



FINAL REPORT

**Funded by the United States Agency for International Development,
the Pan American Health Organization/World Health Organization,
the World Bank, and the Inter-American Development Bank**

May 1994



***HEALTH SECTOR
REFORM
IN EL SALVADOR:
TOWARDS EQUITY
AND EFFICIENCY***

FINAL REPORT

**Funded by the United States Agency for International Development,
the Pan American Health Organization/World Health Organization,
the World Bank, and the Inter-American Development Bank**

May 1994

TABLE OF CONTENTS

LIST OF ACRONYMS	i
ACKNOWLEDGEMENTS	v
INTRODUCTION	ix
OVERVIEW	xv
I. POLITICAL, ECONOMIC, AND SOCIAL ENVIRONMENT	1
1. Background	1
1.1 Neglect of the poor	1
1.2 Political development	2
1.3 Economic development	3
2. Current Situation	3
2.1 Political and economic consolidation	3
2.2 Resolution of social issues	4
3. Outlook	5
II. DEMOGRAPHIC AND HEALTH SITUATION	7
1. Demographic Profile	7
1.1 Data on age and sex	8
1.2 Fertility rate	9
1.3 Population growth	10
2. Epidemiological Profile	10
2.1 Mortality	11
2.2 Infant and child mortality	13
2.3 Maternal mortality	15
2.4 Morbidity	16
3. Health and the Environment	16
3.1 Water supply	16
3.2 Sanitation service	18
3.3 Collection and disposal of solid waste	19
3.4 Air pollution	20
4. High Priority Health Problems	20
III. MOST IMPORTANT PUBLIC HEALTH PROBLEMS	23
1. Infant and Childhood Diseases	25
1.1 Acute diarrheal diseases	26
1.2 Acute respiratory infections	26
1.3 Immuno-preventable diseases	27
1.4 Malnutrition	28
2. Health Problems of Women of Childbearing Age	32
2.1 High fertility and spacing of pregnancies	32
2.2 Sexually-transmitted diseases (STDs) and AIDS	34
2.3 Cervical-uterine cancer	35
3. Health Problems of Adolescents, Youths, and Adults	35

3.1	Inadequate sex and health education	35
3.2	Accidents and violence	36
3.3	Physically and psychologically handicapped persons	36
3.4	Vector borne diseases	37
IV.	ORGANIZATION OF THE HEALTH SERVICES SYSTEM	41
1.	Role of the Government in the Health Sector	41
1.1	Coordination of the development of health policies	41
1.2	Compliance with policies and standards	42
1.3	Shared responsibility for oversight	43
1.4	Human resource development	43
1.5	Sectoral plans and policies	44
2.	Health Services	45
2.1	Organizations providing health services	45
2.2	Health sector resources	49
2.3	Human resources	51
2.4	Financial resources	56
2.5	Services provided	64
3.	Demand for Health Services	65
3.1	Perception of health problems and treatment	65
3.2	Perception of the health services	67
3.3	Access to health services	69
3.4	Quality of health services	71
3.5	Quantitative demand analysis	72
V.	CRITICAL ISSUES IN THE HEALTH SERVICES SYSTEM	77
1.	Organization of the Health Services System	77
2.	Financing Health Services	79
3.	Human Resources	80
4.	Maternal and Child Health Issues	81
5.	Health and the Environment	82
VI.	STRATEGIC GUIDELINES FOR THE HEALTH REFORM	85
1.	Maintenance of the Status Quo	85
1.1	Preservation of existing inequities	85
1.2	Financial collapse	86
1.3	Lowering of the quality of health services	88
1.4	General deterioration of the health situation	89
1.5	Future cost of the health reform	90
2.	General Approach to the Reform	90
2.1	Redefinition of the role of the government and the MOH	91
2.2	Decentralization of health care management	92
2.3	Increase in financing and establishment of an incentive system	93
2.4	Creation of an organized health system	95
2.5	Gradual change	95
3.	Factors Affecting the Proposed Reform	95
3.1	Factors which facilitate the reform	95
3.2	Factors which impede the reform	97

VII. REFORM OF THE HEALTH SECTOR	101
1. Introduction	101
2. General Structure of the Health Reform	102
3. Institutional Reorganization of the Sector	106
3.1 Redefinition of the role of the government	106
3.2 Creation of an organized health system	106
3.3 Description of responsibilities	109
3.4 Institutional strengthening	109
3.5 Human resources	110
3.6 Health promotion and prevention	111
3.7 Investments	111
4. Reorganization of Primary Health Care	111
4.1 Decentralization of primary health care services	111
4.2 Changes in the MOH structure	112
4.3 Increase in financing	113
4.4 Increase in the authority of health promoters and midwives	113
4.5 Establishment of incentives	115
4.6 Institutional strengthening in PHC	115
4.7 PHC Human resources	116
4.8 Health promotion and prevention	116
4.9 Investments	117
5. Reorganization of Specialized and Hospital Care	119
5.1 Transfer of MOH and ISSS hospitals to the private sector	119
5.2 Financing of specialized and hospital care	119
5.3 Introduction of adequate incentives	123
5.4 Institutional strengthening of SHC	123
5.5 SHC human resources	125
5.6 SHC investments	125
6. Health Reform: Global or Partial	126
APPENDIX 1. RECOMMENDATIONS	127
Recommendations Concerning Health Issues	127
Recommendations Concerning the Health System	130
APPENDIX 2. COMMENTS ON THE HEALTH REFORM	132

LIST OF ACRONYMS

ADD	Acute Diarrheal Disease
ADS	Asociación Demográfica Salvadoreña (Salvadoran Demographic Association)
ANDA	Administración Nacional de Acueductos y Alcantarillados (National Administration of Aqueducts and Sewers)
ANSAL	Análisis del Sector Salud de El Salvador (Health Sector Assessment of El Salvador)
ANTEL	Administración Nacional de Telecomunicaciones (National Telecommunications Administration)
APSISA	Apoyo para Sistemas de Salud (Health Systems Support Group)
ARI	Acute Respiratory Infection
BM	Bienestar Magisterial
CCS	Consejo Consultivo de Salud (Health Advisory Board)
CEL	Comisión Hidroeléctrica del Río Lempa (Lempa River Hydroelectric Commission)
COBAS	Basic Health Activities
COINCA	Interinstitutional Committee for Gynecological Cancer
COMURES	Corporación de Municipalidades de El Salvador (Municipalities Corporation of El Salvador)
CONIAPOS	National Committee of Institutions for Potable Water and Waste Disposal
CSSP	Consejo Superior de Salud Pública (Public Health Council)
EDUCO	Educación con Participación de la Comunidad (Education with Community Participation)
FEPADE	Fundación Empresarial para el Desarrollo Educativo (Business Foundation for Educational Development)
FIS	Fondo de Inversión Social (Social Investment Fund)
FONASA	Fondo Nacional de Salud (National Health Fund)
FUNDE	Fundación para el Desarrollo (Foundation for Development)

FUSADES	Fundación Salvadoreña para el Desarrollo Económico y Social (Salvadoran Foundation for Economic and Social Development)
FUSAL	Fundación Salvadoreña para la Salud y el Desarrollo Social (Salvadoran Foundation for Health and Social Development)
GAES	Grupo Asesor Económico y Social (Economic and Social Advisory Group)
GMA	Generation of Medical Assistance
GNP	Gross National Product
GOES	Government of El Salvador
GTZ	Society for Technical Cooperation (Germany)
IDB	Interamerican Development Bank
ISDEM	Instituto Salvadoreño de Desarrollo Municipal (Salvadoran Institute for Municipal Development)
ISSS	Instituto Salvadoreño del Seguro Social (Salvadoran Social Security Institute)
MASICA	Medio Ambiente y Salud en el Istmo Centroamericano (Environment and Health in the Central American Isthmus)
MASS	Metropolitan Area of San Salvador
MEA	Municipalidades en Acción (Municipalities in Action Program)
MI	Materno Infantil (Maternal and Child Care)
MINED	Ministry of Education
MIPLAN	Ministry of Planning
MOH	Ministry of Health
NGO	Non-Government Organization
OEDA	Specialized Water Office
PAHO	Pan American Health Organization
PHC	Primary Health Care
PLANSABAR	Basic Rural Waste Disposal Plan

PROSAMI	Proyecto de Supervivencia Infantil y Salud Materno (Maternal Health and Child Survival Project - AID)
PRSS	Social Sectors Rehabilitation Project
SALUCO	Sistema de Salud Comunitario (Community Health System)
SEMA	Secretaría Ejecutiva del Medio Ambiente (Executive Secretariat of the Environment)
SETEFE	Technical Secretariat for Foreign Financing
SHC	Specialized and Hospital Care
SIEES	Integrated System for Health Statistics and Epidemiological Information
SILOS	Sistema Local de Salud (Local Health System)
SNS	Sistema Nacional de Salud (National Health System)
STD	Sexually Transmitted Disease
TB	Tuberculosis
UES	University of El Salvador
UNDP	United Nations Development Program
UNHCR	United Nations High Commissioner for Refugees
UNICEF	United Nations International Children's Emergency Fund
USAID	United States Agency for International Development
WB	World Bank
WHO	World Health Organization

ACKNOWLEDGEMENTS

The El Salvador Health Sector Analysis (ANSAL) has been a very intense and broadly-based exercise. It was made possible by many people who devoted extraordinary time and effort to the project. In expressing acknowledgments, there is always the risk of involuntarily omitting the names of some of those who collaborated. In spite of this, I would like to attempt to acknowledge the major participants and contributors to ANSAL since a very general expression of thanks would implicitly involve more serious and numerous omissions.

The following organizations provided much support to ANSAL: the World Bank, particularly Madalena Dos Santos; the Interamerican Development Bank (IDB) through its representative in El Salvador, Stephen McGaughy, and Dr. Robert Kestell; the United States Agency for International Development (USAID) through John Tomaro, Paul Hartenberger, Brenda Doe, and other staff members from the Health, Population and Nutrition Office; the Pan American Health Organization (PAHO) and the World Health Organization (WHO) through their representatives in El Salvador, Dr. Hugo Villegas and Dr. A. López Acuña; the United Nations World Food Program through its representative in El Salvador, Oscar Sarroca; and other organizations which gave ongoing assistance such as the United Nations International Children's Emergency Fund (UNICEF), the United Nations Family Planning Agency (UNFPA), and bilateral aid agencies.

The Government of El Salvador (GOES) gave full cooperation throughout the study through the Ministry of Health (MOH) and the Ministry of Planning (MIPLAN). Special thanks go to: the Vice-Minister of Health, Mr. Gustavo Argueta, and the Director of the Economic and Social Support Group (GAES) of MIPLAN, Dr. Evelyn Lovo. At different points during the study when misunderstandings on the part of the ANSAL team caused partially justified resistance among officials and authorities of MOH institutions, Dr. Argueta served as a wise advisor and helped us overcome the difficulties. Dr. Lovo was tireless in the identification of areas of consensus and invaluable in her presentations of these common points to a diverse group of people and institutions. Dr. R. Olivares provided support, information, and thoughtful comments concerning the sensitive topic of social security. Countless officials of the MOH were patient and understanding in meetings with team members and in their review of the various ANSAL documents. We express our gratitude to all of them through Dr. Alcides Urbina and Dr. José Pereira. Finally, as a representative of the legislative branch, Dr. Hector R. Silva was an enthusiastic collaborator in the entire process of revision. His advice and participation, his collaborative spirit, and his realistic analysis made him a key player in this project.

From the beginning the NGO community supported our project in many ways. We give special thanks to the Salvadoran Demographic Association (ADS), to the NGOs affiliated with the Maternal and Child Survival Project (PROSAMI), and to other NGOs not associated with PROSAMI. There are many names we would like to include in this group, but since that is not possible here, we would at least like to mention those who were closest to ANSAL: Dr. Eliseo Orellana, Vicky Guzmán de Luna, Sara Ventura, and Yanira Argueta. The dedication and commitment of this group of Salvadorans was clear to all of us.

In El Salvador there are many foundations and policy institutes which actively participate in the development of public policy. The contributions of the following organizations enriched our analysis: the Salvadoran Foundation for Economic and Social Development (FUSADES), the Ungo Foundation, the Maquilishuat Foundation, the Foundation for Development (FUNDE) and the Salvadoran Foundation for Health and Social Development (FUSAL). They shared with us their own diagnoses and recommendations. We want to give particular thanks to Sandra Barraza, Lilian Caballero, and Hebert Bentacour for their selfless collaboration. The El Salvador Medical Board (Colegio Médico) not only defends the interests of those in the field of medicine,

but also seeks to ensure proper health care for the entire population of El Salvador. Its contribution to ANSAL through the participation of Dr. Angel Murga and Dr. Ricardo Suarez Arana, the current president of the Board, was very important.

Both the drafting of the technical content and the process of revising the ANSAL documents demanded a high level of organization. The community meetings would never have been possible without the kind and effective support from the project staff of USAID/El Salvador. We are grateful to the Health System Support Group (APSISA) director, Carlos Cataño, and staff; the Pro-Familia director, Mr. Larry Smith, and staff; and particularly to the PROSAMI director, Elizabeth Burleigh, and staff. Ellie gave us her support, wise advice, and friendship; we are all very grateful to her. Vivian Sellars was in charge of managing most of the project funds for the U.S. contractor, Logical Technical Services. With her positive attitude she resolved many problems and facilitated the team's work.

Based on their rich experience, José Marques and Mauricio Silva gave us constructive criticism which assisted in refining the analysis and improving the recommendations. Their contributions to the identification of critical issues and to the development of the reform proposal were so valuable that they soon became an essential part of the ANSAL team. Mauricio Silva was responsible for drafting the executive summary, a task which he carried out with unmatched dedication and competence. Our thanks to both of them.

The work of the consultants was assisted by support from the ANSAL Management Support Unit under the guidance of Arq. Emilia de Quintanilla. Dorothy Carranza, Benjamín Rivera, Jashia Castillo, Rafael Hernández, and Judith Melissa González were effective in the scheduling of meetings, distribution of documents, and setting up of appointments. Melissa González deserves special mention because of the leadership and creativity she showed in the organization of the ten community meetings.

More than 1,000 pages of final documents were edited by ANSAL, involving many rounds of corrections, formatting, and proofs. The responsibility for this arduous task was given to a young Salvadoran reporter, Gladis Aída Polfo, who assumed the responsibility with a maturity uncommon for her age. She was assisted in performing her excellent work by Jorge Roberto Obando, Claudia E. Morales, and Marcelina Garcia. Claudia Morales deserves a special note for her capacity to technically and logistically organize the work of the Loyola Center with complete success. This four-person team was able to overcome all of the obstacles with which they were faced. We thank them for their patience, perseverance, and continual search for excellence.

ANSAL benefitted from several complementary studies: Water and Sanitation, Breastfeeding, AIDS, Hospital Costs, Preventive Services, Private Sector, and Quantitative Demand Study. Our appreciation and thanks go to the teams that carried out these studies. The work of Joyce Fowler deserves to be highlighted; she supported the resource team, developed the study on preventive care, and took over the management of the project in its final stage.

ANSAL was a product of teamwork. Charles Lininger, Agustín Carrizosa, John Fiedler, Francisco Becerra, Masako Ii, Roberto Argüello, Alberto Zúñiga, Jim Bates, and David Lee all contributed their specialized knowledge to the analysis. The central team of people who took on the greatest responsibilities consisted of Jaime Ayalde, Cynthia Prieto, Esperanza Martínez and Susan Kolodin. Their efforts and accomplishments were invaluable. All of them far exceeded their scopes of work; my sincere gratitude goes to all four. In addition to the technical responsibilities that they carried out with great professionalism, each person made a special contribution. Jaime brought the maturity and wisdom which comes from experience; Cynthia was able to identify the system's problems with great competence; Esperanza contributed her excellent analytical skills, even

under very difficult personal circumstances; and Susan was a tireless professional who resolved each difficulty as it arose with knowledge and perseverance.

Because of this intelligent and indefatigable team of people, it was a privilege and a relatively easy job to have been the director of ANSAL. Any differences of opinion which might have occurred because of a lack of manners on my part are my responsibility, as are the technical errors in the team's work which could exist here as they do in any human endeavor. I hope that any differences of opinion do not destroy friendships and that any technical errors never become an obstacle in path of ANSAL's effort to improve the welfare of the Salvadoran people to whom I give my final thanks.

Dr. Alfredo Solari
Director of ANSAL

INTRODUCTION

1. Characteristics and Purpose of ANSAL

The purpose of the Health Sector Analysis for El Salvador (ANSAL) was first, to evaluate the overall health status of the population, the organization and functioning of the health services, and the existing health sector policies; and second, to make specific recommendations to national authorities and international organizations concerning how these problems could be resolved.

The last health sector analysis for El Salvador was done in 1978. In spite of the civil war (1980-1992), the economic recession at the beginning of the 80s, and the 1986 earthquake, improvement in several health indicators justified a new analysis at this time.

