire, can be cared for by the health facilities of other public or private institutions through a still unregulated procedure, "reversion of fees," with the IMSS retaining the function of collecting employer and employee contributions. The changes in the health services delivery of the IMSS will be developed gradually when the new Social Security Law takes effect. This voluntary affiliation method is important in the strategy to extend coverage because according to official estimates the number of members could be increased by 3.4% - 5% per year. As a result, within a period of 10 years IMSS coverage could be about 40% of the population.

The reform is being led by the SSA. Information systems are limited and not very dynamic. Starting in 1995, actions were taken to integrate the health services delivery systems of each institution (SSA and IMSS-Solidarity). The Inter-institutional Health Information Group was established, the Sources and Methods Manual was published and

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<sup>5</sup> Ibid.



statistics on mortality and hospital morbidity were decentralized with the creation, under an agreement between the IMSS and SSA, of the Unified Epidemiological Surveillance System and the National Committee for Epidemiological Surveillance.

Based on passing from the central level to the states the health services serving the uninsured population, each Decentralized Public Agency (OPD) is responsible for the administration of human and financial resources. The fund for Health Services Allocations in the 1988 Budget of Federal Payments (PEF) extended powers to the states for performing and controlling their respective budgets.

Intersectoral and environmental health actions are being promoted. The Intersectoral Commission was created to control the processing and use of pesticides, fertilizers, and toxic substances (CICLOPLAFEST) with the participation of agencies in addition to the SSA, in order to control pesticides, plant nutrients, and toxic and hazardous substances. The Mexican Official Standards have been issued to modernize the model surveillance system in this field. The Census of X-rays Facilities is being carried out and four Mexican Official Standards are being prepared on radiological protection and safety. An agreement is being developed among the Secretariat of Energy, the National Nuclear Research Institute and the National Commission for Nuclear Safety and Security. A National Program for Accident Prevention has been created.

It is anticipated that the Social Security Institutions will adopt a separation of the tax-collector and financing functions with respect to the delivery of services. There is no information on the SSA.

There are 224 health jurisdictions in Mexico. They are the regional technical-administrative units within the States, with responsibility for providing health services to the uninsured population within their territory and coordinating institutional programs, intersectoral actions, and social participation. They operate with Jurisdictional Health Committees. In 1989-1994, the decentralization strategy in the SSA was implemented and aimed at developing and strengthening the health jurisdictions, within the context of a strategy to establish Local Health Systems (local health systems). Starting in 1994, political decentralization, called New Federalism, was intensified. It was decided to group State services in the National Health Council (CNS). The CNS is the federal-state coordinating agency for planning, programming, and evaluating health services. In its two years of operations, it has developed guidelines for decentralizing the health services and technical and normative supporting documents; the new model of health care for open populations; the 32 sectoral state health diagnoses and the evaluation of the operating capacity of the services; updated studies on service coverage and master state infrastructure programs in health; and the definition of PABSS.

In 1996, the national agreement on decentralization of the health services was signed by the Federal Executive, the governors of the 32 states and the workers' union of the SSA. All the states have signed the agreements creating the agency responsible for operating services, and this has led to the transfer of personnel, infrastructure, and financing. The central level retains its normative role, regulation of services and control and health surveillance of decentralized products, facilities and services. It regulates the certification of

health professionals and the accreditation of health care units, policies on vaccination and environmental health, and health information.

The states and cities are responsible for organizing, operating, controlling and monitoring public and private services, international health in border areas and other promotional tasks, development and guidance in health. They have broad functions in terms of environmental policy.

With respect to social participation, the "Health begins at home" program trains agents to act as health monitors. The "White Flag in Health" program works with objectives relating to improving the health of children and pregnant women. Local Health Committees have been promoted and have assumed some administrative functions in rural areas. There are also Municipal Health Committees or Councils at the city level, Planning Committees for State and Municipal Development in each State (COPLADE and COPLADEMUN), and under them Health and Social Security Subcommittees. As part of the reform, the healthy cities movement has been revitalized. This agenda covered 606 cities in late 1996, 884 cities in 1997, and is expected to cover 950 cities by late 1998.

The analysis of spending by source shows that households contribute the most, accounting for 49% of total health spending for 1992-1996, as compared to employers (29%) and the federal government (22%).

Of the budget for public spending in health, curative care represents 68% (including hospitalization); administration, policy and planning represent 15%; and prevention 7% (14.6% in health care facilities for the uninsured population and 4% in the SS). Spending in hospitals represents 59.1% of the budget.

In 1992-1994, almost half of the budget for institutions with the highest volume of health services in the country was allocated for personnel compensation (48% in IMSS and 50% in SSA). In the ISSSTE compensation amounted to 21% and operating expenses amounted to 51%. Operating expenses represented 35% of the total in the IMSS, and 3% in SSA for the same period. Spending on materials and supplies between 1992 and 1994 amounted to 12% in the IMSS, 8% in the ISSSTE and 2% in the SSA. Fees represented 35% of total private spending, purchase of medicines 27% and hospitalizations 20%. Private health spending in urban homes is 10 times higher in upper income homes than in low income homes (US\$750 and US\$75); in rural areas it is 20 times higher (US\$1,294 and US\$65).

In 1992-1994, 43% of financial resources was managed by the SS, 42% by the private sector, 13% in health care for the uninsured and 2% in private health insurance. The participation of state governments in funds was 3.7% (1992-1994). In 1997, the SSA budget grew 32% as compared to 1996. The growth of the state budget was 9 times higher in 1997 than in 1996, with the state contribution to the institution's total income growing from 4.5% to 28.5%. The IMSS is financed through employee contributions and standards and contributions from the Federal Government. In the illness and maternity line, the state transfer went from 5% to 37% (replacing employee-employer contributions) during that same period.

With respect to planning the distribution of the health services budget, during 1995 the services of the SSA - serving the "open" population allocated 49.7% to curative care, 25.8% to administration, 11.0% to prevention, 5.9% to infrastructure, 4.9% to research, 1.5% to regulation and 1.2% to other items. In Social Security Institutions,<sup>6</sup> the distribution for the same year was as follows: 71.1% for curative care, 14.3% for administration, 4.7% for prevention, 4.6% for infrastructure, 3.4% for social benefits and 1.9% for research.

With regard to services provided, growth was 7.3% between 1994 and 1996 in outpatient units (especially mobile units, used in strategies to expand coverage), physician's offices and in private medicine. In 1995, it was estimated that the private sector had 30% of the beds, used 34% of the physicians, and provided 32% of consultations. The coverage of private health insurance is limited, the adoption of "managed insurance" schemes is even more limited and the traditional model of direct collection for services at market rates prevails.

Among the initiatives aimed at vulnerable groups, there are programs developed by the National Indigenous Institute, consisting primarily of health actions, food, education, and basic sanitation to serve the 59 ethnic groups. These programs also receive support from the different secretariats of the Federal Government and from the State Governments.

