



## ***FINAL REPORT***

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*THE FINANCING OF THE  
HEALTH SECTOR*

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*El Salvador*

*Health Sector Assessment*

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## ACRONYMS

ANTEL	El Salvador Public Telephone Service
APSISA	Health Systems Support Project
BM	Bienestar Magisterial of the Ministry of Education
CDD	Consejos Departamentales de Desarrollo
CEL	Comisión Ejecutiva Hidroeléctrica del Río Lempa
CDM	Consejo Departamental de Municipalidades
COMURES	Corporación de Municipales de la República de El Salvador
DAFP	Documento de Avance de Fondos Públicos
DAIP	Public Investment Administration
DRG	Diagnosis Related Group
EEC	European Economic Community
FESAL	Encuesta Nacional de Salud Familiar
FUSADES	Fundación Salvadoreña para el Desarrollo Económico y Social
GOES	Government of El Salvador
GTZ	German Development Agency
IDB	InterAmerican Development Bank
ISDEM	Salvadoran Institute of Municipal Development
ISSS	Salvadoran Social Security Institute
MEA	Municipalities in Action Project
MIPLAN	Ministry of Planning
MOH	Ministry of Health
NGO	Nongovernment Organization
PAHO	Pan American Health Organization
PL480	Public Law 480
PRN	National Reconstruction Plan
PROSAMI	Maternal and Child Health Program
PVO	Private Voluntary Organization
RHS	Regional Health Services of the MOH
REACH	Resources for Child Health Project
SCAP	Sistema Computarizado de Administración Presupuestaria
SETEFE	International Financing Technical Secretariat
SM	Sanidad Militar
SRN	Secretariat for National Reconstruction
UNDP	United Nations Development Program
USAID	U.S. Agency for International Development
UTMIM	Technical Unit for Medicines and Medical Supplies
WHO	World Health Organization

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## EXECUTIVE SUMMARY

Analysis of the health sector of El Salvador includes the most important provider of health care, the Ministry of Health (MOH), the Instituto Salvadoreño de Seguro Social (ISSS), the 17 central government agencies that have their own health services or their own, independently administered health care budgets--the most important are Sanidad Militar (SM), Administración Nacional de Telecomunicaciones (ANTEL), and Comisión Ejecutiva Hidroeléctrica del Río Lempa (CEL)--and the private sector.

According to conventional wisdom, it is the Ministry of Health that provides care to 80 percent of the population. According to a 1989 household survey-based study, however, the MOH provides only about 40 percent of total outpatient care, and about 75 percent of total hospital care, while ISSS's shares are 11 percent and 15 percent, respectively. The private sector (for-profit or non-profit) and other government health services provide the remainder of the health care services, 49 percent of outpatient and 10 percent of hospitalizations.

In 1992, health expenditures in El Salvador (exclusive of NGOs) constituted 3.71 percent of GDP, which, in comparison with other Latin American countries, is inadequate. The limited resources are not being used to produce the right mix of health care services (i.e., there are considerable allocative inefficiencies). Specifically, too little is spent on primary health care and too much is spent on physician-provided, hospital-based curative care. Furthermore, the efficiency with which most services and activities are being produced (i.e., operational efficiency) is generally low. For example, despite the significant reduction in the number of hospital beds in El Salvador that were made in the 1980s, occupancy rates throughout the sector remain persistently low, averaging 60-65 percent.

Although the national average of health care provision per capita appears to be adequate, for most Salvadorans it is not, due to serious inequities in the distribution of health care resources and services. Social Security enrollees, for instance, annually receive an average of 10 consultations per person, compared to 0.7 for the 80 percent of the population that is purported to rely on the Ministry of Health. For every one colon the MOH spends on its mandated clientele, the privileged ANTEL and CEL systems spend 11 and 18 colones respectively.

The income of one-half of El Salvador's population is below the poverty line, and half of these poor (one-quarter of all Salvadorans) have incomes that are inadequate to purchase even basic nutritional requirements. While it is estimated that about one-quarter of the population is without access to care, 59 percent of persons who are in the highest income quintile and 78 percent of persons who are in the next to highest income quintile and are hospitalized, are treated in MOH hospitals where they receive care at highly subsidized prices. The average MOH hospital bill is a mere 6 percent of the average fee in the private sector (146 and 2330 colones, respectively). In light of the Ministry's espoused goal of providing care for all indigents, these overly generous subsidies constitute misallocations of the Ministry's limited budget. The Ministry must better target its resources to the poor in order to increase their access to quality care while charging those who can pay the full cost or more for the MOH services they receive. This will encourage persons with adequate incomes to go to private providers and thereby stimulate the growth and development of the private sector, which has long been crowded out by the public sector.

The health sector's resources are disproportionately concentrated in San Salvador. Although the MOH has been the only mechanism by which the availability of health care resources has been made more equitable throughout El Salvador, it presently spends 135 colones per capita in the only two regions of the country which have less than the national average share of poor, and 99 colones per capita in the 3 poorest regions. Forty-two percent of the total operating expenditures of the MOH are made in San Salvador where 29 percent of

Salvadorans live, leaving 71 percent of the population with inadequate coverage by the MOH. The degree of concentration of all of the other subsectors' resources and services in the metropolitan area is substantially greater than the MOH--72 percent of ISSS's resources, 80 percent of ANTEL's, and 70 percent of the private sector's, which results in two-thirds of the entire sector's, resources are concentrated in the metropolitan area.

Three-quarters (74.6 percent) of the MOH's direct service delivery expenditures are dedicated to its 30 hospitals, leaving only 25 percent for its 360 primary care facilities, the most cost-effective type of health care. Although the overconcentration of MOH resources on secondary and tertiary care constitutes an inefficient use of resources, most of the other organizations are having either no primary health or preventive care services, or have just started to develop them in the last 2-3 years.

#### *General Recommendations*

1. Develop a single, universal and obligatory health fund financed by contributions of all employers and employees and used to purchase a uniform set of services for all.
2. Implement a single national health system. This may entail a phase-in period of several years. In the interim, the following reforms of the ISSS system should be implemented: (a) excess utilization of ISSS beneficiaries should be discouraged by requiring that ISSS beneficiaries have a co-payment for curative care services; (b) a moratorium on all hospital construction; (c) persons paying Social Security contributions for health care should have the option of purchasing private insurance coverage with the same monies; and (d) the ISSS privatization scheme for outpatient consultations and pediatric care should be opened up to other (non-ISSS) providers.
3. As an intermediate step in the development of the national health care system, beneficiaries of the ANTEL, CEL, Bienestar Magisterial and other quasi-public/parastatal health care systems or health financing schemes should become ISSS enrollees.

#### *MINISTRY OF HEALTH*

##### *Evolution of MOH Financing*

MOH expenditures as a share of GDP rose in value each year from 1975 until it peaked in 1981. Thereafter, except for 1984, it fell each year until reaching their nadir in 1992, at less than one-half of one percent. In 1993, MOH expenditures as a percent of GDP rose for the first time in 9 years to 1.1 percent of GDP, but remain about 50 percent below their average for the 1975-1993 period. In both absolute and relative terms, the financing of the Ministry of Health of Salvador is inadequate.

##### *Management Issues*

Effective management and planning in the MOH is made difficult by the Ministry's fragmented organizational structure: the 15 major hospitals are autonomous agencies about which the MOH Central Office has little financial data and general knowledge; the MOH's investment projects unit and the financial planning unit are not integrated (therefore recurrent costs of projects coming on-line are rarely taken into account); and six distinct sources of MOH financing exist, each with its own system of control and oversight. As a result nobody in the MOH knows all the Ministry's financial resources.

The historical budget based resource allocation criterion, rather than allocating resources on the basis of organizational goals, health status or some other public health-related criteria has changed somewhat as the result of international donor initiatives and stipulations. Given the level of donor sponsored activities in El Salvador, this has resulted in the MOH's virtual abdication of its control over its budget. This situation, too,

has started to change. The Ministry negotiated a 29 percent increase in its allocation, marking an important milestone in its management of its own affairs.

Between 1975 and 1984, an international donor project expanded the number of MOH facilities by 41 percent, requiring an increase of more than 2,000 MOH employees. Personnel expenditures, 55 percent of total MOH expenditures in 1977, grew to 92 percent in 1984. At the same time, the escalating war and economic dislocation resulted in serious erosion in the MOH budget, precipitating a recurrent cost crisis. At the same time, all other outlays (for medicines, medical-surgical supplies, machinery, equipment, maintenance, and repair) dropped precipitously from 45 to 7 percent of MOH expenditures.

Dependency resulted from the crisis when in 1986-87 massive foreign assistance in the form of AID-purchased drugs and medical supplies was able to restore the viability of the Ministry. Between 25 and 30 percent of the Ministry's total annual operating costs were financed by foreign assistance. Although the level of that dependency has lessened slightly in recent years, in 1992 the combined resources of USAID, World Bank and World Food Program projects covered 21 percent of the MOH's operating expenditures. The USAID and World Bank projects, which the Ministry must be prepared to "pick-up" when they end in the next 2 years, currently represent 15 percent of the MOH operating expenditures alone.

#### *Efficiency Issues*

The productivity of MOH providers is low and falling. In 1987-88, physicians averaged 1,102 consultations per position; in 1990-91, the average was only 852, a 23 percent drop. A 1992 study found that MOH physicians provide half of the consultations per contracted hour that they are suppose to, according to MOH norms, and that they are less than half as productive as an ISSS physician.

One reason for low and falling MOH physician productivity is that their average real level of remuneration has fallen by more than 80 percent since 1980. In addition, wage compression has significantly narrowed wage differentials among MOH employees, sapping the motivation of the more highly skilled personnel. There are also marked regional disparities in staff composition and staff performances, reflecting the absence of standardized treatment protocols and staffing standards.

The severe shortage of nurses and the ratio of nurses to physicians (the reciprocal of the 3- or 4-to-1 ratio recommended for developing countries) has encouraged an inordinant reliance on physicians (they provide 89 percent of all MOH care), and has resulted in unnecessarily high labor costs. Fifty-seven percent of the MOH physicians working in the health centers, units and posts, and three quarters of them working in non-administrative positions in hospitals work only 2 hours per day. In addition, the composition of MOH physicians is such that it fails to foster a corps of professionals identifying with the Ministry, it encourages low productivity, and it generates higher than necessary fixed costs per physician.

An increasing proportion of all MOH ambulatory care visits which are treated as emergencies (33 percent of all hospital ambulatory visits in 1992), manifests the inaccessibility of outpatient care (restrictive hours) while constituting a serious economic problem (costing a hospital 60 percent more to provide than a non-emergency ambulatory visit). The MOH could have saved about 22 million colones, nearly 10 percent of the 14 major MOH hospitals' total 1992 operating expenditures by reducing the emergency share of ambulatory care visits to the customary level (15 percent).

#### *Recommendations*

*Immediate Reforms.* In order to consolidate programs and activities and increase resource availability, the Ministry should simultaneously pursue four complementary approaches: (1) selectively target resources to

provide primary health care services to the underserved population; (2) mobilize additional resources by raising user fee levels and developing alternative sources of financing; (3) contain costs and improve the efficiency; and (4) improve the functioning of the user fee systems and develop other cost recovery mechanisms.

1. Improve personnel-related policies by: (a) increasing the number of other MOH providers--viz., nurses and nurse auxiliaries--relative to physicians; (b) requiring physicians to work a minimum of 4 and preferable 6 or 8 hours per day; (c) establishing standardized care and base personnel allocation on need; (d) reversing the ten-year trend of wage compression: increasing wages of professionals relative to the lowest skill categories so as to improve morale, productivity and retention of higher skilled MOH employees; (e) developing and providing positive incentives for MOH service providers; and (f) increasing the regular hours during which consultations are provided to include afternoon and evening sessions.
2. Develop a needs- and performance-based approach to planning and budget allocation.
3. Develop a municipio- and/or departmental-specific budget allocation formula.
4. Develop a hospital budget allocation formula which is driven by service provision levels and includes controls for case mix.
5. Address the managerial inefficiencies inherent in the fragmented and piecemeal financial information systems.
6. Articulate a detailed plan for decentralization, including a plan for phasing out the MOH's Regional Offices, identifying the roles, nature and coordination mechanisms at the departmental level (the Health Department of the Consejo Departamental de Desarrollo), and the training necessary to ensure that the departmental offices are prepared to assume their new responsibilities.
7. Conduct cost-effectiveness studies of some MOH facilities' to determine if it would be less expensive to contract these services out to the private sector.
8. Provide technical assistance to improve the performance of the user fee systems, and develop a national fee structure with lower prices for lower tiers of care, for primary health care services, and for rural areas.
9. Increase the sale of MOH goods and services, and the renting of MOH inpatient space to the private sector.

*Medium-Long Term Recommendations.* Performance and accountability in the health sector must be assessed in terms of effectively addressing the health needs of the population, as measured by changes in health status. Decentralization holds great promise for being able to generate greater incentives and accountability. Unfortunately, at present, local capacity (at the *municipio* level) to administer a health care system organization is at best nascent. Some *municipios* have the capacity to administer their own health facilities (directly or by contracting with a private entity). they are the exception. The best that could be hoped for at present, is to begin working with the handful of *municipios* that currently have this capability.

Reliance on the *municipio* is consistent with a much broader current effort by the Central Government of El Salvador to develop a more participatory society via the development of *Consejos Departamentales de Desarrollo* (CDDs), department level associations of all of the mayors of the *municipios* within the department. The CDDs are intended to give local governments a critical mass, greater economies of scale in organizational development and administration, and a means by which to acquire strength in numbers so as to ensure a better

negotiating position vis-a-vis the Central Government. One of the 5 departments within a CDD will be a health department. It is imperative that there be wide participation in defining the structure and responsibilities of this department, including how it will articulate with the MOH Central Office and its member *municipios*.

## OBJECTIVES AND METHODOLOGY

The objectives of this technical report are to:

- research the financing of the Health Sector of El Salvador in its entirety,
- analyze the information gathered,
- highlight the accomplishments and remaining problems in all the subsectors, and
- make recommendations based on what was learned.

The methods used to gather information included: (1) review of primary documents acquired at the various institutions within the Health Sector; and (2) review of secondary documents from these same institutions, donor agencies, other consultants, and experts in the health field. Methods used in calculations and analysis are explained within the text where necessary.

## ***I AN OVERVIEW OF THE HEALTH SECTOR***

### **1 The organization and coverage of the sector**

The health sector of El Salvador is comprised of three major components, the Ministry of Health (MOH), the Salvadoran Social Security Security Institute (ISSS), and the private sector. In addition, there are approximately 17 distinct Central Government agencies that each have their own health services for the exclusive use of their employees. The most significant of these are the Armed Forces (Sanidad Militar, SM), the Ministry of Education's Bienestar Magisterial (BM), the Administracion Nacional de Telecomunicaciones (ANTEL), and the Comision Ejecutiva Hidroelectrica del Rio Lempa (CEL).

The Ministry of Health is mandated to provide health care to the entire population and has traditionally been regarded as the chief care provider of 85 percent of the population. The Social Security Institute provides care to its enrolled workers and retirees, their spouses and children up to the age of three. Traditionally, ISSS coverage has constituted 6 or 7 percent of the population, with the private sector accounting for the remainder. As a result of a series of recent expansions in the criteria for affiliation with ISSS, the Institute now (1993) covers about 11 percent of the Salvadoran population.

A national, 1989 household survey-based study of the demand for care, performed under the auspices of the AID REACH Project, however, found that these traditional perceptions of the relative importance of the subsectors were inaccurate. The study found that there were two distinct medical care markets in El Salvador, one for ambulatory care and one for inpatient care. In the case of hospitalization, the traditional perception was not too wide of the mark. The MOH accounted for 76 percent of total care, Social Security 13 percent, and the private sector 9 percent. The market for external consultations, however, was very different than had been presumed: the MOH accounted for only 40 percent, Social Security for 13 percent and the private sector for 45 percent. In light of this finding, it would be more appropriate to use the Ministry's coverage as 40 percent of the population (2,016,000 persons), rather than to continue to use the traditional figure of 85 percent.

In this report, both figures will be used; the former will be referred to as the Ministry's "cotizantes," while the latter will be referred to as its "beneficiaries."<sup>1</sup>

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<sup>1</sup>A major portion of the discussion in this section is about the health subsectors of ISSS, ANTEL, CEL, and BM. One aspect of this discussion consists of an investigation of the degree of equity in the health sector, which will be assessed primarily by examining variations in the level of health care expenditures and service provision in each of these subsectors. The benefits of each of these organizations are limited to their respective members, which consists of two types: (1) the specific individuals who are either directly paying for the coverage or are workers, or (2) the persons who enjoy membership privileges because of their familial relationship to the dues paying individual or worker. In this analysis the dues paying individual or worker will be referred to as the "direct beneficiary" or "cotizante," and the persons who are entitled to membership because of their relationship to the cotizante, together with the cotizantes, will be referred to as the "beneficiaries" of the subsector. The MOH has no special membership, it is open to all persons. On the one hand, because not all persons use the MOH it is important to limit its population so as to obtain a more accurate profile of the Ministry's consultation, coverage, and concentration rates. On the other hand, because all persons may use the MOH it is important to also take into account what its potential consultation, coverage and consultation rates might be if more persons opted to rely on the Ministry for care. Therefore, the analysis will include both of these populations. In a manner somewhat analogous to the membership organizations, the 40 percent of the population which was identified in the 1989 AID Household Health Interview Survey as the MOH's actual constituency will be defined as MOH "cotizantes," and MOH "beneficiaries" will be defined as 85 percent of the population.

A more recent set of household interview surveys, conducted by MIPLAN, while not completely comparable (due to differences in instruments and sampling frame), found that the private sector, was not quite as important as had been indicated by the demand study, but, nevertheless, was significantly larger than had been thought to be the case prior to the demand study. The MIPLAN 1991-1992 survey quantified the private sector's constituency at 37 percent of the population (for both inpatient and outpatient care), and the entire public sector (no institutional distinctions were made) provided care to 63 percent of Salvadorans. The MIPLAN and the REACH studies were consistent in their finding that the Metropolitan Area was least dependent upon the public sector, while the rural areas were most dependent upon it, with other urban areas of the country in an intermediate position. This suggests that the high concentration of the MOH's and the ISSS's facilities, personnel and expenditures in the Metropolitan area, where it is estimated at least two-thirds of private sector resources are located, and people's income is generally higher, rendering them more capable of purchasing those services, is inappropriate.

The three other health care organizations mentioned earlier, ANTEL, CEL and Bienestar Magisterial, much like ISSS, limit their coverage to their members; the 6,843 telephone company employees, and each employee's spouse (including common law marriages, *compañeros/ compañeras*), children up until the age of 18, as well as the employees' parents. In addition, about 1,000 retired ANTEL workers retain full privileges in the system. Although ANTEL does not have any precise data on the number of beneficiaries its health program covers, estimates obtained from different ANTEL health services persons interviewed range from 30,000 to 45,000. If it is assumed that there are approximately 5 beneficiaries per worker, the number of beneficiaries of the ANTEL program may be estimated at 35,215.

Like the ANTEL health program, the Bienestar Magisterial program does not have any precise data on the number of its beneficiaries. Program personnel estimate that there are 26,000 direct beneficiaries (*cotizantes*, including retired teachers) and that it covers a total of 147,000 persons. Bienestar Magisterial covers teachers, their wives or husbands (but not by common-law marriage) and children up to the age of 21. Children older than 5 years of age, do not enjoy several important health program benefits; namely hospitalization, outpatient care by a specialist, or laboratory examinations or x-rays. They do, however, continue to enjoy coverage for outpatient care by general physicians and full coverage of medications.

In 1992, the CEL health program covered the 3,726 electric company employees. The program's beneficiaries includes the workers' 3,094 spouses, and their 7,666 children less than 5 years of age, a total of 14,486 beneficiaries. In 1993, the CEL workforce was reduced by 8 percent and the total beneficiaries of the program contracted by 12 percent to 12,718.

Repeated efforts to obtain information about the Sanidad Militar were unsuccessful. As a result, this subsector lies outside of the domain of the study. The SM has 40 clinics located throughout the country, and has just completed building a new hospital in northern area of the city of San Salvador. SM personnel report that non-military persons are allowed to use the SM infrastructure, though it was not learned under what circumstances or the frequency of this practice. The size of the military and the size of the non-military users of the SM was not ascertained.

The table on the following page presents a summary of the number of enrollees in the four most important membership health care organizations in El Salvador. These organizations together have 424,717 members (*cotizantes*) and 776,864 total beneficiaries. In terms of coverage, ISSS is by far the most important of the membership organizations, accounting for 91 percent of all *cotizantes* and three-quarters of all beneficiaries. The fact that ISSS's share of beneficiaries is substantially less than its share of *cotizantes* reflects the fact that its *cotizantes*' membership qualifies a smaller number of

additional beneficiaries. This stems from the more restrictive coverage of children of ISSS *cotizantes*--only up until 3 years of age--in combination with the fact that, unlike ANTEL and Bienestar Magisterial, the *cotizantes*' parents are not covered.

HEALTH SUBSECTORAL AFFILIATION OF THE SALVADORAN POPULATION:  
SIZE OF THE MEMBERSHIP HEALTH CARE ORGANIZATION

Organization	"Cotizantes"	"Beneficiarios"
A. Number of persons		
CEL	3,726	14,486
ANTEL	7,843	35,215
Bienestar Magisterial	26,000	147,000
ISSS	387,148	580,613
Total	424,717	776,864
B. Percentage of membership organization population		
CEL	0.9	1.9
ANTEL	1.8	4.5
Bienestar Magisterial	6.1	18.9
ISSS	91.2	74.7
Total	100.0	100.0
C. Percentage of total salvadoran population		
CEL	0.07	0.29
ANTEL	0.16	0.70
Bienestar Magisterial	0.52	2.92
ISSS	7.68	11.51
Total	8.43	15.41

Sources: Unpublished documents from CEL, ANTEL, BM, and ISSS.

In El Salvador, as in most Latin American countries, most physicians divide their time between their public sector positions and their private practices: most (63 percent) physicians are employed on a part-time basis by either the MOH or the ISSS, or occasionally by both (Iunes 1994). The predominant private health sector entity is the individual physician with a part-time practice. With most public sector consultations concentrated during the morning hours--especially in MOH facilities--the bulk of individual physician-based, private practice care is provided in the afternoon. There are approximately 3,900 physicians in El Salvador. Approximately

two-thirds of physicians (66 percent) live and practice in San Salvador and its immediate environs (lunes 1994).

Another component of the private sector consists of non- government organizations (NGOs). A recent inventory of NGOs compiled by the United Nations Development Program (UNDP) identified 186 such organizations, 51 (27 percent) of which were begun since 1990. The war's coming to an end has apparently encouraged NGOs to develop or to begin work in El Salvador. Slightly over half of the NGOs identified (94) provide some type of health-related services, and 48 work in the area of environmental health ("Directorio de Instituciones Privadas de Desarrollo de El Salvador, 1992"). The organizations providing health-related services are a highly disparate group, with services ranging from the formation of health volunteers to hospital care provided in a 200-bed facility, though the vast majority concentrate their work in preventive health care and rely on paramedics, such as health promoters. It is estimated that NGO health care services cover over 400,000 Salvadorans (PROSAMI, 1994).

## 2 Financial resources of the health sector

The national income accounts of the Central Bank are in the process of being revised. The war long precluded updating the household income and expenditures data that serves as the basis for some of the more detailed accounts, and specifically for the one of interest here--medical care expenditures. Toward this end, in 1991 a national household income and expenditures survey was conducted by MIPLAN. The survey's domain, however, was limited to urban areas. The findings indicate that medical care expenditures per household averaged 1,342 colones annually, and constituted 4.2 percent of the total annual average household expenditures. The structure of these outlays was:

Type of expenditures	Colones	Percentage
Medical Consultation	237.60	18%
Eyeglass and Eye Care	65.88	5%
Dental Care	11.28	1%
Other Medical Services	397.44	30%
Medicines	629.64	47%
Total	1,341.84	100%

Source: MIPLAN, *Encuesta de ingresos y egresos de hogares a nivel nacional*, 1991.

Based on the survey findings, urban households (constituting 40 percent of the total population) spent 719,963,580 colones on medical care in 1991. If it is assumed that the distribution of rural to urban spending on health in 1991 was equal to that found in the 1989 REACH study (31.6 percent), it may be estimated that national household medical care expenditures in El Salvador in 1991 totaled 947,472,070 colones<sup>2</sup>. Adjusting

<sup>2</sup>These totals are operations costs and do not include GOES investment expenditures or international loans, grants or technical assistance.

these expenditures for the inflation which occurred between mid-1991 and mid-1992 (as measured by the CPI), we obtain an estimate of private sector health expenditures of 1.09 billion colones for 1992.

By adding to this figure (1) the MOH's net expenditures (net of user fee revenues), 464 million colones, (2) Social Security's medical care expenditures, 405 million colones, and (3) total private health insurance claims paid, 18 million colones, (4) ANTEL's 40.7 million colones, (5) Bienestar Magisterial's 35.8 million colones, and (6) CELS's 29.7 million colones, 1992 health sector operating expenditures may be estimated to have been 2.03 billion colones. This still underestimates total expenditures however; it excludes all subsidized (including free) care provided by NGOs. Nevertheless, this is the single best point estimate available. On the basis of this estimate, it may be said that health care expenditures in El Salvador in 1992 were the equivalent of 3.71 percent of GDP. The two major public sector health care institutions, the MOH and ISSS, together accounted for 42 percent of this total. Similar analyses of other Latin American countries are not available. However, in most other Latin American countries the Ministry of Health, alone, has a level of financing that exceeds the 1.55 percent share of GDP that the MOH and the ISSS together spend in El Salvador. One must conclude that the financial resources devoted to El Salvador's health sector are inadequate.

### **3 Health care services provision in El Salvador**

At the time of this writing there was little national level information available about total health care services provision in El Salvador. This section, therefore, relies principally on the service delivery data of the two largest organizational providers in the country, the Ministry of Health and Social Security. These two organizations together control an estimated 42 percent of the total financial resources of the sector and provide an estimated 50 percent of all care.

The evolution of ISSS and MOH outpatient visits, hospital admissions and medical care expenditures is provided in the table and charts on the following pages. While the level of service provision of both institutions was marked by irregularities in the 1980-1986 era when the civil war was at its greatest intensity, their historical trends of increasing service provision--particularly in outpatient consultations--were re-established by 1987. All three of these tables provide evidence of the Social Security system's substantially faster growth relative to that of the Ministry of Health. Relative to the MOH, each year since 1987, the ISSS has come to account for a larger share of total financing, a larger proportion of total outpatient consultations and a larger fraction of total hospital admissions.

## TOTAL COST OF HEALTH CARE SERVICE PROVISION

Year	Total Cost (in thousands of colones)			ISSS as a % of MOH
	ISSS	MOH	Total	
1981	78,203	152,184	230,387	51
1982	74,876	149,823	224,699	50
1983	75,586	143,515	219,102	53
1984	87,022	157,289	244,310	55
1985	94,623	164,445	259,068	58
1986	85,843	216,959	302,803	40
1987	86,504	233,729	320,233	37
1988	124,929	243,318	368,247	51
1989	152,126	274,094	426,220	56
1990	234,056	344,398	578,454	68
1991	319,763	424,204	743,967	75
1992	405,122	463,994	869,116	87

Assumes 40% of the ISSS Health Regime's administrative costs is expended on prestaciones m3dicas and 60% on prestaciones en dinero

Source: ISSS, Estadísticas, Cuadro XIV, various years. *Informe Complementario Constitucional/Informe sobre la liquidaci3n del Presupuesto General y situaci3n del Tesoro P3blico y Patrimonial Fiscal*, Ministerio de Hacienda, various years.

**THE EVOLUTION OF ISSS AND MOH  
HOSPITALIZATION SERVICES**

Year	Total Number of Admissions			ISSS as a % del MSPAS
	ISSS	MOH	Total	
1981	40,849	209,667	250,516	19
1982	39,389	206,813	246,202	19
1983	38,667	203,450	242,117	19
1984	36,930	195,576	232,506	19
1985	37,866	193,175	231,041	20
1986	35,616	198,512	234,128	18
1987	32,449	201,174	233,623	16
1988	36,707	203,997	240,704	18
1989	40,639	196,094	236,733	21
1990	52,081	197,695	249,776	26
1991	58,379	200,569	258,948	29
1992	60,989	181,915	247,492	34

Source: Informe Complementario Constitucional/Informe sobre la liquidación del Presupuesto General situación del Tesoro Público y Patrimonial Fiscal, Ministerio de Hacienda, various years.

**EVOLUTION OF NUMBER OF MOH AND ISSS  
INPATIENT DAYS**

Year	Number of inpatient days			ISSS as a % of MOH
	ISSS	MOH	Total	
1985	228,761	1,376,873	1,606,634	17
1986	202,886	833,750.4	1,036,636	24
1987	157,916	NHI	157,916	--
1988	181,099	1,035,097	1,126,196	17
1989	220,135	980,470	1,200,605	22
1990	275,450	988,475	1,263,925	28
1991	298,813	1,002,845	1,301,658	30
1992	332,885	950,914	1,283,799	35

Source: Estadísticas, ISSS, various years.  
Unpublished data, Departamento de estadísticas, MOH.

**THE EVOLUTION OF ISSS AND MOH  
HOSPITALIZATION SERVICES**

Year	Average length of stay		MOH as a % of ISSS
	ISSS	MOH	
1985	6.04	6.8	112.56
1986	5.70	4.2	73.73
1987	4.87	NHI	
1988	4.93	5	101.35
1989	5.42	5	92.30
1990	5.29	5	94.54
1991	5.12	5	97.68
1992	5.08		

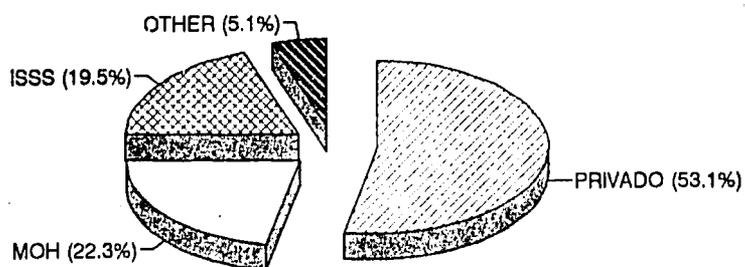
Sources: Unpublished data: ISSS and MOH

**THE EVOLUTION OF THE ISSS AND MOH AMBULATORY CARE**

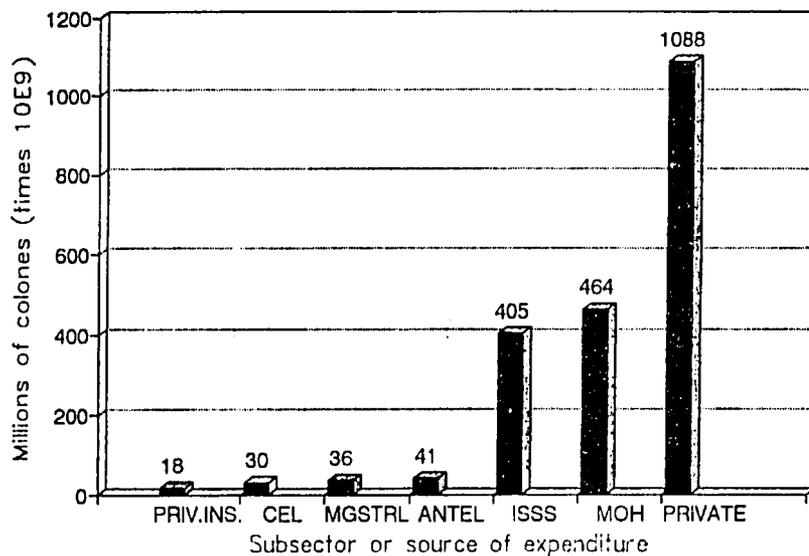
Year	Total physician-provided consultations			ISSS as a % of MOH
	ISSS	MOH	Total	
1977	898,933	2,127,218	3,026,151	42
1978	1,017,121	2,218,170	3,235,291	46
1979	1,024,591	2,390,980	3,415,571	43
1980	1,084,052	2,234,837	3,318,889	49
1981	1,272,535	2,516,440	3,788,975	51
1982	1,250,559	2,333,318	3,583,877	54
1983	1,330,115	2,195,945	3,526,060	61
1984	1,293,433	2,449,614	3,743,047	53
1985	1,276,053	2,271,978	3,548,031	56
1986	1,239,221	2,455,735	3,694,956	50
1987	4,052,398	2,584,012	3,636,410	41
1988	1,349,705	2,627,145	3,976,850	51
1989	1,577,382	2,468,667	4,046,049	64
1990	1,996,667	2,766,542	4,763,209	72
1991	2,282,348	2,945,825	5,228,173	77
1992	2,433,626	2,905,848	5,339,474	84

Sources: Unpublished data: ISSS and MOH

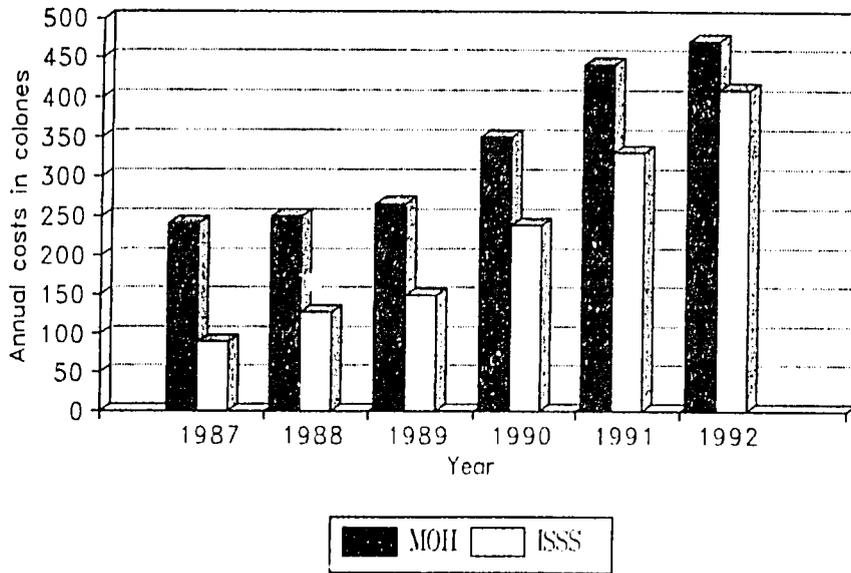
## Total health sector expenditures 1992



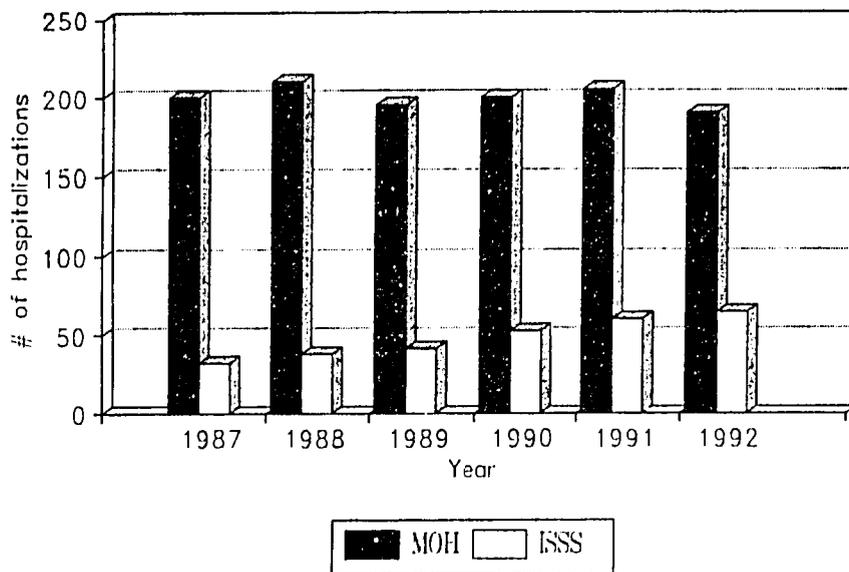
## Total expenditures of health sector by subsector, 1992



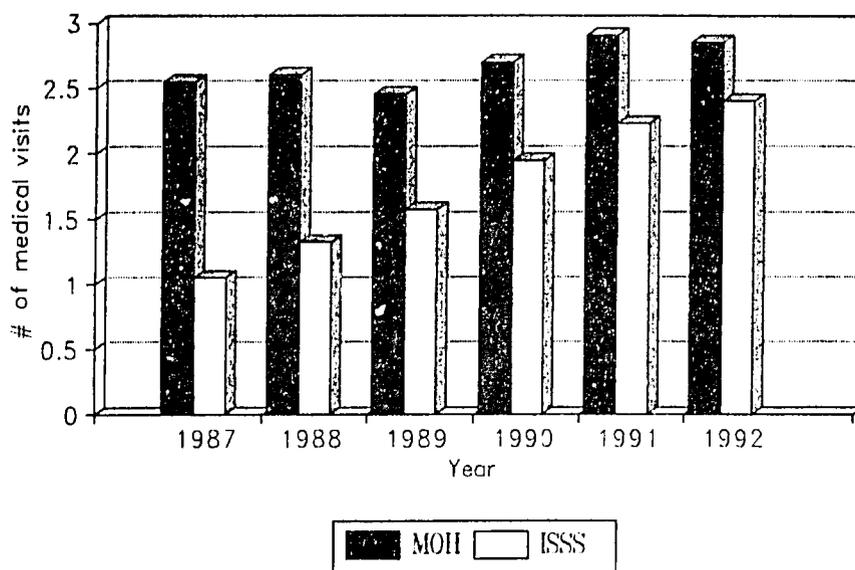
### Comparison of ISSS and MOH: costs of health services



### Comparison of hospitalizations: ISSS and MOH



*Comparison of services:*  
medical visits to ISSS and MOH



These two sources of care together provide an annual average of just over 1 outpatient consultation per Salvadoran. When it is recalled that an estimated 45 percent of the population relies on the private sector for ambulatory care (Gomez, 1990), it may be estimated that on average Salvadorans have about 2 physician visits annually, about 25 percent more than the World Health Organization recommended minimum national average number of 1.5 per person. Although these national averages suggest that the level of health care services provision in El Salvador is adequate, a more disaggregated analysis readily demonstrates that for the vast majority of Salvadorans it is not.