Beginning with the signing of the peace agreement in 1992, the country embarked upon an intense process of national reconciliation and strengthening of democratic structures. This approach implied that the government had to deal directly with economic and social issues and reduce its dependence on foreign aid. In order to strengthen this process, the international aid agencies, and in particular USAID, considered in-depth analyses of the education and health sectors opportune. The recommendations resulting from these evaluations would be made available to the government which would emerge from the spring 1994 election, the first election in many years in which all of the political factions of the society would participate.

The decision to carry out the health sector evaluation was a joint decision made by several international organizations (the result of much coordination) and national authorities, represented by the Ministries of Planning (MIPLAN) and Health (MOH). It was agreed from the beginning that the analysis would give the same emphasis to technical content as to the process used to develop the content. ANSAL was told to make technical recommendations, without consideration of political or economic restraints, concerning the most appropriate measures for the health sector over the next twenty years. The data analysis and the development of the recommendations were to be carried out in a participatory manner, considering as diverse a group of opinions as possible.

2. ANSAL products and team structure

The ANSAL process began in early 1993, when USAID's APSISA project identified preliminary areas of analysis, scopes of work for the experts in each area, and qualifications of the individuals to be hired. This preliminary document was revised, minor changes were made in May 1993, and the document was finally approved in June 1993, the month in which the technical director of the project was selected. During July and August the project experts were selected and by October 1993 the team had begun its work in El Salvador.

ANSAL is organized into three principal subgroups:

- * Health Situation, led by an epidemiologist with experts in maternal and child health, family planning, environmental health, and nutrition
- * Health Services System, led by a public health specialist with experts in organizational development, infrastructure, and pharmaceutical products
- * Health Resources, led by an economist with experts in human resources, medical anthropology, and health services

A legal expert was contracted to serve as an advisor to all of the subgroups; this part of the project was not satisfactory.

To complement the work of the subgroups, six special studies were carried out. The studies required different levels of effort and resulted in a diverse group of publications; these ranged from full evaluations with a complete set of recommendations for AIDS, Water and Sanitation, Breastfeeding, and Hospital Costs, to preliminary studies and analyses in areas which need to be researched in greater depth in the future such as Private Sector Health Services, Quantitative Demand Analysis, and Preventive Programs.

A total of 34 experts participated in the work of the subgroups and the special studies. The number of person-months totalled 72, which averages to a little over two months per expert. Since the subgroup leaders and the experts in global topics participated for almost four months each, however, most of the experts actually worked for only three to five weeks. All of the sponsoring international organizations financed the participation of experts in diverse topics. One third of the consultants were Salvadoran citizens or residents.

ANSAL's technical work lasted for eight months. The number of experts, their limited participation, and the lack of continuity, experienced even by the subgroup leaders, created organizational difficulties which had a negative effect on the final product. The experience taught us two important lessons: first, that it would have been better for the small group of key consultants to have stayed in the country throughout the duration of the project; and second, that the number of special topics to be researched and analyzed through complementary studies should have been smaller.

ANSAL produced many documents: nine technical reports, one final report, and an executive summary. In addition, seven complementary reports were produced in areas which deserved special attention.¹

The technical reports consisted of the following:

- Epidemiological Profile (Dr. Jaime Ayalde)
- Maternal and Child Health (Dr. Francisco Becerra)
- Health and the Environment (Ing. Roberto Argüello)
- Health Service System (Dr. Cynthia Prieto and Dr. Agustín Carrizosa)
- Administration of Pharmaceutical Products (Dr. David Lee and Mr. James Bates)
- Health Sector Infrastructure (Arq. Alberto Zúñiga)
- Health Sector Finance (Dr. John Fiedler)
- Human Resources for Health Care (Dr. Esperanza Martínez)
- Community Perception and Health Services Demand (Dr. Susan Kolodin)

The final report summarizes the main findings and recommendations related to the health care situation, organization of the sector, and available human, financial and infrastructure resources; and it proposes a total reorganization of the health system through a health sector reform. The executive summary was produced for wider distribution and summarizes the content of the final report.

¹ These consist of the following topics: AIDS, Breastfeeding, Water and Sanitation, MOH Hospital Costs, Private Sector Services, and Family Planning and Preventive Services. Copies may be obtained from the Health, Population and Nutrition Office of USAID/San Salvador.

3. Participatory process

The health sector assessment involved participation by a wide variety of experts and institutions involved in health care including: all of the international organizations concerned with health in El Salvador; all of the government institutions and private organizations involved in the health sector; foundations active in the national dialogue over social policies; health care personnel; and community representatives. There were two reasons for this approach: first, to enrich the ANSAL team's knowledge of the national health situation; and second, to construct a pluralist agreement on the nature of the problems of the health sector and their possible solutions.

Many different research instruments were used. One particularly important element was the interviews and personal contacts of the ANSAL team members with representatives from MIPLAN and MOH, with leaders of NGOs associated with PROSAMI, and with health experts from the three major political factions in the country. Staff of the international organizations which sponsored ANSAL were informed on a regular basis of the progress of the studies and the consultation process.

In addition to these contacts, a formal review mechanism was set up for ANSAL. At the end of the first three months, the team had drafted the first versions of the technical reports. Prior to developing recommendations, it was important to have the findings reviewed by a diverse group of knowledgeable individuals. The mechanism consisted of the following four components:

- written comments
- community meetings
- workshops with sector leaders (Loyola Center)
- international organization workshop (PAHO/Washington)

1. **Written comments.** People with experience in the functioning of health care services and representatives from 128 institutions were invited to give their written comments on the validity and integrity of the data presented, the logic of the analysis used, and the feasibility of the recommendations made.

The participation was intense and useful for validating or rejecting ANSAL's preliminary results. Written comments from approximately 30 institutions were received, including the major public organizations (MOH and MIPLAN) and the most important NGOs.

2. **Meetings with health personnel and community leaders.** Ten meetings in different parts of the country were held with different levels and types of personnel (promoters, midwives, doctors, and pharmacists), community leaders (mayors, members of the MOH support commissions or community-based benevolent societies, members of educational associations or EDUCO schools, local leaders), as well as officials and regional and local authorities of the MOH who were invited to participate.

Close to 250 people participated in the community meetings organized around the three components mentioned above. The meetings included brief technical presentations from the members of the ANSAL team and discussion groups covering specific topics. The group with the lowest level of participation was the community leaders.

3. **Workshops with sector leaders.** Two-day workshops were carried out with leaders from the following organizations: public organizations involved in the social and health sectors (MOH, MIPLAN and ISSS), health-oriented NGOs, medical schools, and several political parties. Twelve of the thirteen leaders invited to the

workshops participated in the entire activity. The dean of the Faculty of Medicine of the University of El Salvador was invited to participate but did not attend.

Among the topics discussed were: the overall health situation, sector performance, available resources, the provision of preventive and basic curative services, and the ANSAL proposal for sector reform. Presentations were made by the MOH, the GOES, and political party representatives, and the analysis was done through workgroups.

4. International organization workshop. This consisted of a one and a half day workshop held at the headquarters of PAHO in Washington, D.C. Those who attended included five ANSAL team members, eight Salvadoran sector representatives, and between 30 and 40 officials from the organizations sponsoring ANSAL (IDB, World Bank, USAID and PAHO/WHO). There was full Salvadoran participation in the discussions and workshops.

5. National seminar. Once the final report and the executive summary were completed, a national seminar was held during which the main findings and health reform proposed by ANSAL were presented. Approximately 250 invitations were sent to leaders of public and private organizations as well as to the more outstanding participants of the community meetings. The participants, organized into five workgroups, analyzed the material presented on three pre-defined topics. The groups' conclusions are presented in Annex 2 of this report.

The results of the revision process were useful to ANSAL. The community meetings were particularly valuable in terms of receiving feedback from people who were at the first level of health services or who were of very modest means. The workshops with the leaders and the PAHO/Washington meeting allowed for the discussion of the information and concepts gathered by the ANSAL team. They were useful for facilitating dialogue among people who have the common goal of improving health in El Salvador but who work in different public and private institutions and have varying ideological approaches. Under normal circumstances these individuals have few opportunities for exchanging ideas and opinions.

As a consequence of this process, the Salvadorans and the ANSAL team members came to an agreement concerning the need to carry out a reform of the health sector and the best approach to adopt. The outline of the health reform was presented during the PAHO workshop in Washington by one of the Salvadorans present (as a representative of the whole group); it reflected the consensus which had been reached on the general orientation of the proposed changes. The consensual agreement reached among the diverse group of Salvadorans was very well received by the international organizations which expressed their commitment to ongoing support of the health sector in El Salvador.

4. Content of the Final Report

The final report has seven chapters and two appendices. The first four chapters summarize the general situation in the country and the health sector. Chapter five presents the analysis which led to the development of the reform, and the general approach and the specific components of the reform are described in the last two chapters. Appendix 1 lists the specific recommendations made by the ANSAL team prior to finalization of the health reform proposal, while Appendix 2 contains comments on the health reform proposal made by participants in the national seminar.

Chapter one describes the economic, social, and political environment of the country. It includes: the magnitude and characteristics of poverty; the spatial distribution of the population, with emphasis on rural areas;

illiteracy and other factors which increase the risk of disease for members of the most neglected groups (marginal urban and rural populations with incomes below the poverty level). The chapter ties the social and economic neglect of this segment of the population to the political evolution of the country. There is a description of some of the efforts made over the past five years, both in the public and in the private sector, to correct social problems.

Chapter two presents a global view of the demographic and health situation by describing three interrelated aspects of Salvadoran society:

- a) Principal demographic characteristics: high proportion of infants and children relative to the total population; high fertility rates; high population density; and internal and foreign migration.
- b) Common diseases which have a great impact on public health: contagious and immuno-preventible diseases, parasitic infections, vector borne diseases, and medical problems related to pregnancy, delivery and the postpartum period.
- c) Main causes of these health problems: unsanitary conditions and limited access to potable water.

Chapter three is a detailed study of the main health problems affecting the population. In the case of each health problem, the following is identified: the most affected groups (urban, marginal urban, or rural residents) as well as the impact by socio-economic group; the most important risk factors; and the programs developed to resolve the problems, their results, and the outlook for the future.

Chapter four is a description of organization of the health sector and the public and private system of health services. The health sector is understood as the group of public and private organizations which have some effect on health, while the health service system refers to the organizations which provide the health services. Three topics are discussed: state participation in the sector; the design of the health services system and the main characteristics of the services available; and finally, the characteristics of the demand for health services by the population.

Chapter five first analyzes the key issues which constrain the development of the health sector according to the ANSAL team, and second, it presents in outline form the ANSAL recommendations to deal with these issues. To facilitate the presentation of the recommendations, they are grouped by topics in the following order: organization of the system; financing of the services; human resources; maternal and child care; and water and sanitation. Tables are given where the main issues are directly connected to the corresponding recommendations.

Chapter six is the introduction to the health reform and consists of three parts: (1) the situation if the current system is maintained; (2) the general approach to the reform; and (3) pros and cons of the reform. The second section of this chapter is of particular interest since it explains the general principles of the reform which were agreed upon by the group of Salvadorans that participated in the Loyola Center activities and in the PAHO/Washington Workshop. These principles reflect the goals to be achieved if the health sector changes are made.

Chapter seven describes the four components of the health reform proposed by ANSAL: institutional reorganization, reform of preventive and curative services (primary health care or PHC), reorganization of specialized and hospital care (SHC), and support for environmental health activities.

Chapters one through four of the final report may be read independently. Each section of chapter five can be read in combination with its corresponding segment in chapters three and four. Chapters six and seven may be

read independently, but they will be more easily understood if they are read as a unit. Lastly, the executive summary presents an overview of the material presented in this report which is easy to read, but which still contains the most important elements of the analysis and recommendations.

The technical analysis, the participative process, and the reports are the main results of the ANSAL effort. All of this will only be useful, however, if the findings and conclusions serve to improve the functioning of the health sector and thereby contribute to improving the welfare of the Salvadoran people.

OVERVIEW

If changes are not made in El Salvador's health system, in the future one of every two children will experience poverty-related health problems which will limit physical and mental development.

The above statement summarizes the main conclusion of the Health Sector Analysis of El Salvador (ANSAL). Profound changes are needed in the health system in order to prevent such a vision from becoming a reality. This executive summary presents the background and reasoning behind the changes recommended, the general approach to sectoral reform, and an outline of the four reform components.

Women of childbearing age and children under fifteen years constitute almost 65 percent of the total population of El Salvador. Though this group has major health problems, it receives relatively little attention compared to other population groups. The main health problems of women and children require prompt primary health care; if not prevented or treated promptly, these problems can become more serious. The prevalent health problems and their timely treatment require: 1) focus on preventive, educational, and basic curative services; 2) easy access to basic health care services, particularly in the rural and marginal urban areas; 3) an integrated health system which provides for efficient referral of high risk cases; and 4) an increase in the availability of potable water as well as an increase in environmental protection.

Over the past five years, important efforts made by the Government of El Salvador (GOES) have resulted in an improvement in the overall health situation. In spite of this, however, the health system currently faces major difficulties: 1) limited access to health services for the rural poor; 2) basic inefficiencies in the system; 3) concentration of health services in the metropolitan area of San Salvador; and 4) a mainly curative focus which is inappropriate given the epidemiological profile of the population. The MOH's ability to develop, implement, and supervise health sector policies suffered during the civil war as the state focussed its limited resources on the direct delivery of services. Delivery of public health care became centralized, inefficient, and scattered in terms of the services provided and the population covered.

Other factors play a part in the functioning of the health system. In spite of an increase in government spending over the past four years, health sector financing remains inadequate and heavily dependent on foreign sources, while significant budgetary inequities exist within the system. In addition, the GOES lacks effective human resource policies and there has been minimal coordination with the institutions responsible for the education of health personnel. The centralized management of personnel and the ineffective incentive system have also contributed to inefficiencies that have resulted in an imbalance between the supply and demand of health personnel.

If the current state continues, El Salvador will face:

- a general deterioration of the health situation;
- the preservation of the existing inequities in the health services;
- the financial collapse of the system;
- a reduction in the quality of health services; and
- increased cost of bringing about future changes.

ANSAL's review of the performance of the health system prompted its team to develop specific recommendations dealing with the problems identified. In each area specific recommendations were developed; these are included in Appendix 1 of this document.

Using the sector analysis and the set of recommendations for specific changes as its base, the ANSAL team looked for alternative development models for the health sector in El Salvador. The exercise included an extensive process of consultation with representatives of public and private sector health organizations, community leaders, users of the health system, politicians from a variety of political parties, and representatives of international organizations. The process led to a consensus between Salvadorans and the ANSAL team regarding both the importance of reforming the health sector and the basic approach of the proposed reform. The major international organizations that were consulted—World Bank, Interamerican Development Bank, Pan American Health Organization (PAHO)/World Health Organization (WHO), and the United States Agency for International Development (USAID)—expressed their general support for the approach developed by ANSAL.

The principal problems of the health sector, as determined by the ANSAL team, are: insufficient health services and coverage; a lack of efficiency; inequities; and a lack of financial sustainability.

To solve these problems, ANSAL proposes a strategy based on the following measures:

- redefine the role of the state in the health sector, transforming it from a direct provider of health services to a facilitator for services provided by private organizations;
- focus the attention of the state on the poorest members of the population and on primary health care;
- strengthen the programs directed towards ten priority health problems;
- focus on health promotion and preventive care;
- gradually increase the level of financing and diversify the sources of funds; and
- create an organized health system and increase its efficiency and effectiveness.

The term Primary Health Care (PHC) can be taken two ways: first, as a process of decentralization and community participation in health services with a corresponding strategy for the provision of services (WHO/PAHO); and second, as a synonym for the first level health services including health promotion, preventive health care, education, and basic curative services for the most common health problems. For the duration of this sectoral study, the ANSAL team and Salvadoran institutions agreed to use the second meaning of PHC, that is, referring to first level basic health services.

Insufficient coverage, inequities, and the lack of financial sustainability of the current health system demand greater contributions by the users of the system and by the GOES. The government should concentrate its resources on subsidizing care for low-income groups and focus on delivery of PHC services, while the users who can afford it should pay higher fees for their health care. The system's inefficiency can be reduced by transferring the responsibility for the provision of health services to the local level and to the private sector; at the same time, changes should be made in administrative practices, particularly in the system of personnel incentives.

The health reform, developed with the cooperation and support of local institutions and proposed by ANSAL, has four components:

- institutional reorganization;
- reorganization of primary health care;
- reorganization of specialized and hospital care; and
- support for environmental health activities.

ANSAL recommends that the reform activities be integrated so that the health system is modified as a whole; that all of the components of the reform be carried out; that the changes be gradual; that the reform activities have strong support from political leaders as well as from the general public; and that the activities be executed through a strategy based on participation and flexibility.

Institutional reorganization consists of redefining the role of the state in health care; creating a unified health system; decentralizing PHC services; transferring management of hospitals to the private sector; institution strengthening; developing human resources; and emphasizing health promotion and preventive care. Through the Ministry of Health (MOH), the state will strengthen its role of manager, regulator, supervisor, and financier by restructuring its organization and strengthening its technical capacity.