The Program for Education, Health, and Food (PROGRESA) has been implemented to serve the population residing in 28 states and 1,423 cities. Its health component consists of providing a dietary supplement to minors and pregnant or nursing women, training mothers and/or family caregivers in basic subjects, and care focused on risks to the family group.

In addition, the Program for Support of Indigenous Areas (PAZI) supplements the PAC and PROGRESA in the 303 cities with populations that are more than 70% indigenous.

Distribution of the National Women's Health Book will begin in March 1998 to promote monitoring of perinatal care, use of family planning methods and the results of cytology exams for early detection of cervical cancer. In addition, in the first two months of 1998 the Official Mexican Standard (NOM) for Prevention, Diagnosis, and Control of cervical cancer will take effect.

Sectoral coordination among the institutions providing public health services (SSA and SS) is considered inadequate. Their services are granted according to their own models of care and different schemes, with duplication in service coverage in certain regions.

The New Health Care Model for the Uninsured Population (MASPA), established and expanded by the SSA in 1995, standardizes the delivery of services in the units and makes it operational. It establishes the regulatory criteria for operation of community and institutional resources at the primary care level and in hospital units, linked in service networks through regionalization. It specifies that the services must carry out actions for promotion, prevention, diagnosis, treatment, and rehabilitation based on the needs and

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6 Data only for IMSS and ISSTE. There is not data for PEMEX.

problems in each locality and defines the responsibilities of the different administrative levels in the implementation and development of the model.

There is a program to improve the administrative management of the health services in order to strengthen the managerial capacity of the service managers.

HSR seeks to introduce users' free choice of the physician who will attend them, at least at the primary care level in SS institutions, in order to then establish schemes of rewards based on the choices made by patients, thus promoting the quality and efficiency of care.

There is a National Medical Arbitration Commission (CONAMED) to resolve conflicts generated in the practice of health care. Certification and accreditation powers remain at the central level in the SSA.

In coordination with the National Health Board, the SSA has established the basic table of essential drugs for the primary level. There is a Health Registry of Medications and there are Standards of Good Manufacturing Practice. There is an Official Mexican Standard for the Provision of Human Blood and its components for therapeutic purposes. There is a Commission for Continuous Quality Improvement of the services, within the National Health Council. The Bureau of Quality Medical Care, since 1997 a division of the General Bureau of Health Services Regulation, launched during the second half of 1997 the Program for Continuous Quality Improvement of Medical Care operating in six of the 32 states in the country. This program has been implemented in 517 Health Units; 36 of these are hospitals at the secondary care level. A baseline was designed and, based on results from that measurement, each State has designed specific interventions to carry out concurrent evaluation within a year. It is hoped that this program will be extended to the remaining States over the years 1998 to 2000.

## 2. EVALUATION OF RESULTS

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### 2.1 EQUITY

In health status. The under-reporting of mortality was estimated at 4.0% in 1996 (CONAPO). Under-reporting of births was estimated at 5% in 1994, and 27.6% of births are more than one year old when they are recorded.

The recorded *Infant Mortality Rate* (IMR) was 17.5 per 1,000 live births in 1995. Between 1990 and 1995 it fell 26.8% on average nationally. Mortality is higher in the central area, (22.3 per 1,000 live births) and lower in the north and south (12.2 and 12.8). The States of Puebla (33.2), Tlaxcala (28.7), and Mexico (26.8) have the highest rates, contrasting with Durango (3.9), Sinaloa (5.9), and Guerrero (8.5). The leading causes of death were problems during the perinatal period, birth defects, pneumonia, and influenza, nutritional deficiencies and accidents. Between 1994 and 1995, the recorded IMR was high (17.0 and 17.5% respectively), probably due to adjustments made in the number of newborns, since recorded deaths fell during that period. This means that it is advisable to use the adjusted IMR, reflecting a decline between 1994 (26.5) and 1995 (25.9). The adjusted IMR for 1996 would be 25.9 per 1,000 live births. Several studies found that the IMR among populations speaking an indigenous language is 56 per 1,000 live births.

The *Maternal Mortality Rate* for 1995 was 53, higher than in 1994, when it reached 48 and at levels close to 1990 when the reported rate was 54. The official explanation is that the increase in the last year was due to better recording of deaths with the use of the new death certificate, which examines the preexistence of pregnancies in all deaths among women of childbearing age. In 1995, the highest rates occurred in Puebla with 112, Tlaxcala with 97, and Oaxaca with 90. Of these deaths, 87.1% were due to direct obstetric causes (92.1 in 1990): toxemia 28%, hemorrhages 23.6%, postpartum complications 11.6%.

*In coverage.* The Universal Vaccination Program (PVU) had a coverage in children under one year (1996) of 100% for DPT3, 95% for polio and 93% for measles. The national coverage with the complete scheme (in children under one year) went from 75.3% in 1993 to 88.2% in 1996 (up to June). The lowest rates are in the Federal District (69.8), Chiapas (74.6), Jalisco (79.2), and Mexico (79.6) and the rates are lower among indigenous children. Starting in 1998, a new universal vaccination services will be implemented, applying the triple viral vaccine (measles, rubella, and mumps) and the Td vaccine that protects against tetanus and diphtheria in adolescents and adults.

The coverage of prenatal care provided by a health agent has increased in recent years and the average number of prenatal visits by pregnant woman went from 2.2 in 1990 to 2.8 in 1996 (other sources give 3.9, the goal being 5). The 1996 National Family Planning Survey (ENPF) found that medical personnel participated in attending 86.1% of

the pregnancies occurring between 1993 and 1995, for an increase of more than 50% in the last 20 years. Prenatal monitoring is not received by 6.8% of women (the difference is attended by non-medical health personnel). Those who do not receive prenatal care during the first trimester represent 63.2%.

*In access.* There is no information available on distances to health centers and waiting lists.

*In the distribution of resources.* Total physicians and nurses per 10,000 inhabitants are 19.1 and 21.05 respectively. In 1992, there were 11.91 physicians per 10,000 inhabitants providing their services in public institutions and 13.05 per 10,000 inhabitants in 1994. Greater growth has occurred in institutions for the uninsured: 9.6% for physicians and 7% for nurses, between 1994 and 1996. The number of hospital beds is 0.8 per 1,000 inhabitants (1.2 according to other sources). There is no data available on geographic distribution.

*In the use of resources.* The number of outpatient visits was 1.9 per inhabitant per year in 1994. The figure for hospital discharges (in the public system) was 4.5 for every 100 inhabitants (65.6% for those affiliated with the IMSS and 34.4% for the uninsured population), with an average stay of 4.0 days. The percentage of deliveries attended in public hospitals increased from 54.3% to 68.5% between 1990 and 1995 (ENPF). Twenty percent of deliveries were attended in private hospitals and 11.5% were attended at home or by the midwife.