#### 4 Inequalities in the distribution of health care resources and services in El Salvador

The Salvadoran reality is not well represented by the averages. Serious health care resources and services distribution problems plague El Salvador, include: vast inequalities across organizations, across geographic areas, across socio-economic classes, and between rural and urban areas.

##### 4.1 Geographic inequities

Combining ISSS and MOH data, we can calculate the national average of hospital admissions per 1,000 Salvadorans as 42.6. Most of the hospitals and 56 percent of the hospital beds, however, are located within the Metropolitan Region. The national average of 11.1 beds per 10,000 population is nearly twice as high in the Metropolitan Region, 21.2 beds compared to the rest of the country's mere 6.9 beds per 10,000 population.

The hospitalization rate for the 1.5 million Salvadorans living in the Metropolitan region, 29 percent of the national population, (using the MOH definition of the region) is 30 percent above the national average, and stands at 55.9 per 1,000. Conversely, the rest of national population, has a rate 13 percent below the national

average, 37.1 per 1,000. Similarly, while the national number of inpatient days per 1,000 persons was 270 in the country as a whole in 1992, that for the non-Metropolitan Region was 174, only 35 percent that of the Metropolitan Region's 501. This analysis assumes that individuals obtain their hospital care where they live, and thus overstates differences in utilization rates. Notwithstanding, other data (see the Demand Study and analysis below) provide evidence that most people do indeed obtain care at the nearest appropriate facility type, suggesting that the degree of overstatement is not likely to be marked.

There is a much more serious bias, however, in the other direction. The analysis here, implicitly assumes that all Salvadorans have access to ISSS services. Given the membership nature of ISSS, however, these consultations should not be included in an assessment of the adequacy of the national health care delivery system, since less than 12 percent of Salvadorans have access to this system. Therefore, while the general level of health service provision in El Salvador may be viewed in the aggregate as adequate, the distribution of those services is highly inequitable, resulting in large segments of the population receiving inadequate levels of care, especially outside of San Salvador.

Sixty-one percent of all ISSS physicians and 77 percent of all ISSS beds (1092 of 1425) are in the Metropolitan Region. In 1992, 57 percent of all ISSS outpatient care consultations (1,397,060 of 2,433,626) was provided in these 9 *municipios*. In terms of hospitalization services, 71 percent of all ISSS admissions (43,568 of 60,989) and 77 percent (267,330 of 341,861) of all inpatient days were in the Metropolitan Region in 1992.

#### HOSPITAL BED DISTRIBUTION BY SUB-SECTOR

	% of total hospital beds	Total no. of beds	% in San Salvador
MOH	69	5,544	35
ISSS	14	1,092	37
SM	5	400	50
Private	9	1,168	77
ANTEL	1	90	100

Source: Wight et al. The Role of Health Hospitals in El Salvador: Current Situation, Alternative Options, and Financial Implications. Phase I.

The most recent disaggregated ISSS expenditures data available is for 1991. Those data reveal that 86 percent of all ISSS hospital care-related costs (103,796,431 of 119,894,062 colones), 66 percent of ISSS outpatient consultation costs (61,515,894 of 92,861,567 colones), and 66 percent of the expenditures on odontological care, laboratory examinations, x-rays and pharmacy expenditures (80,282,231 of 122,555,670 colones), or a total of 245,594,556 colones or 73 percent of ISSS's total 1991 health care-related expenditures of 335,311,601 colones were made in the 9 *municipios* of the immediate Metropolitan area of San Salvador.

The private sector too is highly concentrated in San Salvador. According to an inventory of private sector entities conducted in 1987 (IPM), an estimated 66 percent of private sector physicians are located in or immediately around San Salvador (Iunes 1994).

While the Ministry of Health is far less concentrated in San Salvador (37 percent of the MOH's hospital beds, down from 45 percent in 1983) than the other subsectors already discussed, a large fraction of its total resources and services too are found in there. A 1992 analysis of the distribution of total MOH resources by region developed by the new Financial Planning Unit of the Ministry of Health quantified the Metropolitan Region's share as 42 percent of total operating expenditures. That same year the five Ministry of Health hospitals in San Salvador accounted for 54 percent of total MOH hospital expenditures and 32 percent of all MOH direct service delivery expenditures (i.e., total direct operating expenditures of the hospitals and the regional health services). These same five hospitals constituted 36 percent of the MOH's hospitals and accounted for 44 percent of its bed complement. In 1992, they accounted for 54 percent of all MOH hospital admissions, provided 46 percent of total MOH hospital days, and 31 percent of hospital-based outpatient consultations.

From discussions with ANTEL personnel it was learned that 80 percent of ANTEL health expenditures are in San Salvador. The following table summarizes this discussion on the geographic concentration of health sector expenditures and services.

One obvious result of San Salvador's disproportionate share of total health resources is that access to and utilization of health care is inequitably distributed in El Salvador. This is not to suggest that a perfectly equitable distribution--even of MOH resources--should be the goal. After all, the MOH's national referral hospitals are located in San Salvador, and they are the most costly type of facility to operate, or at least that is the common consensus. The conventional wisdom about these MOH hospitals is that by virtue of their being national tertiary care hospitals the patients come from all over the country. In the case of ambulatory care, 84 percent of Maternidad's patients, 74 percent of Rosales' and 68 percent of Benjamin Bloom's patients are from San Salvador. In the case of hospitalizations, the situation is not markedly different, though the proportions are somewhat less; 83 percent for Maternidad, 67 percent for Rosales and 62 percent for Bloom. This suggests that a disproportionate share of total MOH hospital resources, particularly inpatient resources, are being spent on (1) the inhabitants of San Salvador and (2) these five hospitals (Wight et al., 1994).

THE CONCENTRATION OF THE EL SALVADORAN HEALTH SECTOR'S  
FINANCIAL RESOURCES/EXPENDITURES IN SAN SALVADOR

	MSPAS	ISSS	Quasi public*	Private	Total
Percent of Own Resources in San Salvador	42	73	70	70	
Percent of Total Sector Resources	22	20	5	53	100
Own Percent Share of Total Sector Resources in San Salvador	9	15	4	37	65

\*Quasi-Public includes ANTEL, CEL, Bienestar Magisterial. It is estimated that 80 percent of CEL and 50 percent of Bienestar Magisterial's are in San Salvador

Sources: Unpublished documents, ISSS, ANTEL, CEL, Bienestar Magisterial, MOH, ISSS. J. Fiedler, L. C. Gómez and W. Bertrand (1993): *Antecedentes y situación actual del Sector Salud de El Salvador*.

The patterns of patient residence and location of health care facility used observed in the 5 MOH hospitals appears to characterize private sector patients' behaviors, as well. The earlier referenced 1987 study of a sample of private sector physicians with practices in San Salvador (IPM, p. 98) also found that in the private sector that most of the health resources located in the capital are used to treat denizens of the capital.

**PLACE OF RESIDENCE OF PERSONS VISITING PRIVATE PHYSICIANS  
IN THE METROPOLITAN SAN SALVADOR AREA IN 1986-1987**

	Percentage of patients by residence			
	SSMA	Other Urban	Rural	Total
General Medicine	66.5	22.4	11.1	100.0
Surgery	64.7	23.2	12.1	100.0
Ob-Gyn	72.9	20.0	7.1	100.0
Pediatrics	78.6	15.9	5.5	100.0
Total	68.4	21.5	10.1	100.0

Source: Investigaciones de Población y Mercado, 1987, *Estado actual de la capacidad instalada de servicios y facilidades de salud: sector privado e instituciones específicas del sector público en el área metropolitana de San Salvador.*

The San Salvador metropolitan area centers, attract patients from throughout the country, and have to deal with the most complex and resource intensive cases. A review of the MOH hospital morbidity data files reveals, however, that for the most part these hospitals are much like the others throughout the MOH system in terms of the proportion of their clientele who are denizens of the same department. The overwhelming share of the patients of the 3 national acute care

Given these patient flow-facility use patterns, the overconcentration of health sector financial resources and services in San Salvador is troubling: most of those resources are being used by the inhabitants of San Salvador, and not by the three-quarters of the population that lives outside of the Metropolitan Area. Particularly when it is recalled that 72 percent of the ISSS beneficiaries living in a 9 municipio subset of the Metropolitan San Salvador Area, it must be concluded that the 65 percent of total health sector financial resources in San Salvador are overwhelmingly benefitting the inhabitants of San Salvador, that there exist vast inequalities in resource availability and use within El Salvador, and that a large proportion of the Salvadoran population has inadequate access to health care.

It is largely only through the efforts of the Ministry of Health that health care resources and services are available to the extent they are outside of San Salvador. According to unpublished data from the MOH's Financial Planning Unit, in 1992, 58 percent of the MOH's direct health care services expenditures (i.e., exclusive of MOH central office administrative expenditures) were spent in Metropolitan and Occidente regions which have a combined population of 2.5 million, 50 percent of the national population, and are the only two regions of the country that have less than the national average proportion of the population living in poverty. Ministry per capita expenditures in these two relatively economically better off regions came to

an average of 135 colones for the year. In contrast, in the three poorest regions of the country in each of which at least 70 percent of the population has been identified by MIPLAN surveys as living in poverty, the Ministry spent only 99 colones per person. These three regions, Oriente, ParaCentral and Central, have the lowest proportion of ISSS beneficiaries and, according to preliminary data from the private sector study, a small share of private sector providers. If one of the objectives of the Ministry of Health is to ensure access to health care for the poor, therefore, it clearly needs to alter its current geographical expenditure pattern to promote equity.

Within the existing legal and administrative structure of the system, the only organizational mechanism by which the distribution of resources--and by implication, access to and use of those resources--can be made more equitable is the Ministry of Health. Although MOH health care resources and expenditures are far less concentrated in San Salvador than are those of any of the other 3 major health subsectors, a large proportion of MOH resources are located in San Salvador and a surprisingly large proportion of them are used by denizens of the area (Wight et al., 1994). There has been a gradual shifting of patients from national to regional hospitals, and since the 80s the regional hospitals are carrying out more activities (ibid.). In light of the fact that 78 percent of the total resources of the other 3 subsectors are concentrated in San Salvador, enhancing health resources availability outside of San Salvador must become a guiding principle for the MOH in making its resource allocation decisions now and throughout the foreseeable future. The Ministry should not then be building and or accepting projects funded by donors--such as the Specialties Hospital or the Zacamil Hospital--which further concentrate the health sector's resources in San Salvador.

#### 4.2 Membership organizations and subsectoral inequities

Any profile of the Salvadoran health sector based on national averages masks the Salvadoran reality because of the numerical significance of ISSS as a provider of health care (accounting for roughly one-quarter of all care), and the geographic concentration of resources, coverage and services delivery. Because Social Security is such an important actor in the health sector, with roughly 20 percent of the financial resources and providing roughly one quarter of all consultations and 20 percent hospital admissions, the highly skewed distribution of its resources distorts the entire national picture. Even though ISSS's coverage of the population has expanded by 25 percent since 1985, it still provides coverage to less than 12 percent of Salvadorans. Moreover, a slowly, but consistently increasing proportion of its insured workers--72 percent in 1992--resides in just 9 (3 percent) of the country's 262 *municipios*. All 9 are in the San Salvador metropolitan area, and together constitute what ISSS refers to as the Metropolitan Region. This region has a population of 1.2 million persons, 23.4 percent of the national population. ISSS's Metropolitan Region has 20.3 percent fewer people than the MOH's Metropolitan Region.

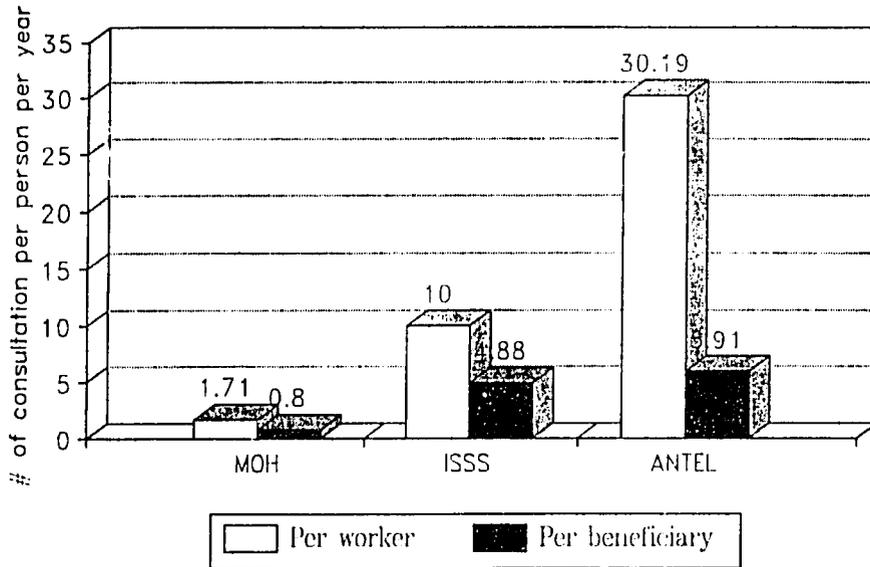
The highly concentrated distribution of ISSS resources and services, has an important impact on the distributional of the entire health sectors resources and services. The most troubling aspect about ISSS, however, is that its potential clientele are limited to less than 12 percent of the national population, resulting in vast inequalities in the level of health care resources spent on and services provided to its beneficiaries compared to either the national average or the levels provided to the clientele of other major institutional agent in the sector, the Ministry of Health. In 1992, ISSS provided an average of 4.88 physician consultations per beneficiary, or 10.00 per active enrollee (i.e., a dues paying worker, or *cotizante*). In stark contrast, the Ministry of Health provided 0.80 physician consultations to its mandated clientele (85 percent of the national population), or, if we restrict the MOH population to the 40 percent of the national population which reported in the 1989 household health interview survey that they usually relied on the MOH for care, the average number of MOH physician consultations in 1992 was 1.71. Using either of these numeraires, the ISSS provided 6 times more physician consultations per person than did the Ministry.

In the case of hospital care, ISSS beneficiaries and *cotizantes* both had about 2.4 times more hospital admissions than their MOH counterparts, 10.5 and 21.5 compared to 4.2 and 9.0, respectively. On either a per beneficiary or per *cotizante* basis, ISSS spent 6 times more than the MOH, 698 and 1431 colones compared to 116 and 247 colones, respectively.

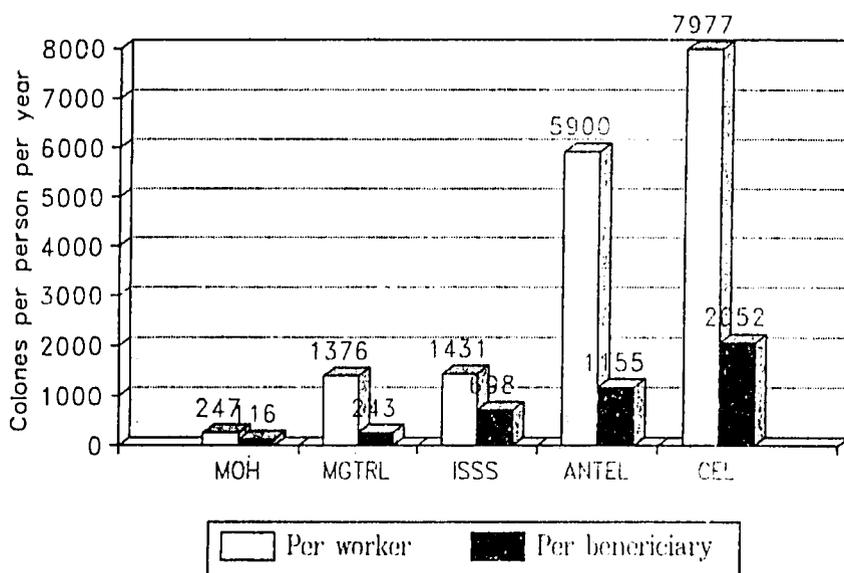
While ISSS beneficiaries look very well off compared to those of the MOH, the beneficiaries of other quasi-public, membership health care organizations as a whole do even better. Although the Bienestar Magisterial Program has per *cotizante* expenditure levels slightly less than those of ISSS, the ANTEL and CEL Programs are so wealthy as to dwarf the differences between the MOH and ISSS, at least in terms of expenditures per *cotizante*, and to a lesser extent per beneficiary. In 1992, the program with the most resources, CEL spent 7,977 colones per worker: an expenditure per *cotizante* level nearly 6 times that of ISSS. ANTEL's expenditure per beneficiary level was a more modest, 2,052, which was nevertheless the highest of any of the subsectors under discussion, 3 times that of ISSS.

The series of graphs on the following pages depict the vast inequities in the level of resources and services per person in each of these subsectors. The final chart in the series presents a standardized measure of the relative expenditures of each subsector. Each subsector's expenditures per *cotizante* and per beneficiary are measured relative to the Ministry of Health. By dividing all other subsector's expenditures by the MOH's average we obtain a relative measure of the inequality across the subsectors. The chart shows that for each colon spent per MOH *cotizante*, the ISSS spends 6, Bienestar 6, ANTEL 26 and CEL 32 colones. For each colon spent per MOH beneficiary, ISSS spends 6, Bienestar spends 2, ANTEL 11, and CEL 18.

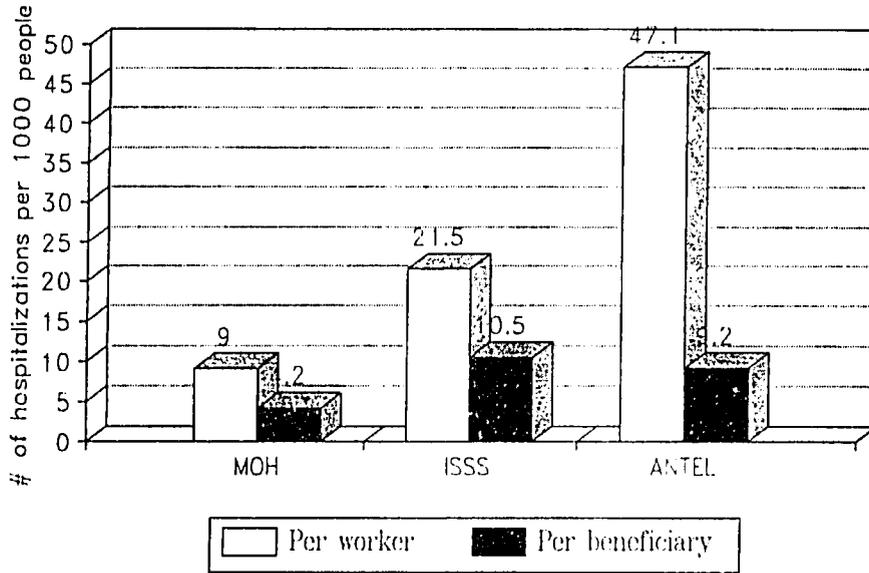
### Comparison of subsectors: Medical consultations per person, 1992



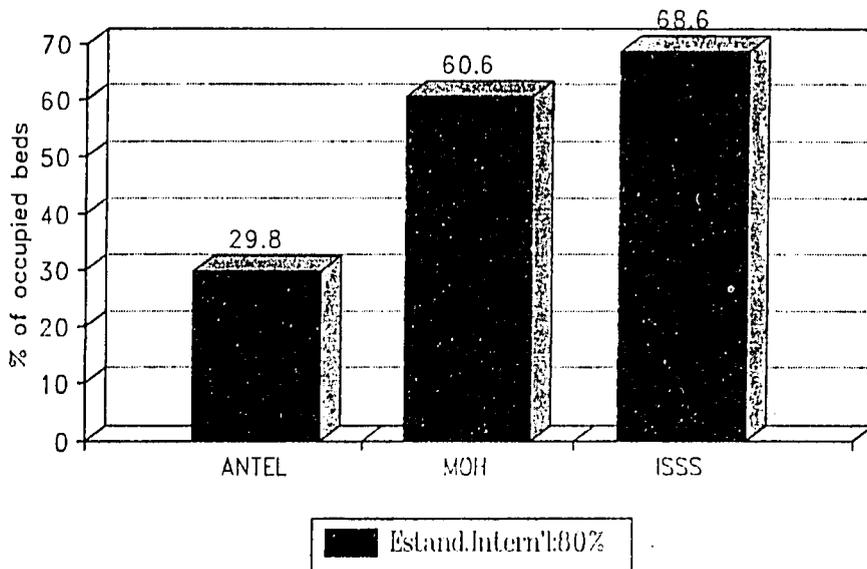
### Comparison of costs for health services in the different subsections



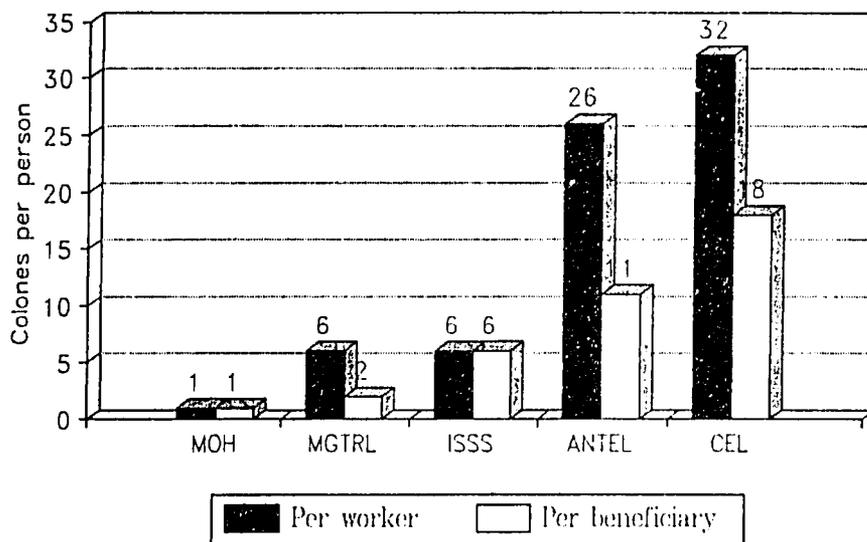
### Comparison of subsectors: Hospitalizations per 1000 people, 1992



### Comparison of hospital occupancy rates 1992



## Relative costs for health services: for each c/person spent by the MOH, '92



Although the health care expenditures of ANTEL, CEL and Bienestar Magistral comprise a relatively small proportion of the total sector, about 5 percent, they remain a matter of concern for five reasons. First, there is some evidence that the very high levels of expenditures in each of the programs is not only due to more complete coverage of more sophisticated services, but is also due to inefficiencies in the management and delivery of services. At least some of the systems appear to be as flush with financial resources as they are, less because of the health care needs, than because of privileged political position of their special clientele. The epidemiological profiles of the illnesses treated by these systems is remarkably similar to that of the Ministry of the Health. Not justified by need, the far greater availability of resources in these systems encourages waste, inefficiencies, and managerial complacency, and tolerates managerial ineptitude, or worse. This is most blatantly obvious in the case of the Bienestar Program, but is readily evident in the case of ANTEL as well, as will be further discussed below.

A second reason for being concerned about these inequalities in expenditures is that they appear to be in part due to unnecessarily high levels of utilization. With absolutely no financial deterrents from consuming health care, and with the added benefit of sick pay, these systems are subject to abuse by consumers, of which some piecemeal, anecdotal evidence was found in the course of preparing this report. These systems should introduce some type of cost sharing arrangements in order to provide at least some deterrent from seeking medical care unnecessarily. As they currently function, these systems encourage the over-medicalization of health problems--already a widespread problem in El Salvador--and one which these systems, by example, foster and reinforce.

The third reason for concern about the vast inequalities that exist between these subsectors is that their beneficiaries, are primarily among the socio-economic better off segments of Salvadoran society. These systems result in the Salvadoran health system providing a disproportionately large share of support to persons

who are already relatively well off, compared to the average Salvadoran citizen, and thus exacerbate inequality in El Salvador.

A fourth reason for concern about the privileged position of especially the Bienestar Magistral and ANTEL systems is that since 1988, they have been the fastest growing health subsectors in terms of their financial resources. Despite the fact that the Bienestar Program's budget has increased by more than 6-fold between 1988 and 1992, it is currently 20 million colones in debt. The ANTEL Health Program's expenditures have grown by about 4-fold over this same period. While CEL has not grown as fast as the other subsectors (see the chart on the following page), one should recall that it already has by far the richest subsector in the entire health care system of El Salvador. In short, the trends in the financing of the health sector over the past 5 years suggest that an ever-larger proportion of the entire health sector's financial resources are being devoted to these small membership groups that already enjoy a disproportionately large share of the sector's total resources and that include at most an only very slowly growing number of Salvadorans (due to ISSS's eligibility expansions). In sum, the already highly inequitable distribution of health resources in El Salvador has been becoming even more unequal.

The fifth reason for being troubled about the privileged position of the membership subsectors has to do with the opportunity cost of these resources. If these resources were more equitably distributed and/or were used to provide more primary health care services, they could have a much greater impact on the health status of El Salvador. Moreover, given that these subsectors are garnering larger absolute and relative shares of health resources, to the extent that the subsectors compete for resources, it suggests that the other segments, most conspicuously the MOH, has lost as these segments have gained (which does not necessarily require that this is a zero-sum game).

## ***II A CLOSER LOOK AT THE INDIVIDUAL SUBSECTORS: STRUCTURE AND FINANCING***

### **1 Bienestar Magisterial**

The Bienestar Magisterial Program was established in 1968. Initially the program was designed to simply provide its beneficiaries with medicines which were supplied out of the Program's central office in San Salvador. The Program has grown and developed substantially from that modest beginning. It continues to dispense medicines from its central office, and has added 3 medicine distribution sites, run by the Program (one in Santa Tecla and 2 in Mexicanos). In addition, it now contracts with pharmacies in other areas of the country where the density of its beneficiaries justifies doing so. A far more important change that has occurred in the nature of the program since its founding, however, has been the addition of financial coverage for ambulatory care, hospitalization, and radiology and laboratory examinations. These additional services that the Bienestar Program has come to include are actually provided by private sector entities. The role of BM has been as the administrator and financing agent of those services, operating, in essence, as a self-insured agency.

The Program not only pays for health care services, but in the event of the death of a teacher, it pays funeral expenses and also pays a fixed proportion of the deceased teacher's salary support for the children of the deceased until they are 21 years old and for the support of the surviving spouse for the remainder of the spouse's life.

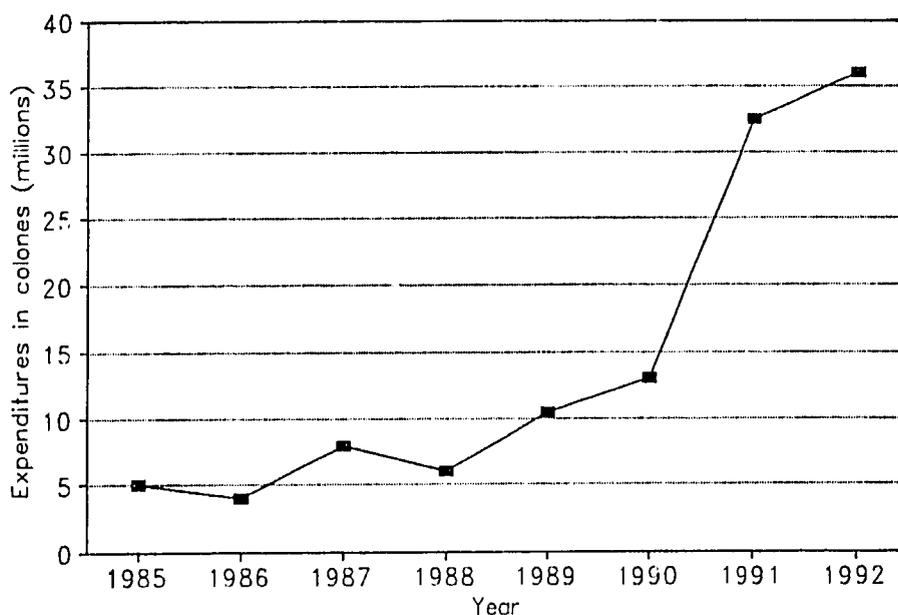
Teachers make a monthly contribution to the Bienestar Program of 3 percent of their monthly salary, but that cannot exceed 20 colones per month (20 colones is what all teachers contribute). This financing scheme has been in place, without modification, for nearly 20 years. As the expenditures of the program have increased, this 20 colones per month cap has provided an ever-decreasing proportion of the total financing of the program. In 1992 17 percent of the total expenditures of the program were financed by the teachers' monthly quota, the remainder is financed by GOES General Funds. All care obtained by BM beneficiaries is completely free of monetary charges; there are no copayments, no deductibles, no exclusions and caps.

The BM's relationship with private sector is not open-ended. Only those physicians and organizations that have contracts with the Bienestar Program can provide services to BM beneficiaries and receive reimbursement for those services. Beneficiaries of the Program are free to choose their provider from the list of those who have been contracted. There are five different types of contracts; a specific type for each type of provider or institution. For individual physicians there are distinct contracts for general practitioners and for specialists. There are three types of institutional contracts, one for hospitals and multi-physician clinics, one for laboratories, and one for pharmacies. All contracts are for a period of one (calendar) year, and each specifies the prices that will be paid for services rendered, and establishes a maximum monthly amount of money that the contractor will be reimbursed. In all cases, the contractors are not to suppose to charge BM beneficiaries anything for the services rendered, but are to bill the BM Program according to the prices schedule specified in the contract. There are reports, however, that some physicians do charge their BM patients something.

The reimbursement rates for each category of contract are uniform for all contractors within the category, but often vary across types of contracts. Hospitals, for instance, generally have higher reimbursement rates for performing different types of laboratory tests than free-standing laboratories. Also, hospitals are able to charge BM 25 percent more than the regular fee charged for medicines provided to hospitalized BM beneficiaries, as well as for nursing services.

The management of the BM Program is seriously deficient. Despite an increase in its budget of nearly 3-fold, from 13.7 to 38.6 million colones, in the last 3 years, from 1990 to 1993, the Bienestar Magisterial Program remains more than 20 million colones in debt. This is the equivalent of nearly 60 percent of the program's 1992 expenditures. Not only is it seriously overextended, but the administration of the program is seriously deficient in terms of its timeliness--and more so than would be the case simply due to its being in debt. Bienestar's debt constitutes the value of approximately 6 months of services, and yet the Program is reported to be approximately one year behind in its payments to private providers. It must be acknowledged, however, that part of this problem lies with the Corte de Cuentas, which is reportedly 6 months behind in authorizing expenditures.

### *Bienestar Magisterial* expenditures



Given the significant financial disequilibrium of the BM Program, it is not surprising that accounts of the Program's beneficiaries being given second-rate treatment are on the rise. Not only are there increasingly frequent reports of participating physicians trying to extract additional payments (copayments) from their BM clientele, but beneficiaries have reported being treated differently, in part, supposedly because of the payments arrears problems, but also reportedly because of the very low prices participating providers are reimbursed for BM Program-financed care.

Other deficiencies of the program include the lack of maintenance of an up-to-date roster of teachers and beneficiaries, the complete absence of information about the types of illnesses for which beneficiaries are treated, the lack of data on the distribution of services or expenditures by type of contract/provider or geography, the lack of information about the distribution of expenditures by type of program benefit (health services versus survivor benefits).

## 2 ANTEL

Analogous to the Bienestar Magisterial, the ANTEL health program is a special employment-related benefit. The program was begun by the autonomous/ parastatal ANTEL 26 years ago, in 1967. The program covers an estimated 35,000 persons at an annual average cost of roughly 5,000 colones per beneficiary. Workers pay 2-3 percent of their salary as a contribution to the program (maximum 30 colones monthly).

The heart of the ANTEL health program consists of the 90 bed hospital located in San Salvador which, the hospital director says, accounts for 80 percent of the costs of the entire system. The program does, however, have several small clinics located outside of the capital, as well. The entire program is administered out the hospital.

The Junta Directiva of ANTEL (not the hospital) has occasionally authorized sending a patient out of the country to receive a special treatment or service. Although this is a relatively rare occurrence, the costs incurred are substantial.

In areas where ANTEL does not have inpatient services, but has workers, the workers are sent as necessary to the nearest ISSS facility. The referred patient is given a referral slip that has been authorized by an ANTEL physician. This entitles the individual to "free" care. This, however, is not a common event. In 1992 ANTEL spent 0.5 percent of its budget reimbursing ISSS for care it provided to ANTEL workers. ANTEL has begun negotiating a contract with the new Military Hospital for the use of particular types of equipment and services. The new Military Hospital has the latest in hi-tech equipment, the ANTEL administrator explains, and both the Military and ISSS are preferred to relying on the much more expensive private sector.

The Central Government's annual publication, *Ley de Presupuesto*, contains a breakdown of the budget the ANTEL's health services within the general ANTEL budget. The Ministry of Hacienda's annual publication which reports expenditures of the Central Government, however, does not contain a breakdown of the general ANTEL budget which allows isolating the health services expenditures. In an interview, the Administrator of the hospital insisted that the budget figures, presented on the following page, were actual expenditures data. He then went on to explain that in 1992 they had spent a bit over 40 million colones, and had had to request additional funds from ANTEL's central administration to cover the difference. The data then, presented on the following page, are budgeted amounts, not real expenditures, and at least for 1992 understate actual expenditures by about 10 percent.