Delivery of PHC services will be transferred to municipal governments, which will either provide the services directly or contract with a variety of private organizations, depending on the preference of each community. The MOH will pay for all of the services provided to persons below the poverty level through a transfer of funds to each municipality. Calculation of this subsidy will be derived from a standard cost per person for a package of services to be provided by local organizations. In order to guarantee access to the basic services for the poor, the GOES will have to increase the level of funds for this purpose from approximately 230 million to 565 million colones.

Reorganization of specialized and hospital care (SHC) consists of transferring management (though not necessarily the property) of public sector hospitals and institutions providing specialized care to private organizations. This transfer will be accompanied by a complete overhaul of the equipment and buildings, a substantial increase in financing, and a change in the way budgets are calculated, from the use of historical budgets to the calculation of an overall cost per person for coverage.

Private organizations will have great autonomy in their management; they will compete for the hospital services to be provided in the expanded health package of services. The expanded package will consist of a mix of more complex services than those included in the basic package, excluding highly specialized or very expensive treatment. Between the services covered in the basic health package and those in the expanded health package, approximately 90 percent of the health problems in the country will be covered.

The expanded package of health services will be financed by the users, who will be able to choose the hospital in which they want to be treated. A universal and compulsory health insurance is proposed to cover the payment of the expanded health services. The premiums of the poor will be subsidized by the state according to the beneficiaries' ability to pay. Both the government and the individual users will make their contributions to a new National Health Fund (FONASA) which will emerge from a transformed Salvadoran Social Security Institute (ISSS).

Finally, to improve Salvadorans' health, activities related to the environment should be strengthened. Providing potable water, sewage treatment, and garbage collection and disposal should become a high priority. This implies an increase in financing for this purpose as well as cost recovery programs based on user fees.

Reform of the health sector will substantially improve the health of the Salvadoran people, especially the poor population, at a reasonable cost. It will allow children to have the good health necessary for their development and for the society to continue to consolidate peace and to foster economic growth.

I. POLITICAL, ECONOMIC, AND SOCIAL ENVIRONMENT

A sector analysis is a special opportunity for in-depth study of all of the components of the sector. It is a costly exercise and therefore infrequently done; the last health sector analysis in El Salvador was completed in 1978. Since there has been an extended period between studies, problems and solutions are examined from a long-term perspective. The social and economic characteristics presented in this report cover the last twenty to thirty years and thus go beyond one government term. With regards to the recommendations made, they will be valid for a period which goes beyond the present administration.

The health sector analysis and the recommendations require consideration of the social context, the main elements of which are: the magnitude and characteristics of poverty; geographical distribution of the population, especially in the rural areas; illiteracy and other factors which increase the risk of disease for members of the most neglected groups (marginal urban and rural populations with incomes below the poverty level). The social and economic neglect of this segment of the population is tied in this chapter to the political evolution of the country. There is a description of some of the efforts made over the past five years, both in the public and in the private sector, to correct social problems. There have been some achievements from the economic growth and the economic adjustment programs, but major problems remain which must be taken into account in the reorganization of the health sector.

Arguments are made in favor of improving the social conditions of the poor (health conditions are considered included in social conditions), not only for the intrinsic value of the improvements, but also because better social conditions are seen as essential to the consolidation of peace and economic development. As will be explained below, political, economic, and social factors currently exist which create a favorable environment for implementation of the necessary changes.

1. Background

1.1 Neglect of the poor

El Salvador is known for its broken topography, small area, and high population density, all of which create pressure on the factors of production, and in particular on arable land. With approximately 675 inhabitants per square mile, it is the most densely populated nation in the Latin American and Caribbean region. Historically, the distribution of wealth, income, opportunities, and welfare, has been skewed, particularly in terms of the neglect of the rural population. Poverty levels are very high; it is a moral imperative to reduce poverty in El Salvador. According to the multiple-use household survey of MIPLAN, in 1992 the income of the lowest 40 percent of the population represented only 16 percent of the total income, while the income from the top 10 percent of households accounted for 30.4 percent of the total. These figures show a slight worsening relative to the situation in 1988.

The marked social differences have probably increased in the last fifteen years. During the period from 1978 to 1982, the GNP per capita dropped by 25 percent and basically remained constant until 1990, when the economy began to grow again. Poverty increased substantially during the twelve-year period from 1978 to

1990. MIPLAN's figures show that the percentage of the population classified as poor increased by 11 points between 1976 and 1989 and then dropped by 7 points in the next four years.²

After adjusting the figures to correct for underestimation of income, (which decreases the percentage of poor people), the World Bank estimated that approximately 50 percent of the total population of El Salvador lives in poverty, with 12 percent classified as living in extreme poverty. The level of poverty is higher in rural areas, where 61 percent of the poor and 67 percent of the extremely poor reside (with only 50 percent of the total population). In Metropolitan San Salvador (MASS), where approximately 30 percent of the population lives, the proportion of poor and extremely poor is much lower³.

A country's educational system reflects the historical distribution of opportunities. At the same time, by contributing to social mobility, education can serve as a powerful instrument to decrease poverty and to improve social welfare. Educational opportunity in El Salvador varies in direct relation to the household income level; at the elementary level, children from low-income homes have fewer opportunities to attend school, begin school at a later age, and remain in school for fewer years than children from families with higher incomes. The educational level of mothers is a determining factor in the health of other members of the family. In 1992, 24 percent of the children between the ages of 7 and 12 were not registered in school and the adult literacy rate was only 71 percent, with a lower rate among women and rural residents. Approximately 30 percent of the population has not had access to formal education; this percentage is decreasing, but only very slowly.

The differences in family income and access to education and other services such as health care have a serious negative effect on the rural residents who make up 50 percent of the total population. El Salvador is a divided country in which half of the population has been systematically neglected. This constitutes a true challenge to the proper functioning of a democracy.

1.2 Political development

El Salvador went through a violent civil war between 1979-80 and 1992. One of the causes of the conflict was the inability of the political system to correct social disparities. The armed conflict ended in 1992 with the signing of the peace agreement, but the causes of the conflict remain and need to be resolved before consolidation of peace will be guaranteed.

Peace was achieved in 1992 mainly because of the desire of both sides to resolve their differences through peaceful political means instead of through force. The peace agreement provided for national reconstruction activities to deal with both the immediate effects of war (programs to reintegrate ex-combatants into civilian society) and the deeper historical causes of the war (programs to rehabilitate the social sectors).

The National Reconstruction Program and the political process which culminated in the April 1994 elections demonstrate: social and political change; respect for human rights and the strengthening of civilian society;

² The EHPM underestimates income, mainly in low-income populations. Nevertheless, it is probable that this underestimation remains constant over time. If this is so, then the tendency represented by these figures is real and the percentage of the poor in relation to the total population is higher in 1993 than in 1978.

³ For 1992 extreme poverty was defined as a monthly income which does not cover the basic food basket (2,200 calories/person/day), or 204 colones per household per month in urban areas and 119 colones in rural areas; relative poverty is defined as twice the above figures.

political consensus that a democracy is the best system for resolving conflicts of interest; and agreement that lessening social inequities will decrease poverty and lead to a more equitable society.

1.3 Economic development

The Salvadoran people are ethnically homogeneous, made up mostly (more than 80 percent) by mestizos who dominate the social, economic, and political life. In El Salvador, as opposed to most other countries in the region, the differences in opportunities do not have an ethnic character. Salvadorans are characterized by a willingness to work and to seek opportunity, which may at least partially explain why El Salvador continued to progress during the war, in times of recession, and in the face of marked inequities.

Historically the country has been characterized by high levels of migration. During the 1980s, emigration was particularly high as the result of the civil war and the economic recession. At the end of 1993, approximately one million Salvadorans were living in the United States. The Salvadoran immigrant is generally successful and the separation does not usually destroy family bonds. Families keep in close contact, visits back and forth occur, and funds are sent back to the family members who remain in El Salvador. Family remittances were the main source of the country's foreign exchange for 1993 and amounted to approximately US\$900 million (in contrast to US\$650 million from exports). Emigrants come from all levels of society, and therefore remittances are received by diverse social sectors; as a source of funding almost equal to the national budget, this foreign exchange has become the principal means of income redistribution.

Over the past four years the Salvadoran economy has improved. At the end of the 1980s the economy was in crisis; there had been no economic growth for the previous ten years; inflation reached an annual rate of 20 percent; the fiscal deficit, before foreign aid, reached 6 percent of GNP; income from exports had decreased by 50 percent since the beginning of the decade; and overdue foreign debt payments amounted to US\$165 million. Beginning in 1989, a program of stabilization (inflation and deficit reduction) and structural adjustment (reorientation of the economy to foreign markets and increased competitiveness) was implemented in order to create the proper climate for economic growth. As a result of the changes introduced, a more liberal and open economy has been established. The GNP grew at an annual rate of 5 percent for 1992 and 1993 and inflation fell to 12 percent in 1993. The fiscal deficit remains high (3.9 percent of GNP in 1992), however, and government funding is still excessively dependent on foreign aid.

2. Current Situation

2.1 Political and economic consolidation

The past administration (1989-94) achieved peace and was able to improve the economy and give it a solid base. The political support shown in the recent elections was a demonstration of the popular approval of peace, stability, and economic growth. More liberal trade, fiscal and monetary discipline, and the freeing of market forces have all been part of an economic strategy which never became a controversial topic in the recent electoral campaign.

While most of the promises made in the peace agreement have been fulfilled and the pacification process is almost completed, some difficulties remain; political protests still occur and the problem of street crime remains of great concern to the public. The electoral campaign and the election itself were carried out openly and with full freedom of the press; there was minimal harassment of political adversaries. Public hopes are focussed on the political stabilization process, on the consolidation of peace, and on the recovery of the economy. All of the political parties have expressed their commitment to social programs.

The end of the ideological conflict and the absence of guerilla activity constitute positive elements for the consolidation of peace, democracy, and economic growth. Over the next five years, lower levels of foreign aid will force El Salvador to use its own political and economic resources to maintain peace and economic development.

2.2 Resolution of social issues

The general conditions described above lead to positive expectations about El Salvador's prospects for the next five years. Major issues such as poverty and the social conditions in which the poor live still remain, however, and need to be resolved. In the same way that the civil war was justified in part by the social and economic neglect of large sectors of the population, consolidation of peace and economic development will be assisted by improvements in the income level and social conditions of the poor. Growth of a competitive economy requires more developed human resources (improved education and better health conditions) and progress in social sectors will support economic growth and reform.

Independent of the justification for changes made above, improvement in the conditions of the poor population is a moral imperative. During ANSAL's period of consultation, it became apparent that this belief was shared by persons with different ideologies, institutional connections, and approaches as to how the changes should be implemented. Instead of being a conflictive issue, discussion of improvement in education and health could become an area of consensus and unity for the Salvadoran society.

The government's strategy for reducing poverty has not had its desired results. The strategy was based on three basic ideas: economic growth; increased human capital; and redistribution programs (primarily the Social Investment Fund and the National Reconstruction Program). The major weakness of the strategy was that there was no significant increase in state funding for social programs⁴; in spite of the magnitude of the problem of poverty in El Salvador, the government spends barely 10 percent of GNP on programs directed towards the poor. Consequently, the programs have minimal impact on the levels of poverty. The lack of adequate government financing and the dependence of the ministries of health and education on foreign aid reflect the low priority given to resolving the problem of poverty.

The most important component of the strategy to fight poverty, the increase in human capital, has been implemented with limitations due to the inefficiency of the institutions implementing the social programs in education and health; this has resulted in only partial improvement in social indicators.

It should be noted that in spite of the problems discussed above, there have been some significant advances in the health field. Among these we can mention the reduction in infant mortality, increased coverage of maternal child programs, and better targeting of high risk groups through funding for nutrition programs, immunizations, and training for health promoters and midwives.

⁴ A series of economic and political circumstances partially explains the fact that public sector spending on social programs did not increase to a sufficient level. Some of the most important factors were: the need to support economic recovery, the high level of military spending, the 1989 offensive, and the demands of the programs created by the peace agreement and national reconstruction activities.

3. Outlook

The following are the main characteristics of the political, economic, and social context inherited by the new government of El Salvador in June 1994.

Politics: The achievement of peace and the desire for consolidation of the democracy.

The signing of the peace agreement in January 1992 in Mexico initiated an intense process of national reconciliation in El Salvador, thereby ensuring a stable climate necessary for economic growth and peace, the reduction of foreign aid, the institutionalization of democracy, and an increase in all forms of citizen participation. The general support for democracy, the elections, and the climate of peace have created conditions in which greater social benefits are demanded, above all for the poor, while at the same time adjustments, at times difficult, are recognized as necessary in order to achieve greater equity and efficiency.

Economy: Economic growth, beginning of the modernization of the state, emphasis on fiscal discipline, opening of the economy, and the need to prepare for the drastic reduction of foreign aid.

Modernization of the state involves a significant change in government functions; the state will move from serving as a direct provider of services to being a less interventionist state which will concentrate on managing, facilitating, and supervising development. For the social sectors, this means strengthening the capacity of the central government to manage, regulate, supervise, fund, and distribute, at the same time as its role as the provider of services is reduced.

Fiscal reform emphasizes the elimination of inefficiency, the search for efficacy, and the reduction in the budget deficit, while ensuring the reduction of inequities through redistribution. Finally, foreign aid donors have already announced a marked cutback in the level of bilateral aid, particularly in terms of the grant funding.

These three factors--modernization of the state, fiscal reform, and a reduction in foreign aid--demand a new way of financing the health sector which will achieve the objectives to reduce financial inefficiency and inequity, to reinforce and diversify national funding sources, and to lessen the dependence on foreign aid.

Social issues: Historical neglect of large sections of the poor population and high expectations concerning increased social benefits, especially for the poor majority.

The end of the civil war and the emphasis on democratic processes encourage the contribution of groups from all social sectors (NGOs, municipalities, and private enterprise), at the same time as there is a great need to develop effective channels for such citizen participation. Economic development demands a competitive labor force, which can only exist when the population is healthy and educated. It also calls for social and labor stability, which is why the private sector and the labor sector concur in the need to make efficiency and equity a priority for both health and education.

All of these factors combine to create an environment which is ready for the necessary changes in the social sectors, particularly in health and education.

II. DEMOGRAPHIC AND HEALTH SITUATION

This chapter describes three interrelated aspects of Salvadoran society:

- a) its main demographic characteristics;
- b) the most common health problems which have a significant impact on public health; and
- c) the principle causes of these health problems.

The main demographic characteristics of the Salvadoran people related to health are: the high proportion of children and young adults; elevated fertility rates; high population density; and internal and foreign migration. There is a direct relation between the age distribution of the population, urban-rural distribution, and the main health problems.

The health problems in this country are typical of the epidemiological pre-transition period⁵: (infectious diseases, vaccine-preventable diseases, parasites, vector-transmitted diseases, problems with pregnancy, delivery, and postpartum, and other health problems related to unsanitary conditions and the lack of potable water). This situation requires that health care, particularly the care provided by the state, focus on: preventing these health problems (preventive care and health promotion and education); eliminating the causes (polluted environment and poor living conditions); and treating the health problems which are characteristic of the pre-transitional period. To a great extent the health problems are caused by the environment and poor personal living conditions (half of the population is classified as poor) which are described in chapter one of this document.

1. Demographic Profile

According to the 1992 Census, El Salvador has 5,047,925 inhabitants. Women predominate, especially those who are in the fertile period (20 to 29 years old). This underscores the importance of health programs directed towards women, particularly family planning programs.