*Financial equity.* Financial barriers are being overcome through the PABSS, the PAC, and mobile units. The budgetary allocation formula to reduce lags, correct inertia, and promote equity among the states in terms of health resources has been explicitly incorporated in the Fiscal Coordination Law in 1998. Under this formula, resources are distributed based on variables such as the population to be served, the prevalence of impaired health (standardized mortality rate) and the marginalization rates.

## **2.2 EFFECTIVENESS AND QUALITY**

*Effectiveness and technical quality.* No information is available on health centers and hospitals established and evaluated programs for quality control and sensitivity-training.

*Effectiveness and perceived quality.* There is no information available on health centers and hospitals with patient health care services and surveys of user perception.

## **2.3 EFFICIENCY**

*In the allocation of resources.* Information on access to drinking water is inconsistent. For 1995, it was estimated that 96% of the population in urban areas received piped water (not necessarily potable), while in rural areas only 52.5% received it. According to other

sources, the urban population with a drinking water connection in the home is 65.3%, the urban population with reasonable access to public sources of drinking water is 26.0% and the rural population with reasonable access to drinking water is 53.4%.

With regard to sewerage, coverage was 85.5% in urban areas and 20.9% in rural areas (other sources provide total figures of 76%, with 93% in urban areas and 29% in rural areas for 1995).

The urban population with systems for periodic collection of solid waste is 49.4%. Seventy percent of the waste produced is collected and 17% is only disposed of in sanitary landfills. There are proposals for programs to recycle refuse, although this field is still inadequately developed.

With regard to *reallocation of resources*, FONSIDA will begin to operate in January 1988, seeking to provide supplementary support for patients with AIDS. The Comprehensive Care Model for patients with AIDS will be implemented in all states of the Republic. Operations will begin in four regional viral load laboratories.

*In the management of resources.* There is information in the aggregate and by state regarding the impact of some programs (e.g., the National Program for Control of Diarrheal Disease, PRONACED) on infant mortality due to specific causes as a result of the commitments adopted in the World Summit for Children. There is no information available on the percentage of health centers and hospitals with standardized and operational measurements of activity.

## **2.4 FINANCIAL SUSTAINABILITY:**

In 1992, 1993, and 1994, total spending of the national health system reached 5.1%, 5.6% and 6.1% of GDP respectively (estimates). For 1994, it was US\$264 per capita. Public spending in health (including SSA and SS) was 592 pesos per inhabitant in 1994 and 873 in 1996 (taking inflation into account, this would be the equivalent of 444 pesos). For 1997, 4% of GDP will go to public spending in health. For every 100 pesos, 70 pesos are allocated to IMSS and 30 pesos to institutions serving the uninsured ("open") population. Twenty-one percent of programmable public spending is allocated to health.

## **2.5 COMMUNITY PARTICIPATION**

There is no information available on the percentage of health centers and hospitals with operating health councils. However, it is known that for 1997 there were more than 20,000 active Health Committees.





# **NICARAGUA**

Revised 30 March 1998

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# **1. MONITORING THE PROCESSES**

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## **1.1 DYNAMICS OF THE PROCESS**

Immersed in the transformation and modernization of the State, in 1993 the Ministry of Health (MINSA) began an analysis of its health policies, plans and programs and their impact on the health of the population. After the National Health Policy was formulated, Health Sector Reform was introduced, modifying the organization and operation of MINSA, transforming the relationships between the different participants in the National Health System and the service delivery model, and deepening and consolidating the SILAIS (Comprehensive Local Health Systems) and Municipal Health Services. The SILAIS were created by ministerial resolution in 1991. Their development was widespread with participation at the national and local level, allowing in 1994 for consensus-building among different participants for explicit definition of the health policy.

More than an Action Plan, there is a National Health Policy, but it is not sufficiently specific. There is no evaluation project. There are statements of intent in all aspects relating to equitable access to basic health services.

## **1.2 CONTENTS OF HEALTH SECTOR REFORM**

The Political Constitution of the Republic, the Law Creating the Single National Health System, the current Health Code and the provisions contained in international agreements or instruments form the legal framework. To allow MINSA to develop and perform its leadership and regulatory role, the General Health Law was prepared and sent to the Legislative Assembly in 1996. There have also been other initiatives in health legislation (arrangement of the activity of the MINSA, structural and organic adjustments, review and updating of rules of procedure and the medical audit project), legalization of real estate, and various legal treatments.

The National Health System is the set of institutions, standards and political, legal and administrative processes linking all individuals and public or private legal entities carrying out actions related to health promotion, prevention, care and recovery, those that carry out rehabilitation activities, as well as academic institutions and social organizations that train and organize human resources to carry out such actions. The following provide health services: the Ministry of Health (MINSA), the Ministry of Government, the Military Medical Services, and private suppliers. MINSA is the principal service provider. It is estimated that the private sector serves 4% of the population. The National Social Security Institute (INSS) only has financing functions.

The percentage of the population with regular access to health services is 83%.

The INSS began a review in 1992. It seeks to achieve progressive coverage of workers and their dependents, expanding the basic benefits and coverage to the family group (wife or companion and children up to age 6), for a total of 290,000 beneficiaries. The Welfare Care Model operates by purchasing health services with funds from contributions (from the employee, the employer and the State) from organized service provider agencies. This model has given the private sector a larger share in real terms in the market for delivery of medical services. The INSS retains its function as a collector of contributions, transfers the health risk to the Welfare Medical Companies (EMPs), and performs the roles of facilitator and supervisor of health actions so as to ensure a minimum level of quality in the services. There are 32 EMPs. The INSS finances and regulates them and purchases a basic package for its beneficiaries. What it does not cover is handled by MINSA, in addition to pensioners and retirees.

The private subsystem shows an incipient level of development. It has seven hospitals with 200 beds, 200 outpatient care clinics, and an unidentified number of laboratories and pharmacies.

A basic package of essential services is not explicitly defined, nor have territories and risk groups been prioritized.

The agency responsible for the steering role is MINSA, with normative and organizational capacity in the area of provision and human resources, among others. There is under-reporting in the health information system, which means that it must be adjusted. MINSA does not perform a regulatory function with respect to the prices or quality of private health services delivery.

Differentiation or separation of functions is found in the INSS, an insuring and financing agency, but it contracts the delivery of services with EMPs who may be public or private. It doesn't exist in other areas.

The central level defines policies, formulates sectoral strategies, and prepares technical standards, adopts and controls compliance with resolutions, regulations, and provisions on health care processes, regulates international cooperation and appointments to positions. The SILAIS level (17 in the country) controls the process of adapting strategies according to the characteristics and realities in each territory; coordinates and controls the resources in each territory and advises in the technical processes of health care. The municipal level (145 cities) carries out local strategic administration, identifying and prioritizing problems, programming actions and arranging joint activities with other health resources within its territory through effective intersectoral and inter-institutional linkages, administers institutional health resources, and formulates, develops and evaluates programs and projects at the municipal level. The city is the basic organizational unit, where a set of sectoral and intersectoral political and administrative resources are concentrated under a single management responsible for developing the health of a defined population within a given territory. The hospitals also direct their services to a specific territory.