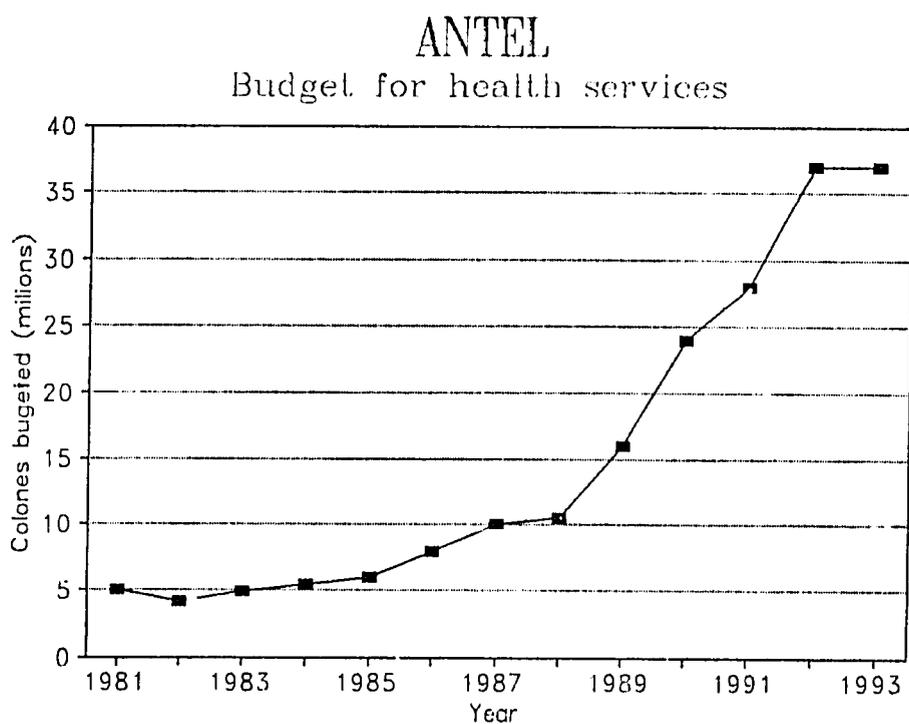
From the budget disaggregation by class of expenditure presented on the following page one is struck by the large proportion of total funds which were destined for "materials and supplies." This is one indication of the financial position of the system. In contrast to the MOH, which devoted 9.9 percent of its operations budget to materials and supplies in 1992, and ISSS which spent 38 percent that same year, ANTEL devoted 50 percent<sup>3</sup>. This availability of financing is in part reflected in ANTEL's having the highest number of laboratory examinations per physician consultation among the three subsectors for which we have such data, as shown on the graph comparing these data. ANTEL physicians ordered 3.3 times more than lab exams per consultation than did providers of either ISSS or the MOH. They had slightly lower, though still very high, average numbers of prescriptions per consultation than either ISSS or MOH providers, 2.59 versus 2.93 and 3.21, respectively. Finally, ANTEL providers ordered x-rays more frequently than ISSS providers, but less frequently than MOH providers, as the graphs on the following pages show. These differences would seem

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<sup>3</sup> This figure is exclusive of the hospitals-- since their budgets are not disaggregated and thus preclude undertaking such an analysis.

to reflect a somewhat different type of epidemiological profile among ANTEL workers, though no disease or illness-type information is maintained by ANTEL, precluding the undertaking of such an analysis. Given these findings, it is not clear what accounts for the very different cost structure of the ANTEL health system relative to the MOH and ISSS.

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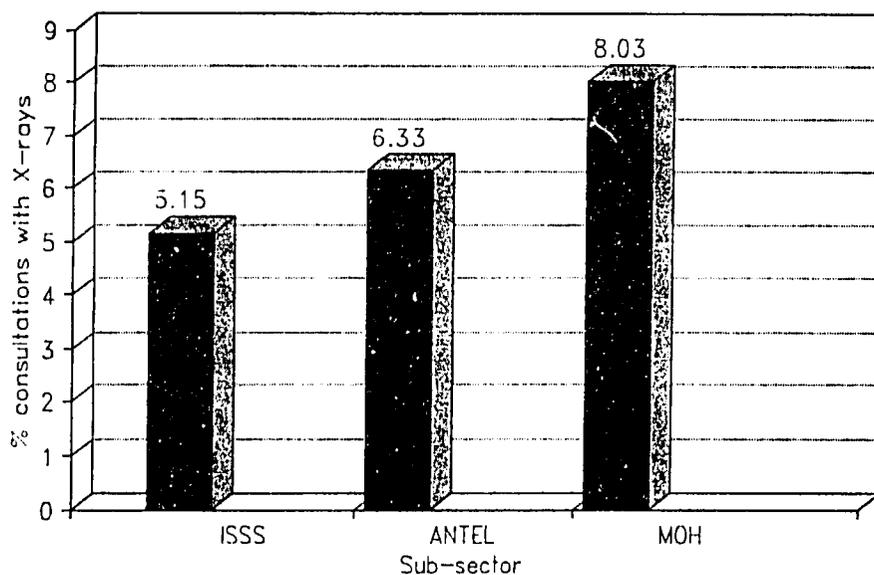
ANTEL: HOSPITAL EXPENDITURES, 1981-1992  
(NOMINAL COLONES)  
(ONLY HEALTH SERVICES)

Year	Personnel Services	Non-personnel services	Materials and Supplies	Machinery and Equipment	Current Transfers	Total
1981	2,699,267	120,951	2,157,355	50,370	0	5,027,943
1982	2,812,280	138,951	1,453,875	24,940	0	4,430,046
1983	2,894,499	127,515	1,445,786	260,184	6,300	4,734,284
1984	3,413,534	102,217	1,750,802	190,879	0	5,457,432
1985	3,910,749	222,139	2,034,078	148,908	0	6,315,874
1986	4,171,761	190,128	3,630,632	77,876	1,125	8,071,522
1987	4,613,802	281,254	4,407,294	516,197	0	9,818,547
1988	4,786,120	527,456	4,640,475	700,222	619	10,654,892
1989	6,161,939	273,512	8,395,239	1,372,918	94	16,203,702
1990	7,683,960	577,140	14,213,262	1,354,670	175,000	24,004,032
1991	9,735,000	966,333	13,117,130	3,892,220	60,405	27,771,088
1992	15,084,170	2,535,800	18,459,500	1,194,800	51,000	37,325,270
1993*	15,084,170	2,535,800	18,459,500	1,194,800	51,000	37,325,270

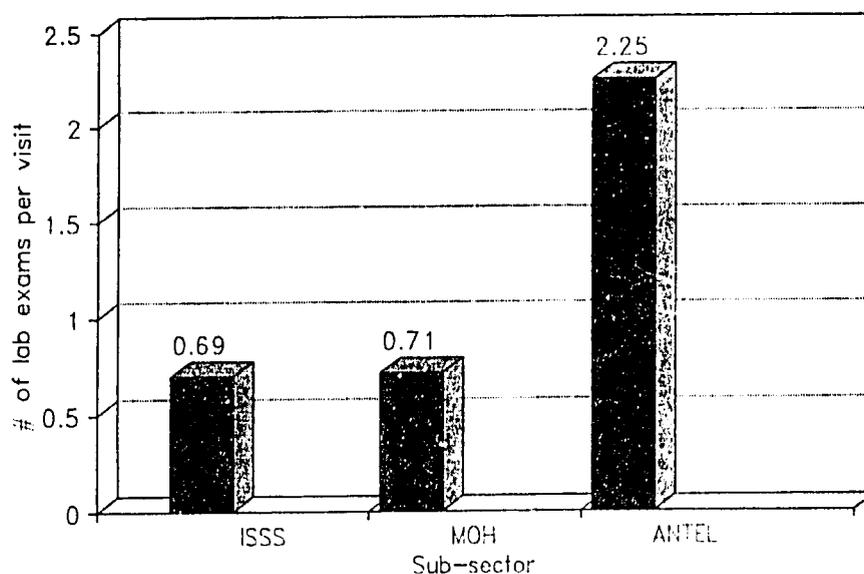
\* Budgeted

Source: ANTEL, unpublished documents.

Comparison of subsectors:  
X-rays/100 consultation



## Comparison of subsectors: lab exams per medical visit



### 3 CEL

Like both the Bienestar Magisterial and ANTEL systems, the CEL health care system is an employment-related benefit. In 1992, the program covered the 3,726 electrical workers and their families, a total of 14,486 persons. Before 1993, workers were not required to make any contribution, but since the beginning of 1993, employees have had to make a 1 percent of their salary contribution for the health program. There are no co-payments or deductibles.

The CEL health program is structurally different from the other two work-related systems, however. The system consists of two distinct parts; (1) a network of 15 small clinics located throughout the country, most staffed by a part-time general practitioner and a nurse, and (2) a network of more than 500 private sector physicians, hospitals, pharmacies and labs for workers in need of a specialist. The total medical staff consists of 46 physicians (most of whom work 2 or 4 hours daily) and 23 full-time graduate nurses. All private providers participating in the CEL program have to agree to charge and to accept as full payment the specific fee schedule CEL has developed. The fee schedule is a highly specific and is elaborated in an 82 page document containing more than 1200 prices. The director of the program reports that the surgical fees in the schedule have not changed for 3 years, although all other fees are revised every 6 months.

The CEL program also has agreements with 3 MOH hospitals (San Vicente, San Miguel and Ahuachapan) whereby they will pay these hospitals for inpatient care in the event that private sector beds are not available. The director of the program reported that he is in the process of negotiating a contract with the new Military Hospital.

The 15 clinics maintained by CEL accounted for one-third of the cost of the program in 1992. Payments to private physician constituted another 20 percent and payments to private hospitals another 26 percent, with

pharmacies representing an additional 10 percent. The remaining 10 percent consisted of fee payments made to private laboratories and dentists and payments for glasses.

Within the past year, the program has started to track some of the data it receives on the causes of illnesses and on number of consultations, hospitalizations and inpatient days. For the most part, however, just as is the case with Bienestar Magisterial and to a lesser extent ANTEL, officials remain woefully ignorant of the content of the health program.

#### 4 ISSS

The Instituto Salvadoreño del Seguro Social (ISSS) was established in April 1954. The ISSS has two basic funds: one a health services fund, the other a retirement/pension fund. Since its inception, the health services component has been funded by contributions from the employee, the employer and the State (specifically the Ministry of Hacienda). The funding scheme underwriting the health services fund has been altered three times. The current contribution levels were instituted on June 1, 1993, the first change since 1978. The rates that had been in effect prior to this recent change were established in 1978, and had become one of, if not the oldest, set of rates currently in effect in Latin America.

The health program actually consists of two different regimes which have different contribution rates. The bulk of ISSS enrollees are in the General Regime, which is comprised of private sector employers and employees. There is also the Special Regime which consists of a subset of central government public sector employees. The General Regime's contribution scheme consists of the employee contributing 3.0 percent of his salary, with an additional 7.50 percent contributed by the employer, and the State--which prior to 1978 likewise paid a set fraction of the employee's salary--now is supposed to contribute approximately 5 million colones per year (a figure which, upon adoption, it was agreed would be actuarially adjusted every five years). The General Regime rates prior to the recent increase were 2.5 percent for employees and 6.25 percent for employers. Although the recent changes constituted a 20 percent increase in contribution rates, the current combined rates sum to 10.5 percent, which, next Honduras' 10.0 percent, is the lowest rate among Central American countries.

The Special Regime rates are 5.57 percent for the employer and 2.23 percent for the employee. The Special Regime rates are lower than those of the General Regime, reflecting its more modest benefit package. Participants in the Special Regime are not entitled to ill-health-related cash and (of lesser significance) in-kind compensation, as are the workers who are covered by the General Regime. In 1992 this additional benefit accounted for 156.8 million colones, 28 percent of the total Health Fund's expenditures (the remainder was spent on providing or purchasing health care services). This proportion has been relatively constant throughout the past few years. Thus, while the Special Regime's contribution is only 11 percent less than that of the General Regime's, Special Regime participants are systematically excluded from 28 percent of the total expenditures of the Health Funds. While a complete assessment of the equity of the differential rates would require analyzing the value of the health care service benefits obtained by each group, it appears as though the Special Regime may be carrying an inordinate amount of the financing burden of the ISSS Health Fund.

Both the employee's and the employer's percentage contributions are paid on only the first 6,000 colones of monthly income (approximately US\$681). Thus, an individual whose income is less than or equal to 6,000

colones per month pays 3.0 percent of their income into the fund<sup>4</sup>. Those whose income is greater than the 6,000 colon ceiling, however, pay a smaller proportion of their total income into the fund. For instance, if an individual has a monthly income of 12,000 colones, he still pays at most 3.0 percent of his monthly income of up to 6,000 colones, or a maximum of 180 colones per month. Paying nothing on the second portion of his salary--that above the 6,000 colon ceiling level--effectively cuts his overall contribution rate in half, which is now the equivalent of 1.5 percent of his income. Hence, the social security tax is, overall, a regressive tax: while for incomes up to the cap of 6,000 colones per month the tax is proportional--taking the same 3.0 percentage of every covered worker's income--for Salvadorans who earn more than 6,000 colones a month, the tax is less than proportional. As their income increases, the Social Security tax takes a smaller percent of their total income. It is noteworthy that the Chief of the ISSS Financial Division estimates that only 3-5 percent of ISSS enrollees have a monthly salary of more than 6,000 colones.

In terms of its impact on businesses, that too varies and, again, the source of variation is the ceiling beyond which no tax is paid. Businesses with a high proportion of relatively low-paid workers have to contribute a larger proportion of their total wage bill compared to a company with a larger proportion of workers who earn more than the 6,000 colones cap per month. To my knowledge, there has never been a study in El Salvador of the impact of the social security health tax/contribution on job creation/maintenance or the relative capital intensity of Salvadoran businesses.

#### 4.1 Coverage

Initially ISSS coverage was limited to industrial, commercial and service establishments in only 9 of El Salvador's 262 *municipios*, and even there it excluded companies with less than 5 or more than 249, employees, those earning more than 500 colones monthly, and those working for either a municipal government or the central government. Starting the next year, 1955, a series of amendments to Chapter III of the Social Security Law, resulted in the gradual extension of coverage of the program. It was not until November 1973, however, that the ISSS covered the entire national territory. The most significant recent extensions of coverage have been concentrated in two periods, 1979-80 and 1989, and included:

- the 1979 development of the Special Regime--the mechanism by which public sector workers were incorporated, distinct from the General Regime which included private sector workers--and the incorporation of public sector workers in the western zone and the eastern zone of the country in January of that year and September 1980, respectively,
- the February 1989 extension of coverage to public sector employees in the Central and Metropolitan regions of the country,
- the March 1989 incorporation of widows and widowers of ISSS retirees, and, more important numerically, of children less than two years old of ISSS enrollees (who had previously enjoyed coverage only up to 6 months of age), and
- the May 1989 addition of health care coverage to the male spouses of the insured (up until that time only females spouses had been covered).

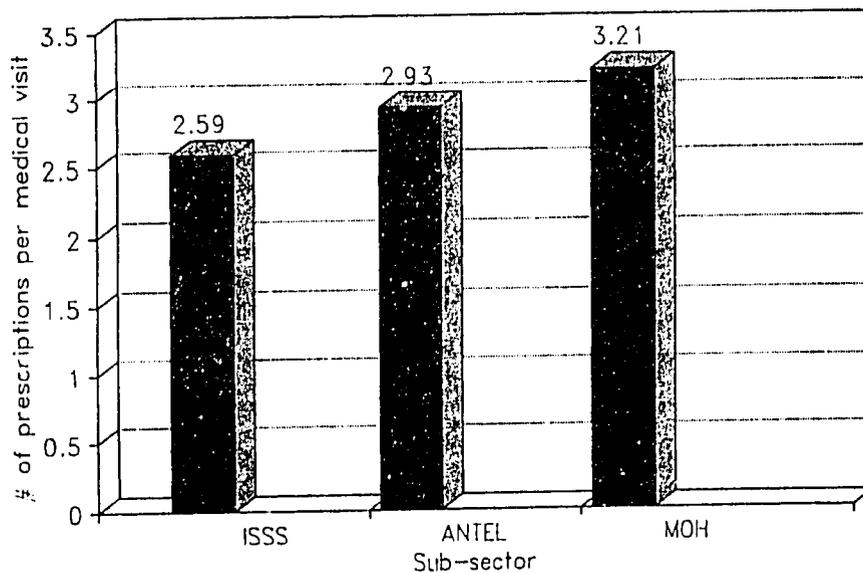
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<sup>4</sup> The current ceiling of 6,000 colones was established in 1989. The previous rate had been 1,500; the social security health tax/contribution, therefore, was even more regressive prior to 1989.

Compared to 21 other Latin American countries' social security systems, traditionally (since at least 1960), the coverage of the Salvadoran system has been the lowest or next to lowest in terms of the coverage of both the proportion of the economically active population and the total population (McGreevey, World Bank, 1990, p.57). However, owing to the various extensions of coverage, there has been a distinct upward trend, as is shown in the table on the following page. The war and the sluggish performance of the economy which first reduced and then maintained formal sector employment at historically low levels meant lower numbers of ISSS enrollees throughout most of the 1980s. Even with the various extensions of coverage, the proportion of the economically active population covered by ISSS did not return to its earlier peak of 15.9 percent set in 1979, until 1989. Since then, with two additional extensions of coverage it has gone on to increase each year, reaching 20.7 percent of the economically active population in 1992, and all beneficiaries (enrollees and dependents) came to constitute 11.5 percent of the national population<sup>5</sup>.

Numerically speaking, the two most significant extensions of coverage were those made in 1989. The incorporation of public sector employees in the Central and Metropolitan Regions added more than 55,000 enrollees and their dependents to the ISSS beneficiary roles, and the incorporation of children less than 2 years of age added more than 18,000. Thus in 1989, while the number of general regime (private sector) ISSS enrollees fell by about 2 percent, the total number of enrolled workers grew by 2 percent due to the significant (23 percent) expansion in the number of Special Regime enrollees. Furthermore, the number of total beneficiaries that year jumped by its largest single year total ever (23 percent) as the new public sector enrollees, their spouses and--now for the first time--children up to the age of two, came to be included as ISSS beneficiaries. As the economy began to pick up in 1990, the number of ISSS enrollees and beneficiaries have reached all-time record highs each year.

Comparison of subsectors:  
prescriptions per medical visit, 1992



<sup>5</sup> The percentage is calculated here is lower than that appearing in the table. The table is based on official ISSS documents, which is based on a national population of 5.51 million, whereas the 11.5 percent figure presented in the text uses the preliminary results from the 1992 census of 5.04 million.

## THE EVOLUTION OF ISSS COVERAGE

Year	National Population	Total Enrollees both regimes	Total Beneficiaries	Total Beneficiaries as percentage of the national pop.	Total Annual growth		
					Enrollees in the general regime	Total Enrollees	Total Beneficiaries
1975	3,924,095	169,026	243,340	6.2			
1976	4,040,248	182,798	263,223	6.5	8.1	3.1	8.2
1977	4,159,840	206,299	297,449	7.2	12.9	3.1	13.0
1978	4,282,971	219,384	316,326	7.4	6.3	3.1	6.3
1979	4,409,747	232,609	335,600	7.6	2.8	3.1	6.1
1980	4,539,516	210,868	305,045	6.7	-14.9	3.2	-9.1
1981	4,582,638	214,224	306,126	6.7	-5.1	1.7	0.4
1982	4,624,914	214,095	305,941	6.6	1.4	0.9	-0.1
1983	4,662,788	323,800	332,671	7.1	8.5	0.8	8.7
1984	4,706,821	225,354	322,030	6.8	-3.3	0.9	-3.2
1985	4,767,570	226,658	323,894	6.8	2.8	1.3	0.6
1986	4,845,588	237,346	339,168	7.0	4.8	1.6	4.7
1987	4,933,835	240,737	344,013	7.0	1.7	2.4	1.4
1988	5,031,483	255,367	364,919	7.3	6.6	2.2	6.1
1989	5,137,707	311,190	448,336	8.7	-1.8	2.3	22.9
1990	5,251,678	338,233	494,465	9.4	3.7	2.4	10.3
1991	5,375,045	361,954	536,001	10.0	9.7	2.5	8.4
1992	5,508,359	387,148	580,613	10.5	12.0	2.7	8.3

NOTES: Total = Enrollees + Dependents ( = Cotizantes + Beneficiarios) of both the General and the Special Regimes. The 1989 extension of coverage to children added 72,405 additional beneficiaries.

SOURCE: ISSS, Estadísticas 1992, 1993.

Prior to the war, the proportion of the national population which was covered by ISSS vascillated around the 6 to 7 percent range. With the various extensions of coverage came, especially the most recent recent ones which have broken the direct tie of beneficiaries to employment--viz., the incorporation of ISSS enrollees' spouses and the rate of coverage broke the traditional range of coverage, and climbed to 8.7 percent in 1989, 9.4 percent in 1990 and reached 10.0 percent in 1991. Still, by international standards the proportion remains small. One of the implications of the extension of coverage to public sector employees is that because they are generally more secure in their jobs and less subject to hiring and firing due to fluctuations in the economy, that their incorporation has served to help stabilize the number of ISSS enrollees and beneficiaries. As can be seen in the table on the preceding page, the annual growth rate of total enrollees (cotizantes) is much more stable and regular than that of just of the General Regime enrollees. Bringing public sector employees into

the ISSS Health Fund has not only increased the number of ISSS enrollees and beneficiaries, it has also made the ISSS more impervious to economic fluctuations because government is not as quick as the private sector to hire and fire when general economic conditions change.

The most recent change in ISSS coverage rules has been the adoption of a policy which will annually extend beneficiary status to progressively older children of enrollees. By 1996 children of enrollees up to the age of 6 will be covered.

#### 4.2 Geographic distribution of enrollees

Within ISSS's General Regime (which includes all private sector ISSS enrollees), there has been a long term tendency of ISSS enrollees being increasingly concentrated in the 9 *municipios* of the San Salvador metropolitan area. These 9 *municipios* comprise what ISSS refers to as the Metropolitan Region, which, it is important to note, is a much smaller area than the Ministry of Health's Metropolitan Region which consists of the entire department of San Salvador, 19 *municipios* and a population 25 percent larger.

In 1976, 64 percent of ISSS enrollees (*cotizantes*) were in the Metropolitan area. By 1992 this proportion had increased to 72 percent. The majority of the persons who have become incorporated into ISSS have been in the Special Regime. At the time of this writing, no information was available about the regional distribution of this group in order to assess how the extension of coverage to this group has affected the geographic concentration of ISSS participants. In 1992, these persons constituted 30 percent of ISSS enrollees, and while their numbers are such that they will not greatly impact the distributional pattern of ISSS beneficiaries, being central government public sector workers who are probably primarily located in the Metropolitan Region, their incorporation has probably exacerbated the geographic concentration of ISSS. ISSS coverage is highly concentrated and has become incrementally more so in recent years.

#### 4.3 ISSS Financing

From 1980 through 1985, the Health Regime of ISSS operated at an annual deficit, and by 1986 had accumulated a debt of approximately 50 million colones. The war, decapitalization, and falling income levels together had destroyed much of the industrial base employing the type of labor that constituted the backbone of ISSS contributors. Manufacturing employment fell about 18 percent between 1979 and 1982. As a result, ISSS suffered from a sharp contraction in its dues-paying members, and thus its income. The single biggest annual reduction, 15 percent, occurred in 1980 and was followed the next year by another 5 percent drop. Without the introduction of the Special Regime in 1979 and its expansion in 1980, these drops would have been much more marked.

Another major reason for ISSS's Health Regime's poor financial performance during the early 1980s was that (according to a 1992 ISSS document, p.32) for 8 years, from 1982 through 1989, the Government did not honor its agreement to annually contribute 5 million colones as its share for General Regime workers. Then, in 1990, it paid 10 million colones, only to pay nothing again in 1991. In addition, the Government paid only a portion of what it was obligated to pay as the employer of enrollees in the Special Regime, and what it did pay, it frequently paid erratically.

The Health Regime of ISSS remained viable by receiving a 41 million "transfer" from the old age and retirement fund, reportedly to compensate the Health Regime for its having paid the Institute's administrative expenditures throughout the 1969- 1985. In addition, the Ministry of Finance provided ISSS with a 22 million

colon "subsidy" in 1986 to pay off the debt ISSS had incurred between June 1984 and April 1986. Since 1986, the ISSS has annually generated a surplus.

Beginning in 1992 it began renting the new Hospital de Especialidades from the MOH. Negotiations are under way to allow the ISSS to buy the facility by transforming its rental payment into a mortgage payment. In addition, the Government gave it the land on which the Medico-Quirurgico Hospital was built after the General Hospital was destroyed by the 1986 earthquake. It is rumored that these lands were given and some say the Hospital Especialidades will be given to ISSS as "in-kind" payments by the Central Government for past due payments of the State's portion of the tripartite contribution.

ISSS has just completed and opened a new Cancer Hospital in San Salvador. In addition, it currently is planning to construct a new General Hospital in the next two years, and to move the Medico-Quirurgico Hospital from its current site, which is a temporary structure built after the earthquake in 1986.

#### 4.4 Aspects of efficiency, with some international and domestic comparisons

A recently published World Bank document presents a comparative analysis of the administrative efficiency of 21 Latin American countries (William McGreevey, *Social Security in Latin America: Issues and Options for the World Bank*, 1990). El Salvador is about average among these countries as ranked by one of these measures, the proportion of its Social Security system costs that are expended on administration (its 13.7 percent ranks it 10th). That data, however, comes from the mid-1980s, and starting in 1986, the proportion of total costs accounted for by administration has grown steadily and in 1992 stood at 19.5 percent for the combined Health and Pension Funds, and 22.6 percent of the total costs of just the Health Fund. By the second efficiency measure in McGreevey's work, employees per 1,000 insured, El Salvador's ranking at that time (1985) was second only to what is universally regarded as the least efficient Social Security system in the Americas, that of the Dominican Republic. The number of administrative positions per insured has slowly increased since the early 1980s (*Sintesis, ISSS*, 1993, p. 35). It is estimated that administrative costs account for approximately one-third of the total (direct and indirect) costs of an ISSS specialist outpatient consultation.

Some average productivity measures of ISSS and MOH staff are presented in the table on the following page. ISSS physicians and dentists are generally from one and one-half to two times as efficient as MOH providers. The lower portion of that same table contains the estimated unit costs of a number of different types of services for which there was comparable data for both institutions. Although the specific results depend upon the type of care and the type of facility, for hospitalization services, ISSS has considerably higher unit costs relative to the Ministry of Health. The differences range from medical care for which ISSS care is nearly 4 times more costly, to ob-gyn which is about twice as costly, with surgical care being more mixed, but generally more comparable.

SOME AVERAGE PRODUCTIVITY MEASURES OF THE ISSS AND THE MOH

	Consultations per hour		MOH Productivity as a % of ISSS's	
	Physician	Dentist	Physician	Dentist
ISSS: Overall Average	4.4	3.4	--	--
MOH: Hospital-Based	2.9	--	66	--
Health Unit-Based	2.6	1.8	59	53
Health Post-Based	1.8	0.6	41	18

Sources: MOH and ISSS unpublished documents.

COMPARISON OF SOME SERVICE COSTS OF THE ISSS AND THE MOH

Hospitalization	Cost/day	MOH as a % of ISSS
Medical	--	--
ISSS	568	--
MOH Hospital	152	27
Center	146	26
Surgical	--	--
ISSS	194	--
MOH Hospital	190	98
Center	81	41
Ob/Gyn	--	--
ISSS	308	--
MOH Hospital	208	68
Center	158	51

Sources: MOH and ISSS unpublished documents.

Other goods and services	Unit cost	MOH as a % of ISSS
Physician outpatient visit		
ISSS	42	
MOH-Hospital	41	98
Center	43	102
Unit	26	62
Center	32	76
Average cost of X-rays		
ISSS	47	
MOH-Hospital	28	60
Center	33	70
Average cost of laboratory examinations		
ISSS	14	
MOH-Hospital	6	43
Center	9	64

Sources: Adaptations of *Estadísticas*, ISSS 1992, Molina 1992, Gómez 1992.

The bottom portion of the table reveals that an outpatient visit at an ISSS facility has roughly the same cost as one at an MOH hospital or center, but is approximately 30 percent more expensive than one provided at an MOH health unit or post. MOH hospitals' unit costs of a lab exam are roughly half those of ISSS, while health centers are two-thirds as expensive. Finally, the MOH produces x-rays more efficiently than ISSS.

No analysis has ever been done to ascertain the causes for the different cost structures of these two institutions. Such an analysis would also need to examine and control for variations in the quality of the services rendered. Unit cost data for the MOH has only very recently been available as a result of a special study conducted in 1992 by the AID APSISA Project. The ISSS, on the other hand, has tracked unit costs since 1987. One potential source of the variation in the two institutions' costs is the substantially higher salary structure enjoyed by ISSS employees. At least in the case of physicians and dentists, however, it may be that their higher average productivity completely offsets their higher salaries, resulting in roughly equivalent labor costs per unit of output. This and other systematic sources of variation in the costs and the management techniques of the two institutions would make for a worthwhile comparative study from which both institutions stand to gain.

#### 4.5 ISSS-MOH coordination

Although there has long been talk in El Salvador about the need for MOH-ISSS cooperation, coordination and possibly the eventual merging of the two organizations, there has been no substantive progress in this area since the two institutions signed a letter of agreement in 1987. The signing of that document consummated an agreement whereby ISSS may (a) purchase MOH services provided directly to its insured clientele, and (b) lease MOH facility space. The ISSS has specific contracts formalizing this agreement with 30 MOH facilities. The fee structure governing these transactions were established by the Central Government in 1985, and still remain in effect today. Inflation, however, has increased MOH costs by roughly 150 percent since the development of that schedule, and it appears that the prices at which the MOH provides these services to the ISSS are now so low that the MOH is actually losing money as a result of these arrangements (because the

cost of the providing the services exceeds the gross revenues they generate). If this is indeed the case, it constitutes a net subsidy from the MOH to the ISSS, with very troubling equity. The MOH is currently re-assessing its price schedule and these contracts. In the last two years the value of the 12 most important of these contracts, all of which have been with MOH hospitals or centers has averaged about 900,000 colones.

#### **4.6 ISSS's partial privatization of specialized ambulatory Care**

From the time the earthquake destroyed ISSS's primary hospital in late 1986, the Institute has had a growing backlog of appointments. This backlog--particularly for specialty consultations--resulted in appointment delays of 3 months or more, and became the source of some of the most caustic criticisms of the Institute. In response to this excess demand, ISSS changed clinic hours from 8 to 12 hours per day. This measure, however, proved inadequate. Thus starting in May of 1990, ISSS has partially privatized ambulatory specialty care. Physicians--only those who work for ISSS, but acting now in a private capacity--can provide care to ISSS-insured patients and be reimbursed for that care by the Institute. The physicians are paid 40 colones per consultation. The rate has not been altered since the initiation of the program two and a half years ago.

Initially the privatization scheme was limited to the first visit for a particular illness episode and only in the San Salvador Metropolitan Area. About one year after the initiation of the program, however, the program was modified to include the second consultation, and in July of 1991 it was made effective throughout the entire country.

Not any ISSS beneficiary can simply go to a private sector provider and have ISSS pay for the services received. Individuals must first visit a general ISSS physician. If they are then referred to a specialist and have to wait more than three days for an appointment, they become eligible for opting into the privatization scheme. Initially, persons who met this requirement and wanted a private consultation were assigned a particular physician. This practice has been altered in the past two years. Patients are now able to select their private provider from a list of participating physicians.

The privatization program covers the cost of the consultation, but only the physician's fee. ISSS beneficiaries must obtain any required complementary laboratory examinations, x-rays or prescriptions from ISSS facilities. Thus participating in the program can be cumbersome and time-consuming depending upon the nature of the consultation. In 1991, FUSADES conducted a physician and consumer satisfaction survey of the privatization scheme and found overwhelming support for the program.

ISSS officials maintain that restricting private sector participation in the program to physicians who work part-time for the Institute obviates the Institute's having to train the participating physicians in its standards and norms of care, or in having to monitor them as closely as they might otherwise feel compelled to do. 66 percent of the Institute's 226 physicians working in the Metropolitan Region participate in the privatization program.

In the 7 months of 1991 during which the program was in effect 44,507 private specialty consultations were provided. In the first 10 months of 1992, nearly 55,000 such consultations were provided. Initially, this partial privatization scheme was intended to be a temporary program that would remain in effect for a limited time, only long enough to reduce the appointment backlog to an acceptable level. ISSS officials now state that the program will become a permanent feature of ISSS health services delivery.

The scheme has been extended to the pediatric care as well. As explained earlier, ISSS is in the process of amplifying its coverage of children. Since historically children were covered only for their first 6 months of

life, the Institute has not had need for and has not had a large staff of pediatricians. To meet the growing demand for pediatricians, ISSS has extended the privatization scheme to pediatric visits.

According to ISSS's estimates, its total costs per specialty consultation (including administration) were 53 colones in 1990 and 64 colones in 1991. The cost of the privatized consultation is 40 colones. The cost of administering the privatization scheme have never been quantified. If we drop the administrative costs of a consultation provided directly by ISSS, however, we find that the cost of the in-ISSS provided consultation was only 33 colones in 1990 and 46 colones in 1991, suggesting the privatization scheme may not have been a good financial deal for the ISSS (as has been universally acclaimed) until 1991. More recent data is not available.

#### **4.7 ISSS beneficiaries' satisfaction**

Criticism of ISSS, and particularly its health services regime, is common throughout El Salvador. Because of the long delays involved in obtaining care and the fact that ISSS does not cover children beyond the age of two, a substantial (but undetermined) number of business firms have opted to provide their workers with private insurance while they continue to meet their legal mandate of paying their ISSS contribution. This decision is generally made on purely economic grounds; the value of work-time saved by providing workers with an alternative source of more expeditious care outweighs the cost of the insurance premium. Other firms, driven by the same economic considerations, have established their own health service capacity, generally hiring one or more health care providers to provide care at the work-site on either a part-time or full-time basis. No systematic analysis has ever been done to identify the numbers and types of such arrangements. Clearly, however, they reflect perceived deficiencies in ISSS services delivery system, i.e., consumer dissatisfaction.

#### **5 The for-profit private sector**

The analysis of the private sector is by far the most limited analysis of the three subsectors due to the inherent difficulties of acquiring systematic information from this relatively disorganized, atomistic sector.

Two recent studies, 1987 and 1993, provide the most recent information on the sector. Whereas the 1987 focused on the private providers in San Salvador, the 1993 study covered the entire the country. The following table compares the total numbers of each type of health facility although not the total interviewed during these two surveys. In 1987, 15 hospitals, 130 physicians, 37 clinical-pathological laboratories, and 2 X-ray clinics (all within the metropolitan area of San Salvador) took part in the survey. Whereas, in 1993, 35 hospitals, 391 physicians, 66 clinical laboratories, 8 pathology laboratories, and 13 X-ray clinics took part.

## THE FOR-PROFIT HEALTH SECTOR

	1987	1993
HOSPITALS	--	35
PHYSICIANS	2100	3910
CLINICAL LABORATORIES	--	330
PATHOLOGY LABORATORIES	--	8
X-RAY CLINICS	--	13

Sources: Investigaciones de Población y Mercado (IPM), 1987, *Estado actual de la capacidad instalada de servicios y facilidades de salud: sector privado e instituciones específicas del sector público en el área metropolitana de San Salvador*, and Roberto F. Iunes, 1994, *Estudio: Evaluación del sector privado*.