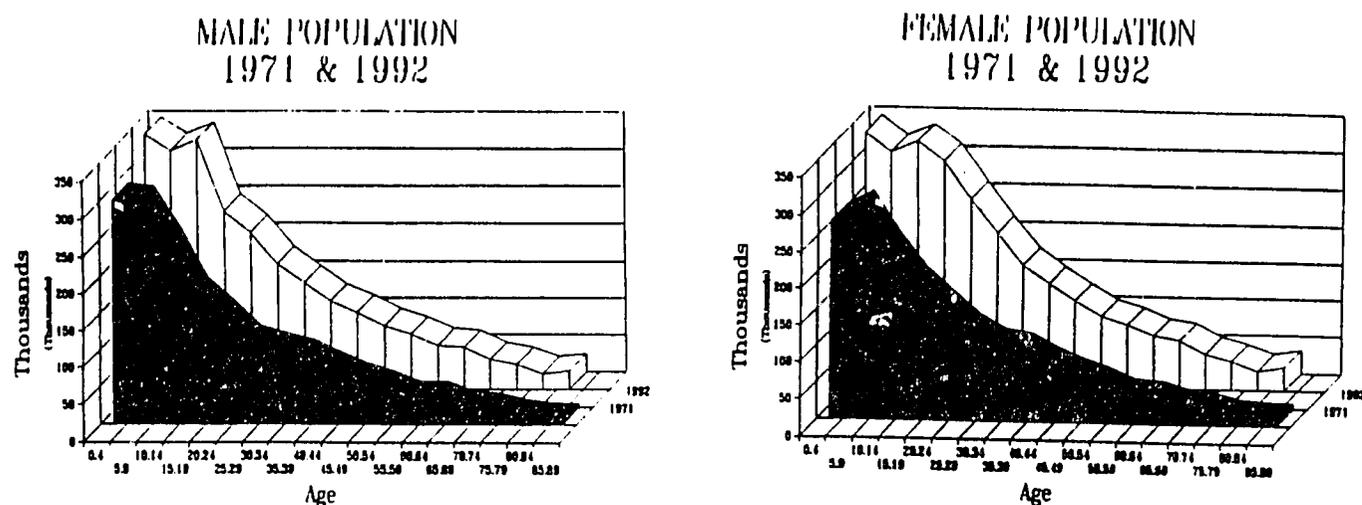
El Salvador is a small, densely-populated country (240 inhab./km²) with an annual growth rate of 2.2 percent. The urban population consists of those people who live in the municipal capitals and in any community with more than 2,000 inhabitants. The rest of the population is considered to be rural and is estimated at 50 percent of the total. Traditionally the country's population has been migratory, a phenomenon that increased as a result of the civil war; there are now approximately one million Salvadorans living in the United States alone. After the peace agreement was signed, some emigrants returned to El Salvador; according to the United Nations High Commission on Refugees (UNHCR), almost 30,000 emigrants of all ages have returned after having lived as refugees for the past decade. This situation clearly increases the demand on health services.

⁵ In his study of the evolution of mortality and natality in industrial societies, Osrarn (cited by Paul F. Dever in Textbook of International Health, 1990), described an evolutionary process that he called "epidemiological transition", in which changes were related to demographic and epidemiological factors. The first period has high mortality and natality rates and low population growth, infectious diseases predominate because of poverty and the lack of environmental control; in the second period, the mortality rate drops without any immediate impact on the natality rate, there is explosive population growth, and then the mortality rate drops further because of control of the environment and of infectious diseases; in the third and fourth periods, there is a sharp drop in the natality rate, stable and slow population growth, and health problems linked to human behavior predominate (violence, cancer, cardiovascular disease, etc.).

In conclusion, for the next five to ten years, El Salvador will have a predominately young population, and in spite of important advances in the control of transmissible diseases, problems will remain such as high infant mortality rates, high fertility rates, malnutrition, and other problems of the epidemiological pre-transition characteristic of the agrarian cultural influence.

1.1 Data on age and sex

The 1992 Population Census shows that in spite of a drop in the birth rate, the population pyramid still has a very wide base, with decreasing size of the groups as the age of the population gets increases. Relative to the 1971 data, the 1992 figures show that the relative size of the group of children and young adults is smaller and that the population over 15 years old is larger. The widening of the pyramid for the intermediate age groups is the result of the high fertility rates in the past which have led to an increase in the number of women in the fertile period.



Even though the proportion of children and young adults is decreasing, it is still relatively high. While in 1971 46.5 percent of the population was under 15 years of age, in 1992 this proportion had dropped to only 39.2 percent. Due to a decrease in the total fertility rate, it is expected that this figure will continue to fall over the next ten years.

Sexual activity begins early among teenagers and young adults. According to FESAL-93, the average age for the first sexual encounter is 18.5. This increases the risk for gynecological diseases, STDs (including HIV/AIDS), and cervical-uterine cancer and has been identified as a serious health problem. Boys often start to work in the informal urban sector or, in increasing numbers, become homeless, often at a very young age (10 to 12 years). According to UNICEF (reported by PAHO), there may be as many as 100,000 in El Salvador. Some of these boys join gangs called *maras*, which are responsible for theft, property damage, and other violent acts.

El Salvador has almost the same dependence rate⁶ as Germany: 44 percent and 43 percent respectively. While in Germany, however, more than half of the dependent population is older than 64, in El Salvador more than 90 percent of the dependent population is less than 15 years old.

1.2 Fertility rate

The 1992 Census shows a decrease in the total fertility rate (TFR) from 6.1 children per fertile-age woman in 1971 to 3.5 in 1992 (FESAL-93 estimated 3.85 for 1993). This decrease in fertility could be related to the older age at which women are having their children, a decrease in the number of women having children, and greater use of contraceptives, including sterilization.

Even though the fertility rate has dropped, it is still high. While it is below the rates in Guatemala, Honduras, and Nicaragua (all are above 5), it is above Costa Rica (3.2) and countries which have completed the demographic transition (around 2).

If the 1971-1992 tendency continues through the year 2000, then by that time the fertility rate will have decreased to 2.9 children per woman. This rate is similar to that of Argentina and Brazil (2.8), but higher than the rates in developed countries (1.8 children in 1991). The fertility rate varies by place of residence; as seen in Table 1, for the period 1978-1993 the rate was stable in Metropolitan San Salvador, dropped from 4.1 to 3.5 in "other urban areas"⁷, and decreased from 8.4 to 5.0 in the rural zone. As with other factors, the rural population is at a disadvantage relative to the rest of the population; it has the highest fertility rate.

Table 1

TOTAL FERTILITY RATE BY AREA OF RESIDENCE, 1978-1993 (Women 15 to 44 years of age)

Area of Residence	1978*	1985	1988	1993
All areas	6.3	4.5	4.6	3.9
Metropolitan San Salvador	2.6	3.3	3.0	2.7
Other urban areas	4.1	3.7	3.7	3.5
Rural	8.4	5.8	5.9	5.0

* women 15-49 years of age

Source: Charles Lininger, *Family Planning*, ANSAL-94.

⁶ The dependence rate is defined as the number of people younger than 15 or older than 64 per 100 working age people.

⁷ Several FESAL surveys divide El Salvador's population into three groups: the Metropolitan Area of San Salvador (MASS) which includes the city of San Salvador and the urban areas of all of the neighboring municipalities; "other urban areas" which includes all of the other urban areas in the country; and the rural areas which includes all territory outside of the urban areas.

1.3 Population growth

The 1992 Census showed a total population significantly below that projected by MIPLAN-CELADE-UNFDP. The population growth rate is currently being revised in order to produce new figures, taking into account the natural population growth (birth rate minus death rate) and emigration. By changing both variables, the projected size of the population should decrease.

The TFR has decreased more than expected, and thus the birth rate is lower than expected as well. Furthermore, emigration during the 1980s was higher than projected because of the civil war and the economic recession. With this in mind, new projections (non-official) were made to estimate the population growth expected for the next 30 years.

Table 2

RATES OF POPULATION INCREASE PER 1,000 INHABITANTS

Period	Births	Deaths	Net migration	Net Increase
1990-1995	33.47	7.05	-4.57	21.85
2000-2005	28.49	5.88	-2.60	20.21
2010-2025	23.21	5.32	-1.48	16.41

Source: Charles Lininger, *Family Planning*, ANSAL-1994.

As seen in Table 2, the net rate of population growth is expected to continue decreasing (from 2.18 percent in 1990-95 to 1.64 percent in 2010-2025). The decrease in natural growth is greater than the decrease in net growth because a decrease in emigration is expected.

Leaving emigration aside, which is more difficult to forecast, continued decreases are projected for the birth rate, the general death rate, and the natural growth rate. If the projections are accurate, the population distribution by age group will change much more during the next twenty years than during the past twenty years. For the period 2000-2005, there will be proportionally fewer children and young people and more people over 65. This is accentuated by the implications of significant emigration of young people at the age when they would form families and have children.

These trends in population growth will force the country over the next ten to fifteen years to treat health problems connected to the post-transition period as well as to the epidemiological pre-transition period.

2. Epidemiological Profile

The MOH regularly produces two epidemiological reports. The first is a weekly report which covers 100 diseases and provides data for immediate decisions; the second is the Integrated System of Statistical and

Epidemiological Information in Health (SIEES), which is produced monthly by computer and allows for review of the global situation and general trends of all of the diseases and other medical problems. This second report covers approximately 300 of the most frequently diagnosed health problems.

As in other developing countries, birth and death records are not complete. The mortality records are especially poor; many deaths go unrecorded in rural areas, particularly in the case of infant death (prematurity, newborn infections, etc.). Inasmuch as these deaths are never recorded, both the mortality rate and the data on the different causes of death are inaccurate.

The lack of universal access to health care leads to a situation in which one third of the deaths are not certified by a doctor, and another third are certified by a doctor who never treated the deceased individual. In the latter case, the doctor has to rely on the accounts given by family members and witnesses. Because of this situation, the official data on the causes of death are not reliable; for more accurate information special studies are necessary.

2.1 Mortality rate

It is estimated that deaths are underreported by up to 25 percent in some areas of the country. If the assumption is made that a similar trend existed over the last five years, then there has been a slight drop in the death rate from 5.3 per 1,000 inhabitants in 1990 to 5.2 per 1,000 in 1991; this can be attributed to the decrease in infant and child mortality. The data for 1992 are not available yet.

Table 3 shows the number of deaths and the death rates in the five health regions of the country between 1987 and 1990.

Table 3

NO. OF DEATHS AND DEATH RATES (PER THOUSAND) BY REGION AND YEAR

Region	Eastern	Central	Metro-politan	Para-central	Western
Year	No. (rate)	No. (rate)	No. (rate)	No. (rate)	No. (rate)
1987	7,183 (6.1)	3,960 (5.4)	7,106 (6.2)	3,634 (3.8)	5,658 (3.6)
1988	7,118 (5.9)	3,991 (5.3)	7,614 (5.9)	3,886 (4.0)	5,752 (3.6)
1989	7,287 (5.9)	3,809 (5.0)	7,756 (6.4)	3,835 (3.9)	5,079 (3.1)
1990	7,500 (5.9)	3,798 (4.8)	7,498 (6.1)	3,959 (3.9)	5,440 (3.3)

Source: MOH. *Public Health in Figures, 1991. Anuario 23.*

This data related to the death rate by region⁸ does not appear to be logical. It is not likely that the Eastern Region, which is relatively less developed and more affected by the civil war, had lower death rates than the Metropolitan Region⁹.

According to the data from the 1992 Census, the life expectancy at birth (LEB) was estimated to be 60.5 years for men and 69.1 years for women. This is an improvement over 1971, when the figures were 52.6 and 56.9 years respectively; it represents an increase in the life expectancy of approximately 10 years over the period. It is expected that this trend will continue and that in 2010 the LEB will reach 72.7 years (similar to other Latin American countries with better health indicators).

The difference between the LEB rates of males and females doubled from four to nine years during the period 1971-1992, and the relative risk of death at an early age increased for males. These two observations can be attributed to the high death rates of young men, which in turn can be attributed to the high incidence of violent deaths which is common in developing countries (traffic accidents, homicides, suicides, etc.). In El Salvador, the high male death rate also reflects the effects of the armed conflict, even though there were some females combatants and civilians who died in the war as well.

As explained earlier, the figures on the distribution by cause of death are not reliable. One example of this concerns infant diarrhea; according to data from FESAL-93, about 1,600 infant deaths from diarrhea were expected in 1993 (adults and children were to be added), and yet diarrhea does not appear as one of the ten major causes of death for 1993 according to official figures.

Table 4 shows the 1991 deaths divided into six groups by cause. Despite the limitations of the data (e.g., there are no figures for cancer deaths, one of the six groups), the table highlights the importance of external causes and transmittable diseases.

⁸ The regions in El Salvador are the territorial divisions which the MOH has determined for technical and administrative purposes. These are: the Western Region (Departments of Ahuachapán, Santa Ana, and Sonsonate); the Central Region (Departments of La Libertad and Chalatenango); the Metropolitan Region (Department of San Salvador); the Paracentral Region (Departments of Cuscatlán, Cabañas, San Vicente, and La Paz); and the Eastern Region (Departments of Usulután, San Miguel, Morazán, and La Unión).

⁹ The Eastern and Paracentral regions are formed by departaments with high migration rates during the 80s. The total population for these regions, therefore, is probably overestimated and may have lowered the mortality rates of these regions in relation to the other regions of the country.

Table 4
DEATHS BY CAUSE

Group	Causes of Death	No.	%
1	Transmissible*	2,316	8.6
2	Neoplasms	n/d	n/d
3	Circulatory System	2,469	9.1
4	Perinatal period	1,591	5.9
5	External causes**	4,530	16.7
Subtotal	Defined causes	10,906	40.3
Subtotal	Other causes	16,160	59.7
Total		27,066	100.0

* No deaths from diarrhea or dehydration were reported; this would increase group 1;

** External causes include: wounds, poisonings, homicides, suicides, accidents, and other violent acts.

Source: Adapted from *Memoria*, MOH (1992-93).

The integrity and quality of the data should be considered in the interpretation of the figures on causes of death. The underreporting already mentioned which occurs in rural areas and with regards to specific age groups, particularly children, seriously affects the validity of the data on distribution by cause. Furthermore, for the majority of Latin American countries the category "other causes", which includes poorly-defined signs, symptoms, and morbid conditions, is equivalent to "unknown cause".

2.2 Infant and child mortality

According to MIPLAN estimates, the infant mortality rate (deaths per 1,000 live births recorded) decreased from 118 for the period 1970-75 to 57 for the period 1985-90. FESAL-93 (1988-93 period) data show that the infant mortality was 41 per 1,000 live births and child mortality (children under 5) was 52 per 1,000 live births. The infant mortality rates in the ex-conflictive zones are higher and according to the Concertación de Salud are estimated at 73.1 per 1,000 live births.

The infant mortality rates for the 1950-1955, 1970-1975, and 1985-1990 periods, and projections for the year 2000, estimated by CELADE and the United Nations (1989) and cited in the "Health Conditions in the Americas", OPS/WHO (1990), are shown in Table 5.

Table 5

INFANT MORTALITY RATES PER ONE THOUSAND LIVE BIRTHS

Country or sub-region	1950-1955	1970-1975	1985-1990	2000
Latin America	127	82	55	41
El Salvador	151	99	60	36
Non-Latin Caribbean	83	40	21	15
North America	29	18	10	7

Source : PAHO. Health Conditions in the Americas. *Scientific Journal* 524. 1990.

The data provided on El Salvador is based on surveys and projections, since most of the data is not recorded systematically. For example, in Table 8 of the MOH's 1991 annual report (No. 23, *Public Health Figures*), the infant mortality rate is shown as 28.3 in 1987 and 24.9 in 1990. The MOH Statistics Unit agrees that for ANSAL's purposes, figures from surveys carried out according to international standards must be used. All estimates coincide in the favorable evolution that the infant mortality rate has had in El Salvador over the last twenty years. The child mortality data (0 to 4 years of age) from the 1992 Census confirm these estimates; the rate was estimated at 37.1 deaths/1,000 live births which represents a substantial improvement relative to the figure of 108 per 1,000 observed in 1971. This rate compares favorably with Nicaragua and Bolivia, although it is still higher than Costa Rica.

In spite of improvements in the last 20 years under unfavorable circumstances, infant and child mortality rates are still high, and can be improved, especially in the rural areas. This will have an impact on the national rate which is an average from the data collected in all areas of the country. An example in the variation in the rate by geographic zone concerns the estimated infant mortality for 1990; the national rate is 50 per thousand LBR, the metropolitan area shows 44 per thousand LBR, the marginal-urban area 60 per thousand LBR, and the ex-conflictive zones 73.1 per LBR.

Official data on the causes of death for infants and children are not reliable for the reasons already stated above, and therefore data from surveys such FESAL-93 should be used. This document states that the two major causes of neonatal deaths are prematurity/low birth weight (43 percent) and asphyxia/birth trauma (36 percent). With regards to the children who die in the post-natal period, the two major causes are diarrhea/dehydration (51 percent) and acute respiratory infections (44 percent). These two causes are also the most frequent for child deaths between the ages of 1 and 4 years (33 percent diarrhea/dehydration and 41 percent ARIs). Table 6 provides data from FESAL-93 on the five main causes of death by the age of the child at death.

Table 6

PERCENT DISTRIBUTION OF FIVE PRIMARY CAUSES OF DEATH
BY CHILD'S AGE AT DEATH

Cause	0-4 years %	0-11 months %	1-4 years %
Diarrhea/dehydration	20.0	19.0	24.1
Acute respiratory infections (ARIs)	18.6	16.3	27.8
LBW/prematurity	14.6	18.1	0.0
Congenital disorders	9.5	11.3	1.9
Delivery trauma/asphyxia	7.6	9.5	0.0
Other causes	29.7	25.8	46.2

Source: FESAL-93.

More than half of children's deaths in El Salvador are avoidable (those due to diarrhea/dehydration (ADD), to ARIs, and to low birth weight/prematurity). The main components of any strategy to reduce infant and child mortality should include: to clean up the polluted environment; to improve the nutrition of pregnant women, newborns and children; and to provide effective control during pregnancy and delivery as well as monitoring of child development (early diagnosis and treatment for ADDs and ARIs).