There is a National Health Council, Local Health Councils, Hospital Governing Boards and Specific Commissions on a national level. The National Health Council, in operation since 1993, is comprised of different social actors (union and guild health associations,

private companies, community organizations, churches, the Health Commission of the National Assembly, NGOs working in health, women's associations, etc.). It is the senior deliberating organ of the Ministry and is presided over by the Minister. It was the National Health Council that approved the National Health Policy in October 1993. Currently, the activities of Local Boards are very restricted. Another form of citizen participation in health management are the different commissions (National Breast-feeding Commission, National Commission for Nutrition, National Commission on Micronutrients, the Atomic Energy Commission, etc.).

The Nicaraguan health sector has six sources of financing: i) donations to the government (30.1% of total health spending), ii) companies (21.2%), iii) taxes (16.1%), iv) credits to the government (15.8%), v) households (11.9%), and vi) donations to NGOs (4.9%). MINSA's sources of financing are: i) taxes (24.9%), ii) loans (25.8%), and iii) donations (49.3%). The INSS is financed by : i) households (73.5%), ii) companies (23%), and iii) government, through taxes (3%). The private sector is financed by: i) households (79.3%), ii) companies (19%), and iii) donations (1%).

The institutions of MINSA spend 61.3% of total health expenditure; the EMP's, through the INSS, spend 27%; private hospitals spend 6.9%, and NGOs providing medical services spend 4.8%. Of total spending, 66.1% is for the uninsured population, 27% for the insured population and 6.9% for the population with purchasing power in the private sector.

Ninety-seven percent of MINSA spending is current expenditures and only 3% is for investment. In 1994, 35.4% of spending was for personnel, 27.1% for materials and supplies (including food and drugs at 13.7%), and 14.9% for current transfers. In the same year, 52.4% was spent on hospital care and 37.3% on primary care.

Private spending is very important as a source of funds. For the rural population, the increase in payments for services in public facilities led to a great decline in their use. However, for the urban population, comparable increases led to changes in the mix of public services utilized, replacement of sources of health care and a small reduction in utilization.

Drugs for maternal and child health, as well as for tuberculosis, malaria, dengue, and sexually transmitted diseases are free in the health centers, but are not always available.

The Ministry of Health has 873 units in primary care, potentially covering 72% of the population. It also has 28 hospital units, although 39% of their equipment is shut down or operating irregularly. New hospital services such as ambulatory surgery have emerged, starting in 1991-1992.

There are statements on priorities for more vulnerable social groups, but these are not made explicit.

There are two levels of care: primary and hospital. Patients tend to go directly to hospital centers.

There are management commitments between MINSA and the director of each SILAIS, with prior approval from the Governing Board of the respective SILAIS. The director assumes the obligation of meeting the commitments to production of services, impact on health and user satisfaction as expressed in the Local Plan. MINSA undertakes to allocate the resources and provide the technical assistance needed to achieve the goals. Resources are decentralized, reflecting the development of local capacities to administer them. There also are Commitments between hospital directors and MINSA, and between hospital directors and SILAIS directors.

The INSS purchases services from public or private EMP's for its members, and services for pensioners in hospitals for general patients. Fees are charged for some services, e.g., radiology and laboratory services.

There is no explicit human resource development policy. Professional education is not coordinated with the MINSA. There is high turnover in human resources and a tendency toward concentration in the private sector. No incentives have been designed to improve the distribution of professionals and the quality of care.

A National Registry of Health Facilities will be created as well as commissions to prepare Qualification and Self-evaluation Standards and compulsory minimum standards for Accreditation of Health Facilities. A second step is the formation of the National Accreditation Commission. Health Registration will be designed for pharmaceutical products, cosmetics, food, and toxic substances and the pertinent control measures.

## 2. EVALUATION OF RESULTS

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### 2.1 EQUITY

*Equity in health status.* Under-reporting of mortality was 56% in 1995, with an upward trend in recent years, but has remained stable in children under one year (40%). There is 40% under-reporting for the birth rate and 50% of the births recorded are more than one year old at the time they are recorded.

The *Infant Mortality Rate* was 47 per 1,000 live births (although other sources indicate 58 per 1,000) in 1996, lower than the 71.8 per 1,000 shown a decade earlier. Matagalpa, Jinotega, León, and Chinandega exceed the national average and the rate is lower in Managua. The leading causes of death are intestinal infectious diseases, disorders originating during the perinatal period, acute respiratory diseases, birth defects, and malnutrition.

The *Maternal Mortality Rate* is 130 per 100,000 live births, although due to under-reporting this figure varies according to the source. In 1995, it reached 155, but this is possibly because of better reporting, since it includes information provided by midwives, volunteers, health promoters and health workers. The leading causes are hemorrhage, hypertension, sepsis, and abortion, and adolescent pregnancies, pregnancies in older women and multiple births contribute to mortality.

*Equity in coverage.* In 1996 the coverage of the Expanded Program on Immunization in children under one year was 91% for DPT3 (with figures ranging from 76% in Rivas and 78% in Carazo and León to 100% in the SILAIS of Jinotega, River San Juan, Madrid, New Segovia and Matagalpa). At the national level, the coverage for polio was 99% (two SILAIS, Rivas and León, have 80% coverage, and five SILAIS have coverage between 86% and 99%). National coverage for measles reached 90%, but is lower in Rivas (75%) and 100% in four of the 17 SILAIS. The coverage of BCG at the national level was 100%, with lower coverages in Rivas (78%), León (83%) and Managua (78%).

The coverage of Prenatal Check-ups was 85% in 1995. Trained personnel checks 17.5% of women in their first trimester. Total prenatal check-ups show an upward trend with relative growth of 29%.

*Equity in access.* Geographical access to health services is acceptable in urban areas. In Managua, 13% of the population indicates that they are more than 30 minutes away from the health unit and 8% does so in other urban areas of the country. In rural areas, 33% is more than two hours away from the hospital, 22% more than two hours away from the health center, 10% more than two hours away from the health post, and 26% more than two hours away from a private physician.

*Equity in the distribution of resources.* In 1995, there was one physician for every 1,000 inhabitants and 0.56 nurses per physician. There are no territorial data.

*Equity in the use of resources.* There are 1.2 outpatient visit carried out per inhabitant, with a downward trend. Seventy-five percent of the visits were at the primary care level and 25% at the secondary care level (includes emergency care). Hospital discharges were 62 per 1,000 inhabitants. The Hospital Occupancy Rate has increased until reaching in 74.2% in 1995 (63.7% in 1991). There is an increase in major surgeries due to operating room improvements. There is no information by geographical areas.

The data on deliveries attended by trained staff are very inconsistent and sources show figures of 87% and 22% for 1995. The coverage of institutional delivery reached 45% in 1995.

*Financial equity.* There are no charges for services and drugs are free for hospitalized patients and the mother and child group.