### 5.1 Physicians

The distribution of physicians reflects the reality--concentration where the patients that can pay for their services live. In 1987, approximately 80 percent of the physicians lived in the metropolitan area of San Salvador. Although the 1993 survey indicated that this had been reduced to 66 percent, if the 9.2 percent that live in Santa Ana are added, it means that three-fourths of the physicians serve 35 percent of the people (Iunes 1994).

The 1993 study found that physicians generally worked part-time for the MOH and/or ISSS (18 percent work at both ISSS and MSPAS, 22 percent work at only ISSS, 22 percent work at only MSPAS, 37 percent do not work at either MSPAS or ISSS), and part-time in their own clinic for an average of 26 hours a week (in 1993). The 1987 data does not have information on work performed in the public sector, but it did show that on average a private physician worked 28 hours a week in their own clinic and 25 percent of those interviewed also work in other private institutions an average of 10 hours per week (IPM, 1987).

Approximately 6 percent of the physicians interviewed in 1993 said they had a contract with ISSS for 40 hours a week and that they still worked in their private clinic at least 10 hours a week. Another 6 percent have the same arrangement at MOH. It is doubtful that these physicians are fulfilling their contract with a public facility. This could also be true for those physicians who work at least 30 hours at ISSS and or MOH and work a total of 45 hours per week. If you add all these up you arrive at 13.5 percent that probably do not fulfill their contract with MOH and another 16 percent who do not so with ISSS (Iunes 1994).

An analysis of a 1987 sample of 130 private physicians' clinics, found that in the course of a month, the average physician (specialty did not seem to make a difference) attended approximately 116 patients. One factor that did make a difference in the number of patients attended was number of years the physician had been practising--the more years, the more patients the physicians had.

The productivity among physicians in 1993 varied: 27.5 percent averaged 0.6 consultations/hour, 13 percent attended 2 consultations/hour. In fact, 10 percent of the physicians do 37 percent of the consultations which is equal to the productivity of the 68 percent of those who had less consultations (Iunes 1994). These low

numbers of consultations could reflect the limited number of patients that can afford private physicians and/or the concentration of physicians in San Salvador. Private physicians with private clinics conducted approximately 2.4 million consultations in the San Salvador area in 1987 which rose to 3.8 million in 1993. This could reflect an increase in the number of physicians and/or patients.

Prices reflect demand to some extent and can be useful. But the data in these studies is limited--the 1987 study did not look at prices private physicians charge per consultation and the prices the physicians said they charged in the 1993 study for one consultation are very variable and may not be totally accurate, from 8 colones to 220 colones (30 times more). The average price is 56.5 colones, with the most common prices, in descending order, being 50, 30 and 70 colones. This information is not desegregated by geographical area or by specialty, which might account for the variability. Although, there appears to be no relationship between the price and number of consultations, this does not mean necessarily that price is not determining factor in choosing a physician (a factor which has important ramifications for the idea of user fees). It could mean the prices are inaccurate (a possibility because physicians have resisted talking to the government about their earnings), or it might reflect the fact that the more experienced physicians have more patients and also charge more (Iunes 1994).

The type of patient that use for-profit private physicians is not analyzed in either study in any detail. The 1987 study did find that 68 percent of the patients were from the metropolitan area of San Salvador, 22 percent from other urban areas, and 10 percent from rural areas.

Twenty-six percent of the physicians do consultations for private insurance companies. In general these physicians tend to have more experience and are specialists (particularly heart specialists and surgeons; and also, but to a lesser degree: internists, gynecologists/obstetricians, and general practitioners). These are generally more productive--working approximately the same number hours/week but giving more consultations--and charge an average of 24 percent more. The higher demand plus higher price could be due to: (1) better quality physicians; (2) lack of alternatives; or (3) a combination of these two factors.

## PHYSICIANS

	1987	1993
Number of physicians	2100	3910
Percent in metropolitan area of S.S.	80	66
Average no. of hours worked/week in own clinic	28	26
No.(in millions) of consultations in S.S.	2.4	3.8
Avg. no. of patients seen in a month/physician	116	123
Percent doing consultations for insurance	--	26
Avg. no. total hours worked	38	45
Avg. no. of private consultations/wk.	29	30
No. consultations/hour (own clinic)	--	1.18

Sources: Investigaciones de Población y Mercado (IPM), 1987, *Estado actual de la capacidad instalada de servicios y facilidades de salud: sector privado e instituciones específicas del sector público en el área metropolitana de San Salvador*, and Roberto F. Iunes, 1994, *Estudio: Evaluación del sector privado*.

## 5.2 Private hospitals

The 1993 study showed that private hospitals are also concentrated in San Salvador (69 percent) and 94 percent are located in less-poor areas (Iunes 1994).

## HOSPITALS

	1987	1993
Percent hospitals in metro area	---	69
Percent beds in less-poor areas	---	98
Average percent bed occupancy	52.6	53.5
Avg. length of stay (days)	---	3.6
Avg. daily price for hosp. bed	---	66
Minimum cost for room	20	18
Maximum cost for room	100	150
Avg. admittance/month/hosp	152	159
Total beds	---	1168
Avg. no. of beds/hospital	36	33
Avg. no. of nurses/hospital	17	25
% consultations: consulta ext.	78	---

Sources: Investigaciones de Población y Mercado (IPM), 1987, *Estado actual de la capacidad instalada de servicios y facilidades de salud: sector privado e instituciones específicas del sector público en el área metropolitana de San Salvador*, and Roberto F. Iunes, 1994, *Estudio: Evaluación del sector privado*.

A limited link between the private hospitals and the public sector exists. Although the 1987 study did not investigate these links or those with the insurance companies, in 1993, 9 percent of the hospitals had contracts with ISSS, 49 percent with private insurance companies, and 45 percent with autonomous institutes (Iunes 1994).

The most frequently utilized procedures and surgeries are simple reflecting the epidemiological profile of the country and possibly the low income of the majority of the salvadorans who cannot afford complicated interventions in the private sector (Iunes 1994).

Hospitals tend to be small, averaging 33 beds/hospitals (ranging from 10 to 128 beds) (Iunes 1994). This is slightly less than the average of 36 beds/hospital in 1987. The beds were classified according to specialty in 1987 (50 percent general medicine, 18.7 percent surgery, 20.4 percent gynecology and obstetrics, and 10.9 percent pediatrics), but in 1993, 80 percent of the hospitals did not classify beds.

The cost of the hospital room ranged from 20 to 100 colones in 1987, and averaged 66 colones in 1993, with a range from 18 to 150 colones. These prices could reflect the geographical location of the hospital and the relatively unsophisticated procedures of these hospitals.

Sixty-seven percent of the hospitals had clinical laboratories and 53 percent had radiology labs in 1987. The data on support facilities in 1993 needs to be reanalyzed, but Iunes (1994) concludes that 20 percent of the hospitals surveyed did not have adequate support services for them to function adequately as a hospitals.

Personnel numbers seem to be adequate in some hospitals but not in others. While an average of 0.73 nurse/bed is acceptable, the low (0.01 nurse/bed) is not. The hospitals that have the highest number of nurses/bed also have the highest number of other types of employees/patient (Iunes. 1994).

The cost effectiveness of these for-profit hospitals, their needs, goals, and their possible inclusion in a nationwide health system needs to be addressed. The best use of hospitals is not necessarily outpatient care, yet in 1987, 78 percent of the consultations were ambulatory visits.

### 5.3 Clinical laboratories

Most clinical laboratories work independently, reflecting ambulatory care necessities. Productivity and prices are variable. The concentration of productivity, is reflected in that 10 percent of the labs did 49 percent of the exams (1987). The six most common are the exams reflect the epidemiological profile of the country in both the 1987 and 1993 studies (glucose, urine, feces, hemogram, VDRL, and urine culture).

#### CLINICAL LABORATORIES

	1987	1993
% in San Salvador	--	62
Total number surveyed	31*	66
% with contracts with private institutions	--	15.2
% with contracts with private hospitals	--	6.1
% with contracts with public hospitals	--	6.1
% with contracts with autonomous institutions	--	40.9
Avg. no. of exams/month/lab	861	1612
Avg. price/exam (in current colones)	20	25
% without trained professionals	16	--

\*Includes 5 pathology clinical laboratories and 2 pathology labs.

Sources: Investigaciones de Población y Mercado (IPM), 1987, *Estado actual de la capacidad instalada de servicios y facilidades de salud: sector privado e instituciones específicas del sector público en el área metropolitana de San Salvador*, and Roberto F. Iunes, 1994, *Estudio: Evaluación del sector privado*.

### 5.4 Pathology laboratories

The pathology laboratories in 1993 numbered 8, all but one in the San Salvador metropolitan area (there has been no change since 1987). None have contracts with public hospitals, 2 have contracts with private insurance companies, 1 with a private hospital and 62.5% have contracts with autonomous institutions. The prices charged for exams is not variable reflecting the concentration of services, where 2 labs do 73% of the work (in 1987).

### 5.5 X-ray clinics

	1993
% in San Salvador	46
Avg. no. hrs./radiologist/wk.	54
% radiologist work with MOH	61
% radiologists work with ISSS	37.5
% clinics work for ISSS	31
% clinics work for private insurance	46
% work for private institutions	61.5

Source: Roberto F. Junes, 1994, *Estudio: Evaluación del sector privado*.

The most common studies are thorax, abdominal ultra-sound and lumbar-sacral vertebra area.

### 5.6 Private insurance

While the private health insurance market is small, it has grown substantially throughout the past decade. There are no data about the number of persons carrying private health insurance. The only indicator of the size of this market that is available is the amount of total annual premiums paid. According to the Central Government agency in charge of regulating and monitoring insurance companies, banks and other financial institutions, the Superintendent of the Financial System, private health insurance premium payments grew at an average annual rate of 25.1 percent between 1980 and 1991.

Private health insurance plans are almost exclusively group policies, purchased by employers for all workers in their company. The employers pay for these plans in addition to still making their required ISSS contribution. About half of private health insurance plans cover only hospitalization. Plans generally include a 500 colones deductible per person and a 20 percent copayment. Currently it is estimated that 100,000 persons have health insurance, almost all of them in San Salvador.

Private health insurance is purchased in addition to ISSS because of the long appointment time delays at ISSS, which result in long illnesses and significant disruptions in work schedules. Another motivation in purchasing private health insurance is that ISSS does not cover the insured's children, with the exception of the first two years of life (although this coverage of children is being gradually extended).

As private health insurance premiums increased by 11-fold during the 1980-1991 era, the proportion of total insurance premiums that they constituted increased 3-fold. Thus, health became an increasingly important part of the insurance companies' portfolios. Still, in 1991, health insurance premiums totaled 37 million colones and accounted for only about 8 percent of total insurance premiums, well behind the principal business lines, fire and life insurance. Moreover, the much greater risk involved in setting fixed premiums (the industry norm) and the relatively high administrative costs of health plans have together kept most health insurance coverage conservative--with a 500 colon deductible per insured, 20 percent coinsurance and coverage frequently limited to hospitalization (i.e., no ambulatory care coverage)--and has discouraged some companies from offering it altogether. Only 6 of the 14 insurance companies operating in El Salvador currently offer health insurance. Two of these 6 companies dominate the market with roughly 80 percent of the total value of premiums.

Although the two companies that dominate the market are aggressive in seeking out new clients, there is at least one reason that suggests that future growth in the market will be largely determined by general economic conditions. The claims payment to premium ratio of health insurance is higher than that of any other type of insurance currently offered in El Salvador, and it is generally increasing in absolute and relative terms. In the last 5 years, claims payments have been the equivalent of roughly 78 percent of premium payments. With administrative expenses consuming a substantial (but undisclosed) portion of the remaining 22 percent of insurance companies' health insurance-related gross income, companies have recently been pushed to start forming loosely structured preferred provider organizations, using sophisticated U.S. produced Relative Value Scales to determine reasonable relative levels of remuneration for various services, and working closely with employers both to monitor and to verbally exhort workers to regard their coverage as a type of catastrophic insurance, which if they abuse, they will lose.

One method by which to increase growth in the private health insurance market would be to devise additional mechanisms (beyond just the workplace) for bringing together people interested in obtaining health insurance so that their risks may be pooled, thereby making the level of their premiums more attractive.

An attractive and popular alternative to private, third party, indemnity insurance is the arrangement that an undetermined number of generally larger, public and private companies have with their workers. Rather than pay a commercial insurance carrier, these companies either hire their own health care providers (on either a full-time or a part-time basis) to provide care directly to their workers, or, alternatively, companies may send their workers to a private physician and then pay for all or most of the care. These two arrangements may be regarded as types of self-insurance.

### **III THE FINANCING OF THE MINISTRY OF HEALTH**

#### **1 An overview of the organization and structure**

The MOH has six different sources of financing, and a number of distinct and sometimes partially overlapping systems of control and oversight for each. The six sources of MOH funding are:

- GOES General Funds and specific types of external loans which together comprise the GOES General (Ordinary) Budget,
- the GOES Extraordinary Budget, consisting of external loans,
- direct financial assistance to the MOH, consisting of specific types of external loans and grants which their external donors require be used to implement specific MOH projects,
- technical Assistance, consisting primarily of in-kind bilateral and multilateral assistance,
- two distinct user fee systems, one commonly referred to as the *patronato*- (community health board-) system, which is an outpatient services -based user fee system , and the other,
- a hospitalization services-based user fee system.

#### *The GOES general (ordinary) budget*

It is the principal source of MOH funding. It is comprised of General Funds of the GOES and some external loans. Generally, the external loans included in the ordinary budget are infrastructure project loans from the InterAmerican Development Bank, the most important of which in recent years has been the Basic Rural Sanitation Project.

The MOH has direct control over and monitors only its ordinary budget. Although the preparation and disbursement processes of the Ordinary Budget is described in greater detail in the next section of this report, it is important to establish from the start of this discussion that the MOH's financial realm is characterized by structural and procedural fragmentation due to a variety of factors some of which are endogenous to the MOH and some of which are exogenous to it. This fragmentation of control and oversight compromises the Ministry's ability to track all of its financial resources, and thus constitutes a major impediment (though by no means the only one) to the MOH's being able to improve the efficiency with which it uses its resources. This is an important, pervasive problem which must be addressed as systematically and expeditiously as possible. Improving this situation (we are not speaking of absolutes here) is a necessary, but not sufficient, condition to improving the managerial performance of the MOH. This theme of financial control is an important one to bear in mind throughout this section, which so clearly demonstrates the severity of the problem and the challenge that significantly altering the present situation entails. It should be mentioned that the system is in the process of modernization (through the *Documento de Avance de Fondos Públicos, DAFP*) which should facilitate the process considerably.

The General Budget is annually appropriated by the Legislative Assembly and disbursed by the Ministry of Hacienda and monitored by the Corte de Cuentas, the Ministry of Health Financial Accounting Department's Accounting Section, and the Ministry of Hacienda. The Ministry of Health's Financial Accounting Department bears the responsibility for preparing all General Funds budget requests, for tracking and auditing all expenditures and earmarks of these monies, and for reporting this information to the single Ministry of Hacienda person who is responsible for overseeing and monitoring the public health sector budget (Hacienda's public health *sectorialista*).

In addition to the official responsibility of the Financial Accounting Department to manage and maintain oversight of these monies on an MOH-wide basis, the MOH Planning Department's Financial Planning Unit has

long provided supplementary assistance to the Financial Accounting Department, especially in its annual budget request-related activities. Traditionally, indeed up until 1992, MOH resources have been allocated on the basis of their historical patterns with very little planning per se.

#### *The extraordinary budget*

Most of the considerable international assistance received by El Salvador's Ministry of Health-- particularly investment projects--comprises what is referred to as the extraordinary budget. The extraordinary budget is managed by the Ministry of Planning's (MIPLAN's) Technical Secretariat for External Financing, or SETEFE. The overwhelming majority of the MOH's extraordinary budget has consisted of PL-480 loans, but have included smaller loans from a number of other bilateral and multilateral agencies.

#### *Direct financial assistance*

The direct financial assistance to the MOH in the past few years has consisted chiefly of the AID APSISA project and the World Bank Social Sector Rehabilitation Project's health component. Generally these funds are administered by the donor through a local project office, and are commonly used to finance vertical programs. SETEFE communicates on a monthly basis directly with the project office or the MOH Program which receives any such monies. The Financial Accounting Department of the MOH does not track these monies.

#### *Technical assistance*

Technical assistance is comprised of a much larger number of smaller bilateral and multilateral projects, which generally have a considerable in-kind component. As the name of the category suggests, these projects consist of technical assistance, as opposed to infrastructure, and, as such, consist primarily of operations, rather than investment, expenditures. The largest technical assistance efforts have been those of the Pan American Health Organization, have often been jointly undertaken with other bilateral or multilateral organizations.

#### *User fee revenues from ambulatory care services*

A series of Salvadoran laws, dating from 1946, define the structure and procedures of a formal institution by which the community may provide material and financial support to its local MOH health facility. These local community health boards are referred to as *patronatos*. Although there is no explicit discussion in the law about the specific mechanisms by which a *patronato* may go about raising resources to contribute to its affiliated health facility, it seems that for several decades the primary methods used were to elicit philanthropic contributions, to provide in-kind material assistance and labor, and to host various fund-raising activities in the community (e.g., the hosting of an annual carnival). Beginning sometime in the mid to late 1970s, some *patronatos* began the practice of requesting a voluntary contribution from persons receiving ambulatory care at the *patronato's* affiliated facility. During the 1980s, when the MOH suffered a protracted financial crisis, the practice of requesting voluntary contributions became universalized. Although the contributions were, and still are, generally referred to as voluntary contributions, it is expected that users of MOH facilities will pay for the care they receive. In virtually all of these highly decentralized systems, consideration is given to the capacity of the patient's family to pay. It appears that the proportion of patients not paying has been reduced significantly throughout the course of the 1980s, and that at present, roughly 75 percent pay. The 1989 demand study indicated that 80 percent of the physician provided outpatient visits and 41 percent of the hospitalizations in the MOH were paid for (Gómez 1990).

Many MOH facilities, however, do not have *patronatos*. This form of community participation seems to be primarily limited to the 14 major hospitals, the 15 health centers, and the largest of the health units. It appears that in most of the MOH facilities, user fee systems have evolved under the auspices of the facility, without any community involvement in terms of designing and administering the system. These systems, too, however,

are referred to as *patronatos*. There is no information on how many *bona-fide patronatos* exist. Consistent with local custom, we will use the term *patronato* to refer to all outpatient-based user fee systems, bearing in mind the fact that some of these systems are sponsored and administered by *patronatos* and some are simply the creatures of their MOH facility.

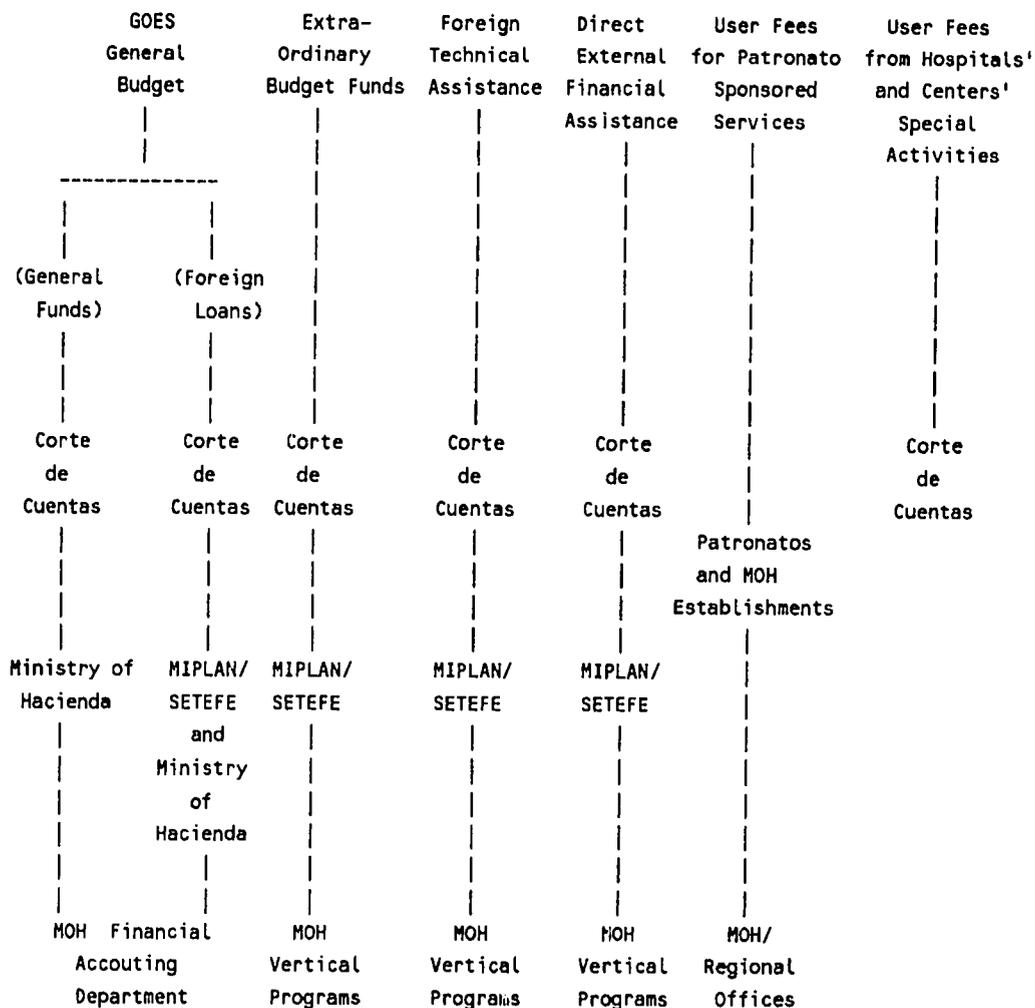
*User fee revenues from inpatient services (special activities/actividades especiales)*

The MOH hospitals and centers also have user fees for inpatient-related services which they have always administered independently of any outpatient-based *patronato* system they might have. Financially the most important of these services have included relatively higher quality and/or more private room and board services, known as *pensiones*, the sale of some medical and surgical supplies, the sale of medicines, and charges for laboratory examinations.

Special Activity user fee revenues are generally not reported to the MOH. The hospitals are required, however, to report this income to the Ministry of Hacienda in their annual initial budgetary request for the subsequent year. The health centers, however, have no similar such budgetary exercise. To obtain data on the health centers special activities revenues, just as in the case of the hospitals' *patronato* revenues, it is necessary to visit each of the individual facilities.

The diagram on the next page provides a schematic representation of the six MOH financial systems, including the sources of funds, oversight and accountability of each. The reality is even more complex, as there are three distinct agencies within the Ministry of Planning (MIPLAN) with responsibility for three of these systems.

MOH FINANCING: OVERSITE AND ACCOUNTABILITY BY SOURCE OF FUNDING



## 2 Total MOH expenditures

There is no single agency or person--inside or outside of the MOH--who is responsible for integrating all of the MOH's financial information and identifying (yet alone tracking) the Ministry of Health's total budget and expenditures. Nobody pulls together the information contained in the different segmented financial systems. Having identified all 6 potential sources of funding and the 7 financial systems of the Ministry of Health, it would appear to be a rather straightforward exercise to simply add up the total budget and total expenditures of each sub-system; but such is not the case. Aggregated, organized data is not available for most of these sub-systems. Information is particularly dispersed and piecemeal for the very sizeable international assistance component--which comprises 3 of these sub-systems.

Despite considerable effort, the data monitored by MIPLAN could not be assembled. In order to (1) understand why it was not, (2) to appreciate the level of effort that would be required to develop this information, and (3) so as to understand why the fragmentation of the MOH's financial information system is not only a problem of the MOH, but of the GOES, the discussion turns to a look at the MIPLAN and its organization and monitoring of foreign assistance for health, before turning to some estimates of total MOH expenditures and an analysis of the degree of dependence of El Salvador's Ministry of Health on foreign assistance.

### 2.1 MIPLAN and foreign assistance

There are three MIPLAN agencies with monitoring responsibility over portions of the MOH's resources: the División de Administración de Inversiones Públicas (DAIP), the Secretaría Técnica de Financiamiento Externo (SETEFE), and the Dirección de Cooperación Internacional Técnica. Although theoretically there is a mutually exclusive division of labor amongst these three entities, in practice there is considerable overlap in their duties and purviews.

The responsibility of the DAIP is to manage all public sector investment projects. SETEFE has a more narrow charge; to administer and monitor the Central Government's extraordinary budget. The extraordinary budget contains all of the loans that El Salvador receives as foreign assistance. Generally these monies are earmarked for particular investment projects. SETEFE also contains a division, the Dirección de Operaciones, which manages counterpart funding for the operating costs of those foreign assistance projects with counterpart funding requirements. For the most part, however, foreign assistance for operations expenditures is the responsibility of another MIPLAN agency, the Dirección de Cooperación Internacional Técnica.

The Dirección de Cooperación Internacional Técnica was established to coordinate and manage all foreign assistance taking the form of technical assistance. In fact, however, the Dirección also manages funds donated for other types of assistance, including capital investment projects.

The type of financial information maintained by each of these MIPLAN units varies considerably. The Dirección de Cooperación Internacional Técnica maintains only the originally negotiated and initially budgeted amount of funds assigned to each project. Regardless of project duration (projects commonly have lifespans of 3 or more years) this single budget figure is usually the only financial data available in the Dirección about the technical assistance it manages. The occasional exception to this rule is when the two sectorialistas working in the health sector within the Directorate have annual operating budgets. In all cases, however, the only financial data available are budget appropriations; no information is maintained on actual expenditures.

For a variety of reasons (detailed below) there are often marked discrepancies between initial budget allocations and actual expenditures. The major task of the two health *sectorialistas* in the Dirección de Cooperación Internacional Técnica is to assist international agencies of cooperation with the identification of sector needs and the design of assistance projects. While they apparently remain fairly well informed about the content of the projects during the implementation phase, including a general knowledge of what their financial status is, the *sectorialistas* do not track or know where data on the actual expenditures of the projects is available, outside of contacting each of the individual project executing units or the individual donor agencies.

While on the one hand there is overlap and duplication of the tracking of some forms of international assistance, on the other hand there are some forms of aid that are not tracked by any representative of the GOES. The most commonly "missed" type of assistance expenditures is what is termed "direct financial assistance." Generally consists of expenditures made by international aid organizations that do not pass through the Central Government, but go directly to the operational level of government, for example, to a particular health facility. While some of this type of expenditures are captured in the GOES "system," government officials from all three of these foreign assistance-related agencies concede that only a portion is "picked up." Thus, nobody is in charge of overseeing all four of the different types of international aid.

Moreover, the accounts records of these different systems do not coincide in terms of structure and content, and therefore, preclude ascertaining the Ministry's total level of financing. Whereas the Ministry of Hacienda's financial data is reported on an accrual basis (i.e., it includes commitments, *compromisos*, entered into), that of MIPLAN is reported on a cash basis (i.e., it includes only actual expenditures). The differences in these two types of accounting practices can perhaps be best illustrated by how drug purchases are treated in each. In the accrual basis approach used by Hacienda (and adhered to throughout this report), expenditures on drugs are recorded in the year in which solicitations for bids on specific orders are made. In the cash basis approach used by MIPLAN, those same expenditures are not likely to appear until at least one year, and very possibly two years later, or more. This is because purchasing drugs from a domestic supplier is usually an 8 to 10 month undertaking, and when it involves an international purchase, it requires 22 to 24 months. The very different ways in which the two accounting methods treat these outlays, which have come to represent nearly 15 percent of total MOH operations costs, can give varied pictures of the evolution of MOH expenditures.

Throughout the past decade in excess of 90 percent of all Ministry of Health investment costs have been financed by international assistance. As is discussed elsewhere in this report, there is no doubt but that investment projects have a direct impact on the operating costs of the MOH; e.g., more facilities require more supplies and more staff to operate them. From a sustainability perspective, however, the most fundamental issue about international assistance is not concerned with investment expenditures, but rather with operating costs, and the single most important question is: How much of the Ministry of Health's operating costs are currently being financed by foreign assistance?

## **2.2 The sustainability issue: estimating the importance of international cooperation in financing the MOH's operating costs**

A special study of the financing of the Ministry of Health sector undertaken in 1990 assembled information concerning the level of foreign assistance provided to the MOH during the 1987-1990 period by obtaining the data directly from each donor agency (Miguel Luis Martínez, "Análisis Institucional de los Recursos Presupuestarios Financieros Recibidos por el Ministerio de Salud Pública y Asistencia Social Durante el

Periodo 1987-1990"). Time constraints did not permit assembling similar data for the 1991-1993 era. A different approach had to be adopted.

Recognizing that in assessing the sustainability of the MOH's current efforts, operating costs as opposed to total costs, inclusive of investment, are the paramount consideration, data collection efforts focused on the few international cooperation efforts with sizeable operating cost components. The most important foreign assistance financed projects/programs were identified and expenditure data was collected on only this subset of foreign aid efforts.

The table on the following page presents the expenditure totals for the three most important foreign assistance projects/programs providing support for MOH operating expenditures; the USAID APSISA Project, the World Bank's Rehabilitation of the Social Sectors: Health Project, and the World Food Program (which receives substantial funding from AID). The table also includes other sources of financing of the MOH, but does not include user fee revenue-based expenditures. These are deliberately excluded in order to be able to compare these figures with those which may be culled from the Martinez report.

THE FINANCIAL SIGNIFICANCE OF THE MOH'S THREE MOST IMPORTANT INTERNATIONAL ASSISTANCE PROJECTS/PROGRAMS

	1991	1992
AID-APSISA	104,130.3	59,388.6
Banco Mundial	408.4	26,848.6
World Food Program	33,795.0	33,795.0
Three project total	138,333.7	120,032.2
MOH GOES-funded (General Funds) Operating Expenditures	424,204.1	463,993.7
Total MOH operating expenditures	562,537.8	584,025
Three project share of total MOH operating Expenditures	24.6%	20.6%

NOTE: In order to make these data comparable with those of the Martinez study, the MOH totals do not include expenditures of user fee revenues.

World Food Program data are based on a MIPLAN, Direccion de Cooperacion Internacional Tecnica estimate of the Program's having spent 60 percent of its average annual budget allocation.

World Bank Project data are from the Project Executing Unit's unpublished expenditures reports.

USAID data are from SETEFE, MIPLAN unpublished reports.

**SOURCES OF TOTAL MOH OPERATING EXPENDITURES**  
(In Thousands of Current Colones)

	1991		1992	
	Total	%	Total	%
International Assistance: Three project total	138,334	23.5	120,032	19.4
MOH GOES-funded (General Funds) Operating expenditures	424,204	71.9	463,994	75.1
User fee systems' expenditures 1. <u>Patronatos</u>	21,964	3.7	26,901	4.4
Special activities	51,63	0.9	6,816	1.1
<b>Total MOH operating expenditures</b>	<b>589,665</b>	<b>100.0</b>	<b>617,743</b>	<b>100.0</b>

World Food Program data are based on a MIPLAN, Dirección de Cooperación Internacional Técnica estimate of the Program's having spent 60 percent of its average annual budget allocation.

World Bank Project data are from the Project Executing Unit's unpublished expenditures reports.

USAID data are from SETEFE, MIPLAN unpublished reports.

User Fee data are actually revenues, which have always coincided very closely with (95-98 percent of) expenditures.

According to the Martinez report, USAID alone provided the following shares of total MOH operating expenditures during the 1987-1990 period:

1987 20.5 %

1988 18.4 %

1989 19.7 %

1990 23.1 %

The figures developed for 1991 and 1992 are fairly comparable to those of Martinez in terms of magnitude. The table on the next page, incorporates user fee system expenditures, and provides an estimate of total MOH operating expenditures in 1991 and 1992.

Throughout the 1987-1992 era, international assistance financed the equivalent of roughly 20 percent of total MOH operating expenditures. This proportion has remained relatively constant throughout the past 6 years. One must conclude that the MOH is highly dependent upon international assistance, which raises serious questions about the sustainability of the Ministry's current level of effort. As international assistance in the

form of the current AID and the World Bank projects winds down rapidly by 1995, the GOES will not be able to sustain its current efforts without adopting one or a combination of 3 possible courses of action: (1) find other donors to fill this substantial void--a dubious undertaking, (2) make a dramatic and permanent increase in the level of GOES General Funds support of the MOH, or (3) redefine the role of the MOH, to more narrowly focus its efforts and/or its target population.

While 1993 was marked by a significant increase in the size of the GOES General Funds contribution to MOH operating expenditures, from preliminary data it appears that there have been near equally large increases in the level of international assistance. Thus the Ministry's degree of dependence has not lessened, or not lessened substantially even though GOES-funded MOH operating expenditures have been increased significantly. To reduce the degree of dependency and to make the MOH's current efforts more sustainable will require an even larger and sustained increase in GOES General Funds supported MOH expenditures.

### **3 The ministry of health's general (Ordinary) budget expenditures**

The previous section examined the composition and recent trends in the Ministry of Health's major sources of financing. In this section the focus is narrowed to the MOH's financing by Central Government General Budgetary Funds, i.e. the so-called Ordinary Budget. Financial analyses of the MOH have traditionally focused on this source of financing; because: (1) it is the largest component of MOH financing; (2) it is the most significant component of the MOH's chief sources of financing in terms of being more indicative of the longer term financial well-being (financial sustainability) of the Ministry; and (3) because the MOH has a greater degree of control over these funds, studying how they are allocated and spent is particularly useful for identifying areas of MOH inefficiency and learning about managerial practices and capabilities; in short, for developing a financial and managerial diagnosis of the Ministry.

The level, composition and trends in General Budget expenditures on public health provide insight into the financial status of a Ministry of Health. There are a number of different indicators of the financial well-being of the Ministry of Health. Unfortunately, none of them is without some shortcomings. Absent a single best measure, we will examine several indicators which may be grouped into two different broad categories, absolute measures and relative measures.

#### **3.1 Absolute measures of the MOH'S financial well-being**

##### **3.1.1 MOH general budgetary funds expenditures in current colones**

The table on the following page, "MOH Expenditures," presents the Ministry of Health's General Budgetary Funds expenditures in current colones. Exclusive of 1993 and 1994, the data for which are not expenditures but rather budgeted amounts, over the 18 year period from 1975 to 1992, the annual rate of growth fluctuated considerably, from a low of -7.8 percent to a high of 31.6 percent, and averaged 11 percent. This era had three distinct periods. The average of annual growth rates in the first of these 3 periods was: 1975-1980, 16.1 percent; 1980-1985, 0.04 percent; and 1985-1992, 11.2 percent. In 1993, the Ministry is on track to posting its all-time highest annual growth rate; expenditures in 1993 will be more than 50 percent greater than in 1992. Moreover initial budget allocations which have been approved by the Ministry of Hacienda (but have yet to be approved by the Legislative Assembly) will continue the rapid pace of growth; increasing 21 percent, about half the rate of 1993's pace.