2.3 Maternal mortality

FESAL-93 was the first survey in El Salvador to include a section on maternal health. Maternal mortality at a national level was estimated by the method of sister survival. The maternal mortality rate for the period 1988-1993 was 158 deaths per 1,000 LBR, which is higher than that reported by the MOH (147 per 1,000 LBR), but lower than that estimated by PAHO (300 per 1,000 LBR).

The principal causes of maternal mortality reported in 1992 by the MOH were: hemorrhages (34.04 percent), toxemia (34 percent), puerperal and postpartum (including abortion and miscarriage) sepsis, and post-abortion complications (10.63 percent). In addition, phosphorus poisoning is one of the main causes of maternal mortality not related to pregnancy. The MOH hospital maternal mortality rate for 1993 was 193 per 1,000 BAR, while the same rate for the ISSS was 150. It should be kept in mind, however, that not all of the deaths which occurred in hospitals involved individuals who had been treated in the hospitals. The great majority of these deaths occurred in women who came to the hospital after having had serious complications elsewhere; most of them died within 24 hours of arriving at the hospital. Furthermore, two thirds of these women had never had any prenatal care.

The development of the Simplified Perinatal Clinical History form was one of the most important steps taken to improve prenatal health and to reduce maternal mortality. The form was designed to identify high risk

pregnancies and to establish criteria according to the risk detected. The criteria are based on the appropriate level of care required for a safe pregnancy.

2.4 Morbidity

The main causes in 1990 for medical visits and hospital stays for children under five were: ARIs, intestinal infections, and intestinal parasites. These three categories covered 80 percent of consultations and hospital discharges. Since 1991, the reporting of diarrheal diseases increased by 77 percent, and beginning in August 1991, cholera became a growing problem.

3. Health and the Environment

The limited access to potable water and the inadequate disposal of sewage and garbage produce a high level of biological pollution in water and food, thereby contributing to the spread of infectious diseases and parasitic infections throughout the population.

3.1 Water supply

Institutional framework

There are many organizations participating in water and sanitation activities in El Salvador; for this reason there should be coordination between the organizations and clear definitions of what the responsibilities are of each organization.

ANDA (National Water and Sewage Administration) was created in 1961 to manage the provision of potable water and sanitation services. Later the MOH became involved with water programs through the National Basic Rural Sanitation Plan (PLANSABAR). In 1987, the Salvadoran Institute for Municipal Development (ISDEM) was created in order to provide technical and financial assistance to municipalities throughout the country; of 262 municipalities in the country, 72 handle the administration and operation of potable water systems themselves. Finally, in its development of policies for the water sector, the government¹⁰ created the National Committee for Potable Water and Sanitation Institutions (CONIAPOS) which is made up of the MOH, MIPLAN, and ANDA.

The multiplicity of actors in the water sector is the cause for confusion in the functions assigned to each entity.

¹⁰ The GOES has also created other institutions in recent years which implement programs related to the supply and use of water. These institutions are:

. SEMA	Executive Secretariat of the Environment
. CONAMA	National Council of the Environment
. OEDA	Special Water Office
. FIS	Social Investment Fund
. SRN	National Reconstruction Secretariat
. CEPRHI	Executive Committee for the Protection of Water Resources
. COMURES	Corporation of the Municipalities of El Salvador
. MASICA	Environment and Health for Central America

Regulatory framework

The main problems in this sector are related to the lack of political will to implement policies and regulations. Though it has gaps, legislation exists to deal with water and sanitation issues; a water code is currently being drafted which will standardize the regulations, identify responsibilities, and establish appropriate sanctions. Notable weaknesses in this area are:

- lack of a coordinating authority for all water use
- lack of categories for water use
- need for the Legislative Assembly to approve the rates
- lack of serious penalties for those who break the law
- need for rate policies for water service

Coverage and access to water services

In El Salvador, 45 percent of the population lacks public water services. This figure does not give an accurate picture of the national reality, however, since there is a marked difference between the urban and rural areas; in the urban and marginal urban areas, only 14 percent of the population does not have water service, while this percentage rises to 84 percent in rural areas. For the purposes of developing policies and plans, the lack of water service is almost exclusively a problem for the rural population. Table 7 shows water service coverage for 1992 by place of residence.

It is important to note that even though 95.5 percent of the people with access to water have running water in their homes, this is not necessarily any indication of the quality of the water service received.

Table 7

**WATER SERVICE BY PLACE OF RESIDENCE
1992**

Geographic Area	Public System		% without public access
	% homes with direct connections	% with public access	
Urban and periurban	82.4	4.0	13.6*
Rural	15.4	0.7	83.9**
All areas	52.4	2.5	45.1

* Includes the population with well water or who buy the water from suppliers. There is no information on the safety or reliability of this water.

** The population receives limited water from individual and collective wells, from springs, and from water suppliers. Source: Project PRO-AGUA/MASICA/PAHO/WHO. *National Plan for Monitoring the Quality of Water for Human Consumption*, July 1993.

Quality of service

Interruptions in water service are common throughout the country. According to data from ANDA, in the metropolitan area of San Salvador the average number of hours of water service per day varies from 16 to 18, with some critical sectors such as Soyapango, Ilopango, and San Marcos only receiving water for 8 hours per day. There are many reasons for this problem, including: insufficient production capacity; insufficient sources of water; operational and maintenance problems; inadequate energy supply; and the lack of technical, operational, and management capacity to balance supply and demand.

Water pollution

To date the sector has not been able to bring together adequate institutional, technical, and financial resources for water treatment. Existing water treatment plants, besides being small and few in number, still lack operational capacity. Practically no waste water is treated before discharge into the environment. According to the ECO-92 Environmental Agenda¹¹ prepared by SEMA, water is the most polluted natural resource in El Salvador. Residual water from sewage systems, from coffee, sugar, maguey, and alcohol plants, as well as from other industrial establishments, does not receive any treatment. It is believed that 95 percent of surface water in the country is polluted, limiting its potential for human consumption¹².

In 1991 the Water and Sanitation Health Project (WASH) carried out the study "Pollution in Surface and Subsoil Waters in Some Basins in Southwest El Salvador", which revealed important data on water pollution:

- a) fecal pollution of surface waters and wells in the area studied was high: 13 out of 30 water sources (45 percent) have more than 9,000 coliform per 100 ml;
- b) of those people interviewed who had well water, most of them considered that their water was high quality;
- c) high concentrations of the pesticide Metamidofos (tamarón) were found in some of the samples;
- d) the rivers analyzed were not considered fit for human consumption; in fact, the levels of dissolved oxygen are below 7 mg/l whereas the biochemical demand surpasses 6 mg/l; and
- e) boron concentrations above safe limits were found in the ground and in water samples.

3.2 Sanitation service

Although 69 percent of the population has access to some form of waste disposal, including sewage systems and latrines, only 33 percent of the population is connected to a sewage system, which in terms of health conditions is much better than latrines.

¹¹ National Environmental Council, *Environment Agenda and Action Plan*, Volume I. National Commission, ECO92. January 1992.

¹² Ing. José Mario Soto, UNDP-PAHO/WHO-ANDA/OEDA. *Development of Hydraulic Resources in El Salvador*. February, 1989.

Table 8

**COVERAGE OF WASTE DISPOSAL SERVICES
BY PLACE OF RESIDENCE, 1992**

Access to waste disposal	% connected to sewage system	% with latrines	% w/o any disposal system
Urban and Peri-urban	59.4	24.1	16.5
Rural	n/a	51.9	48.1
All areas	32.8	36.5	30.7

Source: Project PRO-AGUA/MASICA/PAHO/WHO. *National Plan of Quality Control of Water for Human Consumption*, July 1993.

PLANSABAR, *Diagnosis of the Potable Water and Waste Disposal Sub-Sector, in Rural Areas*.

Table 8 presents the population's access to different systems of waste disposal by place of residence. Of the urban and peri-urban population, 59.4 percent is connected to a public sewage system, while 24.1 percent have latrines. In the rural area, latrines are the only disposal method available and are used by 51.9 percent of the population; the remaining 48.1 percent have no waste disposal facilities.

The rural population has at a disadvantage compared to the urban population, and other population centers are at a disadvantage relative to the Metropolitan Area of San Salvador (MASS). Looking at the percentage of municipalities which have sewage systems, this pattern is clear: in the Western Region, 51 percent of the municipalities have sewage systems; in the Eastern Region, 18 percent; in the Paracentral Region, 32 percent; in the Central Region, 18 percent; and in the Department of San Salvador, 79 percent.

Many health problems are closely tied to basic sanitary conditions. Examples of this include the prevalence of diarrhea, both in children and adults, and the recent outbreak of cholera.

3.3 Collection and disposal of solid waste

The Health Code assigns the responsibility for regulating and approving the disposal of waste to the MOH, but specific regulations have not been issued establishing exactly how this should be done. The Municipal Code, in turn, establishes that the municipalities are responsible for collecting and disposing of garbage as well as street cleaning. In spite of these codes, however, there is no national policy on the handling and disposal of solid waste, and the responsibility is scattered among several institutions.

According to the Salvadoran Institute for Municipal Development (ISDEM), 50 percent of the solid waste generated by the cities is not collected and thus creates a health hazard. Only 31 percent of municipal centers (80 of 262) have garbage collection systems, and the marginal urban areas are those with the most severe deficiency. Abandoned garbage harbors insects and rodents, increases the risk of fire, and blocks the gutters, thereby increasing the possibility of infection and endangering the health of adults and children who live and play in the area. Finally, solid wastes are not sorted; domestic and other wastes such as toxic and hospital wastes are all sent to the same dump.

Hospital waste

The 1991 study *Quick Evaluation of Hospital Solid Waste in San Salvador* (PAHO/WHO, 1991) indicated that none of the hospitals evaluated, except for two, sorted wastes correctly or systematically (including radioactive wastes). All waste was collected, stored, and transported together to the dump. The lack of adequate infrastructure to solve this problem is alarming: 73.1 percent of public and 63.6 percent of private hospital beds are located in establishments which do not have an incinerator.

A 1991 MOH study of its own hospital network detected problems in the infrastructure and operational collection and disposal of hospital waste in most hospitals. In fact, the only incinerators which were operating were located at the following hospitals: Especialidades, Rosales, Ahuachapán, and San Miguel. The other four hospitals (Santa Ana, Chalatenango, San Vicente, and Usulután) had incinerators which were not being used because of a lack of fuel.

3.4 Air pollution

Atmospheric pollution was measured in El Salvador from 1970 to 1980 (the year in which the program was stopped) by the Panamerican Air Sampling Network (REDPANAIRE). The purpose of the program was to evaluate the levels of suspended particles, sulphur anhydride, and sedimentary particles, as well as the index of atmospheric corrosiveness in Latin American cities. The MOH Environmental Waste Disposal Division was the local entity responsible for its implementation in El Salvador.

Concentrations of sulphur anhydride, a corrosive gas produced by sulfur fuels, were below the acceptable limit but on the rise. It can be expected that with the change in the 80s of the quality of the petroleum refined (it now has more sulfur) and the increase in the number of vehicles, the concentrations have risen.

Sedimentary particles (pollen, metal and mineral) increase the risk for respiratory infections and allergies. Levels are affected by industry, agriculture, soil removal, and diesel vehicle emissions; this form of pollution is produced mainly in the MASS and in the larger cities (such as Santa Ana, San Miguel and Sonsonate).

The importance of air pollution from wood fires used for cooking is not known. Although not well documented, it appears to be a health risk and could partially explain the high number of ARIs and corresponding high child mortality rate in rural zones.

4. High Priority Health Problems

The analysis of the demographic and health situation of the Salvadoran population permits the identification of the characteristics which influence health policies.

First, women of childbearing age and children constitute the highest priority population group. Second, the major health problems do not require high level care, though if not treated promptly, the problems can quickly become more serious. Timely health care requires: 1) focus on preventive, educational, and basic curative services; 2) easy access to basic health care services, particularly in the rural and marginal-urban areas; 3) an integrated health system which provides for efficient referral of high risk cases; and 4) an increase in the availability of potable water as well as an increase in environmental protection.

The ANSAL team believed that it was important to identify major health problems which had solutions which would substantially improve the health of the population. Based on magnitude of the health problem, the population group(s) affected, and the possibility of resolving the problem, ANSAL selected ten areas which

should be targeted by the health sector. The recommendation is to focus the available resources first on programs dealing with these areas. Effective implementation of these programs will: bring about an improvement in the overall health situation, particularly for the poor rural population; reduce the wide disparity in the health conditions in different areas of the country; and allow for control of the health problems which are typical of the pre-transition period.

The ten areas represent varying levels of specificity and range from specific medical problems to groups of health activities.

1. Integrated prenatal, childbirth, and postpartum care
2. Multi-parity and insufficient spacing between pregnancies, especially for younger women
3. Infant and child survival, with emphasis on the control of diarrheal disease, ARIs, and immuno-preventable diseases
4. Maternal and child nutrition; breast-feeding
5. Sexually-transmitted diseases, AIDS, and cervical-uterine cancer
6. Access to potable water in rural and urban marginal areas as well as treatment of liquid wastes
7. Insufficient capacity for the collection and disposal of solid wastes
8. Prevention and control of major endemic diseases (malaria, tuberculosis, etc.)
9. Physically and mentally handicapped war victims
10. Accidents and violence

III. MOST IMPORTANT PUBLIC HEALTH PROBLEMS

Chapter II presented the demographic and health situation in El Salvador. The objective of Chapter III is to look more closely at the major health problems facing the Salvadoran population. For each health problem, the following will be identified: the groups affected (urban, marginal urban, or rural population and socio-economic level); the most important risk factors; and the performance of programs directed towards these problems.

Table 9

TEN MAIN OUTPATIENT CARE DIAGNOSES

	Diagnosis	Total consultations*	%**	Rate per*** 100,000 inhab.
1	Acute respiratory infections	208,912	8.5	3,968.2
2	Undiagnosed intestinal infections	124,592	5.1	2,366.6
3	Normal pregnancy	121,768	4.9	46,258.6/A
4	Other urinary diseases	103,536	4.2	1,966.6
5	Acute rhinopharyngitis (common cold)	103,320	4.2	1,962.5
6	Intestinal parasites (non-specific)	81,380	3.3	1,545.8
7	Well-baby and child care	74,556	3.0	n/d
8	Flu	58,356	2.4	1,108.4
9	Non-specific bronchitis: acute or chronic	53,706	2.2	1,020.1
10	Examination: malignant tumors	48,946	2.0	929.7
	Sub-total	979,072	39.7	
	All other first consultations	1,484,714	60.3	
	Total	2,463,786	100.0	

* Reference to first consultations.

** Percentage of each diagnosis in relation to the total number of consultations.

*** Rate based on total population calculated in the Health Statistics Unit.

/A Based on total population of the corresponding group.

n/d No data available

Source: Daily Record of Outpatient Consultations in MOH Establishments, *Public Health in Figures 1991*.

According to data from PAHO/El Salvador, outpatient care at MOH establishments during the period 1988-1991 was concentrated in the following areas: infectious diseases (mainly respiratory and intestinal diseases); prenatal care; and well-baby and child care. For the same period, hospital statistics show that the most frequent reasons for hospitalization were childbirth and infectious diseases such as bronchopneumonia, colitis, enteritis, urinary tract infections, and appendicitis (Tables 9 and 10).

Table 10

TEN MAIN DIAGNOSES FOR HOSPITAL DISCHARGES

Order	Diagnosis	Total consultations	%*	Rate per 100,000 inhab.**
1	Normal delivery	40,691	19.1	15,458.2/A
2	Bronchopneumonia (non-specific)	7,519	3.5	142.8
3	Non-specific abortion, without complications	6,261	2.9	2,378.5/A
4	Colitis, enteritis, gastroenterological infections	4,194	2.0	79.7
5	Risk of premature delivery	3,485	1.6	1,323.9/A
6	Delivery obstruction	3,450	1.6	1,310.6/A
7	Intracranial trauma	3,117	1.5	59.2
8	Urinary infection	2,765	1.3	52.5
9	Inguinal hernia without obstruction or gangrene	2,447	1.1	46.5
10	Acute appendicitis without peritonitis	2,120	1.0	40.3
	Sub-total	76,049	35.6	
	All other first consultations	137,461	64.4	
	Total	213,510	100.0	

* Percentage in relation to the total number of visits.

** Rate based on total population calculated by the MOH Statistics Unit.

/A Based on expected total number of pregnant women.

n/d No data available

Source: Daily Record of Hospital Discharges, *Public Health in Figures*, MOH 1991.

1. Infant and Childhood Diseases

Mortality

Mortality studies of infants and children are divided as follows:

- 0 to 28 days (neonatal)
- 0 to 11 months (infant)
- 29 days to 11 months (post-neonatal)
- 12 to 59 months (child)

According to the results of the *National Census on Family Health in El Salvador (FESAL-93)*, the main causes of child mortality from 0 to 4 years are: diarrhea/dehydration; ARIs; low birth weight/prematurity; congenital anomalies; and newborn trauma/asphyxia. Taken together, these five health problems are responsible for 70 percent of the deaths of children under five years old. The FESAL data are more reliable than the mortality data reported by the General Office of Statistics and Census.