## **2.2 EFFECTIVENESS AND QUALITY**

*Effectiveness and technical quality.* There are no data on health centers and hospitals with established programs for quality control or sensitivity-training.

*Effectiveness and perceived quality.* There are no data on health centers and hospitals with patient health care services or surveys of user perception. The general survey results are known: the degree of satisfaction with curative health care services is 80.7%; for prevention and control visits the degree of satisfaction is 76.3% and 87.5%, respectively. The overall degree of satisfaction in hospitalization is 70.1%. There is a high degree of user satisfaction with the services provided by the EMP's of the INSS.

## **2.3 EFFICIENCY**

*In the allocation of resources.* There are conflicting data according to source on water coverage. Water coverage is provided to 82.4% of the urban population and 30.1% of the rural population (other sources give overall figures of 69%, with 93% for urban areas and 28% for rural areas). In 46.6% of households drinking water comes from the INAA water supply systems, 21.5% gets water from dug wells, 12.7% from rivers, and pools, 15.5% from public taps, and 3.9% from tank trucks.

The figures are equally contradictory for sewers and waste disposal. The INAA administers 19 sanitary sewerage systems, and only seven have their own treatment units. In 1996, 32.6% of the population had a sanitary sewerage system (34.1% of the urban population was connected to public waste disposal system, 51.7% of the urban population had individual systems for waste disposal and 28.0% of the rural population had adequate waste disposal systems). Of total dwellings, 21.9% have sanitary sewerage systems, 8.1%



catch basins or septic tanks, 55.7% latrines and 14.2% have no system. Other figures show 66% overall with sewerage systems and waste disposal, 88% in urban areas and 28% in rural areas.

Solid waste management for the collection and final disposal of waste (municipal solid waste) exists in 69 of the 143 municipal seats of government, representing 35% of the urban population covered. There is no adequate final disposal of collected waste (this is done in the open air) or adaptation of municipal spillways (only 13% of spillways have sanitary authorization).

Strategies and programs for re-allocation of resources have not been developed.

In the management of resources. There are no data on percentage reductions in infant mortality due to specific programs. There are no data on centers with measures of activity or collection capacity.

## 2.4 FINANCIAL SUSTAINABILITY

Total per capita health spending was US\$ 34 in 1994, or 8.7% of GDP. Total public spending in health in 1995 was 6.6% of GDP and 16.2% of public spending. MINSA expenditures were 4% of GDP. Per capita spending went from US\$ 22 in 1993 to US\$ 34.6 in 1995.

A recent study estimated that total per capita spending in health (in constant córdobas) and as a percentage of GDP for the years 1995 and 1996, as follows:

	1995		1996	
	per capita	% of GDP	per capita	% of GDP
<b>public sector</b>	497.6	8.81	562.4	9.02
<b>private sector</b>	913.8	4.14	1,046.6	4.16
<b>total sector</b>	582.51	12.96	685.7	13.20

Source: CNS, INEC, BCN

## 2.5 COMMUNITY PARTICIPATION

At the local level, there are: a) Base houses: form of community organization that with the health units jointly develop ongoing comprehensive actions for prevention, promotion,

and basic health care; b) In the cities: multisectoral commissions for a coordinated approach to problems and Municipal Health Councils, where different social actors participate in the planning processes and carry out social control of health management; c) In the SILAIS: participation on the Governing Boards of SILAIS. Community representatives have played an important role over the last 15 years particularly in local programs for disease prevention and health promotion and even more so in rural areas. Community organizations have selected these representatives and have participated actively in training and monitoring them.

There is no information on health centers and hospitals with functioning health councils.

# **PARAGUAY**

Revised 18 March 1998

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# 1. MONITORING THE PROCESSES

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## 1.1 DYNAMICS OF THE PROCESS

Since 1989, Paraguay has been going through a stage characterized by the transition from an authoritarian regime to democracy. In June 1992, a new Constitution was ratified consecrating the existence of Human Rights and a Democratic and Social Government of Law. Since then there have been elections for the president, legislators, and governors, and there is separation of powers and freedom of the press. Although not all uncertainties have disappeared, in November 1996 Paraguayans were for the first time able to freely elect aldermen and mayors.

The change of regime also represented a new economic stage. In 1991, the country signed the treaty of Asunción creating MERCOSUR. Although serious problems persist (e.g., tax evasion and the fragility of the financial system) from 1992 to 1996 inflation was controlled, exchange rates were unified, fiscal deficit and foreign debt were reduced, per capita GDP grew, interest rates were liberalized and modernization of the tax and tariff systems was studied. Since late 1996, there have been signs of stagnation and risk of increased unemployment (9% recorded and 20% underemployment).

In addition, public social spending increased from levels under 4% of GDP last decade to almost 9% in 1996. However, it is estimated that 25% of the urban population lives below the poverty line and that the percentage is higher in rural areas. The Secretariat for Social Action was created in 1994 and the Strategic Social Development Plan was formulated in 1996.

To date, restructuring of the government has been slow and limited in scope in terms of improved services and administrative rationalization and there are cases of corruption. However, progress has been made in promoting citizen participation and in decentralization.

Since 1994, the Ministry of Public Health and Social Welfare (MSPyBS) has been detailing the objectives of Sectoral Reform (HSR): i) to expand coverage through greater coordination among the different actors; ii) to improve efficiency and effectiveness of actions, giving priority to vulnerable populations and prevalent diseases and risks and, iii) to promote the accessibility and quality of services through decentralization of management and increases in targeted investment.

Up to now there has been no specific agency in charge of the design of Sectoral Reform, or terms defined to implement it. The Minister of Health himself often appears as the leader and principal negotiator of the process. No explicit mechanisms have been created for evaluating HSR.

After complex parliamentary proceedings, Law 1032 creating the National Health System was approved in 1996. The Law assigns a leadership function to the Ministry of Health and Social Welfare and creates the National Health Council (CNS) as the senior agency for consensus-building and sectoral coordination. According to the Law, the CNS has an Executive Committee and under it a Medical Directorate, the Supervisory Authority and the Public Health Fund, institutions that have yet to be implemented.

Various international organizations (UNFPA, UNICEF) and countries (Japan, Spain, the U.S., Germany) cooperate in specific health programs, and the role of NGOs is also important. Since 1996, for the first time there are two important sectoral loans from the World Bank (IBRD) and the Inter-American Development Bank (IDB). The second (as yet undisbursed) loan incorporates HSR components. Recently PAHO collaborated with the Ministry of Public Health and Social Welfare in a participatory Sectoral Analysis exercise that involved the CNS and other relevant actors. The point of the exercise is to give a place to health policy and HSR as government policy within the context of this year's electoral process.

## **1.2 CONTENTS OF HEALTH SECTOR REFORM**

Since 1992, health has constitutional rank but the Health Code (CS) that establishes the scope of government action in health dates from the 1950s. Law 1032 establishes the National Health System (SNS) and indicated the intention of creating a regulatory agency, a financing agency and a benefits agency. In the absence of complete regulatory development, the legal framework identifies numerous provisions unreflective of current reality, legal vacuums, and inadequate compilation to facilitate compliance with the Law.