**MOH EXPENDITURES**  
(In thousands of current colones)

Year	Nominal Expenditures	Annual Growth Rates
1975	86,465.4	
1976	110,829.2	28.2
1977	127,060.8	14.6
1978	143,278.8	12.8
1979	142,090.5	-0.8
1980	178,435.7	25.6
1981	167,025.9	-6.4
1982	165,677.1	-0.8
1983	170,395.9	2.8
1984	191,551.2	12.4
1985	176,522.7	-7.8
1986	232,354.5	31.6
1987	252,692.9	8.8
1988	289,477.2	14.6
1989	308,377.6	6.5
1990	377,173.9	22.3
1991	424,240.1	12.5
1992	480,455.7	13.3
1993	730,000.0	51.9
1994	881,905.0	20.8

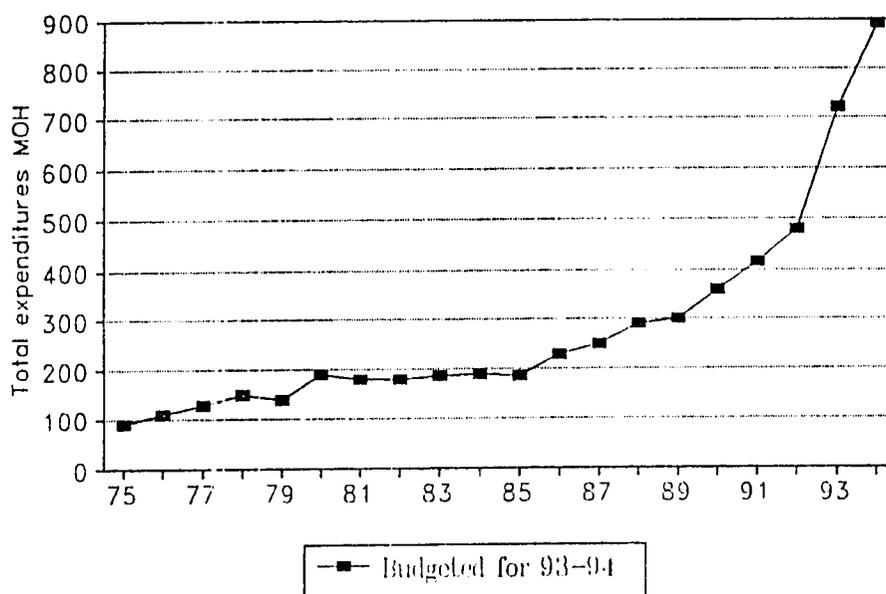
**AVERAGE ANNUAL RATES OF GROWTH**

1975-1980	16.1
1980-1985	0.04
1985-1992	15.7
1975-1992	11.2

Note: Expenditures are "total utilizado", which is the sum of actual expenditures ("gastos") and earmarked commitments ("compromisos"). Figures for 1993 and 1994 are initial budget allocations ("asignaciones iniciales").

Source: *Informe Complementario Constitucional/Informe sobre la liquidación del Presupuesto General y situación del Tesoro Público y Patrimonial Fiscal*, Ministerio de Hacienda, various years.

### Total MOH expenses (in millions of real colones)



#### 3.1.2 MOH General Budgetary Funds Expenditures in Constant Colones <sup>6</sup>

Using the public administration deflator implicit in unpublished documents of the Banco Central de Reserva, the nominal MOH expenditures data were converted into constant value (1962) colones. These real MOH expenditure totals, their annual growth rates, and the per capita levels of both of these measures are presented in the table on the following page. As is readily evident in the table, after peaking in 1980 the level of real MOH expenditures has fallen from what had been its traditional magnitude and range. From 1975 to 1980, the annual level of MOH expenditures averaged 62,063,000 colones (in 1962 colones). It then fell 16 percent, to average 53,576,500 in the 1980-1990 period. Real MOH expenditures have been increasing in each of the last 3 years, and in 1993 it appears as though the level of real expenditures will post their all time high as shown in the table on the following page.

There have been four distinct eras: 1975-1980, 1980-1985, 1985-1990, and 1990-1993. The earliest period was characterized by positive growth which averaged 4.1 percent per year. The 1980 to 1985 era was strikingly different, as MOH real expenditures contracted sharply for half a decade. The MOH suffered severe financial dislocation throughout this period, with the annual growth rate averaging (-7.2). In the 1985-1990 period, growth was erratic ranging from 11.5 to -7.4 per cent per year, but averaging a more hopeful 1.6

<sup>6</sup> There does not exist a Ministry of Health-specific price index by which to adjust the MOH's current colones expenditures into real (constant value) colones. Such an index was constructed on a one-time basis in 1986 (Fiedler, 1986). That exercise demonstrated that the GDP deflator seriously overstated the impact of inflation on the MOH's expenditures, and that the public administration deflator understated the impact. The public administration deflator, however, was the preferred tool; it resulted in a much smaller bias. Due to time constraints a Ministry-specific price index could not be developed during this consultancy. Accordingly the public administration deflator was used in making all inflation adjustments in the following analysis.

percent per annum. Most recently, since 1990 the average annual real growth rate has been a robust 15.4 percent.

**MOH GENERAL BUDGET-FUNDED REAL EXPENDITURES  
AND ANNUAL GROWTH RATES**  
(In 1000s of colones)

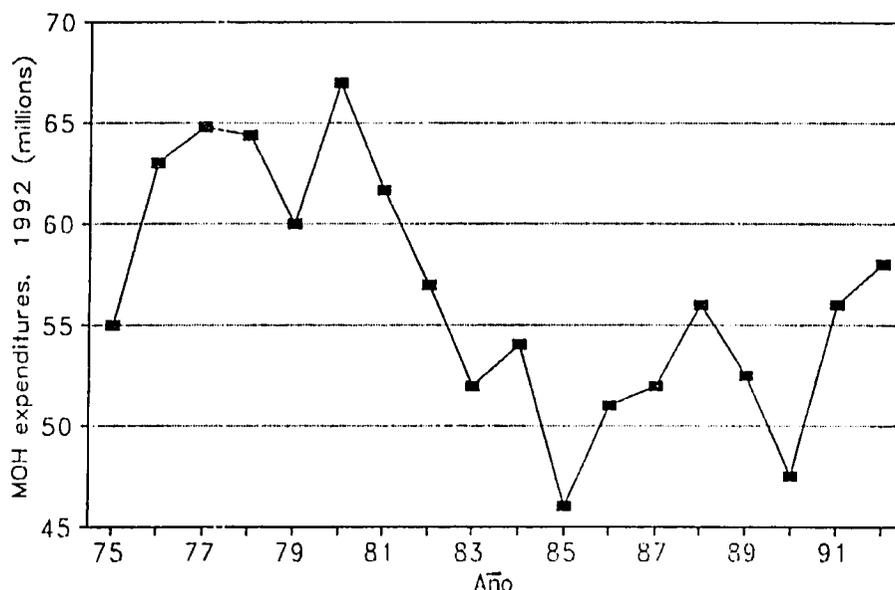
Year	Real Expenditures	Annual Growth Rates
1975	54,933.5	--
1976	62,580.0	13.9
1977	64,172.1	2.5
1978	63,878.2	-0.5
1979	60,233.4	-5.7
1980	66,586.5	10.5
1981	61,249.0	-8.0
1982	56,916.9	-7.1
1983	52,108.8	-8.4
1984	53,912.5	3.5
1985	45,332.0	-15.9
1986	50,566.8	11.5
1987	51,225.0	1.3
1988	56,318.5	9.9
1989	52,164.4	-7.4
1990	47,923.9	-8.1
1991	56,822.9	18.6
1992	58,685.2	3.3
1993	73,000.0	24.4

**AVERAGE ANNUAL RATES OF REAL GROWTH**

1975-1980	4.1
1980-1985	-7.2
1985-1990	1.6
1990-1993	15.4
1975-1993	2.0

Note: Deflated using the Banco Central de Reserva's Public Administration Index Deflator. Assumes 1993 public administration inflation is 10.0%.  
Source: *Informe Complementario Constitucional/Informe sobre la liquidación del Presupuesto General y situación del Tesoro Público y Patrimonial Fiscal*, Ministerio de Hacienda, various years.

### Real expenditures, MOH (in 1962 colones, public adm. deflator)



In sum, while the significant erosion of real MOH expenditure levels suffered in the first half of the 1980s has been halted and, particularly in the past 3 years, real growth has been re-established, in absolute terms, real MOH expenditures have only in 1993 surpassed their historical levels. Moreover, on a per capita basis, they still remain below their historical levels. Real per capita MOH expenditures peaked in 1976 at 18.1 (1962 colones), and thereafter remained relatively constant until 1980. In 1993, despite the very substantial real growth in MOH expenditures over the last 3 years, real per capita MOH expenditures were 14.5 (1962 colones), 20 percent less than their 1976 level, and 16 percent below the 1976-1980 average (17.3 colones).

### 3.2 Relative measures of the MOH's financial well-being

This set of indicators measures changes in the Ministry of Health's financial resources relative to some type of economic benchmark. The purpose of relative measures is to provide a reference point so as to incorporate into a simple absolute measure additional information which is indicative of the country's commitment to health (i.e., its willingness to spend money on public health) or the country's ability to spend money on health.

#### 3.2.1 The MOH share of central government expenditures

The MOH share of central government expenditures measures changes in the relative priority accorded health vis-a-vis other areas of Government activity, while controlling for changes in the Government's ability to allocate and spend monies on public health. The Ministry of Health's share of total Central Government expenditures fell steadily over the 1975-1992 era, and only in 1993, after making a huge jump of 45 percent, has it returned to levels approaching those which existed prior to 1981. In the 1975-1980 era, it annually averaged 10.4 percent. Between 1981 and 1985, it fell by more than 20 percent to an annual average of 8.2

percent, and from 1986 until 1992 it slipped an additional 10 percent to annually average 7.3 percent of total Central Government expenditures. It appears, however, that the MOH's 1993 share of Central Government appropriations will not be maintained. The as yet unapproved budget for 1994 calls for the MOH to receive 9.2 percent of Central Government appropriations. While this is substantially above the level of recent years, it is less than in 1993 and less than its share in the pre-war era. See the table and graph on the following pages for year-by-year accountings.

**EVOLUTION OF THE MOH SHARE OF  
TOTAL CENTRAL GOVERNMENT EXPENDITURES**

Year	Ministry of Health's Share of Expenditures
1976	10.7%
1977	10.2%
1978	10.7%
1979	9.8%
1980	10.8%
1981	8.7%
1982	8.5%
1983	9.2%
1984	7.0%
1985	7.5%
1986	6.2%
1987	7.3%
1988	8.1%
1989	7.9%
1990	7.4%
1991	7.4%
1992	6.6%
1993*	9.6%

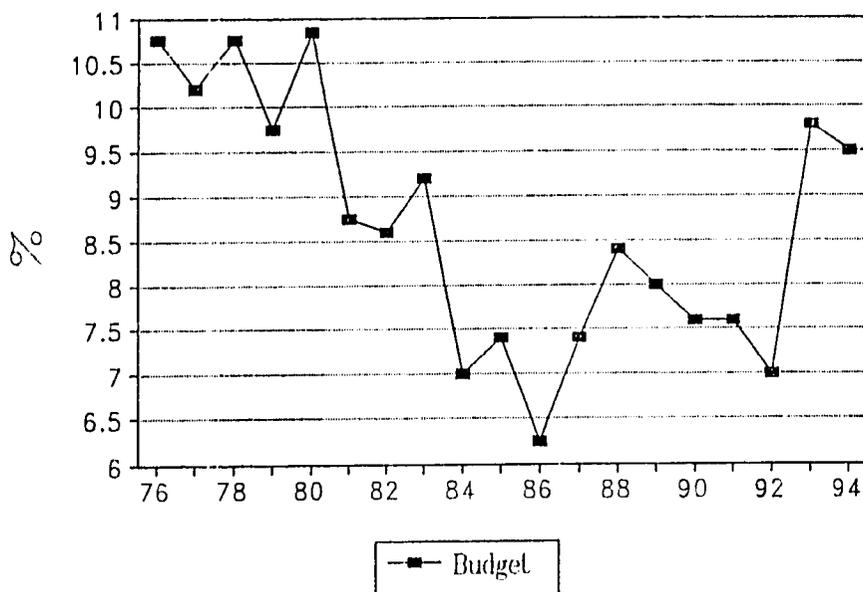
Average of Annual Shares	
1976-79:	10.4%
1980-84:	8.8%
1985-89:	7.4%
1990-92:	7.1%

\*Initial appropriations

Note: Includes operations, transfers and capital expenditures. Includes "total utilizado" including "compromisos".

Source: Informe complementario constitucional sobre la Hacienda Pública/Informe sobre la liquidación del presupuesto general y situación del tesoro público y patrimonio fiscal, Ministerio de Hacienda, various years.

### Evolution of % of central governments budget expended on MOH

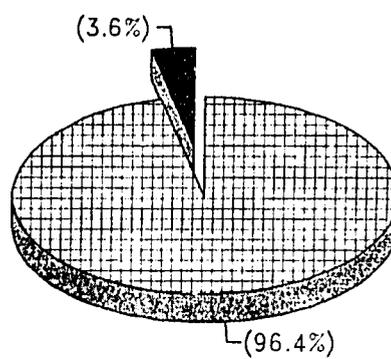


#### 3.2.2 MOH expenditures and the size of the public sector

The share of total Central Government expenditures is the most commonly used measure of the financial well-being of a Ministry of Health, although it too is not without its shortcomings. While changes in its level are perhaps the best indicator of a country's changing commitment to the MOH, this indicator does not take into account what is happening to the size of the public sector in general. When this reference point is examined, we find that there is more reason to be disturbed by the trends of the past decade.

The size of the public sector in El Salvador has fallen rapidly and steadily since it peaked in 1985, as is shown in the table "Evolution of the Size of the Public Sector." It reached its nadir in the post-1975 era in 1987, and has followed a downward trajectory (though not monotonically so) since then. In 1993, El Salvador's public sector will be the smallest it has been in the past 2 decades, as measured by government expenditures as a percent of the Gross Domestic Product (GDP) slightly in 1990. From 1980 until 1992, the Ministry of Health's share of total public expenditures has fallen while the share of total public expenditures in GDP has fallen. In other words, for 12 of the past 13 years, the MOH has suffered a reduction in its share of a shrinking pie.

## Health Sector as % of GNP, 1992



## EVOLUTION OF THE SIZE OF THE PUBLIC SECTOR

Year	Government Expenditures as a Percent of GDP	Millions of Current Colones
1976	18.0	1,035.8
1977	17.3	124.7
1978	17.2	1,187.5
1979	16.5	1,449.9
1980	17.5	1,652.2
1981	22.2	1,919.8
1982	21.7	1,949.1
1983	18.2	1,852.1
1984	23.4	2,731.7
1985	16.5	2,360.3
1986	18.9	3,742.2
1987	15.0	3,473.1
1988	13.0	3,553.0
1989	12.1	3,896.8
1990	12.4	5,101.1
1991	12.0	5,728.5
1992	13.3	7,275.4
1993	11.5	7,636.4

## AVERAGE ANNUAL PERCENTS

1976-1980	17.3
1980-1985	20.4
1985-1990	14.4
1990-1992	12.7
1990-1993	12.3*

\*Initial appropriation is reported for Central Government expenditures.  
Banco Central de Reserva GDP projection.

Note: Includes earmarked expenditures ("compromisos").

Source: Informe complementario constitucional/Informe sobre la liquidación del presupuesto general y situación del Tesoro Público y patrimonio fiscal. Ministerio de Hacienda, various years.

It is possible that if a country is growing fast enough that a falling share of a shrinking public sector can still be consistent with a public sector entity improving its financial position (in an absolute sense). In such a case, a falling proportion of total Central Government expenditures is less of a problem (since its absolute level of funding is increasing) and is reflective of changing Government priorities. Such was not, however, the case

with El Salvador's MOH, at least until perhaps 1991. As has may be seen in the table entitled "Gross Domestic Product," since it reached its nadir in 1982, El Salvador's real GDP growth rate only slowly edged upward until 1989. When population growth is factored in, it becomes apparent that the situation throughout the 1980s was one of economic stagnation, or worse. Starting in 1990, however, there has been a significant economic recovery. Real GDP growth since 1990 has averaged nearly 4 percent. Thus while the relative size of the public sector has continued to shrink, because the economy has been expanding at a respectable pace the contraction in the absolute size of the public sector has been much less than would otherwise have been the case. Indeed even though the Ministry of Health's share of the public sector fell in 1991 and the public sector's share of GDP fell, the absolute size of the MOH was able to grow (in real terms).

### GROSS DOMESTIC PRODUCT (GDP)

Year	Nominal GDP (current colones)	Real GDP (1962 colones)
1975	4,477.7	3,122.8
1976	5,705.9	3,247.0
1977	7,167.1	3,443.7
1978	7,692.2	3,664.8
1979	8,607.1	3,601.7
1980	8,916.6	3,289.3
1981	8,646.4	3,016.8
1982	8,966.2	2,847.7
1983	10,151.8	2,870.4
1984	11,657.2	2,935.6
1985	14,330.8	2,993.6
1986	19,762.9	3,012.5
1987	23,140.6	3,093.5
1988	27,365.8	3,143.8
1989	32,230.0	3,177.0
1990	41,057.0	3,285.0
1991	47,792.0	3,400.9
1992	53,887.0	3,545.0

Source: Unpublished documents, Banco Central de Reserva, various years.

### 3.2.3 MOH expenditures as a percent of GDP

Looking at changes in the absolute level of MOH expenditures is not particularly insightful if we do not at the same time take into account what is happening to the country's ability to spend money on public health. The final relative measure of the MOH's financial health attempts to do so by including GDP as the measure's

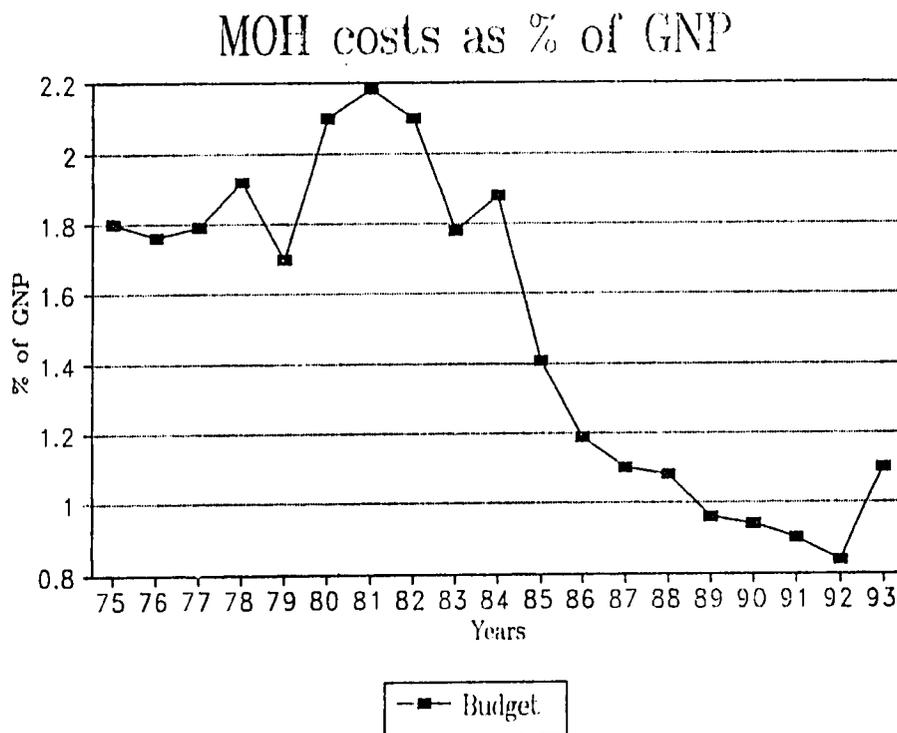
denominator as an (admittedly crude) indicator of a country's ability to spend money on public health. As may be seen in the table "Evolution of MOH Expenditures as a Percent of Gross Domestic Product," in El Salvador this measure followed a generally increasing trend until peaking in 1981. Each year from 1981 until 1992, with only one exception (1984), the MOH share of GDP fell. In 1992, Ministry expenditures as a percent of GDP were at their lowest level throughout this 18-year period, and stood at less than 40 percent their share in the Ministry's "best" year, 1981.

**EVOLUTION OF MOH EXPENDITURES AS A PERCENT OF  
GROSS DOMESTIC PRODUCT (GDP)  
(Millions de colones)**

Year	GDP (Current Colones)	MOH Share of GDP (percent)	MOH Share Change From Previous Year (%)
1975	4,477.7	1.80	----
1976	5,705.9	1.75	-2.8
1977	7,167.1	1.79	2.3
1978	7,692.2	1.93	7.8
1979	8,607.1	1.71	-11.4
1980	8,916.6	2.09	22.2
1981	8,646.4	2.17	3.8
1982	8,966.2	2.01	-7.4
1983	10,151.8	1.76	-12.4
1984	11,657.2	1.87	6.3
1985	14,330.8	1.41	-24.6
1986	19,762.9	1.17	-17.0
1987	23,140.6	1.09	-6.8
1988	27,365.8	1.06	-2.8
1989	32,230.0	0.96	-9.4
1990	41,057.0	0.92	-4.2
1991	47,792.0	0.89	-3.3
1992	54,762.0	0.86	-3.4
1993*	66,638.1	1.10	27.9

	Annual Average Percents	Period Average of Annual Changes
1975-1980	1.80	0.65
1980-1985	1.98	2.50
1985-1990	1.10	-10.80
1990-1992	0.89	-3.63
1990-1993*	0.94	4.25

\* GDP projections of Banco Central de Reserva, *Foreign Economic Trends*, August 1993, U.S. Embassy, El Salvador; MOH expenditures are based on appropriations as of November 1993 obtained from the Unidad de Planificación Financiera, MOH. Sources: *Informe sobre la liquidación del presupuesto general y la Situación del Tesoro Público y Patrimonio Fiscal*, Ministerio de Hacienda, various years.



As has been the case with many of the indicators reported here, 1993 marks a break with long term historical trends. In 1993 MOH expenditures are expected to equal 1.1 percent of GDP, a 28 percent increase over 1992's share, but a level which is still only slightly more than half the level recorded throughout the 1975-1982 era.

#### 4 Conclusion and prospects for change

A consistent story emerges from this review of financial indicators. Throughout the decade of the 1980s, the MOH suffered a severe decline in its financial resource base. That decline bottomed-out in 1986. But while the deterioration of the Ministry's financial well-being was substantially halted by that time, the situation did not subsequently readily improve. Rather, the absolute financial status of the MOH largely stagnated at what was by historical standards a lower level. The average annual real level of MOH expenditures went from 63.1 million 1962 colones in 1976-1981, to 51.2 million 1962 colones in 1983-1990. In 1991-1993, it has averaged 62.8 million 1962 colones, still slightly below its historical level. Moreover its financial status in the most recent period, 1991-1993, has been heavily influenced by the dramatic increase of 1993.

This suggests that things are starting to change. Are these only temporary changes, or are they likely to be of a more lasting nature? The MOH's budget allocation and its actual expenditures have both shot up by substantial amounts since 1990. In part, this was due to the loosening of the stranglehold of military and public debt servicing expenditures on total public expenditures. As shown in the table "Military and Public Debt Expenditures," in 1990 military spending (the sum of the Ministry of Defense and Public Security) grew by only 3 percent in nominal terms, while public debt servicing expenditures fell by 23 percent. The sum of these two classes of expenditures as a percent of total public sector spending fell from 46.5 percent to 33.9 percent in 1990. Although the absolute amounts of these 3 types of expenditures has increased substantially in 1991

and 1992, they have continued to constitute roughly one-third of total public sector spending, which is about one-third less than their share of about 45 percent which characterized the middle and late 1980s. As a result, the degree to which these classes of expenditures crowded out health expenditures has dropped significantly since 1989, enabling (but by no means guaranteeing) the substantial increase in the MOH General Funds appropriation.

### MILITARY AND PUBLIC DEBT EXPENDITURES

#### A. IN THOUSANDS OF CURRENT COLONES

Year	Defense	Public Security	Public Debt Servicing
1980	161,485	75,143	69,525
1981	188,598	110,905	158,485
1982	234,031	120,764	252,306
1983	275,780	121,092	269,429
1984	516,216	144,304	708,335
1985	555,887	169,640	313,030
1986	757,905	202,982	741,191
1987	774,303	207,688	580,772
1988	771,404	212,757	546,733
1989	946,422	253,691	613,326
1990	996,085	239,795	195,259
1991	1,019,200	246,100	774,700
1992	1,236,400	Combined with Min. of Defense	1,102,805

## B. AS A PERCENT OF TOTAL PUBLIC SECTOR SPENDING

Year	Defense	Public Security	Public Debt Servicing	Sum of These 3 Classes of Expend.
1980	9.8	4.6	4.2	18.6
1981	9.8	5.8	8.3	23.9
1982	12.0	6.2	13.0	31.2
1983	14.9	6.5	14.6	36.0
1984	18.9	5.3	25.9	50.1
1985	23.6	7.2	13.3	44.1
1986	20.3	4.4	19.8	45.5
1987	22.3	6.0	16.7	45.0
1988	21.7	6.0	15.4	43.1
1989	24.3	6.5	15.7	46.5
1990	19.5	4.7	9.7	33.9
1991	17.9	4.3	13.5	35.7
1992	17.0		15.2	32.2

Source: *Informe complementario constitucional*, Dirección de Contabilidad Central, Ministerio de Hacienda, 1980-1986. In 1987 this annual report was renamed *Informe sobre la liquidación del presupuesto general y situación del tesoro público y patrimonio fiscal, 1987-1992*.

The burdens of both military expenditures and debt servicing will be maintained at their present, much lower levels, or even less. Although the 1994 budget calls for maintaining Ministry of Defense expenditures at their 1993 level, economic growth is expected to continue at a brisk pace; 4-5 percent per annum throughout the remainder of the decade by most accounts (Banco Central de Reserva). These are very positive signs, portending the GOES' ability to continue its recently increased level of financing of the MOH throughout at least the near- to mid-term future.

It is imperative that the Ministry use these additional funds it receives in the next two years to wean itself from its high level of dependency on AID and other donor financing, since, over the course of this same period, AID and World Bank financing of the MOH will be steadily and significantly declining. These are the two most important sources of external financing to be concerned about and they are the only projects that are currently financing operations expenditures. AID support for drug and medical supplies alone accounted for nearly 64 million colones in 1992 and 80 million colones in 1993, constituting 14 and 11 percent of total MOH operating costs and 68 and 46 percent of the total cost of these crucially important inputs, in each respective year.

Other international assistance projects, such as the Zacamil Hospital built by the European Economic Community, are important because of their derivative impact on recurrent costs. The Zacamil Hospital's 1993 budget was 25 million colones, 3.5 percent of the total MOH operating costs.

When AID, and to a lesser extent, the World Bank's projects accelerate their pace of phasing out, the MOH will have a huge financing gap to fill simply to maintain its current level of activities. If the MOH does not begin to fill in where AID, World Bank and other donor financing has been systematically reduced, or if the Ministry does not redefine what its role in the health sector of El Salvador is to be, and accordingly modify its activities, the Ministry will inevitably suffer some severe programmatic and financial dislocations. In the interest of improving its long term independence, its efficiency and its effectiveness, the Ministry must view the next few years as a critical transitional period during which it must consolidate and/or redefine its programs and activities. The temptation to use the significantly increasing influx of domestic monies during the next few years to significantly expand infrastructure or programs without altering its domain of activities, would be imprudent.

### **5 Important MOH financing-related issues**

One very crude, but commonly used, measure of the administrative and managerial capability and more specifically of the absorptive capacity of a Central Government agency is the extent to which it executes (spends) its allotted financial resources. In assessing this measure it is important to distinguish between initial and final appropriations. The initial appropriations (*asignaciones iniciales*) of the Ministry of Health (as well as of all other Central Government agencies) are established by the General Assembly at the end of each year for the subsequent fiscal year. (The GOES fiscal year coincides with the calendar year.) Usually in December the seven month budget preparation process culminates in the General Assembly's passage of the "Budget Law" (*Ley de Presupuesto*), which contains the initial budget appropriations. (This document is published in the final December edition of the *Diario Oficial* and is also subsequently published under separate cover.)

During the course of the year, the Ministry of Hacienda generally makes relatively minor adjustments in the initial budget appropriations to each Ministry. These adjustments may be prompted by:

- discrepancies in estimated and actual government revenues which may result in either increases or decreases in the initial allocations,
- changes in individual, ministerial-level programs,
- changes in Central Government program or Ministry priorities, and
- Ministries' overspending their initial appropriations, due to factors (a) which may be exogenous to the specific Ministry (for example, an increase in salaries via a change in the Central Government-wide Salary Law, *Ley de Salarios*), or (b) which may be endogenous to the Ministry (for instance, poor management) and petitioning and receiving additional funds from the Ministry of Hacienda.

The table on the following page presents the initial and final budgetary allocations of the Central Government from 1979 to 1992. Over this 14 year period, final allocations annually averaged 14 percent more than the initial allocation levels. In 1986, a particularly large jump in the final over the initial appropriation occurred. This was due to a major earthquake which racked San Salvador on October 10. If this aberrant year is excluded from the analysis, the mean annual increase in final vis-a-vis initial allocations falls to about 12

percent. With one (other) exception, 1984, the 5 most recent years had the largest changes, all increases, from the initial to the final appropriation.

The total appropriations presented in that same table are disaggregated into their operations and capital expenditures components. Although capital appropriations have averaged only 22 percent of total initial appropriations since 1979 (and were of generally decreasing financial significance until 1992), it has been changes in capital appropriations which have been the source of most of the annual fluctuation in total appropriations. The mean annual increase in operations appropriations over this 14 year period was 8.5 percent compared to 36.1 percent for capital appropriations.

**TOTAL CENTRAL GOVERNMENT GENERAL BUDGET ALLOCATION:  
INITIAL VERSUS FINAL  
(In Thousands of Current Colones)**

	Total	Operations	Capital
Initial (1979)	1,451,925	1,075,635	376,290
Final	1,511,606	1,129,180	382,425
Percent Change	4.1	5.0	1.6
Initial (1980)	1,676,064	1,122,964	553,100
Final	1,763,767	1,201,505	562,262
Percent Change	5.2	7.0	1.7
Initial (1981)	1,988,518	1,340,707	647,811
Final	2,191,022	1,479,367	711,655
Percent Change	10.2	5.0	22.7
Initial (1982)	2,111,069	1,411,397	699,672
Final	2,239,564	1,586,254	653,310
Percent Change	6.1	12.4	-6.6
Initial (1983)	2,058,803	1,472,374	586,429
Final	2,187,627	1,522,476	665,152
Percent Change	6.3	3.4	13.4
Initial (1984)	2,298,442	1,611,465	686,977
Final	2,957,460	1,849,834	1,107,626
Percent Change	28.7	14.8	61.2
Initial (1985)	2,427,467	1,885,647	542,420
Final	2,583,114	1,988,264	594,850
Percent Change	6.4	5.5	9.7
Initial (1986)	2,631,318	2,076,140	555,178
Final	3,888,077	2,474,548	1,413,529
Percent Change	47.8	19.2	154.6
Initial (1987)	3,451,425	2,727,140	724,284
Final	3,605,636	2,731,244	874,392
Percent Change	4.5	0.2	20.7
Initial (1988)	3,505,878	2,815,250	690,628
Final	3,777,653	2,852,086	924,566
Percent Change	7.8	1.3	33.9
Initial (1989)	3,714,028	2,902,267	811,760
Final	4,203,868	3,333,866	870,760
Percent Change	13.2	14.9	7.2
Initial (1990)	4,255,730	3,560,058	695,672
Final	5,305,241	4,040,454	1,264,787
Percent Change	24.7	13.5	81.8
Initial (1991)	4,985,884	4,199,474	786,410
Final	5,902,9	4,620,9	1,282,0
Percent Change	18.4	10.0	63.0
Initial (1992)	6,757.6	5,467.0	1,350.7
Final	7,654.4	5,769.9	1,884.5
Percent Change	13.3	6.7	39.5

Source: Ministry of Hacienda, *Informe sobre la liquidación del presupuesto general*.

It is important to understand that the nature of capital expenditures renders them more prone to fluctuations in both appropriations and actual expenditures. Capital expenditures are usually large outlays for a single project (e.g., a health center) or a single item (e.g., an X-ray machine). Thus, to the extent that there are changes in plans or if for any other reason (including administrative malfeasance) the purchase of a single item or the undertaking of a single project is not followed through on, there is very likely to be a large amount of appropriated capital budget monies which go unexpended. Also, to the extent that changes occur in the amount of monies budgeted for capital expenditures as opposed to operating expenditures, it increases the likelihood that some budgeted monies will not be spent, that those monies will be substantial, and that they may constitute a significant proportion of the entire capital budget. In short, the nature of capital purchases render them more prone to being volatile and of there being unexpended monies. Ministry of Hacienda budget regulations preclude transferring unexpended capital budget monies to paying for operations.

The table entitled "Changes in the MOH Budgetary Appropriation: Initial Versus Final Allocations" covers the 1977 to 1992 period. Over this 16 year period, the annual initial allocation of the MOH has been altered by 5.5 percent in absolute terms. In the few years when the final allocation was less than the initial one, the discrepancies were--with one exception--proportionately small, never exceeding one-half of one percent in any single year. The largest reduction was in 1992 when the final appropriation was 3.1 percent less than initial one.

In contrast, in those years when the original allocation was augmented, the magnitude by which it was added to was relatively substantial. In half of the years of the past 14 years the addition to the original budget appropriation for the MOH exceeded 5 percent. In the 11 years in which it increased, it did so on average by 9.0 percent per annum. The overall average annual increase was 5.1 percent. In only one of the 13 years for which there are comparable data in the table on Central Government and the table on MOH initial versus final appropriations (1980) was the proportionate increase in the funding of the MOH greater than that of the total Central Government.

How much of its final allocation did the MOH actually spend? Given the dynamics and the exogenous regulations of the Central Government's budgetary process, a relevant benchmark against which to gauge the performance of the MOH is the percentage of the final appropriation actually expended by the entire Central Government. The table "Percent of Final Budget Allocation Expended" contains the percent of the MOH total, operations and capital final budget allocations that it spent, as well as a ratio of the percent of the final allocations expended by the MOH to the percent of the Central Government spent. In any given year, if they expended exactly the same proportion of their total appropriations, the ratio would be equal to 1.000. If the MOH expended a relatively larger proportion of its budget, the ratio would exceed 1.000.

**CHANGES IN THE MOH BUDGETARY APPROPRIATION:  
INITIAL VERSUS FINAL ALLOCATIONS**

Year	Initial Budgetary Appropriation	Final Budgetary Appropriation	Final minus initial	(Final minus initial) as a % of the initial
1977	120,590,720	128,287,862	7,697,142	6.4
1978	148,775,910	148,504,300	-271,610	-0.2
1979	147,617,960	174,155,000	-462,910	-0.3
1980	171,167,680	186,396,000	15,228,320	8.9
1981	178,839,270	187,972,900	9,133,630	5.1
1982	179,168,670	180,546,400	1,377,730	0.8
1983	178,694,550	177,822,600	-871,950	-0.5
1984	200,245,840	213,891,500	13,645,660	6.8
1985	197,534,280	197,532,900	-1,380	-0.0
1986	186,666,180	241,904,600	55,238,420	29.6
1987	287,104,220	305,250,100	18,145,900	6.3
1988	288,996,880	296,554,190	7,557,300	2.6
1989	298,996,880	324,236,800	25,239,900	8.4
1990	377,027,970	385,816,000	8,788,000	2.3
1991	404,820,830	430,207,620	25,386,790	6.3
1992	530,000,000	513,809,022	-16,190,978	-3.1
1993*	730,000,000			

\* Initial appropriation incorporates changes as of November 1993.  
Source: Ministry of Hacienda, Ley del Presupuesto.