According to FESAL-93, the rate of infant mortality decreased between 1988 and 1993 from 54 to 51 infant deaths per 1,000 live births. This decrease is due to the smaller number of post-neonatal deaths, since the neonatal mortality rate did not drop during that period. Just over 50 percent of infant deaths occurred during the first 28 days of life.

Low birth weight and prematurity are responsible for 34 percent of the deaths in the neonatal period. Pregnant women are considered a group at risk, and thus they should have easy access to health services, nutrition education programs, and supplementary food programs. The second major cause of death after low birth weight is birth trauma and asphyxia, which cause 18 percent of neonatal deaths. Although the records show a higher proportion of children dying from birth trauma in urban areas relative to rural areas, these figures are most likely just the result of the poor birth and death records in rural areas. Strategies for reducing the infant mortality rate should include training of midwives, increased access to health services, and referral of high risk cases to proper medical facilities.

Congenital anomalies make up 15 percent of neonatal deaths; these could be related to genetic factors, nutritional deficiencies, improper use of medicines, alcohol consumption, or exposure to insecticides.

In the post-neonatal period, diarrhea with dehydration and ARIs are responsible for 68 percent of the deaths. This underscores the need to:

- a) promote and facilitate access to health services for mothers with infants and young children;
- b) introduce substantial improvements in well-baby care as a preventive strategy, and in particular to focus on improving mothers' knowledge and practices of breastfeeding and oral rehydration.

Over a period of thirty years (1960-1989) infant and child mortality rates (grouped by cause and sex) show the following:

- a) under 1 year old: the infectious disease rate was stable or had slight annual rises until 1972, when the rate started to decrease;
- b) from 1 to 4 years: the rate of infectious disease decreased throughout the period;
- c) from 5 to 14 years; the rate of infectious disease decreased throughout the period (similar to the 1 to 4 year old group), with a marked decrease in infectious diseases beginning in 1973.

1.1 Acute diarrheal diseases

In 1990 diarrhea was the main cause of infant mortality (17 percent of all infant deaths) and child mortality (19 percent of all child deaths). Approximately 69 percent of all deaths from diarrhea occurred in children under the age of five. Respiratory infections and diarrheal diseases are the main health problems for children.

In 1992 a study was carried out on the prevalence of diarrheal disease in 80 sites. Three regions (Central, Paracentral and Eastern) had rates of diarrheal disease between 40 and 42 percent, while the other two regions (Metropolitan and Western) had approximately 30 percent. Although the latter regions are more urban and developed, acute diarrheal disease (ADD) even in those regions is still a significant problem.

At ISSS facilities, diarrhea is the second most common cause of inorbidity even though most of the beneficiaries live in urban zones. According to the National Program for Maternal and Infant Health, in 1993 there were on average four diarrheal episodes per child, which marks an improvement relative to previous years.

The MOH Maternal and Child Care Department evaluates ADD treatment based on the results from the 80 study sites. The indicators used are: Oral Rehydration Therapy (ORT), which is the application of any of three treatment plans (plans A, B, and C); and Oral Rehydration Salts (ORS), which is the use of rehydration salts in a specific form (plans B and C).

- ORT usage rate: the cases of diarrhea in children under five years old are treated with salts or a recommended home-made substitute (plans A, B and C) - 45 percent;
- ORS access rates: the proportion of the population with reasonable access to a trained provider (promoter, nurse or doctor) with a supply of rehydration salts - 84 percent;
- ORS usage rates: the proportion of all the diarrhea cases in children under five that are treated with salts - 45 percent according to the results of the MOH study.

The findings of FESAL-93 and those of the MOH (80 study centers) are very similar. According to FESAL-93, 93 percent of the children with diarrhea received treatment. One third received treatment from a doctor and the remaining two thirds received treatment from relatives and/or a pharmacist. Commercial medicines were used in 86 percent of the cases. Rehydration salts were used in 51 percent of the cases and homemade salts in 23 percent. These figures demonstrate inappropriate treatment of diarrhea; treatment occurs more frequently with antibiotics and other drugs than with oral rehydration salts which are more economical and preferable from a medical point of view.

MOH policies, plans and programs for diarrheal disease must be implemented in order to deal with this major health problem.

1.2 Acute respiratory infections

According to FESAL-93, ARIs are the second cause of death in infants and children. In children from 1 to 4 years, ARIs are the primary cause of death, both in urban and rural areas. These figures coincide with those presented in *Public Health in Figures* (1991, MOH Annual Report 23).

The death rates indicate a high percentage of respiratory infections such as broncho-pneumonia, rhinopharyngitis, influenza, and pharyngitis. According to FESAL-93, the general prevalence of ARIs is 69 percent, with a slightly higher figure in rural areas. Treatment was received in 94 percent of the cases, and medical care in 44 percent. Antibiotics were used in 62 percent of the cases in the MASS and in 48 percent of rural cases.

The proportion of ARIs treated with antibiotics is higher than ARIs treated by a doctor, which is evidence of unprescribed antibiotic use and inadequate supervision.

ARIs frequently begin without complications, but if the condition is not treated it can quickly become more serious. In many underdeveloped countries, mortality caused by ARIs has been significantly reduced through training community health workers in the early detection and treatment of ARIs. The MOH trains its promoters in the diagnosis of ARIs and treatment of the symptoms for uncomplicated cases; the serious cases are referred to the health centers. Unfortunately, 40 of the patients referred by the promoters do not follow through with the referral. Consequently, many children who have been correctly diagnosed as having serious ARIs never receive proper treatment.

The PROSAMI NGOs train their promoters to give basic antibiotics for the treatment of ARIs, referring the more serious cases to a higher level of health care. MOH promoters do not receive such training and therefore are not equipped to handle antibiotics of any sort. This is because:

- a) MOH regulations establish that in order to avoid a curative role, health promoters and assistant personnel cannot handle complicated cases of ARIs; and
- b) the MOH has minimum supervision of these health workers and fears that if the promoters could dispense antibiotics, there would be some misuse.

The evaluation of the PROSAMI NGO promoters' handling of respiratory infections was positive: first, the promoters had been able to detect serious pneumonia at an early stage and had referred the cases accordingly; and second, by providing antibiotics at an early stage the promoters had a positive effect on the evolution of numerous cases of ARIs.

These findings must be taken into consideration in planning the infant survival program. Training health promoters to treat diarrheal diseases and respiratory infections would provide wider coverage of basic health services, resolve the medical problems within the local community, and contribute to a reduction in the infant mortality rate.

1.3 Immuno-preventable diseases

The evolution of immuno-preventable diseases has been favorable over the last five years (1988-1993); vaccination rates have increased and the prevalence of these diseases has decreased. El Salvador is now free of polio, the last case having been detected in 1988. Diphtheria was detected for the last time in 1987.

The rates (per 10,000 habitants) of immuno-preventable diseases have decreased between 1988 and 1992 as follows: whooping cough, 1.2 to 0.5; measles, 321.8 to 9.4; and neonatal tetanus, 0.6 to 0.5. The prevalence of whooping cough and measles has decreased significantly, unlike neonatal tetanus. The incidence of measles continued to drop during 1993; through the end of November 1993, only 37 cases had been registered for the year, which is the equivalent of a rate of 0.7 per 100,000.

According to FESAL-93, vaccination coverage rose from between 60 and 70 percent in 1988 to more than 80 percent in 1993. The proportion of children under five with full immunization coverage in 1993 was: BCG-87 percent; polio-82 percent; DPT-82 percent; and measles-86 percent. Coverage was high throughout the country,

in both urban and rural areas; even though the rural vaccination rate was slightly below that of urban areas, it was still over 80 percent for all of the vaccines.

According to the existing government policy, the strategy is to continue to provide vaccines; this is complemented by the national vaccine campaigns which last for two weeks and which are held simultaneously throughout the country. The Epidemiology Unit at the central level of the MOH regulates and monitors vaccination activities, while the regional health offices implement them. NGOs have been active participants in the immunization campaigns, particularly in the ex-conflictive zones, and their efforts have had positive results.

1.4 Malnutrition

Insufficient and inadequate nutrition of pregnant women, newborns, and children constitutes one of the most serious health problems of these groups. As in other Central American countries, infant and maternal malnutrition is a widespread and chronic problem, with serious repercussions for the general health of the population. There are two kinds of malnutrition: first, a general lack of nourishment, causing growth retardation (weight and height); and second, a shortage or complete lack of certain nutrients (iodine, vitamin A, iron, etc.), causing specific health problems.

Low birth weight

Birth weight is a good indicator of the nutritional state of the mother. At the same time it assists in predicting the future health and nutrition of the child. A child who weighs less than 2,500 grams at birth has greater possibilities of getting sick and dying in the first year of life than other children. Figures on birth weights in El Salvador are unfortunately not available; this is because almost 50 percent of the deliveries occur at home, making accurate weight records very difficult to obtain. The figures in the Infant Survival Action Plan (1991), though only partial, reflect an alarming situation: low birth weight was recorded in 16 percent of the births in the Maternity Hospital and in 21 percent of the births at home (as recorded by trained midwives).

Infant and child malnutrition

The FESAL-88 and FESAL-93 polls gathered information on the nutritional state of children under five years old. Even though the situation has improved, important deficiencies remain and are reflected in all of the nutritional health indicators: growth retardation (weight/age), chronic malnutrition (height/age), and severe malnutrition (weight/height). The rural population is at a disadvantage relative to the urban population, particularly compared to metropolitan San Salvador (MASS). As seen in Table 11, malnutrition rates in rural areas are twice as high as in the MASS.

Table 11

MALNUTRITION OF CHILDREN UNDER FIVE
(percentage by age groups and place of residence)
1988 and 1993

Parameters	Weight/age		Height/age	
	FESAL 88	FESAL 93	FESAL 88	FESAL 93
Area of residence				
MASS	10.0	7.2	24.2	13.6
Other urban	14.7	9.1	25.3	20.1
Rural	17.5	14.0	34.5	28.1
Age groups				
0-11 months	8.6	4.8	11.9	8.3
12-23 months	23.0	14.5	33.0	22.5
24-35 months	18.8	14.4	42.3	22.5
36-47 months	13.9	10.7	30.9	27.0
48-56 months	12.9	10.5	34.1	32.4
National Average	15.2	11.2	30.0	22.8

Source: FESAL-88 and FESAL-93.

Evolution of malnutrition rates over the past five years has been very positive, but malnutrition is still a major health problem (Table 11). All of the 1993 indicators are better than those for 1988, but chronic malnutrition continues to affect more than 20 percent of Salvadoran children, a figure which rises to 28 percent for children living in rural areas. The drop in malnutrition rates between 1988 and 1993 for children under five years old is due to an improved economy and better social policies. Preventive health care and nutrition programs for the maternal and infant risk group were emphasized.

Malnutrition of school children

The *First Census on Height of Primary School Children* (6-9 years old), carried out in 1988 by the Ministries of Education and Health, showed that 30 percent of the children suffered chronic malnutrition. This matches FESAL-88 results, which also showed a 30 percent deficiency. The prevalence of height retardation increased in direct relation to age. The census was able to identify the geographic areas with the highest malnutrition rates. Significant height retardation was discovered in 67 municipalities (ranging from 37.1 percent to 75

percent of school children). Based on the results of the study, social programs were redirected to focus on the reduction of poverty in these specific municipalities¹³.

MICRONUTRIENTS

Iodine deficiency

Iodine deficiency affects mental capacity, motor coordination, and neuro-muscular development and should be considered a high priority for health programs. El Salvador has made marked progress in reducing iodine deficiency. For the period from 1965 (*INCAP Survey 1965-67*) to 1990 (*National Survey on Endemic Goiter Prevalence in El Salvador*), the prevalence of iodine deficiency dropped from 48 percent to 24 percent, while the prevalence of goiter was reduced from 54 percent to close to 25 percent. In spite of the improvement, however, the rates are still high. It is recommended that low-cost and effective methods such as the iodization of locally-produced salt be used to resolve this problem.

Vitamin A deficiency

An important correlation exists between the level of vitamin A and the high mortality rate, particularly deaths due to diarrheal disease and measles. Vitamin A deficiency in children under the age of five has increased over the past thirty years and is higher in rural areas than in urban areas. In the 1960s, the vitamin A deficiency rate was 30 percent; in the 1970s, 33 percent; and in 1988, 36 percent. The problem is due to a diet lacking in vitamin A. UNICEF is currently supporting a vitamin A fortification program which adds vitamin A to locally-produced sugar.

Iron deficiency

Iron deficiency and anemia cause many health problems: a decrease in physical productivity and learning capacity in children; chronic fatigue; an increased risk of hemorrhage in pregnant women; and increased risk of low birth weight. FESAL-88 showed that 23 percent of children under the age of five had anemia (measured by hemoglobin levels), with a higher rate among those between ages of 12 and 23 months.

Nutrition and food programs

Nutrition programs can be divided into five groups based on the primary emphasis of the program: (a) supplementary food; (b) micronutrients; (c) nutrition education; (d) nutritional control; and (e) production, processing, and consumption of food.

The MOH has three supplementary food programs:

- a) **Food package:** This involves the donation of a family food package. The program started in the 1980s in rural areas and targets pregnant women, infants, and children at risk or with some degree of malnutrition; the program has an educational component and also monitors child growth and development.

¹³ The number of municipalities with programs to eradicate poverty has increased to 133, based on epidemiologic and risk criteria of the MOH. Among the activities to fight poverty are: basic infrastructure projects, job creation programs, micro-enterprise credit, and most importantly, primary health care and supplementary food and programs.

- b) **High nutrition mixture (Nutricereal):** This program is a component of the Strengthening of Social Sectors Project (PRSS)¹⁴ and provides a food supplement for children between the ages of 6 and 36 months to prevent malnutrition when the children are weaned. It has an educational component which is carried out with the participation of volunteers who use manuals and other educational materials developed by the MOH Nutrition Department with the technical support of the Nutrition Institute of Central America and Panama (INCAP).
- c) **Rural nutrition centers:** There are 29 centers in the country, which consist of community centers in which children under the age of five are taken care of by local volunteers. The children stay in the centers for four to six hours per day and have both breakfast and lunch there, which covers approximately 60 percent of their daily caloric requirements. Educational, recreational, and health care activities are carried out as well as the monitoring of nutritional status.

The Ministry of Education has two food programs:

- a) **School lunch:** This involves the distribution of food to schools which then serve school lunches. The purpose of the program is to improve school attendance, academic performance, and the general health conditions of the students¹⁵.

The implementation of the program has been somewhat uneven and the results to date have been inconsistent:

- The number of school children covered by the program exceeded expectations in 1991 and 1992.
 - The percentage of the food actually distributed to the children was low: 44 percent for 1990 and 42 percent for 1991.
 - Nutrition education, measured by education discussion groups for parents and school gardens, was not very successful, with an average of 10 parents per discussion group in 1990 and only 6 in 1991. In 1990 37 percent of the planned school gardens were planted and in 1991 only 24.4 percent.
 - The health objectives were not achieved for the children who participated in the program and received lunches.
- b) **School snacks:** This program is also a part of the PRSS and covers 30,940 children. It provides a daily snack (consisting of a cereal-fortified drink and two cookies) to children in schools in 78 municipalities where the EDUCO (Education with Community Participation Project) program is functioning. Coverage will be expanded to 39,970 children in 1994, to 60,165 in 1995, and to 75,950 in 1996.

¹⁴ The purpose of the PRSS is to support the Ministries of Education and Health in the improvement of their services. The project is being implemented in the municipalities with the highest poverty rates, particularly in rural areas. The project is still in its pilot phase and covers approximately 6,500 children; the goal is to reach 50,000 children in the first year, 90,000 in the second year, and up to 110,000 children in the third year of the project.

¹⁵ The objectives of the program are: (a) to increase the attendance rate of primary school children and to improve their academic performance, particularly in rural areas; (b) to contribute to the reduction of the school desertion rate; (c) to increase community support of school activities; (d) to promote educational activities related to food and nutrition; and (e) to promote the use of health services.

2. Health Problems of Women of Childbearing Age

In El Salvador there are approximately 1.2 million women of childbearing age. Even though the fertility rate has decreased, it is still high. The health problems of the women in this group are important in relation to their large numbers relative to the total population and to the intensity of their reproductive activity.

ANSAL did not deal with female malnutrition as a separate topic because of the lack of data. The only data available were from 1978 and showed that iron deficiency and the resulting anemia were significant problems for women. It is likely that adult female malnutrition would have the same characteristics as malnutrition in children (presented earlier in this chapter).

2.1 High fertility and spacing of pregnancies

Table 12 presents fertility rates for 1993 by age group and area of residence. It shows that in all geographic areas, women between the ages of 20 and 25 have the highest fertility rates. On a national level, there are 221 deliveries for every 1,000 women between 20 and 24. The fertility rate in the MASS is lower than in the rural area for all age groups.