The Constitution guarantees the right to health but effective coverage fails to reach 70% of the population. Differences based on ethnic group, rural location, and low income levels determine lower coverage and even no coverage. There are several projects (many with external financing) to increase coverage for territories where more than 70% of the population resides. In addition, there is growth in the number of private insurers and the possibility of developing the National Health Authority contemplated in the SNS Law is being studied.

Public health insurance is split between the Ministry of Public Health and Social Welfare (30-35%), IPS (17-20%), Military Health (8%) and other smaller systems. There is currently no reliable data on or regulation of private health insurance. Some estimates put at 15% the population covered by this type of insurance and the extent of multiple insurance are unknown. Starting this year, demand has been subsidized so that public employees can contract private health insurance.

There is currently no effective separation of the functions of insurance, financing, and provision, although the SNS law establishes this separation through the respective entities (Health Authority, Medical Directorate and Public Health Fund). The market of providers operates in the case of the Institute of Social Welfare (IPS) which purchase services from private providers. There is no regulation of the factors market.

The leadership role is exercised by the Ministry of Public Health and Social Welfare, and the presence of the Minister of Health himself is very dominant. The Ministry of Public Health and Social Welfare administers approximately 60% of all human resources in the health sector and its budget is allocated by law. It also serves as a partial protector of the environment. Information is often incomplete and not always reliable. The need to create modern information systems on health status (under-reporting is frequent) and the operation of services has been identified.

In 1997, the Ministry of Public Health and Social Welfare began its decentralization, delegating functions to the Ministries of Health of the Departmental Governments, which provide support for the Regional and Local Health Councils. These Councils and the National Health Council (CNS) are the expression of participation and social control and the place where the functions of coordination and consensus between the public and private sectors are carried out. However, to date the process has not affected the health network of the IPS, and the Regional Health Directorates of the Ministry of Public Health and Social Welfare have continued to exist. In early 1998, a standard was enacted that seeks to clarify the distribution of powers at the departmental level.

The public health budget (primarily the Ministry of Public Health and Social Welfare and the IPS) is prepared on the basis of historical spending and directed preferably to the hospitals. The sources of financing are mixed (General Budget of the Nation, employer and employee contributions and fees), with precarious control of processes and results. Although the public facilities have fees, they do not always relate to costs and the income thus generated is transferred directly to the Ministry of Finance.

The services provided show some recent modifications. In the last five years, there are new private facilities for primary and hospital care and an increased supply of outpatient care in the case of the IPS. There is no increase in beds in the public sector but in recent years health centers have been renovated and there are plans to continue strengthening the public primary network through the IDB loan. However, there are no assessments of the impact of investments.

The management model does not provide for contracts to allocate resources between levels of care or for evaluation of results. The administration of human resources is centralized, with almost all hiring documents and medical licenses for staff members going through the office of the Minister of Health.

There are no specific mass programs for vulnerable groups, except the maternal and child care programs which have been reinforced since 1996 with the IBRD loan. There are highly targeted specific programs directed to ethnic groups, e.g., the program developed by the Mennonite community in Chaco Central for the 18,000 members of the indigenous population.

Concerning the model of care, material resources have been strengthened in the last two years (ambulances and communications equipment), but there are no known formal patient referral and back-referral mechanisms. There is a manual on accreditation of hospital facilities that has not yet been applied. Only the professionals in the Ministry of Public Health and Social Welfare, the Department of Control of Health Professions and

similar agencies are registered. There is no health technology assessment or quality certification.



## 2. EVALUATION OF RESULTS

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### 2.1 EQUITY

*In health status.* Information systems are inadequate. Under-reporting of deaths is 38.7%. Medical certification, although compulsory, is only carried out directly by the professional slightly more than half of the time. Under-reporting of births is estimated at 51%.

The *Infant Mortality Rate* (IMR) is 43.3 per 1,000 live births, with a spread between 36.8 and 91.9. The highest rates occur in areas where indigenous, rural, and poor populations predominate. The *Maternal Mortality Rate* has the same distribution, with a national average of 139.5 per 100,000 live births and a spread between 48.9 and 519.9. Both rates show a downward trend but remain among the ten highest on the continent.

*In coverage.* Vaccination coverage with DPT3 and measles exceeds 75% of children under one year. Measles outbreaks occur every three years, are clearly diminishing, but could make it doubtful that the target of eradication by the year 2000 will be met. There was only one case of diphtheria in 1995 and tetanus is not reported except for its neonatal form (10 cases in 1996 concentrated in 12 districts).

The coverage of prenatal care provided by trained personnel reaches 40% of pregnant women, placing it among the five lowest coverages on the continent.

*In access.* The percentage of the rural population is 49.7%, ranging from 20.4% and 87.1% and predominating in indigenous and very poor areas. There are no national studies on the rural population more than one hour away from a health care center or the urban population more than 30 minutes away from a health care center. Also, There are no data on waiting lists.

*In the distribution of resources.* The budget of the Ministry of Public Health and Social Welfare represents 2.6% of the General Budget of the Nation (1996). Total per capita spending reached US\$ 145 (1996) and per capita public spending in health was US\$ 32 (comes to US\$ 51 if the IPS is included).

The country has 6.7 physicians and 1 nurse for every 10,000 inhabitants.

*In the use of resources.* The information available related only to benefits from the facilities of the Ministry of Public Health and Social Welfare, where there are 0.5 visits per inhabitant per year, and 21.0 discharges per 1,000 inhabitants per year. There is no national figure for surgical interventions or ICU discharges. The percentage of deliveries attended by trained personnel is 40%.

*Financial equity.* There is no reliable information on financial barriers impeding access although they presumably do exist.

## **2.2 EFFECTIVENESS AND QUALITY**

*Effectiveness and technical quality.* There are no health centers and hospitals with programs for quality control and sensitivity-training or patient care programs.

*Effectiveness and perceived quality.* There are no systematic and recent surveys of user perception.

## **2.3 EFFICIENCY**

*In the allocation of resources.* Drinking water is provided for 27.1% of the population, with large variations between urban and rural areas (urban 58% and rural 11%). Sewerage systems cover 60% in urban areas and 8% in rural areas. Only Asunción has solid waste collection.

There are no recorded national programs reporting intersectoral actions, although some NGOs attempt this in areas of the interior). There is no knowledge of experiments in re-allocation of resources to benefit actions that are more cost effective than others.

*In the management of resources.* With regard to some production indicators, the information available relates only to the facilities of the Ministry of Public Health and Social Welfare. The average period of hospitalization is 4.9 days ranging from 16 (Asunción) to 2.7 (Missions) due to complexity and chronic pathologies in the first case and to less supply and difficulty of access in the second case. The percentage of cesarean sections is 18.8%, ranging from 7% in Boquerón and 25% in Asunción. There is no information on the extent of operating room use.