## PERCENT OF FINAL BUDGET ALLOCATION EXPENDED

Year	Ministry of Health			Ministry of Health Rate as a Percent of Overall Central Government Rate		
	Total	Operations	Capital	Total	Operations	Capital
1977	99.0	99.4	97.9	1.013	1.025	0.989
1978	96.5	96.3	96.9	1.002	1.007	0.992
1979	96.6	98.0	88.2	1.003	1.016	0.921
1980	95.7	97.4	88.6	1.027	1.038	0.963
1981	88.8	94.9	53.7	1.014	1.007	0.727
1982	91.8	98.7	55.2	1.056	1.048	0.797
1983	95.8	98.4	84.0	1.132	1.070	1.239
1984	89.6	99.6	61.3	0.970	1.031	0.719
1985	89.4	99.9	36.7	0.978	1.015	0.489
1986	96.1	99.5	64.3	0.999	1.013	0.703
1987	82.8	99.2	27.2	0.863	1.002	0.309
1988	97.6	99.8	87.4	1.037	1.003	1.131
1989	95.1	99.4	70.6	1.026	1.014	0.978
1990	97.8	99.9	79.8	1.017	1.005	0.929
1991	98.6	99.1	90.5	1.016	0.997	1.018
1992	93.5	98.5	38.7	0.984	1.013	0.441

Source: Informe sobre la liquidación del presupuesto general y situación del tesoro público y patrimonio fiscal, 1987-1992.

With the exceptions of 1984-1987 and 1992, the MOH expended a larger fraction of its total final budget appropriation than did the Central Government. With the exception of 1991, in every year from 1977 to 1990, the MOH outperformed the Central Government in terms of spending its allocated *operations* budget. When it comes to *capital* expenditures, however, the story is very different. In all but 3 of the 16 years under study, the Central Government utilized relatively more of its allocated capital budget. Especially from 1981 to 1987 and in 1992, the MOH's execution of its appropriated capital budget lagged significantly, on average spending only about half (54.6%) of its allocated budget. Thus a larger share of the MOH's total expenditures, vis-a-vis its total final allocations, consists of operating costs. Furthermore, throughout the 14 year period for which we have comparable data on the Central Government and the MOH (1979-1992), the MOH has a significantly smaller proportion of its total budget allocated for capital expenditures projects. While the Central Government share has averaged 24 percent, that of the MOH has been only slightly more than 12 percent.

In August of 1993, the Financial Accounting Office of the MOH, with technical assistance from PAHO, installed a network of computers and a computerized accounting system to facilitate and to expedite the paying of bills and the maintenance of systems of accounts. The new system, known as the Sistema Computarizado de Administración Presupuestaria, or SCAP, has reportedly reduced the time required to process invoices from several weeks to a few days. While this has no doubt improved the MOH's relationship with the companies it purchases supplies from, and has or will in time probably increase the number of companies willing to do business with the MOH, as the Ministry's performance on actual expenditures versus appropriations discussion demonstrated, the MOH has not had a problem moving money. That is, at least with regard to its operations budgets, the Ministry of Health has historically proven very capable, more capable than the Central Government in general, to spend that which it has been allocated. This system has improved the efficiency of the Ministry as evidenced by the improved business relations and the reduced need for office personnel within Financiera Contable now that the very cumbersome manual system has been replaced. Also, it is likely that the new system is more accurate. It involves fewer invoice processing steps, thereby reducing the likelihood of committing errors.

In summarizing this section, relative to the entire Central Government, the MOH generally spends a larger proportion of its final allotted budget. The Ministry, however, has a somewhat easier task of executing its budget because it is generally less subject to change over the course of the fiscal year and it is generally comprised of a smaller fraction of capital than operating expenditures. Two factors would appear to account for the relatively large fraction of the MOH's capital budget going unspent. Since the mid-1970s, the majority of the Ministry's capital appropriations have been allocated for rural water supply projects. Especially between 1981 and 1987, when the Ministry's budget execution performance was the poorest, the schedules of these projects were probably subject to a great deal of disruption by the civil war. A second factor is that the MOH implementing units, the Health Engineering Directorate and PLANSABAR, appear to be poorly managed and inefficient. In 1990 they did not use 20 percent of the funds allocated to the, in 1991, 10 percent and in 1992, 62 percent. The Health Engineering Directorate functions only in an administrative capacity, contracting out the infrastructure construction projects.

#### **IV STRUCTURAL IMPEDIMENTS TO IMPROVING THE MOH'S OPERATIONAL AND ALLOCATIVE EFFICIENCY**

##### **1 Organizational fragmentation: centralized versus decentralized agencies**

The Ministry of Health is characterized by organizational fragmentation. It is divided into two unintegrated general categories of organizational entities. The State Secretariat (or Central Office) and the Regional Health Services together constitute what are referred to as the Centralized Agencies. The other "half" of the Ministry consists of the so-called Autonomous, or Decentralized, Agencies, which are overwhelmingly dominated (financially) by the 15 hospitals.

As their label suggests, the Autonomous Agencies independently plan their own activities, independently develop and execute their own budgets, and, for the most part, independently compile and submit their own program statistics. They are creatures of the MOH only in name. Historically, the hospitals existed as independent entities totally apart from the MOH structure until the mid-1960s. The mid-'60s effort to integrate the hospitals within the MOH was a shortlived one. In (circa.) 1969, they again became completely independent organizations, only to be "re-merged" with the Ministry in the early 1970s.

Despite the fact that a sub-directorate for hospitals was developed within the MOH Central Office in 1991, very little is known about the hospitals' budgets or activities at the MOH Central Office. Although two documents which are regularly prepared by the State Secretariat include information about the hospitals, most of the data are simply compiled and reported by the Central Office, and in the case of the financial data, no analysis is performed. The only financial data about the hospitals that is sent to the MOH Central Office are the "Anteproyectos" which are annually submitted to the Financial Accounting Department as part of the annual budget exercise. The Autonomous Agencies' requests are simply arithmetically summed with those of the rest of the Ministry and the resulting document is submitted to the Ministry of Hacienda (Treasury). The only other hospital data which is submitted to the MOH Central Office are service provision data sent to the Statistics Unit on a quarterly and an annual basis.

The most recent expenditures data that may be had in the Central Office are the at least one and one-half year old data contained in the "Anteproyectos." That such basic current information about the hospitals is not available at the MOH Central Office manifests both the hospitals' independence and the Central Office's lack of interest in attempting to, as well as its inability, to oversee, manage or even influence the behavior of MOH hospitals.

In part, this is a financial accounting problem. The Ministry of Health budget lines (cost centers) which it has long used to disaggregate its budget are not useful to would-be MOH managers: they cut across programs and types of facilities and as such are not even potentially useful tools for program or facility managers to assess efficiency or other aspects of performance. The current Modernization of the State Project being undertaken by MIPLAN in three Ministries, including the MOH, is intended to aid in addressing this problem. The Project is working with MOH personnel to restructure the Ministry's accounting system in such a way as to develop more managerially meaningful cost centers. This is an important reform, but it will not necessarily change the way in which the MOH functions. While the successful implementation of this reform will provide a means by which to improve the managerial performance of MOH programs and personnel, it will not necessarily do so. It will also be necessary to restructure the way the Ministry currently functions so as to provide positive and negative incentives for caring about and doing something about the performance of the system, of its component programs, and other parts, a much more difficult, but essential, task.

Returning to the issue of the hospitals, their marked degree of autonomy and the absence of levers for influencing their behavior, constitutes a major impediment to effective and meaningful MOH planning. Without control of the hospitals--or far more fundamentally, without even current, basic knowledge about the hospitals--the MOH Central Office cannot effectively plan the MOH's activities. This would not necessarily be a problem if the hospitals were totally independent of the MOH, but they are not. The hospitals receive a large share of budget program number (i.e., line item number) 102 General Administrative Services, subprogram number 29 Departmental Supplies and Materials, which contains most of the Ministry's supplies, including everything from paper to drugs. The vast majority of the value of these supplies consists of drugs, and medical and laboratory supplies. After an initial annual allocation, these supplies are disbursed on a "first come, first serve basis" by the MOH Central Office Drug and Medical Supplies Technical Unit (UTMIM) to the hospitals, health centers and regional offices<sup>7</sup>. As long as the requested drugs are available they are sent to the requesting facility. Without additional information about the hospitals' drug budgets, drug expenditures, and drug dispensing records, together with the hospitals' patient case mix, UTMIM cannot rationalize its distribution system.

The drug and medical supplies that are included in budget line item 102.029 are in addition to the direct transfers that the hospitals receive for general operations and supplies, including other allocations which they directly receive specifically for drugs and other medical supplies. Thus the hospitals' share of the MOH operating budget is not fully reflected in the transfers, which are commonly regarded as their sole source of GOES general funds revenues. Yet, the only unit within the MOH which maintains information about the type and value of these drugs and medical supplies which the MOH Central Office distributes to the hospitals is the UTMIM. Neither the Ministry's Division of Financial Accounting, nor anyone in the recently formed Financial Planning Unit of the Planning Department, maintains this information. Thus nobody in the Ministry of Health knows how much of the Ministry's resources go to the hospitals. By simple extension, nobody in the MOH knows the value or the proportion of MOH resources that is spent by the Regional Health Services. Clearly, a necessary but not sufficient condition for the Ministry to manage its hospitals effectively, is its having timely and detailed financial information about the hospitals which it does not have.

The table on the following page presents "Expenditures on the Major MOH Hospitals Versus MOH Regional Health Services Expenditures." The RHS expenditures consist of the Central Government General Funds expenditures of the health centers, units and posts, as well as those of the regional offices. These expenditures data are budget program code 106, subprogram 019, Total Expenditures ("total utilizado") reported annually in the table entitled "Estado de gastos por clases generales del presupuesto general, resumen por categoria de programas, unidades primarias de organizacion y detalle por programas," contained in the Ministry of Hacienda's annual publication *Informe sobre la liquidacion del presupuesto general*. The individual hospital totals presented in the table are the individual hospitals' Total Expenditures listed under budget program code 201, Current Transfers, contained in the same table of the same Ministry of Hacienda publication.

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<sup>7</sup> In September 1990, UTMIM started shipping drugs and medical supplies directly to the health centers. Prior to that time the centers, along with the units and posts, received their supplies from their respective regional office. The Regional Offices continue to control the health units and posts supplies.

**EXPENDITURES ON THE MAJOR MOH HOSPITALS VERSUS  
MOH REGIONAL HEALTH SERVICES EXPENDITURES**

(Does Not Include Supplies of Materials and Equipment  
from Budget Line 102.029)

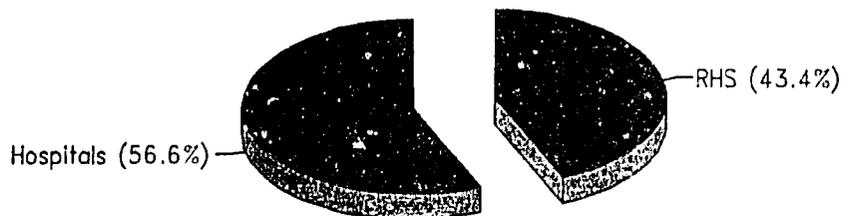
Year	Regional Health Services Expenditures (000 colones)	MOH's Major Hospitals' Expenditures (000 colones)	Regional Health Services' % Share of Hospitals' Expenditures
1980	38,228.7	66,750.6	57
1981	42,083.0	69,199.6	61
1982	41,829.2	67,299.1	62
1983	41,063.2	67,430.5	61
1984	46,207.9	74,998.9	62
1985	60,914.2	79,879.1	62
1986	67,720.2	100,819.3	62
1987	72,044.5	108,423.4	62
1988	84,407.3	110,357.8	65
1989	84,407.3	126,805.5	67
1990	101,118.5	162,233.8	62
1991	123,158.1	199,073.3	62
1992	152,942.3	228,555.7	67
1993*	184,330.3	245,498.6	75
1994*	273,391.0	342,091.4	80

\* Initial appropriations.

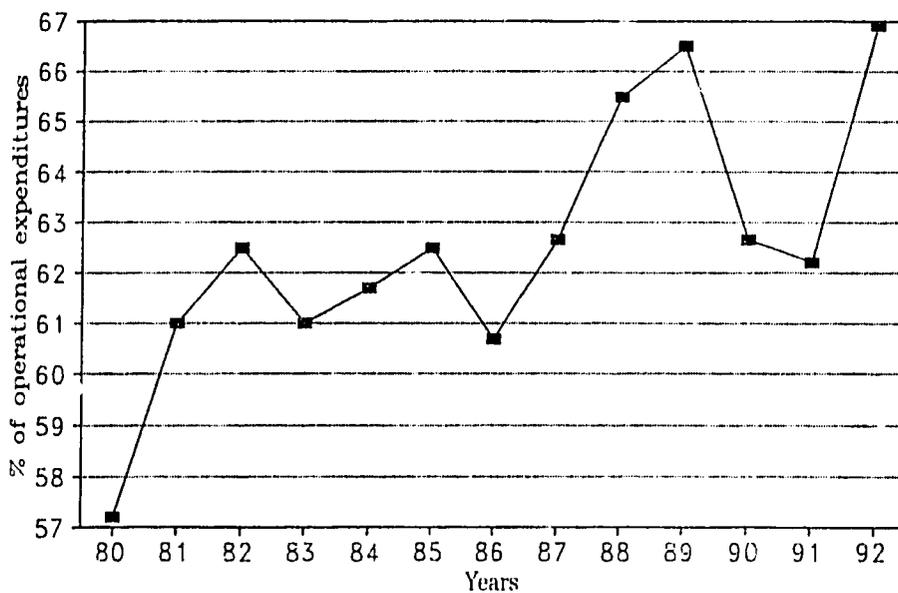
Note: Includes "total utilizado" for both "funcionamiento" and "transferencias corrientes."

Source: Informe complementario constitucional/Informe sobre la liquidación del presupuesto general, Ministerio de Hacienda, various years.

## Relative costs of MOH regional health centers and major hosp.



## Costs of regional health services as % of MOH major hospitals, MOH



As the table shows, over the first eight years of the 14 year study period, the relative split between Regional Health Services, RHS, and the hospitals remained relatively constant and remarkably so from 1981 to 1987. Indeed in 9 of the eleven years from 1981 through 1991, the RHS's share of the hospitals' expenditures was either 61 or 62 percent.

The following table presents the evolution of the major hospitals' share of MOH operating expenditures since 1980. It is insightful to note that until 1992, the hospitals' share of the total MOH budget has generally not been determined by the Minister or Ministry of Health. Traditionally, the Ministry of Hacienda has kicked off the start of the budget development process and the preparation of the Anteproyecto documents each April/May, with a letter to the the Minister of Health. That letter generally informed the Minister of the anticipated amount of funds which would be available for the MOH in the coming fiscal year, and would include separate maximum allocations for each of the autonomous agencies of the MOH. Traditionally, these target amounts and the hospitals' maximum suggested appropriations have been accepted by the MOH as the initial appropriations (*asignaciones iniciales*), and have been integrated into the Ministry's initial appropriation requests.

**THE PROPORTION OF TOTAL MOH GENERAL BUDGET-FUNDED OPERATIONS  
EXPENDITURES MADE BY THE MAJOR MOH HOSPITALS (14)**

(Does Not Include Health Centers, Nor Expenditures  
on Supplies from Budget Line 102.029)

Year	Total MOH Operating Expenditures (000 colones)	MOH Major Hospitals' Expenditures	
		In 000 colones	Percent
1980	147,491.1	66,750.6	45.3
1981	152,491.1	69,199.8	45.5
1982	149,823.1	67,299.1	44.9
1983	143,515.3	67,435.4	47.0
1984	157,288.5	74,998.9	47.7
1985	164,445.4	79,879.1	48.6
1986	216,959.2	100,819.2	46.6
1987	233,729.3	108,423.4	46.4
1988	243,317.6	110,357.8	45.4
1989	274,094.2	126,805.5	44.2
1990	344,397.9	162,233.8	41.5
1991	424,204.1	199,073.3	46.9
1992	463,993.7	228,555.7	49.3
1993*	716,180.0	245,498.6	34.3
1994**	850,359.6	342,091.4	40.2

\* Initial appropriations.

\*\* As proposed by the Ministry of Hacienda to the Asamblea Legislativa, December 1993.

Note: "Operating expenditures" includes "total utilizado" for both "funcionamiento" and "transferencias corrientes."

Source: Informe complementario constitucional/Informe sobre la liquidación del presupuesto general, Ministerio de Hacienda, various years.

It is important to note that in the development of the current, 1993, budget, that the MOH broke with tradition and its usual quiescent and acquiescent role. It took the initiative, requesting and substantiating its need for an additional 200 million colones, a 35 percent increase in what the Ministry of Hacienda had initially informed the MOH it would be able to make available to it. Hacienda agreed to the massive increase, which resulted in a dramatic break from the otherwise generally downward long term financial trends that were discussed earlier. It should also be pointed out, however, that at the same time, the Central Government had found itself in a rather different position; the value added tax had garnered considerably greater revenues than had been anticipated. Some observers have also pointed out that the upcoming presidential elections may have been yet another reason for the significant increase in the Ministry of Health's budget allocation.

When reviewing the data presented in the table on the proportion of total MOH general budget-funded operations expenditures made by the major hospitals it is important to bear in mind that these data contain only a part of the hospitals' total share of MOH expenditures: they contain only the "current transfers" made to the MOH. As was discussed earlier, in addition to these monies, the hospitals also receive a large fraction (46 percent in 1990) of the total expenditures of budget program 102: General Administrative Services, subprogram 029: Departmental Supplies and Materials, resulting in an underreporting of the hospitals' total share of MOH expenditures.

Unfortunately, there are only two years for which other than very crude estimates of the hospitals' share of this account are available, 1990 and 1993 (through November). Moreover, the data for 1990 covers only three-quarters of the total, only the drug component. This information is available because the drug component of this account was computerized in 1990. Prior to 1993, the only way in which a similar figure could be obtained, and the way in which the distribution of the 1990 total was obtained, was by compiling them from the receipts of each and every one of the individual purchase transactions and the subsequent distributions throughout the MOH system of those purchases. Effective January 1993, the UTMIM computer program has been revised to make this type of analysis possible on a routine basis. Thus we have two years in which we can make more precise estimates of the major hospitals' (combined) share of MOH operating expenditures, 1990 and 1993.

In 1990, the hospitals received 46.3 percent of 20,947,890 colones worth of GOES purchased medicines included in the 102.029 budget line<sup>8</sup>. We assume that the hospitals received an equal share of the medical-surgical supplies that were purchased with GOES funds through the same budget line. Including the 10.4 million colones in medicines and medical-surgical supplies the hospitals received from the 102.029 account in 1990 the major hospitals alone accounted for 172,633,800 colones, 50.1 percent of total MOH operating expenditures in 1990. This still underestimates the major hospitals' share, since we still have not taken into account (a) the fact that they received a portion of the remainder off the funds in this account--which constitute two-thirds of its total value, but about which we have no information--or (b) that the hospitals should be "assigned" a portion of the MOH's overhead costs of administration.

One way to more accurately compare the distribution of MOH resources between the major hospitals and other facilities would be to compare the hospitals' total direct expenditures to the regional health services' expenditures. This too is not ideal, however, because the way in which financial information about the regional health services is maintained does not allow us to ferret out the administrative costs of the regional

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<sup>8</sup>Bear in mind that the hospitals also received GOES funds directly in their global transfers with which to purchase medicines and received AID and PL-480 purchased supplies from the UTMIM, as well. In 1990, the health centers received 19.6 percent of the value of medicines distributed through 102.029, and the units and posts received 34.1 percent (unpublished UTMIM documents). Drug financing and supplies will be further discussed later in the report.

offices, which are substantial. According to Wight et al. the percent personnel in administrative work has not changed for the past 10 years, averaging about a quarter except that the regional hospitals have increased their numbers 10 percent as opposed to only 3.4 percent in the national hospitals. Thus this approach, while an improvement over the previous analysis, still includes a large amount of the indirect costs of the health centers, units and posts, but does not include any of the hospitals'.

The 1993 data on the distribution of drugs and medical-surgical supplies reveals a generally similar pattern to that of 1990. The hospitals received 52 percent of the value of medicines and 69 percent of the value of medical-surgical supplies, 55 percent of the combined total value of these inputs. The hospitals' share of the 102.029 purchases comes to 84.8 million colones.

What are the relative costs of the different types of MOH facilities? As part of this exercise a new estimate was developed using a report prepared by the AID APSISA Project (Gomez, 1992, p. 23) as a starting point, but making the following adjustments in the estimates: (1) distributing the 102.029 expenditures as described here (which was overlooked in the APSISA analysis), (2) reducing the size of MOH recurrent costs by the 15 percent which consists of MOH transfers to other than the hospitals (but which were included in the APSISA analysis), (3) dropping the direct investments (which were apparently inadvertently included in the analysis, and (4) including the regional office administrative costs as part of budget line 106. This yields the following estimates of the relative operations cost structure of MOH facilities as:

Hospitals	62.3 percent
Centers	12.3 percent
Units	18.4 percent
Posts	6.1 percent
Total	100

When it is recalled that the health centers are also hospitals, we see that 74.6 percent--virtually three-quarters--of the Ministry of Health's direct service delivery operations costs are devoted to the 30 hospitals, leaving a meager 25 percent for the Ministry's 360 primary health care facilities. It must be concluded that far too few of the Ministry's resources are allocated to primary health care and a disproportionate share are allocated to hospital care. The current distribution of MOH resources severely constrains the quality of care that can be provided in front-line, primary health care facilities, and thereby serves to restrict access to care.

## 2 Budgetary fragmentation: investment vs operations budgets and recurrent cost implications

A second source of organizational fragmentation which constitutes another impediment to both effective planning and to improving the Ministry's performance is that the development and oversight of the investment and the operating budgets are distinct, administratively isolated activities carried out by separate entities.

The investment agency, the Health Engineering Division, is responsible for conceptualizing, evaluating, securing funding for, and implementing new investment projects. The Health Engineering Division exists and operates independently of the sections charged with the operating budget, the newly created Financial Planning Unit within the Planning Department and the Financial Accounting Division. While the Financial Planning

Unit also works on some project development activities, neither of the planning units has historically been concerned with post-implementation (i.e., recurrent) costs, which have generally been neglected.

The institutional division of labor encouraged by the fragmented organizational structure of the Ministry encourages the lack of integration between the investment budget and the operating budget. The impact of this fragmented structure is heightened and further compounded by the division of labor between the planning and the budgeting units, which further reduces the possibility of there being a locus of control or oversight of recurrent costs. The budgeting unit maintains the budget data (and even then, only the MOH General Budgetary Funds portion, which in recent years has comprised only 60 and 80 percent of total MOH resources) while the planning unit plans (with at best piecemeal information about budgets and expenditures) with relatively little consideration for recurrent costs. In short, the ease of, and the incentives for, estimating and/or monitoring recurrent costs is, at best, fragmented; at worst, it is non-existent.

The dysfunctional, fragmented structure of the MOH's recurrent and investment budget is further exacerbated by two additional factors. First, as discussed earlier in this report, the General (Ordinary) Budgetary Funds is the only portion of the MOH budget which is tracked by the MOH's Financial Accounting Division. Moreover, even the Ordinary Budget is fragmented into more than 15 pieces: there is one operating budget for the Ministry's Central Office and Regional Health Services, one for each of the 15 hospitals, and one for each of the dozen or so other agencies receiving MOH recurrent transfers. This combined with the existence of the 7 different financial sub-systems and six other-than GOES General Funds sources of funding each with its own, sometimes distinct, sometimes overlapping systems of control and oversight (discussed earlier). That the MOH has six different financing systems would not be cause for concern were it not also true that no single MOH unit has the responsibility of overseeing and managing the Ministry's entire financial system. The Ministry's fragmented financial "system" constitutes a structural impediment to improving its performance because it segments knowledge and understanding of the Ministry's financial processes and its overall financial situation, thereby precluding effective planning.

While much of the information is available in different parts of the Ministry's Central Office, there is no single organizational entity charged with developing, implementing, overseeing or tracking the entire MOH budget. As a result, the Ministry of Health does not know how much money is spent on MOH activities.

There have been two notable efforts made to address this situation. Three years ago, PAHO began, and then the World Bank, to develop an automated accounting system for tracking and monitoring at least three of the Ministry's sources of financing: GOES General Funds, *patronato* user fee revenues and expenditures and special activities revenues and expenditures. PAHO has completed the installation of the computerized system, but the system contains information only about GOES General Funds. The programs and procedures for incorporating data from the two user fee systems were never developed and the database has never included information about these funds. Furthermore, there are currently no plans to incorporate them. This is certain to complicate matters when the Government gets around to officially announcing the establishment of a uniform national user-fee policy. A major concern that the Ministry of Hacienda has had about establishing such a system is that there are inadequate administrative systems in place by which to monitor and track those monies (i.e., by Hacienda standards, the inadequate administrative system will preclude the "fiscalización" of the funds).

The second reform in the area of systematizing information and improving understanding about MOH finances was the March 1993 establishment of a new unit, the Financial Planning Unit, within the MOH Department of Planning. This unit consists of the persons who used to comprise the Institutional Development Unit. These persons work in the same office space within in Ministry, but their salaries are now being paid for out of

World Bank Project funds. Since these positions were already being paid for out of GOES General Funds, this salary money would have been better spent on purchasing one or more computers for these persons to facilitate their performing their new, more analytic tasks. The Unit is about to publish its first report in what is to become a regular quarterly or semi-annual report on MOH financial indicators. The publication of the report is several weeks behind schedule in part because any changes in the by-hand-prepared documents requires considerable time to revise. While the staff of the Unit have been provided with desk-top calculators, such equipment is woefully inadequate for the major task they have been charged with undertaking.

Since 1981, the Ministry has had an Office of International Cooperation to coordinate information and activities in this realm. Unfortunately, to date that office has only had information about foreign technical assistance, the least important form of the three types of international cooperation (the other two being direct external financial assistance and foreign loans which enter into the GOES extraordinary budget). Will developing a new unit help address the problem? Maybe, from the draft first report on MOH financial indicators that has been prepared by the new Financial Planning Unit, there is little doubt that there is cause for greater optimism about the outcome of this reform, at least as far as the gathering of data and the developing of a greater understanding of the Ministry's financial situation. Whether that will, in turn, translate into the improved managerial performance of the Ministry, however, is another issue. The mechanisms currently in place and the plans for introducing new financial planning tools have not been well thought-out and are not viable, although there are plans for a new system for financial planning. We return to this point shortly, after completing discussion of the Financial Planning Unit.

A review of the data put together by the Unit in its still not officially released report reveals some inadequacies, particularly in the area of international cooperation. The information that has been assembled is two years old and varies considerably from reports gathered from the World Bank Project, SETEFE and MIPLAN's Dirección de Cooperación Técnica Internacional. This is to be expected in the first-run. If the report is to be a useful management tool, however, the information it contains must be timely, consistent and accurate. The best way to assure this is to establish and institutionalize a network among all the relevant agencies producing and/or compiling the data. To date, the identification and contacting of relevant agencies has not yet begun. The agencies that must be contacted in the case of international cooperation include the multilateral and bilateral cooperating agencies themselves, the PNUD which receives quarterly updates from all international agencies and bi-annually publishes a report entitled "Technical and Financial Cooperation with El Salvador as Reported by Donors," MIPLAN, which annually publishes a highly aggregative report documenting all international technical cooperation, international loans, several units within MIPLAN for more disaggregated data--SETEFE's Dirección de Administración de Inversiones Públicas (DAIP) and its Dirección de Operaciones, and MIPLAN's Dirección de Cooperación Técnica--the international donations.

In addition, data on the private sector can be obtained from the Superintendencia del Sistema Financiero, which publishes an annual report, *Anuario Estadístico, Seguros-Finanzas-Bancos*. It contains detailed information about the purchases of health and accident insurance, together with payments made by private insurance companies for private sector health services rendered to insurance beneficiaries.

### 3 Implications of allocating resources on the basis of historical-budgets

The MOH's approach to planning and budgeting has traditionally been to follow what is referred to as an historical-budget based resource allocation criteria. This is a very simple resource allocation tool: the MOH's total budgeted monies are allocated across the Ministry programs on the basis of the relative shares they received the previous year. Increases in the total MOH budget result in proportionate increases in the budget share of the different Ministry programs, and decreases in the budget result in proportion reductions in program

budgets. Thus, for example, while the entire MOH expenditure level has varied a great deal since 1975, the split between hospitals and the rest of the public care system (at least until 1990) remained remarkably constant, as did the percentage split of the MOH hospitals' budget, among the MOH hospitals, as may be seen in the table on the following page.

## DISTRIBUTION OF MOH HOSPITAL EXPENDITURES BY FACILITY

Hospital	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
Rosales	19	19	19	19	19	19	18	18	18	18	19	18	17
Bloom	12	12	13	13	12	12	12	12	12	11	11	13	22
Maternidad	10	10	10	10	10	10	10	10	10	10	10	10	8
Psiquiátrico	6	6	7	7	7	7	7	6	6	6	6	6	5
Neumología	5	5	5	5	5	4	4	4	4	4	4	4	4
SJDD Santa Ana	12	12	12	12	12	12	11	11	11	12	11	11	10
Méndez. Ahuachapán	4	4	4	4	4	5	4	4	4	4	4	4	4
Sonsonate	4	4	4	4	4	4	4	4	4	4	4	4	3
Vásquez. Chalatenango	3	3	3	3	3	3	3	3	3	3	3	3	3
San Rafael. Nueva SS	5	4	5	5	4	4	4	4	4	4	4	4	4
Santa Gertrudis. San Vicente	5	5	4	4	4	4	4	4	4	4	4	4	3
Santa Teresa. Zacatecoluca	4	4	4	4	4	4	4	4	4	4	4	4	4
SJDD. San Miguel	7	6	6	6	6	7	9	9	9	9	9	9	8
San Pedro. Usulután	5	5	4	5	5	5	5	4	5	5	4	4	4
Total	100	100	100	100	100	100	100	100	100	100	100	100	100

Source: Informe sobre la liquidación del presupuesto general y situación del Tesoro Público y Patrimonio Fiscal.

Given the nature of historical-budget based planning, the changes which have occurred in the structure of MOH expenditures have been primarily limited to changes in the composition of the expenditures (i.e., in the objects of expenditure such as personnel, materials, equipment, etc.) and these changes have largely been responses and/or accommodations to initiatives introduced by international donor agencies. Given the level of donor sponsored activities in El Salvador, adherence to historical budget-based planning, particularly in a time

of sharply contracting domestic financing, by implication comes to constitute the wholesale abdication of control of the budget, and concomitantly control of the direction and structural nature of the public health care delivery system.

This abdication, the role of donor agencies and the changing composition of the Centralized Agencies' budget are clearly evident in the the InterAmerican Development Bank's Health Facilities Construction Project which spanned 12 years (1974-1986) and under which the vast majority of the considerable expansion of the Ministry's infrastructure occurred. The continued expansion of infrastructure meant that it was necessary to expand personnel expenditures in order to staff these facilities, which in turn meant that when MOH financing began to slip, that all other categories of expenditures had to contract that much faster. Based on average staffing ratios, it is estimated that the new facilities built or completed between 1975 and 1980--the 450 bed San Juan de Dios Hospital at San Miguel, 3 health centers, 35 health units and 46 health posts--together constituting a 41 percent increase in the number of MOH facilities--required at minimum 2,000 MOH employees to staff them. This represents the bulk of the substantial increase in total MOH personnel which the MOH experienced over this period. Supplying the necessary medical supplies and these new facilities and personnel, of course, further increased recurrent costs. The impact on the structure of MOH expenditures was dramatic. The share of personnel expenditures grew from 55 percent of the Centralized Agencies' expenditures in 1977 to 92 percent in 1984. The high ratios of administrative personnel to total personnel (particularly in regional hospitals), some exceeding 1/3, is also a result of over-construction of facilities and low occupancy rates, but fixed administrative staff (Wight et al. 1994). Concurrently, expenditures on all other supplies--medicines, materials, medical supplies, machinery, equipment, maintenance and repair--have fallen from 45 percent to 7 percent over the same period. Continuation of the infrastructure project in the face of falling MOH funding precipitated a major recurrent cost crisis.

And the MOH's infrastructure expansion continues. The final major episodes have been the 1989 opening of 3 new health centers (financed by the Dutch), the Specialties Hospital (financed by the French and the U.S.), and the Zacamil Hospital (financed by the EEC).

#### **4 The post-1986 MOH performance turnaround and future prospects**

The war, the 1986 earthquake and the November Offensive (1989) all disrupted MOH operations. All eventually proved to do so, however, for a limited period of time; their impact eventually dissipated. The fundamental conditions which gave rise to the altered level and pattern of MOH service provision/utilization in the 1982 through 1986 era, which were a combination of (1) war-related factors, (2) the severe financial crunch that precipitated a protracted recurrent cost crisis, and (3) the inadequacy of the funding, organization and functioning of several key logistic systems of the MOH, have abated. Although the more deep-seated, organizationally rooted, causal factors did not "go away," their most telling impacts were attenuated by changing conditions--most importantly the decreasing impact of the war, and the massive foreign assistance. In large part, increased donor activities have played an important role in turning the situation around. The AID APSISA Project, in particular, appears to have been responsible for alleviating the what were from MOH consumers' perspectives, the most important quality-debasing manifestations of the recurrent cost crisis--viz., the shortages of drugs and medical supplies--and for improving the organization and functioning of most of the MOH's major logistic systems.

It is imperative that the MOH not be lulled into a false complacency by these recent improvements. While the MOH's performance rebounded in the late 1980s, given the population growth that occurred between 1975-76 and 1991-92, the relatively slower rate of growth in service production over the entire period implies that either a smaller proportion of the Salvadoran population now has access to health care and/or that more people

now turn to other than the MOH for care. Even though there is now less felt need, or at least less of a felt urgency, for the various reforms currently underway--stemming largely from the ending of the war, economic recovery (since 1990), the government's major renewed commitment to financing the health sector, and continued high levels of international aid--the fundamental causes of most of the critical problems experienced in the past decade persist. There continues to exist a very real potential for a renewed recurrent cost crisis. This is not an unfounded or far fetched concern. The proportion of the ordinary budget-supported operating expenditures of the MOH's non-hospital functions devoted exclusively to personnel averaged 91 percent. Again donor construction of new facilities--the 3 new health centers built by the Dutch opened in 1989, the French-built Specialties Hospital which opened in 1990, and most recently the European Economic Community-built Zacamil Hospital have all required new staff and generated increased personnel costs. In 1993, the new Zacamil Hospital had a budget of 25 million. Whereas the MOH's regional health services staff had increased by only 4.0 percent from 1981 through 1988, from 1988 to 1991 it jumped 13.8 percent. The implications for supplies are self-evident: a woefully inadequate proportion of the ordinary budget continues to be dedicated to drugs and medical supplies, not to mention machinery and equipment. AID continues to finance roughly half of the Ministry's purchases of drugs and medical supplies, and a minimum of 11 percent of the MOH's total operating costs. What will happen after 1996 when AID assistance is scheduled to be greatly reduced if not eliminated? Unless a major alternative donor takes the place of AID (which seems most unlikely), the recurrent cost crisis will return, although, owing to very significant increases in the size of the ordinary budget appropriations in 1993 and 1994 the situation will not be as dire as the experience of the 1981-1986 era.

#### **5 How not to try to solve the MOH's budgeting shortcomings**

The Ministry currently plans to begin incorporating local-level financial planning as the basis for developing estimates of its financial requirements. This bottom-up approach would be useful, but primarily for reasons other than macro-level MOH financial planning. It is inadvisable to pursue this approach, if it is to be used alone. A top-down approach must at the very least, be the primary tool for undertaking MOH financial planning for several reasons.

First, to date, the evaluations that have been performed of the Ministry's local programming efforts have shown the annual programming exercise produces abysmal results in terms of developing realistic goals and in terms of performance, as measured by the attainment of established goals (see the reports of Dr. Rodrigo Bustamante, Clapp & Mayne, 1991-92, and Dr. Fabio Molina's "Evaluación de Metas Asistenciales y Analisis de Actividades de Consulta Externa, Servicios de Apoyo y Hospitalización," 1992). Moreover, the Ministry's responses to these critical reports, to say the least, have not been positive: they have been reflective of an organization that does not tolerate criticism well, even self-criticism.