Table 12

FERTILITY RATES (by age group and area of residence), 1993

Age	Metropolitan	Urban	Rural	TOTAL
15-19	101	102	158	124
20-24	177	218	263	221
25-29	123	164	210	168
30-35	87	112	166	126
35-39	35	78	126	86
40-44	13	28	64	39
45-49	0	2	5	3

Source: FESAL-93. Preliminary Report (women ages 15-49).

Family planning in El Salvador has increased; in 1993, 53 percent of women aged 15 to 49 used some form of birth control or were sterilized. The usage rate for efficient methods was 22 percent in 1975, 46 percent in 1985, and 48 percent in 1993.

In spite of the increase in the use of contraceptives, the fertility rate for El Salvador is still high. This constitutes a risk for both the mother and the child when one considers the fact that many women do not live in stable unions. The high fertility rates of young women reflect that many women begin their sexual activities at an early age and that they are not using any method of birth control to prevent or adequately space their

pregnancies. This is an important public health problem because of the negative impact on the health of the mother and the child.

In El Salvador sterilization is the main cause of the drop in fertility rates. Many women are sterilized at an early age, when they already have had several children. Most of the increase in contraceptive prevalence in the country was due to the increase in female sterilization from 10 percent in 1975 to 32 percent in 1993. The use of elective pregnancy spacing methods for pregnancies has not changed over the past twenty years. In fact, in 1975, 9 percent of the women used temporary methods (oral and IUD), and this proportion only increased to 15 percent in 1993. The figures suggest that effective reversible methods of planning are not easily available or are not accepted by women or the medical community. The rural population shows less favorable indicators in the use of contraceptive methods.

Table 13 presents data on contraceptive use by place of residence; the rural population has lower usage rates than the urban population and the MASS.

Table 13

CONTRACEPTIVE USE BY AREA OF RESIDENCE
(Women ages 15-44 with a sexual partner)

Contraceptive method	MASS	Urban area	Rural area	Total
Utilization rate	66.4	56.7	42.8	53.3
Female sterilization	35.7	32.5	28.1	31.5
Other effective methods *	29.5	15.7	10.7	14.8
Condoms	3.7	2.6	0.8	2.1
Less effective methods**	6.6	6.0	3.3	5.0
No contraceptives	33.6	43.3	57.2	46.7
TOTAL	100.0	100.0	100.0	100.0

* Oral, injectable, IUD, Norplant, vasectomy

** Rhythm/Billings, withdrawal, foam, etc.

Note: The total varies due to approximations.

Source: Charles Lininger, *Family Planning*, ANSAL, 1994.

Less than 40 percent of the women in rural areas have effective contraceptive protection. Of these, two thirds have been sterilized, most likely after having had the desired number of children. Only 11 percent use effective temporary methods. In rural areas the fertility rate is higher; maternal and child health problems occur more frequently and are more serious than in urban areas. This high risk group should have easier access to contraceptive methods which allow them to space their pregnancies and to reduce the number of pregnancies.

Health promoters should be used to increase the coverage of reproductive health activities and sex education in rural areas. Another valuable resource is the local midwife who is normally underutilized for family planning

activities. The participation of MOH health promoters in the family planning program varies according to how closely they coordinate with the doctors from the health centers to which the patients are referred for control. It also varies according to the material and information provided to the promoters; in some of the places visited by the ANSAL team, the promoters did not have any contraceptive materials to distribute.

2.2 Sexually-transmitted diseases (STDs) and AIDS

STDs and AIDS have shown a steady increase. The same factors which affect the use of contraceptives affect STDs and AIDS: the early age at which sexual relations are initiated; the number of sexual partners; and most importantly, the lack of preventive, educational, and public health programs. Much of the population resists discussion of these diseases, which hinders the identification and treatment of carriers. For many women, prenatal monitoring provides the only opportunity to be diagnosed for STDs, AIDS, and other diseases. Unfortunately, the limited nature of prenatal control in El Salvador limits the extent to which other diagnoses can be made. Almost 60 percent of the vaginal cytologies done in the Maternity Hospital during the first six months of 1993 showed the presence of a pathological agent.

AIDS infection is not a high priority for either the government or the NGOs that work in the health field. This may be due to the low infection rate found in the MOH study. Since diagnosis of the first case of AIDS in El Salvador in 1984, the number of HIV and AIDS cases has been increasing. To date there have been 1,220 HIV infections reported, 605 of which are full-blown AIDS cases. In 1992, 286 new cases of HIV infection were recorded. With these figures as a base and using projection models, it is estimated that there are currently close to 30,000 infected persons in El Salvador.

Prevention of AIDS is more effective and less expensive in the early stages of the spread of the disease than at a later stage and should be a high priority for health authorities in El Salvador. Several risk factors support this position:

- 1) the geographic proximity of Honduras (which has the highest infection rate in the region) and the large number of people who move between the two countries;
- 2) the large number of Salvadorans who live in the U.S. and travel back and forth;
- 3) a pattern of sexual conduct which favors the spread of STDs and AIDS;
- 4) the limited effectiveness of the blood screening program; and
- 5) the absence of a sexual education program and the low rate of condom use.

Women of childbearing age are among the groups with the highest rates of AIDS/HIV. If active prevention programs are not implemented in the near future, more pregnant women will become infected who have a high probability of passing the infection to their children. The MOH has established a direct telephone line called TELESIDA (CALLAIDS) to respond to questions the general population may have concerning AIDS. The Health Education Unit of the MOH coordinates this and other social marketing, health promotion, and educational activities, most of which are targeted towards adolescents. These activities need to be strengthened, particularly in light of the tendency already identified for the AIDS infection rate to increase rapidly under current conditions.

2.3 Cervical-uterine cancer

The rate of cervical cancer in El Salvador is 84 per 100,000 women at risk (ages 35 to 60), one of the highest in Latin America¹⁶. The MASS has the highest rate in the country, 126 per 100,000. Approximately 50 percent of the women die within five years of their diagnoses. The factors related to this cancer are already known: repeated vaginal infections, early sexual activity, and multiple sexual partners.

The MOH is implementing an active program of early detection and coverage has improved. Staff of the MOH and other institutions have received specialized training, and the Interinstitutional Committee for Gynecological Cancer (COINCA) was formed with staff from the MOH and the ISSS.

3. Health Problems of Adolescents, Youths, and Adults

According to the WHO, adolescents are defined as those persons between the ages of 10 and 19, while youths are defined as those between the ages of 15 and 24. The chronological changes do not necessarily coincide with the biological, social, and psychological changes that characterize these stages. For most Salvadorans, primarily those with low incomes, both stages tend to be completed in a biological, social, and psychological sense before the chronological periods have been completed.

The most common and important health problems of adolescents, youths, and adults in El Salvador are related to sexual activity, violence, and the physical and psychological consequences of the civil war. Tropical diseases affected by environmental conditions are also significant, such as malaria, which requires ongoing effort to keep the disease under control.

3.1 Inadequate sex and health education

According to FESAL-93, 50 percent of the women have had their first sexual encounter by age 18 and their first child by age 20; this is an indication of early sexual and reproductive activity. Furthermore, only 4 percent of the women used any form of contraception during this first sexual experience, which constitutes a high risk of unwanted pregnancy. The same study indicated that although 98 percent of those interviewed had some knowledge of AIDS and how it is transmitted, only 1.5 percent of the persons at risk took any precautions.

This risky behavior, which encourages unwanted pregnancies and the transmission of disease, is more frequent in rural areas with mothers with minimal educational and socio-economic levels. There is a close relation between educational and socio-economic level and the level of knowledge about how to maintain good health. To date, the sex education programs have been very weak and have not provided adequate information nor have they brought about safer behavior. Adolescents of both sexes, females in particular, suffer from this lack of effective sex education programs.

Other health education programs are also weak. There have been some programs which have been very effective in combatting specific problems, such as those to prevent the spread of cholera and to increase the vaccination rate. In the case of cholera, the campaign to stimulate improved hygiene and better handling of food has had positive results in the prevention of cholera and diarrheal diseases; in the case of the vaccine campaign, the rate of coverage has increased significantly. These two programs, however, involve special activities which are of limited duration and which are targeted at a specific issue. Such programs do not eliminate the need for

¹⁶ MOH, ISSS and Cancer Alliance data.

more broad-based programs that deal with major problems such as mothers' lack of knowledge about basic health matters and sex education.

Even when health education becomes part of the regular school curriculum, special efforts will have to be made to reach the 30 percent of the population that does not participate in the formal education system and yet which constitutes a group at risk for health problems.

3.2 Accidents and violence

The use of physical violence as a means to handle differences of interest or opinions has been a cultural characteristic of the Central American region. El Salvador is no exception to this pattern of behavior. Added to the effects of the armed conflict and the more recent violence associated with common delinquent acts, this high level of violence is apparent in the psychological and physical morbidity rate as well as in the mortality rate.

External causes (effects of war, violence, accidents) constitute one of the most important categories of causes of death in El Salvador. For persons between the ages of 15 and 44, the mortality rate began to increase in 1973 due to the increase in deaths from circulatory system diseases and from external causes. According to the MOH 1992-93 Annual Report, in 1991 there were 1,464 deaths from homicides and wounds inflicted intentionally by another person and 838 deaths from "other violent causes". Together this totals 2,302 deaths from violent causes, or 8.5 percent of the total number of deaths, which makes this category a major cause of mortality in El Salvador. Homicides and violent acts are an important part of the social pathology of the country; though not necessarily a direct result of the war, they have certainly been influenced by the armed conflict.

Factors which affect the morbidity rate are accidents, violence, car accidents, and alcohol use, many of which are frequently interrelated. Other less obvious factors affecting the level of violence include poverty, lack of education, limited work opportunities, and family difficulties exacerbated by the war. Many of the ex-combatants and those disabled by the war have experienced mental and psychosomatic problems.

A related phenomenon is the recent appearance of juvenile gangs (maras) characterized by violent behavior and group loyalty. Though gang members were not directly involved in the war, the armed conflict affected their lives indirectly. Most of them (76 percent) come from broken homes or dysfunctional families, and drug consumption is common. Possible strategies to deal with the problem of gangs include improved access to education, more work opportunities, and additional recreational activities, as well as programs focussed on the family and on drug and alcohol abuse.

3.3 Physically and psychologically handicapped persons

The Salvadoran population was affected in many ways by the civil war. The most obvious effects are those due to physical wounds, principally of combatants but also of civilians. Less evident are the psychological effects, the personal adjustments because of the loss of a spouse or other family members, and the disruption caused by having to change residences.

In 1993 a census was taken of persons wounded or handicapped by the war (Censo Nacional de Lisiados y Discapacitados a Consecuencia del Conflicto Armado) to determine the beneficiaries of Legislative Decree No. 416. The census determined that there were 30,854 potential beneficiaries, including war-wounded ex-combatants from both sides, wounded civilians, and family members of those combatants who died during the

war. There was no estimation of the number of people who experienced serious psychological trauma. Approximately 55 percent of the beneficiaries were concentrated in five of the fourteen departments (San Salvador, Chalatenango, Morazán, Usulután, and San Vicente). It is estimated that there are 12,000 persons with physical wounds: 4,500 from the FMLN; 5,000 from the Armed Forces of El Salvador (FAES); and 2,500 civilians. Of these, 6,000 have been operated and require follow-up.

In September 1993 a workshop was held to develop a long term strategy for the war-wounded. The strategy established that the first beneficiaries of any rehabilitation program should be the wounded civilians and ex-combatants from the FAES and the FMLN. The problems of this target population were identified as: physical disabilities from wounds which require surgery and post-operative care; the need for prosthetic or orthotic devices; damages to the senses and to the nervous system (eyes, ears); psychological problems; post-traumatic stress syndrome; introversion; psychotic episodes; and physical violence and rape.

In this post-war period, there are new demands for psycho-social adaptation as the result of the war. Many people were exposed to traumatic situations which left psychological scars. There is little recognition and acceptance of this problem or the need for professional and technical personnel trained to identify, evaluate, and treat these psychological conditions. Based on the experiences from other countries, the psycho-social problems from the war include:

- an increase in violence, alcoholism, and drug addiction;
- an increase in health problems and psychosomatic illnesses;
- personality disorders, increase in violence towards women and children;
- apathy, distrust, and a loss of value system;
- an increase in the demand for psychological attention.

Improvement in the general health of the population requires that the efforts be continued to improve the quality of life of the wounded ex-combatants and civilians as well as the family members of those who died during the war. This activity should receive priority at both a national and an international level.

3.4 Vector borne diseases

El Salvador has made great progress in the control of diseases transmitted by vectors, particularly with regards to malaria. Though they have not been eradicated, the spread of these diseases has been controlled. Because of this relatively positive situation, some people might argue for a shift of resources to other social or health programs. ANSAL recommends, however, that the programs targeted at vector-transmitted diseases be continued due to the epidemiological conditions of the country and to the fact that the diseases have not yet been eradicated.

Malaria

The originally malaric area of El Salvador measures approximately 19,000km², with approximately 4.5 million inhabitants equalling 89 percent of the total population. The area with the greatest potential for transmission of the disease is the coast where ecological conditions favor the reproduction of the vector mosquito, *anopheles albimanus*. Malaria has historically been a serious health risk, but the introduction of insecticides has lowered its impact, though control of the disease is still irregular.

In 1980 El Salvador recorded 95,835 cases of malaria, and in 1993, 3,887 cases. While in 1980 the cases in El Salvador made up 40 percent of all of the malaria cases in Central America, in 1993 this proportion was only 3 percent. The success of the malaria program is due to the careful management of epidemiological data for

local decision-making. The program used stratified data, with villages (*caseríos*) as the unit of analysis and operations. The villages are classified by the Annual Parasite Incidence (API), and the classification is revised periodically.

There is no doubt that this strategy was well conceived and executed. The positive results are apparent. El Salvador is part of an epidemiological and ecological region, however, in which malaria continues to be a serious health problem. The GOES should not lower the priority of this program or it could risk a reversal of the great progress it has already made. Foreign assistance agencies should promote the use of the same strategy for other countries in the region.

Dengue

Episodes of diseases similar to dengue have been registered in the region for the past 200 years. Until the 1960s the epidemic episodes used to occur more or less in ten-year cycles, but from that time on the periods between epidemics have gradually become shorter.

In El Salvador dengue is usually present as classic dengue, with a minimal number of cases diagnosed as hemorrhagic dengue. During the period 1989-92, there were no cases of hemorrhagic dengue reported. According to the MOH Epidemiological Unit, the total number of dengue cases reported annually ranged from 518 in 1989 to 2,381 in 1990. Infestation of homes by the vector is high; in the departmental capitals, the rate was 45 percent in the dry season and 68 percent in the rainy season.

Dengue control is based on basic sanitation. Residents of the areas at risk can easily eliminate the breeding grounds of the vector with low-cost methods. The vector mosquito, *Aedes aegypti*, is essentially a domestic and urban mosquito and can be controlled with correctly applied physical methods.

Chagas disease

Chagas disease is caused by *Trypanosoma cruzi* and is found from Argentina to the United States. Approximately 16 million people are infected; of these, it is estimated that 27 percent develop cardiac problems. Transmission in the rural environment occurs through vectors. Transmission between humans is through transfusions of contaminated blood.

In El Salvador the presence of *T. cruzi* has been confirmed, as has the occurrence of chagastic cardiopathy, but the information available is very limited and does not permit any analysis of chagas disease as a public health problem. As could be expected, most of the people infected with the disease come from rural areas where the ecological conditions are apt for transmission. The increasing migration from rural to urban areas increases the risk of transmission to the urban population through contaminated blood transfusions.

The MOH informed ANSAL of a positive test for chagas disease in blood donors of 3.8 percent in fourteen public hospitals, with the highest rates in Sonsonate (10.8 percent), Ahuachapán (10.4 percent), La Libertad (8.9 percent), and Usulután (7.1 percent). In a survey done by ANSAL, it was discovered that at least one of every three laboratories which carry out blood transfusions do not carry out serological tests for chagas disease because of the lack of reagents. Blood screening tests for chagas disease, hepatitis, and AIDS should be a requirement for all blood donors in order to protect the patients who will receive the blood through a transfusion.

The most important risk factor for chagas disease is poverty. Its prevention depends on improvement in socio-economic levels. The interaction of wild hosts with reservoirs and domestic vectors that feed off human blood are important factors in the transmission of *T. cruzi*. In order to eventually control this disease, it is necessary to:

- a) carry out prevalence studies in sample populations in order to determine the significance of this disease as a public health problem;
- b) evaluate the importance of blood transfusions in the transmission of *T. cruzi*; and
- c) identify the areas at greatest risk in order to design, with the participation of the community, means of prevention and control based on improvements in housing and domestic environments.