## **2.4 FINANCIAL SUSTAINABILITY<sup>7</sup>**

Total per capita health spending reached 7.4% of GDP in 1996. In that year, public spending represented 35% of total expenditures (22% by the Ministry of Public Health and Social Welfare, and 13% by IPS) or 2.59% of GDP. Private health expenditures reached 65% of total spending in health and 4.8% of GDP. These figures represent the most reliable estimate.

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<sup>7</sup> Health Sector Analysis of Paraguay (preliminary document).

The trend between 1992 and 1996 has been an increase in both public spending and in spending by the Ministry of Public Health and Social Welfare.

## **2.5 COMMUNITY PARTICIPATION**

Community participation is carried out through the National Board (CN), the Regional Councils, and the Local Boards; their main function is to coordinate and seek consensus from the various public and private actors in the health sector. To date, the National Board, 15 of the 18 Regional Council, and 114 of the 264 Local Boards have been established.



# **PERU**

Revised 30 March 1998

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# 1. MONITORING THE PROCESSES

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## 1.1 DYNAMICS OF THE PROCESS

Since 1995, the Peruvian Government has sought to focus government action on areas not reached by the private sector or where criteria relating to social equity, market regulation and safety prevail. The government also intends to promote efficiency and produce institutional capabilities to strengthen the governance and leadership in the sector, redirecting public administration toward the functions of financing, regulation and control, and generally delegating the delivery of services.

Within that framework, the Basic Social Spending Program is being developed. Its purpose is to reduce extreme poverty by 50% before the end of the century. The Basic Health Program for All (PSBPT) is the health sector's specific strategy. The PSBT proposes: a) universal access to public health and priority placed on those with the least

in individual care, b) definition of a basic package of health services, c) modernization of management and information systems, d) separation of the functions of financing, regulation and control, e) prevention and control of priority problems, f) promotion of healthy lifestyles and an intersectoral approach. The PSBT is one of the fundamental components of Health Sector Reform (HSR) in Peru.

There is no national agency with political and technical capability in charge of the design of HSR. The Ministry of Health (MS) has only managed partial direction of the process since it has not succeeded in completely developing its institutional proposal due to slow negotiations with other governmental actors (the Peruvian Social Security Institute (IPSS) and the Ministry of Economy and Finance) to define the instruments, requirements, expected results and terms of Sectoral Reform.

The guidelines of HSR as defined by the MS for the public subsector are:

- a) equity in health care, including financial equity; b) identification of users; c) targeting of health spending within the PSBPT; d) strengthening of the regulatory role and;
- b) modernized management in hospitals and institutes. It is expected that the MS will concentrate on the formulation of policies, strategic planning, and regulation and health control, and that other agencies will assume responsibility for the administration of financial resources and the network of health care facilities in an autonomous and competitive environment.

There is no action plan specifying goals, dates and those in charge of HSR. Nonetheless, there has been some progress in its implementation (e.g., the PSBPT already accounted for 21% of MINSAs spending in 1996, new laws were promulgated, an attempt was made to separate functions, and targeted distribution of resources began). An

important advance in implementation is the creation, in February 1998, of the Coordinating Unit for Modernization of the Public Subsector, under the Minister of Health.

Various international entities (AID, IDB, IBRD, ODA, PAHO, et al.) and countries (the United States, Japan, etc.) are collaborating with specific programs (e.g., investments, increased coverage and nutrition) with growing national coordination of efforts.

Finally, there is a recognized need for criteria to evaluate the processes and the results of the PSBPT, but these have not yet been formulated publicly.

## **1.2 CONTENTS OF HEALTH SECTOR REFORM**

The health sector's legal framework was modified by two general laws. First, the Law on Modernization of Social Security (May, 1997), giving flexibility to the public monopoly of medical care for social security beneficiaries and allowing them to affiliate with private suppliers ( "Health Services Provider Companies"). The Law's stated objectives are to increase coverage for the lower income population, to improve the quality of services and to promote efficiency in the allocation of resources. Second, the general Health Law (LGS, June, 1997) guarantees universal insurance, assigns to the government the responsibility for the delivery of public health services using any provider, and directs public financing toward public health actions and health care for people with fewer resources. The regulations of the Law on Modernization of Social Security create the Health Services Provider Companies Authority (SEPS), the purpose of which is carry out the regulatory function for the private entities that will be part of the new Social Security System and the Peruvian Social Security Institute.

The government guarantees the right to health through universal access to the PSBPT, seeking to ensure regular access to health services and to involve local authorities and the community itself. It has been strengthened through redistribution of human resources and the availability of essential drugs in the pharmacies of public facilities. Free school insurance for children in public facilities was also implemented in 1997 and the feasibility of maternal insurance is being studied.

There is some progress in the leadership role, understood as sectoral management, regulation and strengthening of the health authority, the right to health, and insurance and specific tasks concerning financing and service delivery. In addition, modernization of the information systems for political decision-making, insurance, and provision has been proposed. The LGS identifies MINSA and the IPSS as the agencies responsible for financing, insurance and public provision for their respective networks. Although the law recognizes the planning role of MINSA for the sector as a whole it does not resolve the jurisdictional conflict between the MINSA and the IPSS.

Environmental health is not included in HSR. Even within MINSA, the General Environmental Health Directorate sets standards, makes arrangements with local governments and other sectors, and evaluates aspects of environmental protection, basic sanitation, food hygiene, control of zoonoses and occupational health, while another



ministerial agency, the National Environmental Protection Institute for Health, also issues environmental protection policies and standards.

The decentralization strategy has consisted of defining the roles of the central government and regional and local governments in managing health systems and services (the LGS also includes the separation of financing, insurance and provision functions) and involving the community. The local level has been given obligations and resources without prior evaluation of its management capability.

The Local Health Administration Committees (CLAS) reflect participation and social control. They are made up of people from the community and the health team, and receive financial resources from the state to hire staff and for operating expenses. Staff members and local services have powers to program, arrange, and evaluate.

Information systems on financing and expenditure are insufficient to systematize the information by territorial unit and by facility. Budgets are historically based with limited control and frequent subsidies (e.g., in 1996, of the population served by the MINSA, 20% are military insureds, 13% are under IPSS and 9.8% have private insurance). There is financing from external sources linked to health investment loans on the one hand, and to donations for operating expenses on the other. The sources are bilateral (76.9%), multilateral (20.5%) and international NGOs (1.6%).

Domestic sources of financing, according to 1997 data, are 37.7% governmental in origin, 32.4% comes from households (through out-of-pocket payments and insurance), and 29.2% from companies (contributions to IPSS and other insurance programs).

Information on expenditure is not available by target (e.g., health promotion, outpatient care, hospitals), and/or by function (e.g., human resources, purchase of goods and services, drugs and investments).

Since 1992, the services provided have grown 61% in primary case facilities and the number of occupants per bed has fallen 11.7%. However, under-utilization of installed capacity continues to be a significant problem: fully one-third of the beneficiary population go only to the MINSA and IPSS facilities.