Second, even if the MOH could dramatically improve the quality of its local programming it would still be advisable for the Ministry to develop a top-down approach to the budget development and allocation process because of the incompatible timing of local programming and budget development activities. As already noted, the Ministry of Hacienda begins the budget development process in early May of the preceeding year. The MOH must submit its budget request for the following year to the Ministry of Hacienda by July. In contrast, the local programming activity does not begin until November. As it is currently structured and scheduled, local programming would generate information about local resource requirements 4 to 5 months after Hacienda's deadline. To make the development of that information useful it would be necessary to undertake that activity 7 or 8 months earlier than it currently is: in March or April of the preceeding year in order to have the results ready to respond to Hacienda's initiation of the process. Is it realistic to think that planning currently based largely on the current year's experiences and presently very inadequate could be expected to

become acceptable if it had to be undertaken after only 3 or 4 months into the year--8 or 9 months than at present?

Third, basing resource allocation decisions on locally identified needs ignores one of the most serious problems nagging the MOH, as reflected in its efficiency and service provision performance record; viz., incentives. If the Ministry is to allocate more resources to those who say they need more--as it currently does in many instances, UTMIM being a case in point--it encourages overestimating resource needs, waste and hoarding; all of which debase the efficiency of the organization. Resource allocation at the system-wide level should be based on criteria other than just the sum of the health facilities' stated needs.

Financial planning at the local level is an important activity and one which should be promoted. It encourages the development of managerial skills, prompts practitioners to study existing data, thereby providing an incentive to maintain good quality data, and, in general, forces practitioners to be more cognizant of the local health care market, their clientele, their organization and the efficiency and effectiveness with which they and their fellow workers use their resources. But the degree to which local financial planning encourages or prompts these desirable processes and ends depends upon the motivation of the people involved. Planning and specifically financial planning is much like information systems in this regard: both are necessary, but not sufficient conditions for improving the managerial performance of an organization.

The other indispensable ingredient that can transform these necessary conditions to sufficient ones is motivation. If administrators and practitioners can be motivated by more than simply the desire to "do right," it is more likely that they will be more diligent in their planning and, in general, more effective and efficient administrators and providers of care.

The new Financial Planning Unit cannot and should not be expected to do everything. Current plans call for the Ministry to construct and to annually update a Ministry-specific medical care price index. The purpose of doing so is to provide a mechanism for annually updating the uniform, national user fee schedule which it is expected will be issued shortly after the presidential elections to be held on March 20, 1994.

This is not an activity that should be performed by the Unit for two reasons. First, the development of such an index is not something to be taken lightly; it is relatively complex undertaking. There is no reason persons in the Financial Planning Unit should be required to learn how to construct such an index, when this activity would be easily performed by the Central Bank, which already has a staff that routinely generates this type of information. Second, it would be best to insulate the MOH from the negative political fallout of being identified with the development of, or having to annually announce the new higher price schedule. This unsavory task could and should become the responsibility of the Central Bank. If the Central Bank issued these decrees they would more likely be regarded as technically accurate and therefore acceptable.

The key structural and managerial problems of the MOH continue to characterize the Ministry, but they have been identified as problems that need to be, and most of which are currently being, addressed. Unfortunately, however, the reforms in the area of financial management have been piecemeal, incomplete and uneven. There has been a variety of different reforms and many efforts have not been adequately followed through on, e.g., the integration of the financial systems. An important priority now must be to integrate the increasingly diverse and piecemeal strategies, and to develop a long term plan of action which specifies roles and responsibilities for all donors and all of the departments, divisions of the Ministry involved.

Considerable work remains to be done in each of the important areas where there has been progress: the development of an integrated financial system, the development of an institutional office and capacity to

undertake financial planning, the development of a user fee administrative system and tariff structure, and the development of a long term financial plan for not only the MOH, but for the entire health sector.

Furthermore, these are not the only problems of the Ministry. There are a number of critical efficiency issues that also need to be addressed. These include: (1) the continued financial domination of the MOH by its hospitals and to a lesser extent its 15 health centers (which are actually 65-bed hospitals) at the expense of primary health care, while hospital beds continue to be occupied at levels far below acceptable international standards (55-60 percent versus 80-85 percent); (2) the low level of productivity of MOH service providers; and (3) the growing proportion of hospital and health center ambulatory care which are provided by their emergency departments. These latter two issues merit further discussion.

## **6 Other remaining problem areas**

### **6.1 Personnel issues: compensation and productivity trends**

The average productivity of MOH providers is low and appears to be falling. While physicians annually averaged 1,102 consultations per position in 1987-88, they averaged only 852 in 1990-91, a 23 percent drop<sup>9</sup>. A recent study of the Statistics Unit of the MOH (Molina, 1992) found that physicians provide less than half of the consultations per contracted hour that they are suppose to, according to MOH norms, and less than half of the average productivity of an ISSS physician.

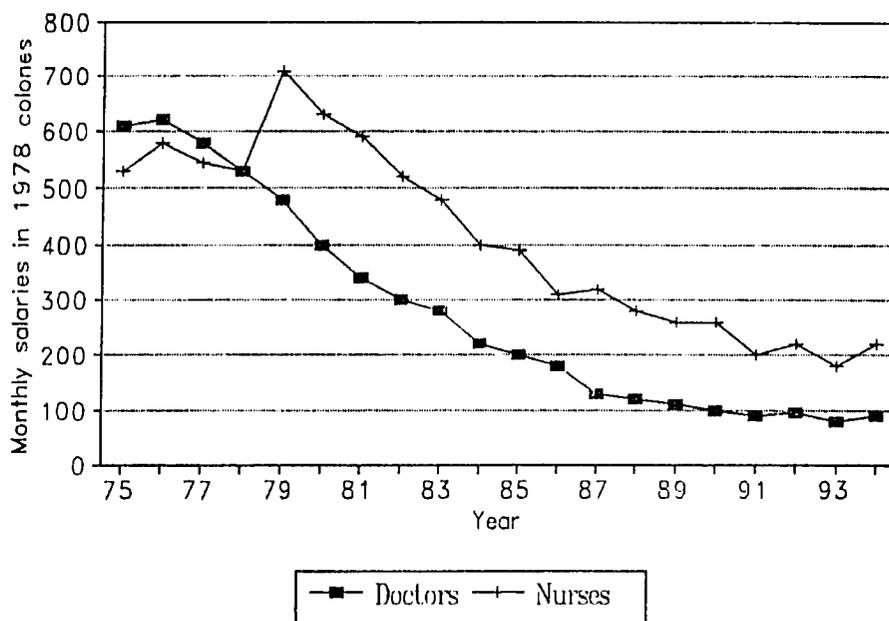
One reason for this reduction in MOH provider productivity has been the fact that MOH physicians' real remuneration levels have been devastated in recent years. From 1980 to 1992, the real purchasing power of a doctor's Ministry of Health salary has fallen by more than 80 percent. This is nearly twice the reduction that has been suffered in the country as a whole over this period.

Another factor that has likely further undermined MOH physician productivity is the marked degree to which wage differentials among different MOH professionals have been increasingly reduced since 1976; a phenomenon referred to as wage compression. One would expect that those who have lost the most ground relative to their fellow workers-- especially the physicians and to a lesser extent the nurses vis-a-vis nurse auxiliaries and sanitary inspectors--would resent the relative erosion of their monetary position and stature, further reducing their motivation and productivity. An analysis of how MOH personnel spend their time-- either a time-motion study or a patient flow study--is a fundamental starting point in assessing the magnitude of this problem and what can be done about it.

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<sup>9</sup> A caveat concerning this productivity measure. Note that the denominator is the number of physician positions rather than the preferred measure; viz., number of hours worked. The measure presented here does not reflect any change in the average number of hours per position that may have taken place over this 5 year period.

## Real salary erosion, MOH doctors and nurses



### 6.2 The MOH personnel system and accountability

Many MOH workers are reportedly assigned to one region or facility but work in another. It is insightful to examine the characteristics of a system which enable this type of situation to occur. They can do so because personnel (and other resource) allocation decisions are made at the center and the personnel tracking system is poor and because the regional- and facility-level managers have little incentive (other than professional dedication), and few mechanisms (other than moral suasion) by which to control their employees; since: (1) there are no procedures for evaluating any employee's job performance, and because (2) most MOH employees are members of the civil service (*Ley de Salarios*) system which virtually ensures them guaranteed tenure in employment<sup>10</sup>.

The structure of the current system and its managerial deficiencies are major reasons why MOH productivity is low. These are in addition to those which we have already cited; namely (1) the impact of the drastically falling level of real remuneration and (2) the long term recurrent cost crisis-induced shortages of drugs and supplies which have prevented MOH health care providers from being able to perform their duties.

To the extent that the MOH spends more on personnel in the next decade, it should do so by improving salary levels and not by increasing the number of its employees. In light of the trends of the past 10 years, enhancing staff morale and motivation must become a priority area. Improving staff morale and motivation will contribute to improvements in productivity, as well as to encouraging the provision of higher quality of care

<sup>10</sup> Starting in October 1990, some personnel-related decisions have been regionalized. Although the basic problems of control mechanisms and incentive structure<sup>10</sup> have not changed, the regionalization of hiring means that the locus of control and oversight is closer to the individual worker which probably renders the control mechanism of moral suasion more personal and thus marginally more effective.

by MOH employees. They are not likely to do so automatically, however. A new administrative scheme that develops mechanisms by which to make and keep people accountable will need to be simultaneously introduced. Consideration should be given to the possibility of introducing some new methods by which to remunerate MOH staff, such as sharing a portion of user fee revenues, to encourage better quality care and greater productivity.

### 6.3 Emergency visits and hours: efficiency and access issues

From 1985 to 1992, there has been a distinct trend of increasing numbers of emergency visits at MOH hospitals and health centers. Two year moving averages of the number of emergency visits provided in hospitals have annually grown an average of 2.0 percent and those in health centers by 4.5 percent. These increases are particularly notable in regional hospitals--the ratio of emergency room visits to doctor outpatient visit was .31 in 1981; this rose to .59 in 1992. Individual hospitals showed more dramatic increases. For example, for every outpatient visit there were 1.35 emergency visits at the MOH hospital in Sonsonate in 1992 (Wight et al. 1994). Not only has there been a substantial growth in their absolute numbers, but emergency visits have increased as a proportion of all ambulatory visits provided in MOH hospitals and centers, averaging 30 percent in the last two years. Generally emergencies constitute roughly 15 percent of a hospital's outpatient department consultations (the figure for ISSS over this period has annually averaged 16 percent).

This situation and these trends are a cause for concern for two reasons. First, it is likely that only a fraction of all of these cases are actual emergencies. Most are probably prompted by relatively inaccessible services. MOH facilities have traditionally provided care only in the morning, and the resulting long waiting times and inconvenient hours of service are regarded as two important aspects of the quality of MOH services that patients are particularly dissatisfied with and that is pushing them into the private sector. Restricting outpatient services to a few hours in the morning appears to constitute a major bottleneck on MOH service delivery and is an important barrier to improving access to care.

Second, a recently completed cost study (Gomez, 1992) found that an emergency visit at a health center costs 67 percent more to provide than an outpatient consultation. At a hospital the difference is even greater; an emergency visit costs 85 percent more. Most of the emergency visits at the regional hospitals are attended by physicians which raises the costs. This is not as dramatic at national hospitals where in 1992 39 percent of the emergency visits were attended by nurses or nurse auxiliaries (Wight et al. 1994). In short, the unnecessary use of emergency services is inefficient; it increases costs and reduces the level of resources available for all other types of activities. At the same time, unnecessary use of emergency services compromises the timely delivery of care to truly urgent cases. This delicate situation warrants a detailed study of the use of emergency services to determine how to improve the efficiency and appropriate use of these MOH resources.

The Ministry's traditional mindset of equating increasing access to care with increasing the number of facilities, or, less commonly, with increasing the number of MOH providers, must be altered. El Salvador is a small country with a good transportation system and an adequate health infrastructure. The most effective and the most cost-effective method by which to improve access to care--the stated centerpiece of the 1990-1994 National Health Plan--is not by building more underutilized facilities, but by more rationally using existing facilities; by providing consultation services for more hours in a day and at hours which are more amenable to the schedules of would-be patients. This must be the major strategy for improving access to MOH care, and should be an immediate policy priority of the MOH.

**EMERGENCY VISITS AS A PROPORTION OF ALL AMBULATORY VISITS  
TO MOH HOSPITALS AND CENTROS DE SALUD**

Health Facility	1985	1986	1987	1988	1989	1990	1991	1992
Hospital Ahuachapán	29	33	44	45	37	31	26	34
Hospital Santa Ana	27	26	30	30	35	36	34	36
Hospital Sonsonate	33	39	31	32	36	47	55	57
Hospital San Rafael	29	27	32	33	29	30	27	30
Hospital Dr. Vásquez	9	19	22	22	21	25	21	40
Hospital Rosales	24	21	19	15	15	11	14	12
Hospital Bloom	19	25	19	18	19	15	17	15
Hospital Maternidad	43	40	39	40	42	42	39	49
Hospital Psiquiátrico	14	14	15	16	22	17	14	18
Hospital Neumológico	--	--	--	--	0	0	0	0
Hospital Zacatecoluca	15	38	53	47	53	64	57	50
Hospital Sta. Gertrudis	28	23	24	27	30	32	31	30
Hospital San Pedro	24	20	19	26	18	12	14	28
Hospital San Miguel	39	32	29	35	33	31	32	32
<b>Hospital Average</b>	<b>27</b>	<b>27</b>	<b>29</b>	<b>30</b>	<b>30</b>	<b>30</b>	<b>29</b>	<b>32</b>
C.d.s. Metapán	20	19	18	17	21	16	16	
C.d.s. Chalchuapa	24	21	20	24	33	39	36	34
C.d.s. Nueva Concepción	20	17	16	22	25	18	17	19
C.d.s. San Bartolo	33	35	41	45	40	39	40	39
C.d.s. Suchitoto	9	20	12	12	10	10	8	9
C.d.s. Cojutepeque	29	31	28	25	28	26	25	30
C.d.s. Sensuntepeque	23	24	25	25	27	26	27	27
C.d.s. Ilobasco	--	--	--	14	22	22	20	22
C.d.s. Santiago de María	18	20	20	17	17	18	16	21
C.d.s. Jiquilisco	--	--	--	29	47	49	49	52
C.d.s. Ciudad Barrios	29	27	31	24	27	22	27	
C.d.s. Nueva Guadalupe	--	--	--	17	18	31	30	26
C.d.s. San Fco. Gotera	30	28	27	29	31	27	26	
C.d.s. La Unión	13	13	13	15	12	10	14	25
C.d.s. Santa Rosa	31	23	31	36	34	33	41	42
<b>C.d.s. Average</b>	<b>25</b>	<b>24</b>	<b>25</b>	<b>26</b>	<b>28</b>	<b>27</b>	<b>28</b>	<b>31</b> <b>34*</b>
<b>Grand Average</b>	<b>26</b>	<b>27</b>	<b>28</b>	<b>29</b>	<b>29</b>	<b>29</b>	<b>29</b>	<b>32</b> <b>32*</b>

\* Previous year totals were substituted for missing data in the calculation of these totals.

Source: Unpublished documents, Statistics Department, MOH, various years.

#### **6.4 If New facilities are to be built, they should be health units**

To reiterate, the MOH infrastructure should not be expanded. However, if additional facilities are going to be built those facilities should not be the centers and hospitals which have been the focus of the most recent projects. The MOH does not need additional bed capacity. Average occupancy rates have long been well below accepted standards, especially in the health centers where they have averaged less than 50 percent since at least 1985 and have been falling. The MOH cannot afford to build more hospital beds. More infrastructure, therefore, can only be justified by the need for greater outpatient capacity, in which case the preferred facility type is the health unit. Health units have generally been well utilized (reflecting their acceptability), and the cost study found them to be the most efficient facility provider of ambulatory care.

## **V CONCLUSIONS AND RECOMMENDATIONS**

### **1 Three general themes - MOH**

#### **1.1 The need to prepare for the departure of the two key international assistance projects supporting MOH operating costs**

Starting in the early 1980s, the MOH suffered a severe decline in its financial resource base which for the most part reached its nadir in 1985-1986. But while the deterioration of the Ministry's financial well-being was substantially halted by that time, the situation did not subsequently readily improve. Rather, the absolute financial status of the MOH largely stagnated at this historically lower level.

Very recently, however, things have started to change. It is likely that the burden of both military expenditures and debt servicing will be maintained at their present, much lower levels. This is a very positive sign, portending the Government's ability to increase its financing of the MOH, which, in fact, it began to do starting in 1993. It is imperative that the Ministry use these additional funds to wean itself from its high level of dependency on international assistance, since, by the end of 1995, the two largest providers of international assistance financing MOH operating costs will be phased out, and the MOH will have a huge financing gap to fill simply to maintain its current level of activities. If, by 1994, the MOH has not already begun to fill-in where this financing will have been reduced, the Ministry will inevitably suffer severe programmatic and financial dislocations.

In the interest of improving its long term independence, its efficiency and its effectiveness, the MOH must view the next three years as a critical transitional period during which it must consolidate its programs and activities. Decentralization should be pursued, but it must be recast from a strategy for increasing access to care, to one which is primarily geared to improving the effectiveness and the efficiency of MOH service delivery through improvements in the organization of resources, and in the generation and use of high quality information in resource allocation and managerial decision-making.

Effectively implemented, decentralization *will* improve access to care, but it must do so by improving the effectiveness, the efficiency and the quality of MOH services, and, thereby making them more acceptable to a larger number of Salvadorans. This is the preferred and sustainable long term strategy for enhancing access to care which must become the cornerstone of regionalization. In contrast, reducing the distance Salvadorans must travel to get to the nearest MOH facility by building more infrastructure is a simple-minded approach to improving access to care, and one which is not sustainable. The concomitant increases in recurrent costs mean that in the longer run, increasing infrastructure reduces the availability of drugs and other medical supplies, and thereby trades off the quality and acceptability of MOH care and pulls people into the private sector or pushes them out of the health sector altogether. That is no solution to the problem of access to care.

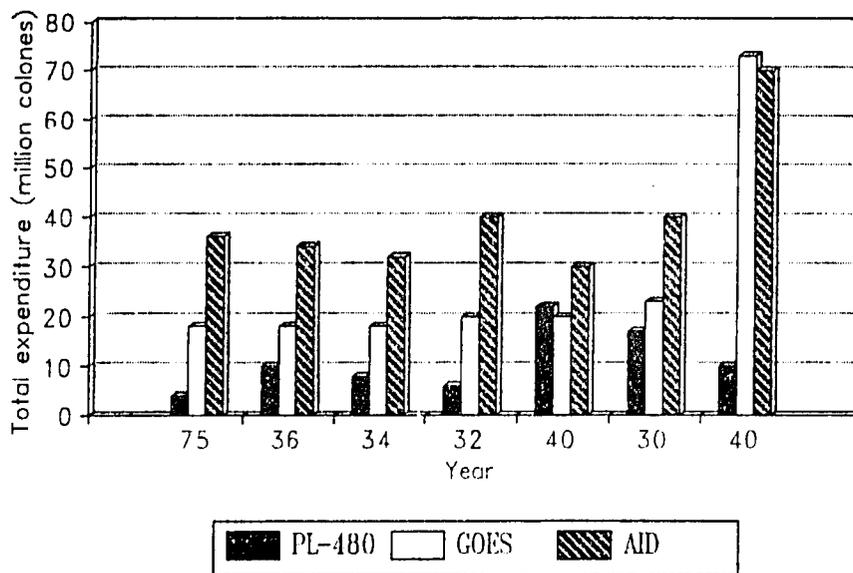
Moreover, while the level of drugs available in the MOH has been increasing, shooting up by 84 percent in 1993, there remains a shortage of drugs within the MOH system. According to APSISA Project estimates MOH drug purchases in 1993 (including all sources of financing) were the equivalent of 80 percent of MOH requirements. That supplies of such key ingredients remain less than adequate, while the restoration of real MOH salary levels has hardly begun, underscores the fact that the fight against the recurrent cost crisis is not yet behind the Ministry. Indeed, with the major structural causes of that crisis still largely unaddressed, the best that can be said is that only a battle, not the war, has thus far been won. This is underscored when one looks at the source of the financing of the MOH drug purchases in 1993: less than half were financed by GOES General Funds. Thus, after more than tripling their expenditure level in 1993, GOES General Funds

finance the purchase of only about 40 percent of the estimated drug and medical supply requirements of the Ministry of Health.

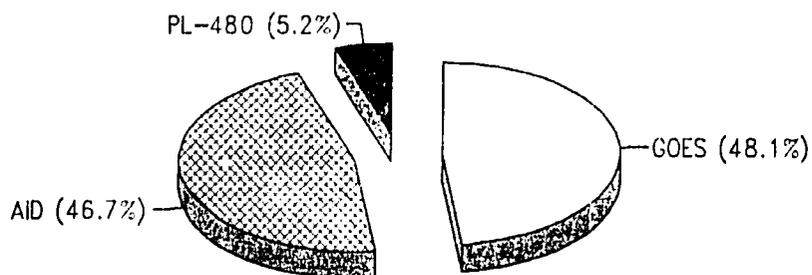
#### FINANCING DRUG PURCHASES BY THE MOH

Year	GOES	PL/480	AID	TOTAL
Nominal colones				
1987	18,208,490	3,193,126	35,000,000	56,401,616
1988	18,208,490	10,000,000	31,500,000	59,708,490
1989	18,208,490	7,875,000	28,000,000	54,083,490
1990	20,947,890	5,000,000	39,780,000	65,727,890
1991	20,947,890	24,055,709	32,000,000	77,003,599
1992	25,392,210	14,000,000	40,500,000	79,892,210
1993	70,884,480	7,656,250	68,733,000	147,273,730
Percentages				
1987	32	6	62	100
1988	30	17	53	100
1989	34	15	52	100
1990	32	8	61	100
1991	27	31	42	100
1992	32	18	51	100
1993	48	5	47	100

### Medicine financing, MOH 1987-1993



### Medicine financing, MOH 1993



## **1.2 Reforming the structure of the MOH in order to make MOH workers more accountable and to provide them with positive incentives, including financial and managerial incentives**

In the long run, addressing the managerial shortcomings of the Ministry of Health will require restructuring the system so as to provide managers with incentives to use information and to use it effectively. The provision of management information should be viewed as an important, but only intermediate, step to achieving the real goal: an accountable, effectively functioning integrated health system. The difficult part in moving toward such a system is in the development of (a) incentives to perform, and (b) accountability, where both are measured in terms other than just colones, and at levels other than just the central administration. Performance and accountability in the health sector must be assessed in terms of effectively addressing the health needs of the population, as measured by changes in health status, as well as in the quantity and quality of the intermediate inputs used to produce these outputs (i.e., consultations, laboratory examinations, etc.). This will require a fundamental change in the relationship of MOH workers to the MOH as well as to MOH patients so as to create performance incentives.

At present, only negative incentives exist for MOH employees to do their jobs well. To the extent that MOH employees are motivated to do their jobs well, they are prompted primarily by accountability requirements; e.g., providers fulfilling their norm of 6 consultations per hour. The current MOH system of incentives is inadequate: employees receive their pay--the same pay--regardless of whether they do a good job or a poor job. Such a system encourages mediocrity and the transformation of norms for minimal levels of effort, into norms for maximal levels of effort. The norm of 6 consultations per hour is a prime example. While it may not be possible or desirable to introduce negative incentives (e.g., penalties for poor job performance), there is a need to design and introduce some positive incentives to encourage workers to perform. At present, no positive incentives exist within the MOH system: i.e., workers are not rewarded (other than feeling good about their work, or other than being verbally praised) for doing a "good job."

Within the Central Office of the MOH at present, too much attention and energy and too many resources are devoted to simply tracking resources, without using that and other information to more proactively manage those resources. The current financial administrative structure and processes of the MOH are Byzantine in nature. The division of labor is unnecessarily complex. At present there is no locus for exercising managerial oversight and control of the Ministry's finances. This type of oversight and control is absent in the present system due to the highly fragmented and compartmentalized nature of all budgeting and spending activities, together with the fact that resource allocation decisions are overwhelmingly based on historical patterns. At present, many MOH employees are responsible for accounting for the monies which are spent, but few are accountable for the cost of the services provided; i.e., there is inadequate concern about the efficiency of the MOH.

### **1.3 The lure of decentralization: but how, where to, and when?**

In the intermediate and longer term, in order to construct a more accountable, effectively functioning and better integrated health system it will be essential to develop (a) incentives to perform, and (b) accountability, where both are measured in terms other than just colones, and at levels other than just the central administrative office. Performance and accountability in the health sector must be assessed in terms of effectively addressing the health needs of the population, as measured by changes in health status, as well as in the quantity and quality of the intermediate inputs used to produce these outputs (i.e., consultations, laboratory examinations, etc.)

Decentralization holds great promise for being able to generate greater incentives and accountability, but these need not be characteristics of a decentralized system unless they are planned for, and carefully crafted and implemented. Originally regionalization was seen as a step toward decentralization. After nearly 20 years, however, regionalization has proven to be an ineffective vehicle for promoting decentralization. In the Salvadoran context, regionalization has meant only deconcentration. In the long run a more locally oriented and controlled health care delivery system will be necessary.

Unfortunately, at present local capacity to administer a health care system organization is at best nascent. Moving too quickly to devolve ownership and/or control to the local level is inadvisable: it could easily result in the system becoming chaotic, dysfunctional and could destroy the system.

Decentralization will be a slow process taking several years or more, depending upon the exact nature of the scheme adopted. How decentralization should be designed and implemented is difficult to determine at present, because of both the lack of capacity at the local level and because the dynamics of the situation. There are a number of important efforts being directed toward the building of *municipio* capacity that suggest that over the next 3 to 5 years the prospect of more and more local governments becoming capable of administering their own health facilities will significantly improve. It must be recognized, however, that this will be a slow and accretionary process.

To what level should the system be decentralized? While there presently exist some *municipios* that have the capacity to administer their own health facilities, they are the exception. The best that could be hoped for at present, is to begin working with the handful of *municipios* that currently have this capability. It would seem advisable not to go below the *municipio* level for three reasons: (1) the added MOH Central Office administrative burden this would represent in terms of administering and monitoring the funds, (2) the dearth of administrative capacity at the *municipio* level means that such capacity will be all the more scarce at the sub-*municipio* level, and (3) reliance on the *municipio* is consistent with a much broader current effort by the Central Government of El Salvador to develop a more participatory society via the development of Consejos Departamentales de Desarrollo (CDDs). The discussion returns to the CDDs below.

Greater understanding of local capabilities and some insight into just how slow a process decentralization is likely to be may be gained by reviewing the types of institution-building activities that have been going on at the local level over the course of the past 8 years. Since in 1986, a number of major, long term, systematic efforts to build local, participatory, governmental institutions and to nurture the local administrative and managerial capacity of those institutions have been in operation. The oldest and best known of these is the USAID-sponsored Municipalities in Action (MEA) Project.

The MEA Project has encouraged the development and support of *alcaldias* at the *municipio* level throughout the country. The project has provided training and monies for undertaking *municipio*-identified community/*municipio* level projects. All projects are identified and selected by the consensus of the community at open town meetings (*cabildos abiertos*). Each year approximately 2000 projects are funded throughout the country. A large proportion of the projects to date have involved road or water system construction, but health post rehabilitation and the purchasing of new and the repairing of old health post equipment have also been popular. From September 1990 through October 1993, there were 103 health post-related projects, including 22 health post expansions, 3 newly constructed posts, and 74 equipment repairs and/or purchases.

The *municipios* have demonstrated that not only can they execute construction projects, but that they can do so in a cost-effective vis-a-vis the Central Government. According to a recent evaluation of the MEA project,

the *municipios* have been able to construct buildings, for example schools, at a cost that is 30-40 percent below those of the Central Government. Thus if health units or posts need to be built, as part of the decentralization plan, the money for doing so should be channeled to the *municipios* for then it will require fewer resources, the resources will go directly to the community and will contribute to the enhancement of local administrative capacity, while vesting the community with pride and ownership of their new or rebuilt facility.

One of the implementation mechanisms of the MEA Project has been the Salvadoran Institute of Municipal Development (ISDEM). This agency annually receives an operating budget equal to 0.25 percent of the Central Government's budget. ISDEM's budget is allocated directly to the *municipios* on the basis of a formula, which is largely population driven. At most, 20 percent of the ISDEM allocation to a *municipio* may be used to pay the administrative costs of the *municipio* (i.e., of the *alcaldia*). The remaining 80 percent is to be used to finance municipal projects. An effort is currently underway to increase the ISDEM budget allocation to 2.5 percent of the Central Government budget. (Guatemala has a similar earmark that constitutes 8 percent of the Central Government budget.)

There is also currently an effort to transfer control of the *ingreso patrimonio* (or to replace it with a more standard type of property tax and to delegate authority over that tax) to the *municipios*. The intent is to provide them with a source of income in order to make them more independent, more viable and more important.

These various projects and other measures to spawn and nurture local, participatory government currently enjoy support from various agencies of international cooperation, including USAID, UNDP, GTZ, the Spanish Technical Assistance Agency, and IDB.

In October 1993 a draft document was prepared and circulated by the Consejo Departamental de Municipalidades (CDM), which is comprised of representatives of MIPLAN, the Ministry of Hacienda, COMURES, the SRN and ISDEM. This document proposed the development of a new department level agencies which are to provide *municipios* with organizational vehicles. This will give them associations for achieving economy of scales for technical assistance which at the same time will provide them with a more powerful voice in presenting their needs in their discussions with the Central Government. These proposed organizations are called the Consejos Departamentales de Desarrollo (CDD).

The CDDs are associations of all of the mayors of the *municipios* within the department. In contrast to the deconcentration approach of the regional office structure, of which there exist more than 20 distinct configurations, the CDDs are entities with a uniform configuration (each one coinciding with one of the 14 departments) which are formed from the bottom-up. The CDDs are intended to give local governments a critical mass, greater economies of scale in organizational development and administration, and a means by which to gain strength in numbers to ensure a better negotiating position vis-a-vis the Central Government.

One of the 5 proposed departments in the Consejo is the Health Department. It is currently proposed that the Health Department have 3 operating units: physician and nurse contracting, material and equipment, and coordination and supervision. In addition, specific responsibilities of (in effect, a proposed division of labor between) the Central Government and the Local Government is spelled out. The CDD is to be introduced on a pilot project basis in Usulután and Sonsonate. Every effort should be made to design and piggy-back an MOH decentralization pilot project onto this more general effort.

In summary, over the course of the last seven years there has been substantial effort to cultivate and to nurture the growth and development of *municipio* level participatory governments throughout the country. While much

has already been accomplished, there remains significant shortcomings in the structures which have been developed to date, but efforts have continued, and indeed they have been stepped up to address some of the more organic structural problems in a permanent manner.

In designing an MOH decentralization scheme, there are a number of obviously important critical issues that will need to be addressed. Given that many of these issues are not unique to the health sector, much can be learned from the debates and experiences of other social sectors as they too attempt to design their decentralization packages. But while the health sector can learn from other sectors, it must be recognized that the health sector constitutes a more complex problem. The more technical nature of health care means that relative to other sectors, the Central Government must continue to play a relatively important role in the decentralized health sector. It must, for example, continue to develop and enforce norms, guarantee the quality of care, drugs and other essential inputs, and uphold minimum standards for care providers.

Another critical issue concerns the role of NGOs. Efforts must be taken to facilitate the participation of NGOs in the decentralized system. NGOs play an important role in providing health care, and especially primary health care, services in El Salvador, particularly in the less accessible, war-torn portions of the country, which have traditionally been underserved by the MOH. Caution must be exercised, however, in developing the mechanisms by which NGOs could be contracted as part of the primary health care service delivery system. One would not want to devolve authority and a budget to entities that may be only short-lived creatures of capricious, national or international, private voluntary or non-profit organizations. The potential dangers to be avoided depend in large part on the specific types of possible contractual arrangements that are to be included in the decentralization scheme.

Another critical issue concerns what is to be done with existing MOH facilities and, more importantly, MOH employees. In *municipios* that have a functioning MOH facility, the local government could take control and perhaps ownership of the facility. Former MOH employees could either continue to be paid, now by the local government or alternatively, the local government might want to hire a private sector entity to run the same facility. In the latter case, the MOH personnel are more likely to be regarded as a liability and, if not protected by some stipulation in the decentralization scheme, would probably be at greater risk of simply being dismissed. Alternatively it could be stipulated that the private entity must work with existing staff, until the employees choose to retire. These are important and highly political issues that will need to be carefully addressed.

#### **1.4 The need to increase the effective resource availability of the MOH**

From a longer term, financial viability and sustainability perspective, the Ministry of Health's strategy throughout the next 3 to 5 years must be to focus on (a) consolidating its programs and activities and (b) increasing the effective resource availability of the MOH. The Ministry's strategy of enhancing its effective resource availability should consist of simultaneously pursuing three complementary approaches:

- mobilizing additional resources by raising user fee levels and by developing, institutionalizing and increasing the significance of alternative sources of financing,
- containing costs and improving the efficiency with which the Ministry uses its resources,
- improving the functioning of the user fee systems, and trying to develop other cost recovery mechanisms, and while at the same time continuing to financially protect those Salvadorans who need MOH care but are medically indigent.

## 2 More specific elements of an MOH financing strategy

### 2.1 Mobilizing additional resources

Long term inadequacy and marked fluctuations have been the hallmarks of the Central Government's budgetary allocation to the Ministry of Health over the past decade. Resource mobilization efforts are needed to both insulate the MOH from these vicissitudes in order for it to be able to more effectively plan its activities, as well as to generate increased funding so as to better ensure that the MOH has a more adequate level of resources with which to provide services.

#### 2.1.1 Revise the current user fee reform package

The long term inadequacy of the MOH's Central Government General budget allocation, underscores the growing importance of the already traditional systems of community financing and the now almost universal application of user fees in Ministry facilities. The 1980s witnessed very rapid growth in the so-called patronato user fee system, and, to a lesser extent, the Special Activities user fee systems (Fielder 1992). This growth was not planned, orchestrated or even widely recognized by the MOH Central Office. It was attributable to local initiative.

Primarily because of the *ad hoc* manner in which they developed, however, there are notable gains which can now be made by standardizing the procedural and administrative aspects of the user fee systems, and institutionalizing such changes. Much work has already been done in this area. A user fee reform package, developed with technical assistance from AID, has been developed and reportedly will be promulgated shortly after the presidential elections. That package, however, has many shortcomings, and should be reviewed before it becomes law. These shortcomings include:

- a) recommended fee changes that have been developed without analysis of the price elasticity of demand or the income elasticity of demand; i.e., without an analysis of the impact of those price changes on the quantity of services demanded, and particularly the demand of low income persons;
- b) inadequate consideration and preparation for developing a uniform, national administrative system for the user fee system (which should include a manual and a training program) in order to successfully implement the system and to obviate objections of the Ministry of Hacienda that the system is not adequate enough to warrant its being officially regarded as "fiscalizing" the revenues and expenditures;
- c) no consideration for how the funds raised could be used to develop positive incentives for MOH personnel to provide more care and higher quality care. There is currently a pilot project in several hospitals but no effort, to date, to ensure compatibility with the lower tiers of care where administrative capacity is much more limited and nothing has been done to ensure that the Ministerio de Hacienda will alter its current position on the handling of these funds. Unless this opposition from the Ministerio de Hacienda can be overcome it makes little sense to proceed with these efforts.
- d) inadequate efforts to ensure that the manner in which the Ministry of Hacienda treats user fee revenues in the budget development process is reformed so as to eliminate the current disincentives to accurately report this income (which threatens the integrity of the system, and undermines the potential effectiveness of the administrative system);

- e) the current reform focuses only on hospitals and health centers, excluding health units, and yet, it is the units that 80 percent of the MOH outpatient user fee revenues have been collected throughout the past decade. The 1989 Demand Study indicated that 41 percent of those hospitalized in MOH hospitals paid something (an average of 146 colones, which is 16 times less than what would be charge in the Private Sector. On the other hand, according to this same study, 68 percent of those hospitalized in MOH facilities were of middle or high income economic level, and therefore being unfairly subsidized.
- f) the reform establishes full cost recovery as the basis for the highest fee level which only persons with relatively high income should be charged and should be such that it generates positive net revenues (i.e., profits), thereby providing additional funds and/or resources for cross-subsidizing the poor, improving access to care, etc.<sup>11</sup>
- g) the price schedule should also reflect a pricing strategy that takes into account the Ministry of Health's fixed costs and its marginal costs of providing care; the proposed schedule took neither into account.

Where MOH fee levels should be set is an important decision not to be made willy nilly, nor on the basis of anything less than the most scientifically sound and rigorous method available. Although some of these issues are currently being addressed or are under discussion, and some, it is reported, will be addressed in the next year or so, it is noteworthy that many of these problems and issues were identified 3 or more years ago. Furthermore, the majority of the changes in financial management that have occurred to date have been based on idiosyncratic methods. Due to a combination of inadequate documentation and the absence of a formalized method, several of these changes (e.g., the regionalization of the budget, or the method of quantifying MOH financing requirements, or the publication of the first annual report of financial indicators) cannot be regarded as permanent, or as having been institutionalized. Much of the "progress" in the area of financial management, to date, therefore, is in danger of being short-lived.

In addition, it would be advisable to formalize the oversight and control functions in ways which ensure the maintenance and promotion of incentives: for the community to pay and local MOH facility personnel to collect the fees so as to foster continued reliance upon these important systems.

### **2.1.2 User fees and positive incentives for MOH providers**

Consideration should be given to introducing fee-sharing arrangements whereby MOH personnel working in a particular facility receive some portion of the user fee revenues they collect as an increment to their salary. Some minimum required level of service should be retained (perhaps the current one, of 6 consultations per hour) with no additional remuneration for providing up to that number of consultations and some associated minimum level of user fee revenues. Beyond that service provision level, however, a given percentage of the revenues generated--exclusive of drug sales, x-ray and laboratory examinations--could be used to reward providers for their extra efforts with the remainder--perhaps somewhere in the neighborhood of half or three-quarters of the revenues--continuing to be used as they are at present. It would be advisable to exclude revenues generated by the sale of drugs and x-ray and lab examinations from the revenue pool on which additional remuneration would be based so as not to provide an incentive to overprescribe drugs or overuse complimentary examinations.

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<sup>11</sup> To the extent that the higher prices push these relatively high income persons out of the MOH market and into the private market, it free up resources that can be used to better serve the MOH's mandated clientele, the less well-off economically, and/or to provide more primary health care services.

Since additional consultations mean more work for all of the facility's staff, and so as to encourage the development of a health facility-team mentality and team effort, all personnel at the facility should receive some portion of the incentive monies. One possibility would be to distribute these incentive monies to staff in direct proportion to their established MOH salary levels. The distribution could be a quarterly bonus which would be paid out at the same time that the facility personnel have a general performance review led by Regional Office officials. The Regional Office representative(s) could bring the bonus checks on a regular quarterly (or semi-annual) basis, and the performance review would simultaneously serve to institutionalize a minimal supervisory visit schedule to all facilities within the Region.

### 2.1.3 Obtain earmarked revenues from specific taxes for the MOH

Securing a regular, minimal source of revenues by earmarking special taxes for the Ministry would increase resource mobilization for the MOH. The consumption of alcohol and cigarettes is detrimental to health, and is responsible for MOH expenditures being greater than they would be otherwise. Thus, from what public finance economists refer to as a "benefits received" philosophy of taxation, smokers and drinkers should contribute more and should contribute directly to the MOH for the provision of MOH services. In addition, these taxes, and increases therein, act to increase the prices of these commodities, thereby reducing the quantity of them that is consumed, which, in turn, reduces the magnitude of their adverse impact on health and on the costs and provision of services by the MOH.

The tables on the following page present data on Central Government revenues from taxes on tobacco and alcohol products, respectively, for the past 17 years. As the tables show, there has been steady revenue growth from both sources, although as a proportion of total taxes, each of has been of generally declining significance. In the left hand column of both tables tax revenues as a percentage of total MOH operating expenditures are calculated. Throughout the past ten years, these proportions have been relatively stable for alcohol and tobacco combined, fluctuating around the 85 to 95 percent level. In 1992, the Central Government collected 218.4 million colones in alcohol tax revenues (47 percent of MOH expenditures that year) and 146 million colones in revenues from tobacco taxes (31 percent of MOH expenditures that year). Earmarking these taxes for the MOH, therefore, would provide a minimal ensured level of revenues which would help to stabilize the MOH appropriation, and, if coupled with additional, discretionary allotments could help to mobilize additional resources for the Ministry.

EL SALVADOR'S CENTRAL GOVERNMENT REVENUE FROM TAXES  
ON CIGARETTES AND TOBACCO PRODUCTS

Year	Absolute Amount	As a % of total taxes	As a % of MOH operating expenditures
1976	24,583,695		29.2
1977	27,818,956	2.46	28.3
1978	30,517,736		28.0
1979	38,142,065	3.28	30.9
1980	43,988,461	4.44	29.8
1981	45,399,998		29.8
1982	48,694,575	5.11	32.5
1983	51,744,044	4.79	36.0
1984	55,066,201	4.08	35.0
1985	62,591,397	3.77	38.1
1986	78,610,297	2.91	36.2
1987	94,110,013	3.73	40.2
1988	113,571,358	4.47	46.7
1989	101,499,998	4.13	39.6
1990	121,221,318	3.79	37.5
1991	166,769,811	4.11	39.3
1992	146,013,737	2.99	31.4

Source: Cuadro No. 1-2 del Informe complementario constitucional, Ministerio de Hacienda, varios años. In 1987, this report was renamed Informe sobre la liquidación del presupuesto general y situación del Tesoro Público y Patrimonio Fiscal.

## EL SALVADOR'S CENTRAL GOVERNMENT REVENUE FROM TAXES ON ALCOHOL

Year	Absolute amount	As a % of total taxes	As a % of MOH operating expenses
1976	60,901,983		72.3
1977	73,275,213	6.48	74.6
1978	73,746,966		67.8
1979	76,626,163	6.59	62.2
1980	77,537,876	7.83	52.6
1981	82,691,786		54.3
1982	78,894,707	8.29	52.7
1983	81,608,180	7.56	56.9
1984	87,175,756	6.46	55.2
1985	97,917,928	5.90	59.5
1986	108,580,893	4.02	57.1
1987	123,123,246	4.89	58.9
1988	123,290,871	4.90	50.7
1989	141,191,508	5.74	45.8
1990	175,395,074	5.48	50.9
1991	216,879,484	5.35	51.1
1992	218,350,007	4.47	47.1

\* Operating expenditures are defined here as the sum of total funds utilized for "funcionamiento" and "transferencias." Total MOH utilized funds is the sum of these two components plus direct investment. Direct investment has fluctuated between 3-8 percent of total MOH expenditures for the past 15 years.

Source: Cuadro No. 1-2, *Informe complementario constitucional*, Ministerio de Hacienda, various years. In 1987 this report was retitled *Informe sobre la liquidación y el presupuesto general y situación del Tesoro Público y Patrimonio Fiscal*.

Another possibility would be to levy a permanent surcharge on annual automotive vehicle registration fees. Reasoning that traffic accident victims are generally treated in MOH hospitals, this proposal can also be regarded as embodying a type of public insurance cum "benefits received" approach. In 1990, there were 151,356 registered automotive vehicles in El Salvador (MIPLAN, 1992, page 97). Since then there has been a surge in the number of vehicles in the country. Estimating that there are now 200,000 vehicles in El Salvador, an annual surcharge of 50 colones per vehicle would yield the MOH 10 million colones.

The earmarking of these specific sources of government revenues is not an original idea. Many other countries, including several in Latin America, already practice this approach to financing their public health sectors.

It should be pointed out that from a public finance perspective, earmarking monies is generally considered undesirable for two reasons. First, earmarking entails greater public sector administrative costs. Second, from a more theoretical, societal perspective, public sector expenditures ideally should be allocated in a manner that maximizes social benefits for a fixed outlay of public funds. Earmarking short circuits this calculus--to the extent that this idealized approach, devoid of political considerations, is undertaken. A third reason for considering earmarking undesirable in this particular instance is that it does not ensure that adequate funding will be available. The revenues that are garnered from the taxes examined here, constitute only about 85 percent of the MOH's budget. Thus one of the primary motivations for earmarking--namely, to avoid the annual political battle for relatively scarce resources--is not avoided. Although a smaller amount of additional funds beyond the earmarked revenues must be obtained, and so the battle to obtain those funds may be less intense, the Ministry will still need to justify its entire budget in order to obtain those additional monies.

## **2.2 Improving the management of the MOH: increasing efficiency and containing costs**

### **2.2.1 Targetting resource use**

#### *Type of service*

Three-quarters (74.6 percent) of the MOH's direct service delivery expenditures are dedicated to its 30 hospitals, leaving only 25 percent for its 360 primary care facilities. Primary health care services, in general, are among the most cost-effective types of health care services. The overconcentration of MOH resources on secondary and tertiary care constitutes an inefficient use of resources. Given the inadequate level of health care expenditures in El Salvador, this unnecessarily restricts access to care and limits the quality of care that can be provided.

According to a 1989 household survey-based study the MOH provides only about 40 percent of total outpatient care, and about 75 percent of total hospital care (MOH facilities have approximately 69 percent of the health care). The efficiency with which most services and activities are being produced (i.e., operational efficiency) is generally low. For example, despite the significant reduction in the number of hospital beds in El Salvador that were made in the 1980s, occupancy rates throughout the sector remain persistently low, averaging 60-65 percent. National hospitals on average have a higher occupancy rate than the regional hospitals, whose occupancy is low and falling (Wight et al. 1994). In 1993, the 53 percent occupancy rate resulted in that the average bed spent more time unoccupied than occupied; 65 percent of the hospitals had 50 percent or less of their beds occupied. This is a result of declines in admissions in most national hospitals--in the 1980s these averaged high 60,000s and by 1990 these were down to only 48,000 (in 1992 these were back up to 57,000). The regional hospitals were more stable ranging from 103,000 and 109,000 in the 1980s, reaching a new high

in 1992 in 115,000 (Wight et al. 1994). The low occupancy is also due to the reduction in average length of stay (ALOS) from 9.7 in 1986 to 8.0 in 1991.

#### *Type of client*

The Ministry must do a better job of targetting its resources to those most in need. The income of one-half of El Salvador's population is below the poverty line, and half of these poor (one-quarter of all Salvadorans) have incomes that are inadequate to purchase even basic nutritional requirements. While it is estimated that about one-quarter of the population is without access to care, 59 percent of persons who are in the highest income quintile and 78 percent of persons who are in the next to highest income quintile and are hospitalized, are treated in MOH hospitals where they receive care at highly subsidized prices. The average MOH hospital bill is a mere 6 percent of the average fee in the private sector (146 and 2330 colones, respectively).

In light of the Ministry's espoused goal of providing care for all indigents, these overly generous subsidies constitute misallocations of the Ministry's limited budget. The Ministry must better target its resources to the poor in order to increase their access to care and the quality of MOH care, while charging those who can pay the full cost or more for the MOH services they receive. This will encourage persons with adequate incomes to go to private providers and thereby stimulate the growth and development of the private sector, which has long been crowded out by the public sector.

#### *Geography by health status*

Another aspect of the health care distribution problem is geographic in nature: the health sector's resources are disproportionately concentrated in San Salvador, making access to care problematic for the 70 percent of Salvadorans who live outside of the metropolitan area. Forty-two percent of the total operating expenditures of the MOH are made in San Salvador where 29 percent of Salvadorans live. This leaves the 71 percent of the population that lives outside of the capital with inadequate coverage by the MOH.

The MOH has been virtually the only mechanism by which the availability of health care resources has been made more equitable throughout El Salvador. Still, the Ministry can do much better. At present the MOH spends 135 colones per capita in the only two regions of the country which have less than the national average share of poor, and 99 colones per capita in the 3 poorest regions. The Ministry can and must do more to make health care services, and particularly primary health care, more accessible throughout the country and especially to the poor.

### **2.2.2 Improve personnel-related policies**

#### *Increase the number of other-than physician providers--viz., nurses and nurse auxiliaries*

For many years now, the MOH's mix of health providers has been inefficient, and, therefore, inordinately expensive. The MOH employs far more physicians relative to nurses and nurse auxiliaries than is necessary (and the number of physicians has increased over the last 10 years from 171 to 195, mostly in regional hospitals)(Wight et al. 1994). Established international standards--which combine considerations of the adequacy of care and efficiency--maintain that the Ministry should employ roughly 4 nurses and 8 nurse auxiliaries for each physician. The MOH nurse-to-physician ratio is roughly 0.85, less than one-fifth of the international standard, and the auxiliary-to-physician ratio was 1.71, about one-fourth of what it should be. In short, the MOH relies on a far more skill-intensive mix of personnel than is essential, and, therefore, is spending considerably more on personnel per patient, other things being equal. This imbalance may be primarily the result of the way in which the Ministry recruits and/or pays different types of personnel, and/or it may be due to the MOH's *de facto* or *de jure* division of labor within the health provider team (i.e., among physicians, nurses and auxiliaries), or it may be caused by some combination of all 3 of these considerations.

*Reduce the marked regional disparities in the provision of services by different types of MOH providers by establishing standardized provider-type responsibilities and basing personnel allocation on need*

Over the past 15 years there have been persistently different levels of outpatient services provided by nurses and auxiliaries vis-a-vis physicians across the five MOH health regions. Although physicians provide the bulk of care throughout the country, a nurse working outside of the Metropolitan Region provides two to three times as many patient encounters as one working in that Region. Spatial differences in this crude measure of productivity are even more pronounced in the case of auxiliaries. These differences appear to be largely due to variations in the supply of providers, suggesting that the inefficiencies associated with overly-physician-intensive care provision are particularly acute in the Metropolitan Region. Analysis of regional variations in staffing patterns taking into account variations in types of facility is an essential first step to changing hiring policies and designing other policies to improve this inefficiency. Depending upon what the staffing needs study would recommend, it might also be useful to consider paying hardship bonuses for personnel working in particularly isolated areas in order to reduce resistance to being reassigned.

*Reverse the two-decade-long trend of wage compression: increase wages of the highest skill categories relative to the lowest skill categories so as to improve morale, productivity and retention of higher skilled MOH employees*

Between 1975 and 1993 the real level of remuneration of MOH physicians fell by 90 percent. (See the tables on the following pages.) In contrast, real salaries in the private sector fell by slightly more than half this amount over the same period. Public policy throughout the post-1978 era, acted to increase the (nominal) wage levels of the lowest wage earners relative to those earning higher wages. The result has been a compression of the MOH salary structure. For example, whereas auxiliaries earned 15 percent of the average two-hours per day physician's wage in 1976, by 1994 the proportion will have increased to 53 percent.

Analysis of the 1990 and 1991 MIPLAN family income and expenditures surveys provides additional evidence of the compressed salary structure of the MOH. The surveys reveal that the lowest tiers of Ministry of Health employees receive salaries which are approximately 30 percent greater than those received by persons with similar education levels and responsibilities in the private sector. As one moves up the skill/occupational ladder, however, the private sector soon comes to easily outdistance the MOH in terms of the level of salaries.

The structure and evolution of MOH wages has undermined incentives to provide quality care and is at least in part responsible for retention problems among persons with higher levels of skills. The development of positive incentives for MOH providers must be a priority. Operations research studies should be conducted to explore alternative and/or supplemental methods of paying physicians (and other MOH care providers) in order to identify new methods for improving their productivity and retention.

REGIONAL HEALTH SERVICES PERSONNEL REMUNERATION:  
MONTHLY SALARIES (IN 1978 COLONES)

Year	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Physicians (2 hrs/day)	615.4	626.6	584.1	536.1	478.4	423.2	368.9	330.1	291.7	261.2	225.8	170.8	142.6	123.9	105.3	97.6	75.3	74.6	61.8	76.0
Nurses	531.5	574.4	543.2	530.9	713.0	607.4	570.4	510.4	451.1	404.0	382.3	289.2	295.3	243.5	207.0	206.8	159.5	177.4	146.9	180.8
Nurse Auxiliary	49.7	378.6	379.7	376.3	483.0	411.4	358.6	397.3	351.2	314.5	309.0	233.8	223.3	206.5	175.5	179.7	138.7	157.1	130.6	161.1
Sanitary Inspector	433.6	489.6	455.6	469.1	464.6	419.3	365.4	348.4	307.9	275.8	277.3	247.3	234.1	215.5	183.2	179.0	143.7	162.2	134.3	165.2
ARS Supervisor (Inspector de Prom. de Salud)								348.4	307.9	275.9	277.3	269.8	252.1	230.5	195.9	197.3	129.7	167.7	131.9	164.7

Source of the CPI is Dirección General de Estadística y Censos. Source of the nominal wage data is the Ley de Salario, various years.

MEDICAL PERSONNEL MONTHLY SALARIES  
(IN CURRENT COLONES)

Year	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Physician (2hrs/day)	440	480	500	520	520	540	540	540	540	540	570	570	594	618	618	668	668	736	736	905
Nurse	380	440	465	515	775	775	835	835	835	835	965	965	1.230	1.215	1.215	1.415	1.415	1.750	1.750	2,153
Nurse Auxiliary	250	290	325	365	525	525	650	650	650	650	780	780	930	1.030	1.030	1.230	1.230	1.550	1.550	1.907
Sanitary Inspector	310	375	390	455	505	535	575	575	575	575	705	825	975	1.075	1.075	1.275	1.275	1600	1600	1.968
ARS Supervisor						N/A	N/A	570	570	570	700	900	1.050	900	900	1.150	1.150			

Source: Ley de Salarios, various years.

*Change MOH provider work hours: increase the regular hours during which consultations are provided to include afternoon and evening sessions*

The household interview survey-based demand study conducted by the AID REACH Project in 1988 revealed that two of the major reasons people turned to the private sector rather than the MOH was to take advantage of the convenience of scheduled appointments (with shorter in-office waiting times) and more convenient hours of operation. The MOH's traditional practices of not having scheduled appointments and providing consultations only in the morning, in other words, has carried with it a high price in terms of reducing access to MOH care. This is perhaps best evidenced by the fact that 32 percent of all physician consultations provided by MOH hospitals and about 34 percent of those in health centers in 1992 were provided in 24-hour emergency rooms. Physicians typically work part-time--98.7 percent in 1992, of which: 81 percent worked 2 hours or less/day--further reducing access (Wight et al. 1994).

Altering both of these traditional practices of the MOH will increase the demand for and utilization of MOH services (which would reduce their average cost). According to cost estimates developed by APSISA (Gomez, 1992), a regular ambulatory physician consultation provided in an MOH hospital costs 41 colones, just 54 percent of the average cost of 76 colones for an emergency consultation. The comparable figures for health centers are 43 colones (60 percent) and 72 colones, respectively. If the MOH could reduce the share of its consultations provided in more expensive emergency rooms by one-half, such that its proportion of total outpatient care provided in emergency settings was equal to the average in most health care delivery systems (including that of ISSS), and the reduced emergency care provided instead in non-emergency settings, the Ministry would annually save about 22 million colones; 16 million colones in hospitals and about 6 million colones in health centers. This is 9.6 percent of the MOH hospitals' total 1992 operating budgets (the same year for which the cost estimates were developed)--a very significant potential source of savings. The possibility of charging more for non-emergency care services provided at non-traditional hours would provide a mechanism for effectuating this transfer. The introduction of additional regular hours, in the afternoon and in the evening--just as ISSS has recently done--would also help to realize these substantial savings.

### **2.2.3 Develop a needs- and performance-based approach to planning and budget allocation**

The MOH's planning criteria in determining how it is going to spend its money has long been based on what is referred to as an historical budget-based resource allocation process, although this is starting to change. The historical budget approach to planning simply allocates the Ministry's budget on the basis of its historical budget distribution pattern, rather than on the basis of health needs, program priorities or performance. This approach discourages new initiatives and, by not basing resource allocations on the basis of need or performance, renders epidemiological tracking and assessment, as well as MOH personnel and facility performance evaluation virtually meaningless undertakings, thereby dissipating motivation to perform these tasks well. This budgeting mechanism also encourages mediocrity; regions, facilities and personnel continue to get their historical share of the MOH pie, regardless of their performance. The introduction of planning and budget allocation methods based on needs and performance provides an opportunity for improving the efficiency of the MOH by distributing resources to where they are most needed and, therefore, can have the biggest impact, and by providing incentives to provide more care and quality care.

One of the AID-established intermediate goals of the APSISA Project Amendment is to have the hospitals' budget allocations based on the mix of illnesses, medications dispensed and the level of service provision. Such a mechanism would be the Salvadoran analog to the U.S. Health Care Financing Administration's Diagnosis Related Group (DRG) System. It would be developed using empirical hospital cost data to identify how variations in these factors affected actual hospital expenditures, other things being held constant. This information could be obtained from a more indepth segment of the econometric hospital cost study (see

separate report) using expenditures data together with data from the morbidity, supplies and personnel information systems. Over the course of a few years, as the resulting budget allocation tool is refined and managers become accustomed to it, and if the central government budget allocation and disbursement process is adequately reformed (via the Modernization of the State Project) it could be easily transformed into a prospective payment mechanism (in a manner parallel to how DRGs are used in the U.S. to pay for Medicare services).

While AID has not expressly stated that similar such criteria should be used to allocate other-than the hospitals' budgets, it is logical and at least as important to extend the same type of criterion to the Regional Health Services budget allocation process, as well.

#### **2.2.4 Develop a regionalized budget allocation formula**

The aim of establishing formula funding is to help insulate the MOH from the oftentimes capricious impact of politics, to make the basis of funding known, so as to allow regions to better plan their long term activities, and to provide for an objective technique by which to simultaneously incorporate various relevant considerations (such as the level of health care delivery needs, the ability to purchase private sector health care services--as reflected in, for example, income and wealth levels along with the availability of alternative sources of care, the ability of the individual regions to finance their own public health care financing, and to provide incentives to regions to spend their own monies on public health care).

It is important to note that such a formula need not be definitive in identifying the allocations of MOH budget monies to each region. For instance, the formula would probably be best applied to recurrent costs (with capital costs--especially those arising from new construction projects--excluded, or perhaps allocated on the basis of another formula). Or, the formula could be used to identify a minimum or maximum amount of monies which a region would receive.

The components of the formula and their relative weights (i.e., the actual formula equation) would be determined by a national committee of public and private health care experts. It would be important to have a variety of health care experts on the committee; physicians, nurses, epidemiologists, health care demand, and health care budgeting and financing experts. In the course of their work, they would be forced to consider and to identify the priorities of the MOH and the role of the MOH in Salvadoran society, which would be a very useful, provocative, and contentious exercise.

The types of variables which might be in the formula include:

- a) past budget level (average share of the MOH regional budget of the past 3 years)
- b) population of the region
- c) various indicators of health status
- d) last year's level of service provision (or the average of the past 2 years)
- e) indicators of the level and distribution of income and wealth within the region
- f) measures of the region's income or wealth to serve as indicators of the region's ability to spend its own (*patronato*) monies on health care

g) its actual expenditures of its own monies (through *patronatos*) on health care provision.

The rationale for including the past budget level is that one would not want to alter the functioning of the system much--at least initially--as a result of the introduction of formula funding. The importance of this variable could be slowly decreased over time by reducing its weight vis-a-vis other variables in the formula, and eventually phased out.

The population of the region would provide a first proxy for the potential market of the MOH services. Here too refinements could be introduced. For example, the number of children less than 5 or less than 15 could be weighted twice as heavily as the rest of the population.

A variety of indicators of health status could be used to proxy the need for and level of intensity needed of MOH services. Determination of which health status measures to include would require establishing MOH health service priorities, but might include the infant mortality rate, infectious disease morbidity or mortality (a specific disease or a combination of diseases).

Last year's service provision record would provide more specific information about the proportion of the population which relies upon the MOH for health care, as well as the anticipated level of use of the MOH. The wealth and income distribution information provides insight into the number of people who are most likely to turn to the MOH for its free services. It would also provide information about the regional population's ability to pay for MOH services--a possibility which needs to be given more serious consideration now, and, it appears, will be increasingly important to consider in the coming years.

Information about the income and wealth of the region is important to incorporate into the equation because it reflects the region's ability to share in the financing of its public health care system. This consideration could be entered into the equation in such a way as to award larger sums of funds to the poorest regions and less to the wealthiest (other things being equal). Such an allocation mechanism would be consistent with the MOH's charge with providing access to care for all segments of the population.

In addition, regional expenditures of their own resources on health are also an important consideration because they directly measure the regional commitment and level of effort to the health sector. One would want to encourage such expenditures. This could be done by incorporating this variable into the funding formula in such a way as to reward those who use more local (*patronato*) resources (as a share of local ability to raise and spend as reflected in regional income and/or wealth measures), by providing them with matching monies up to some maximum amount.

Initially to aid in the development of the single "best" and most acceptable formula, several different ones could first be constructed and the budget allocations associated with each could be simulated.

#### **2.2.5 The managerial inefficiencies inherent in the continued existence of fragmented and piecemeal financial information systems must be addressed**

An immediate MOH priority must be to develop a unified financial system with more complete information so that the Ministry can better understand how it is using all of its resources, and so that it can better understand what choices/options it has in using its resources. This is basic to the Ministry's becoming better able to effectively plan the use of its limited resources.

### **2.2.6 Articulate a detailed plan for decentralization and provide training necessary to ensure that the regional offices are prepared to assume their new responsibilities**

Perhaps the single most important strategy for improving the efficiency of MOH operations is regionalization. By moving toward a less centralized, more flexible, administrative structure, regionalization holds promise for reducing bureaucracy and for improving incentives by introducing a greater degree of personal accountability into the system. But these are not inevitable results of regionalization. Rather, they must be planned for and assiduously cultivated by designing and implementing appropriate reforms. To be successful, regionalization must entail the development of a long term (10+ years) MOH plan, including the identification of what its present and future mission and role are, what its critical priorities are, and what place the Regional Offices (ROs) will play in this schema. This plan will need to be fully elaborated working closely with the MOH during the first months of the Project.

But that is not enough. Successful regionalization will also require that Regional Office management and support structures are qualitatively adequate, and sufficiently strong and flexible so as to be able to respond to the increasingly important and diverse tasks they will be required to perform and to do so in a timely manner. In addition, it will require that Regional Office (RO) staff have adequate planning and managerial capabilities so as to be able to carryout the new responsibilities involved in their new roles.

The present structures and activities vary markedly across the five ROs (each has a different organogram), reflecting their idiosyncratic institutional development. Successful regionalization must begin with the identification and evaluation of existing structures and capabilities. This assessment must be performed with evaluation criteria based not only on existing organizational needs and performance, but also on the probable types of new activities and skills which the regionalization scheme will require (as identified in the long term plan). Building on the findings of this study, it will be essential to design and implement programs for improving the support systems and/or training programs to remedy deficient planning or managerial capabilities. The training will center on addressing areas of deficiency and be based on a general, practical regional health planning framework.

The training necessary for regionalization of the responsibility for the 1994 budget has begun. It is not documented and it is in jeopardy of not being institutionalized. It currently depends completely on one person in the Unidad de Planificación Financiera who has gone through this exercise before. In short, this is an important advance but it is imperative that the process and criteria be formalized, well documented, and widely discussed.

### **2.2.7 Conduct cost-effectiveness studies of some MOH facilities' (a) general support and maintenance services and (b) specialized technical support and clinical services to determine if it would be less expensive to contract these services out to the private sector**

Many countries throughout the world have found that their public health departments have saved money and scarce managerial talent by hiring private sector entities to perform some of tasks which have traditionally been performed by the public health department itself. This possibility should be examined in El Salvador, as well, starting with the 14 major hospitals and followed by the health centers.

Generally the easiest services to privatize have been general support and maintenance services such as laundry, dietary/food, biomedical engineering/equipment maintenance and repair, and facility maintenance. The most common types of technical support and clinical services which have been involved in these arrangements have been specific types of clinical laboratory examinations, or all lab services, radiology services, pharmacy

services, respiratory therapy services and rehabilitation. A pre-feasibility study of the potential savings involved in contracting out for these types of services would start with an analysis of the hospitals' expenditures on each of these services and discussions with hospital administrators and their financial office personnel and representatives of the private sector. A detailed study design and scope of work for undertaking this work was prepared by the World Bank in 1991. That design should be implemented as soon as possible.

### 2.3 Increasing cost recovery

#### 2.3.1 Provide technical assistance to improve the performance of the *patronatos*

To ensure that the *patronatos* are as effective as possible as generators of revenues, efforts should be made to provide them with regular forums in which they can share their experiences, strategies and methodologies, and to provide them with vehicles whereby they can improve their performances. These should include at minimum, the development of a *patronato* handbook/manual, and the development of a series of national workshop meetings.

The handbook would combine the presentation of lessons from the Salvadoran experience at each type of MOH facility and within each of the five health regions, with theoretical discussions of the issues and principles involved, and presentation of simple, alternative methodological approaches to designing and implementing effective, sustainable user fee systems. The manual would contain simple exercises to illustrate the theoretical discussions and to provide a hand-on/how-to experience.

#### 2.3.2 Increase the sale of MOH goods and services, and the renting of moh inpatient space to the private sector

The MOH should examine the possibility of increasing sales of different goods and services to the private sector, in a manner similar to the way it currently sells goods, services and rents space to the Social Security Institute. There are a few examples of MOH entities already doing business with the private sector. Hospital Bloom's for example has sold laboratory services to the private sector for several years. A short and simple case study of should be conducted as an exploratory foray into this area.

In the same vein, and in a manner paralleling the MOH-ISSS arrangements, the MOH should consider renting space in underutilized hospitals and health centers to the private sector. MOH hospitals are using only about 60-65 percent of their bed-day capacity and health centers a mere 40-45 percent. Since the fixed cost of hospitals is high and the recurrent cost to the MOH of maintaining these underutilized beds is not great, such beds could be leased at prices which could at once be significant net revenue generators for the MOH, while proving (financially) attractive and competitive with private sector hospitals. The findings of the cost analysis would provide benchmarks for the prices which could be charged for such arrangements and a brief, simple and inexpensive survey of the interest of the private sector in this approach could be conducted using a key informant approach. According to the President of the Hospital Rosales *patronato*, six years ago the private sector was very interested in cultivating this relationship until the MOH declared it to be unacceptable. The time to resurrect that proposal is at hand.

## ADDENDUM

We received many verbal and written comments on the draft of this report from many different sources, including the participants of the ten town meetings held during a two-week period in February, 1994. We appreciate all those who took the time to critically assess the content of this report.

### *Written comments*

A draft of this report, along with the nine other technical reports written by ANSAL consultants were widely distributed, (approximately 350 copies of the full report and 400 of the executive summary). Comments on the veracity, integrity, logical progression, gaps, and recommendations were solicited from the recipients of these draft reports by February 18th, 1994. Comments from individuals and institutions, both public and private, were received.

These comments were incorporated into the report as corrections, modifications and additions as was possible. Due to time constraints any major changes in the structure or further investigation was not possible. There were difficulties in obtaining information on the health sector in its entirety (both public and private institutions) and these gaps in the data remain.

The suggestions and comments which resulted from this process were discussed at a seminar, the participants of which included leaders of the health sector, representatives of government health agencies, international donor agencies, NGOs, professional organizations, foundations, projects funded by USAID, and private organizations held at the end of February.

### *Town meetings with health care personnel and community representatives*

The ten town meetings were held throughout the country (San Salvador, Chalatenango, Sensuntepeque, San Miguel, San Francisco Gotera, Sonsonate, Usulután, and Santa Ana). Representatives from from the following groups were invited to participate: local mayors, EDUCO, MOH and NGO health promoters and midwives, local physicians (from the MOH, NGOs, and private practice), MOH authorities (from regional offices, hospitals, and health centers), NGO personnel that work in health, representatives of churches who work in health, *patronato* members, community leaders, and other health professionals. The meetings were divided into short presentations of the findings, conclusions, and recommendations made by the ANSAL team and discussions. The areas encompassed: the health situation, health services, and health personnel and finance. After each of these presentations a discussion was held and the participants would list and prioritize the principal problems of each of these three areas.

The problems and recommendations given the highest priority by the participants at the different town meetings in the area of finance are:

### *Cost recovery*

#### *Comments:*

- a) The central office can often buy things more cheaply than at a local level.
- b) During the war, *Patronatos* played an important role in the centers which the MOH could no longer get to; which is an indication of their ability to function at a community level.

#### *Recommendations:*

- a) Establish user fees according to ability to pay (subsidizing those who cannot)

- b) Develop a system to recover costs. For example, each community would develop a system of user fees and subsidies according to an individual's ability to pay; individuals would be classified according to ability or not to pay, using the health promoter's records. This should be done at a community level due to the impracticality of carrying it out at a national level. One of the reasons given for the importance of user fees was the necessity of improving quality.
- c) A minimum package of health services should be established, and anything beyond this package (i.e., curative care) should charge a fee.
- d) Create legal *patronatos* at each establishment to accumulate funds and administer these efficiently.
- e) Allow the health units to receive economic aid from "other funds" or ask for funds from users.
- f) The community should set fees according to the socio-economic position of each individual.

### *Budget*

#### *Problems:*

- a) The GOES is reducing the deficit at the expense of the MOH.

#### *Recommendations:*

- a) At least 8 percent of the GNP should be designated for health.
- b) Increase the budgets for education, agriculture, and livestock, as well as health.
- c) The budget should be administered by the communities and the MOH.
- d) Increase the resources of those institutions which are capable of solving the most important problems.
- e) The health budget should be increased particularly in preventive health
- f) Transfer funds from curative to preventive care
- g) Transfer funds from the metropolitan area of S.S. to the rest of the country.
- h) The community should participate in the planning and administration of the budget.
- i) Give the budgets to the mayors to run programs they are responsible for (i.e., trash collection, provision of clean water)
- j) Establish a community fund from which money could be dispensed to those in need of medication or food.
- k) Train individuals to manage, administer, and make decisions.
- l) Create a mixed system of authority over the budget setting fees, salaries, and so on.
- m) Provide financial incentives, retraining, education, technical resources, increased supervision, and evaluation for health personnel.

### *External aid*

#### *Problems:*

- a) External aid is diminishing

#### *Recommendations:*

- a) The diminishing external aid should be used to make sure the needy continue getting care.
- b) The remaining external aid should be coordinated to make sure the needs of the communities are met.
- c) External aid should be solicited by the MOH.

### *Efficiency*

#### *Problems:*

- a) Efficiency problems in health services are due to: coordination and communication problems, cultural factors, lack of economic incentives, lack of training, lack of professional incentives, lack of continuing education, lack of technological resources, and poor supervision and evaluation.
- b) People are willing to pay for services if they are perceived to be of high quality.

*Recommendations:*

- a) Resources should be aimed at maternal-child health.
- b) Request free spots in the media for education on hygiene.
- c) Salaries need to be increased.

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