The definition of vulnerable groups is part of the PSBPT, with emphasis on poverty and biohazards. There is no regular information on gender, ethnic group, and marginalization. The National Household Survey (ENAH) indicates a direct association between the perception of disease, medical visits not conducted, lack of economic resources and lower income levels. The strategies defined in this case are insured access to the PSBPT and identification of users.

A key element in changing the model of care is placing priority on disease prevention and promotion of healthy lifestyles through the intersectoral approach, community participation and mass communication. The PSBPT and modernization of hospital management are the other explicit strategies.

As for management models, there are no management contracts or commitments among the different levels of the public health care system. Neither is there the legal possibility nor the physical capacity to bill third parties, although there are some initial steps toward the purchase and sale of services.

The country's human resources supply is inequitably distributed. This situation has been dealt with by hiring physicians to send them to remote areas with high percentages of marginalized population and extreme poverty. Greater flexibility in recruiting, supervising and firing health workers seems to have been introduced as a result of the LGS and the specific role of the CLAS and efforts are being made to introduce performance incentives but there is no information on their application.

There is no information on accreditation, quality and evaluation of health technologies. The users' ability to choose among different providers seems to have increased in accordance with the legal changes, although the extent of this is unknown. There is partial quality control of drugs, the National List of Essential Drugs is being implemented, and the Shared Pharmacy Administration Program was launched in 1994 to expand the availability of drugs with community participation (the program provides 63 low-cost essential drugs to 12 million people).

## 2. EVALUATION OF RESULTS

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### 2.1 EQUITY

*In health status.* The information available on mortality is from 1992, with under-reporting of 46.2%, medical certification of 70.6% and 31.7% poorly-defined causes. There is national classification by income levels based on criteria for basic needs unmet.

In 1993, the infant mortality rate (IMR) was 58.3 per 1,000 live births, ranging between 22.9 (stratum I, highest income) and 113.9 (stratum V, lowest income). The information broken down by departments indicates that those in the mountains and jungle (where the poor, rural and indigenous populations, with geographical and cultural barriers to access, are concentrated) have figures higher than the national average. Neonatal mortality is 25 per 1,000 live births. The principal causes of death in children are communicable diseases at 39.8% (29.7 in stratum I and 46.9 in stratum V). They are followed by perinatal complications at 33.9% (39.3 in stratum I and 29.7 in stratum V) and infectious diseases in third place at 11.1%.

*Maternal mortality* is one of the principal public health problems with a rate of 265 per 100,000 live births, and tending to remain stable. It has a high incidence in rural populations (at 200 in urban areas, the rate rises to 448 per 100,000 live births), among the poor and illiterate (at 49 among those with higher education, the rate rises to 448 per 100,000 live births among the illiterate). One-sixth of maternal deaths and one-fifth of deaths from abortion are among adolescents.

The leading causes of death are hemorrhages (23%), abortion (22%), infection (18%), and toxemia (18%). The leading indirect cause was tuberculosis.

*In coverage.* The Expanded Program on Immunization shows 100% coverage for the third DPT dose in children under one year and measles coverage at 87%.

In terms of prenatal care provided by trained personnel, 67.2% of pregnant women received it (rural 44.5% and urban 87.4%), with no significant changes in the period 1990-1995.

*In access.* There is no information available on distances to urban and rural health care centers or on waiting periods considered unacceptable according to national criteria for selected pathologies.

*In the distribution of resources.* Total per capita health expenditure was US\$ 121 in 1996, ranging from US\$ 91 when provided by MINSA, to US\$ 145 when provided by IPSS and US\$ 174 when provided by the private sector. The information by level of income and ethnic group indicates a distribution pattern wherein MINSA expenditures concentrate on regions with better health indicators. The number of physicians per 1,000 inhabitants is 0.98

but distribution continues to be very inequitable (especially in highly rural departments with high poverty and a high proportion of the indigenous population).

*In the use of resources.* Outpatient visits per inhabitant per year vary between MINSA (0.72) and IPSS (1.54). There is no information available on payments per inhabitant, surgical interventions and ICU payments. Deliveries attended by trained personnel are 55.1% in 1996 with strong variations between urban (93% in Lima), rural (19.1%) and jungle departments (34.4%).

*Financial equity.* There is a political decision to guarantee the right to health through the PSBPT by insisting on the redistribution of human resources. There is no other information on financial barriers limiting access.

## **2.2 EFFECTIVENESS AND QUALITY**

*Effectiveness and technical quality.* There is no information on programs for quality control and sensitivity-training established and evaluated in health centers and hospitals. Twenty-five percent of the drugs evaluated meet established standards of quality and there are isolated examples of total quality programs.

*Effectiveness and perceived quality.* There is no information on patient health care services and surveys of user perceptions.

## **2.3 EFFICIENCY**

*In the allocation of resources.* Sixty-six percent of the urban population is connected to a household water supply network but only 8% has a continuous supply. Residual chlorine is higher than 0.1 ppm in 80% of the samples and higher than 0.4 ppm in 32.2%. Fifty-two percent of the rural population is supplied by watercourses. There are plans to increase the coverage of the rural supply.

Sewerage systems cover 66% of the urban population and 9% of the rural population. Latrines cover 22%.

It is estimated that 60% of the population has solid waste collection. There is only one sanitary landfill that is complete, two that are incomplete and the remainder goes to spillways or watercourses.

There are policies to promote the intersectoral approach based on changes in the model of care and the Local Health Administration Committees (CLAS). Starting in 1996, MINSA launched a national initiative on Healthy Communities for Sustained Human Development in 8 communities where participatory planning processes including the city, NGOs, and grassroots organizations were started. Notable among the subjects discussed

are pregnancy among adolescents, domestic violence, environmental management, and prevent and control of priority communicable diseases.

*In the management of resources.* There is no information on percentage reductions in infant mortality attributable to specific programs. There is no information on standardized measures of activity or on the ability to collect from third parties.

There is no information on the average hospital stay, the number of discharges per bed, the percentage of cesarean sections compared to total deliveries and the extent to which operating rooms are used.

## **2.4 FINANCIAL SUSTAINABILITY**

In 1996, total health expenditure represented 4.8% of GDP.

The share of health spending in public sector spending rose from 9.9% to 13.1% between 1992 and 1995. The data on the percentage of spending by the MS and IPSS are not always consistent.

In 1995, 34.2% of total health expenditure was done by the MINSA, 25.6% by the IPSS. The remaining 40.2% was in the private sector.

The Shared Pharmacy Administration Program provides 63 essential drugs to 100% of the administrative subregions, covers 12 million people with a total expenditure of US\$ 12.6 million. In turn, the IPSS covers half of the population with spending 5 times higher, but on the basis of a list of characteristic drugs based on levels of care.

## **2.5 COMMUNITY PARTICIPATION**

Ten percent of the facilities in primary care have implemented the Local Shared Administration Committees.