IV ORGANIZATION OF THE HEALTH SERVICES SYSTEM

The purpose of this chapter is to describe the organization of the health sector and the health services system. The term "sector" is understood as the group of public and private organizations which have a direct effect on the health of the population. The "health services system" is part of the sector and consists of the organizations that provide health services. As an example of the usage of the two terms, the medical schools are part of the health sector but are not part of the health services system. Analysis of the "critical areas", or "issues"¹⁷, which affect the functioning of the health services will be presented in Chapter V.

Three topics are presented: how the government participates in the organization of the sector; the organization of the health services system; and finally, the demand by the population for health services.

1 Role of the Government in the Health Sector

Existing legislation assigns multiple functions in the organization and functioning of the sector to the government, and primarily to the MOH. According to the Constitution, the government is responsible for the health of the citizens, even though the citizens also have the obligation to take care of their health. The presence of the government in the health sector is greater than its presence in other sectors. As the main organ of the state in the health sector, the MOH has a preponderant presence based on the delivery of health services by the MOH with its own resources. It has had less marked involvement in the implementation of policies, particularly those which affect the health situation for mechanisms other than direct delivery of services. Because of this and as the result of the reordering of the functions and roles within the government, over time public organizations have been created which fulfill some functions similar to those of the MOH. The Secretariat for the Environment and the Secretariat for the Family are examples of this.

Modernization of the government involves the introduction of substantial changes in relation to its current functions. It consists of changing from an interventionist state which is a direct provider to a state which concentrates its actions on the development of policies, plans, and programs; in the approval of standards; and in the supervision and determination of where public resources will be spent. A modern government will be able to guarantee access of all of the population, above all the poor, to efficient and equitable health services.

The armed conflict and the economic recession of the 1980s brought about an important change in public spending. The MOH budget at the end of the decade represented less than half of what it had been ten years earlier in terms of the GNP. Foreign assistance did not fully offset this decrease. As a result, the MOH concentrated its efforts even more sharply on what it understood to be its top priority: direct delivery of health services to the population.

1.1 Coordination of the development of health policies

GOES social policy is outlined in the 1989-94 Social and Economic Development Plan. The Plan had two components: economic adjustment (structural changes to promote sustained economic growth) and redistribution of social benefits to limit the negative impact of the economic adjustments in the short term and to diminish the level of poverty in the medium term. The medium term social policies were designed to respond to the needs

¹⁷ The ANSAL reports in Spanish use the term "critical areas" to refer to what are called "issues" in English.

of the poor in health, education, social security, and other areas. The strategies selected to respond to these sectors were:

- a) decentralization;
- b) focussing of spending and services; and
- c) strengthening of health care systems.

The health and nutrition component was designed to focus on spending on health and to improve the delivery and coverage of primary health services: maternal and child care, nutrition programs, and potable water and sanitation programs. In the Strengthening of Social Sectors Program, support was provided for decentralization, concentration of resources in specific areas, and community participation in the fulfillment of social needs.

The National Reconstruction Plan, developed in 1991-92 as part of the peace agreement to assist in resolving the most important problems in the ex-conflictive areas, is another example of the government's development of social policies, including health policies.

The 1992 Modernization of the State Program, which included the MOH, also touched on the development of social policies because it established strengthening of the administration of the MOH, decentralization of its budget, and improvement in the efficiency of service delivery to the population.

The two plans and the program mentioned above were developed primarily by the Ministry of Planning (MIPLAN), with close coordination between the Ministry and officials and technical staff of the different sectors, especially health. During the period from October 1993 through April 1994, MIPLAN officials and technical staff drew up sectoral plans for the period 1994-99, including the health sector. This process made the similarity of the objectives of MIPLAN and MOH clear, even though the two institutions had different strategies to achieve common goals. As happens in other countries, the same concepts have different practical meanings for the different ministries. Decentralization, concentration of activities and strengthening of services are interpreted differently by different organizations.

The authorities and the technical staff from both institutions have similar objectives but different approaches: the focus in MIPLAN is on the medium to long term and on equity in the use of government resources, whereas in the MOH the main concern is for the immediate and effective satisfaction of the health needs of the population. This does not mean that the MOH is not concerned with efficiency nor that MIPLAN does not care about effectiveness. It just means that there are differences in the emphasis put on the same set of objectives.

1.2 Compliance with policies and standards

The MOH has developed health policies and norms. In the last three years this activity has been strengthened in maternal and child care, breastfeeding, essential medicines, diarrheal diseases, respiratory infections, and others. These policies and norms should be followed by all of the institutions involved in the health sector, independent of whether or not they are public or private, or in the case of public organizations, whether or not they are part of the MOH's services. In the same way, the health sector institutions should fulfill the existing legal norms, most of which are included in the Health Code. The Code has diverse regulations which cover a wide spectrum of issues related to public health.

As the highest authority of the government in health, the MOH is responsible for monitoring compliance of these health policies and norms. The MOH faces difficulties in this task for two reasons:

- a) weak technical structure assigned to this responsibility, particularly in terms of human resources and support services; and
- b) limitations in the political strength to establish sanctions and force compliance if necessary.

The areas to cover are too extensive in relation to the MOH's budget. One example of this involves garbage disposal sites. The MOH is responsible for developing standards for garbage disposal sites throughout the country and for ensuring compliance by all of the municipalities. Given the differing circumstances in each municipality, developing such standards has been a difficult task for the MOH and ensuring compliance even more difficult. Even in areas in which the MOH has been able to develop solid policies and regulations, as is the case with breastfeeding, substantial political difficulties have been encountered in the implementation. The breastfeeding norms are being followed in all of the MOH health services, but not in those of the ISSS. Noncompliance on the part of the ISSS, which gives substitutes of maternal milk to newborns, is not due to any lack of will but rather to pressure from ISSS beneficiaries, who see milk substitutes as a greater benefit.

As a result of these factors, even though El Salvador has established adequate health policies and norms, they are followed only by MOH health establishments and services, which limits their effectiveness.

1.3 Shared responsibility for oversight

The Public Health Council (CSSP) and the professional health boards were created by a constitutional mandate in 1956 to serve as a control over both public and private sector activities in the health sector. The law that established the MOH, however, stated that it was also responsible for controlling the quality of the health services provided to the population. This lack of clearly defined limits and responsibilities weakens the performance of all of the institutions involved. In general terms, the overlapping responsibilities include oversight of public and private health establishments, quality control of medicines, and control over the professional activities of health sector personnel.

The CSSP and the health boards are autonomous institutions whose officials are jointly appointed by the executive branch and the professionals whose activities are being regulated. Since their funding comes from the MOH budget, the autonomy of both institutions is somewhat limited.

Although the confusion related to overlapping responsibilities and the financial dependence on the MOH of the CSSP and the health boards limit the government's capacity to fulfill its constitutional mandate, the most important constraints come from the lack of technical capacity and insufficient political will.

1.4 Human resource development

The quality of health services depends heavily on the availability and productivity of the human resources. For this reason, in many countries the government is actively involved in training health professionals. The government also affects the job market by establishing priority health programs and by providing major financing to health sector activities. As in other areas of education, however, there is often a lack of communication and coordination between the organizations that are providing health services and the institutions responsible for training health sector personnel. In El Salvador, as in other Latin American countries, the involvement of the government in this area is not part of any rational policy. The government finances medical

and health training through its support of the University of El Salvador, and yet it does not condition the funding to the health needs of the country.

The improvement of inter-institutional coordination and the development and implementation of policies for health sector human resources have been limited by the following factors:

- poor planning by the MOH regarding the human resource needs (levels and categories of workers);
- autonomous functioning of the University of El Salvador not linked to the national health priorities as established by the MOH; and
- an increase in the number of private medical schools and other private training institutions without adherence to any norms or standards and without responding to any training plan based on the most pressing health needs of the country.

ANSAL recommends that the MOH become more involved in this area and that it coordinate policies with the Ministry of Education (MINED).

1.5 Sectoral plans and policies

In 1991, with the support of PAHO/WHO, the MOH developed and received approval of the National Health Plan for the period 1991-94. The Plan includes the political approach, the objectives, the strategies, and the programs for the health sector. It also asserts the MOH's objective of fostering, protecting, and restoring the health of the population through integrated programs directed towards individuals and towards the environment. The general objectives are: to increase health coverage, to improve the health services, to support institutional development, to strengthen the financial base, to decentralize technical and administrative functions, to increase intra- and inter-sectoral coordination, and to reduce foreign assistance.

The Plan is divided into operating programs and strategic objectives which cover all of the public health and medical care components. It does not include a statement of specific goals nor a timetable for implementation of the activities, and it does not clarify exactly what is expected from the various institutions involved in the health sector. This will hamper efforts to coordinate with other institutions and to carry out evaluations of the results and impact of the programs and projects.

The 1991-94 National Health Plan has not been implemented by all of the institutions in the health sector. It has served primarily as a MOH institutional plan. This is primarily because the other institutions do not follow the leadership of the MOH and because they did not participate in the development of the Plan. Many policies and norms legitimately established by the MOH are not followed because of this lack of participation. In some cases the norms are not followed for technical, economic, or political reasons, and in other cases the health organizations do not agree with the policies determined by the MOH.

Faced with the same problem of the incompliance, many other Latin American countries have attempted different strategies in the development of plans, policies, and norms for the health sector. It appears that by involving all of the actors in the development of policies from the early stages on, there is a much better chance that the same institutions will voluntarily comply with the policies and norms established with group participation.

2. Health Services

The health services system in El Salvador consists of public and private institutions and individuals in private practice. In the public sector the major providers are the MOH and the ISSS, and in the private sector the most important providers are the NGOs, the pharmacies, and private physicians. The system is not integrated or coordinated in any formal sense, which is similar to the situation in the rest of North and South America, with the exception of Canada, Costa Rica, and Cuba. Though this situation does not necessarily eliminate the possibility of providing high quality and efficient care to the population, certain risks which currently are present in El Salvador must be eliminated:

- a) Some institutions group their beneficiaries according to their income level or other categories. This can result in unequal access to health services, as is the case in government companies (and the ISSS to a lesser extent), in which more complete services are provided to a group which already is privileged relative to the other beneficiaries. ANSAL recommends that access to at least certain basic health services should be a function of need and not of ability to pay or of place of residence.
- b) The growth of the sector through the creation of new institutions or programs favors inefficiency (through the duplication of structures and equipment) and gaps in coverage (through the exclusion of certain groups)¹⁸. Often the new institutions or programs are created because of the difficulties in resolving problems in existing organizations and the ability of a population group to pay for an alternative solution. In these cases, the problems in the older institutions are not resolved and the pressure to deal with them in the future decreases because many beneficiaries have already left the institution.

In order to avoid these risks the GOES has assumed an interventionist role in the health sector. Both the current normative framework and the sectoral policies developed by the MIPLAN and the MOH recognize the need for greater presence of the state. The 1991-94 National Health Plan has as one of its seven basic strategies to develop a national health system. It is not easy to develop a system which favors efficiency, effectiveness, and equity in the delivery of health services while remaining pluralist and respectful of individual choice; nor is it enough to create the formal structure. In many countries the health system was established at an official level but the institutions have not changed how they function. The most important point is that through the MOH, the GOES should be the leader in the organization and functioning of the national health system, with a clear definition of the rules and responsibilities of all of the participating organizations. The MOH was not able to develop the national system during the first three years of the 1991-94 National Plan. This was due to the emphasis the MOH placed on the functioning of its own establishments and services with very limited financial resources throughout the period.

2.1 Organizations providing health services

Public sector health services are provided by the MOH, the ISSS, and seventeen other government institutions that provide services to its employees and family members. This group includes: Bienestar Magisterial (Ministry

¹⁸ As an example: There is currently dissatisfaction with the care provided by the ISSS, which has resulted in many companies contracting for health coverage elsewhere. The companies that cannot afford the higher cost of private insurance stay with the ISSS. This pattern increases the demand for services similar to those provided by the ISSS, but only in the private sector. This can cause duplication in health services.

of Education), the National Telecommunications Administration (ANTEL), the Executive Hydroelectric Commission of the Lempa River (CEL), and others.

The MOH's constitutional mandate permits it to provide care for the entire population of the country; traditionally it has been the principal provider of health services for 85 percent of the population. The ISSS provides services to workers enrolled in the system, retired workers, and workers' spouses and children up to the age of three¹⁹. ISSS coverage has traditionally been 6 or 7 percent of the population, with the MOH and the private sector covering the rest. As the result of a series of changes in the criteria for coverage, however, the ISSS currently covers approximately 12 percent of the population (1993 data). The health programs of several state companies and other organizations dependent upon government funding cover their own employees and dependents; these organizations together with the ISSS cover approximately 15 percent of the population. Finally, many NGOs play an important role in the delivery of basic health services to low-income rural residents, while private physicians and pharmacies provide many health services to people of all income levels living in urban areas.

In 1989 a household survey on the demand for health services was carried out (REACH). The data showed that the traditional view of the relative importance of the health subsectors was inaccurate. There are two different markets for health care in El Salvador, one for ambulatory care and one for hospital care. The data on hospital care supported the common views; approximately 76 percent of those hospitalized were treated by MOH establishments, 13 percent by the ISSS, and 9 percent by private sector institutions. The data on outpatient care, however, showed a surprising pattern; 40 percent of outpatient care was provided by the MOH, 13 percent by the ISSS, and 45 percent by the private sector. Other MIPLAN studies carried out at a later date partially confirmed these findings.

The MIPLAN²⁰ surveys found that the proportion of outpatient care provided by the private sector was higher than traditionally believed, but lower than that claimed by the REACH survey. The 1991-92 MIPLAN survey showed that 34 percent of outpatient care was provided by the private sector, 10 percent by pharmacies and other private sector providers, and 56 percent by the public sector (with no data on the breakdown by institution). According to these results, MOH coverage varies greatly between outpatient care (which covers basic services and preventive health care) and hospital care. The MIPLAN and REACH studies were consistent in their findings that residents of metropolitan San Salvador tended to use the private sector, while rural residents were more likely to receive care from public sector institutions. The data for urban areas outside of San Salvador indicated a more equal distribution of care provided by the private and the public sectors.

Public Sector Institutions

Ministry of Health

This is the largest health care organization in the system. It has 374 health establishments and 21,253 employees, of which 2,556 are physicians. Among public sector institutions, the MOH has the largest presence in rural areas. The network of MOH establishments consists of dispensaries, health posts, health units, health centers (inpatient care), regional hospitals, and specialized hospitals. Financing for the MOH comes from the

¹⁹ ISSS coverage is expanding to cover children by increasing the age of covered dependents by one year every calendar year. In 1994 coverage will be extended to include children up to four years old.

²⁰ The MIPLAN surveys are not completely compatible with the REACH demand study due to differences in the instruments and sample, but they are useful because they provide a complementary source of valid data.

government budget, from international agencies, and in the case of the hospitals, from user fees to a very limited extent.

Salvadoran Social Security Institute

The ISSS was created in 1954 through the 1953 Social Security Law and the 1954 Law for the Application of Social Security. The basic function of the ISSS is to provide two types of coverage for workers: immediate risks (health and pregnancy) and social security risks (disability, retirement, and death). Workers in the private sector receive coverage under both categories; retired workers and public sector employees receive coverage only for the immediate risk category²¹.

The ISSS is currently responsible for coverage of approximately 580,000 people, which accounts for 12 percent of the total population in the country. ISSS funding comes from contributions from workers, from employers, and from the government, which provides 5 million colones annually in addition to its contributions as the employer of all public sector workers.

ISSS services are provided through its own establishments and human resources. Its network is much smaller than that of the MOH; it has 44 health establishments (concentrated in the MASS) and 1,386 doctors. The ISSS also contracts for hospitalization services at a regional level provided by the MOH. To reduce the waiting time for specialized health care, it contracts private physicians throughout the country.

Other government institutions

- Ministry of Education: MINED provides hospital care through Bienestar Magisterial, a teachers' organization which was created by the Law for Teachers' Hospital and Medical Services. It is financed by contributions from teachers (2 percent of salary with a maximum contribution of 20 colones/month) and by the government which provides 98 percent of the funding. Bienestar Magisterial contracts for the delivery of health services with the private sector; these contracts are renegotiated periodically. There are no restrictions on the use of the health services.
- National Telecommunications Administration (ANTEL): ANTEL health services are only for ANTEL employees. It has a hospital in San Salvador and seven outpatient clinics. Financing is through contributions by the employees (3 percent of salary with a maximum per month) and by ANTEL, which provides 97 percent of the budget.
- Executive Hydroelectric Commission of the Lempa River (CEL): CEL health services covers its 3,280 employees and their spouses and children. It has 15 clinics and 45 doctors; it also contracts for the services of 500 specialized doctors from the private sector.
- National Sewage and Aqueduct Administration (ANDA): ANDA health services consist of six clinics and dispensaries which provide basic medicines.

²¹ The deferred risks are covered by INPEP.

- Ministry of Defense: The Ministry provides health care through Military Health (Sanidad Militar) to its employees, both active and retired, and to their dependents. A full range of health services is provided through two hospitals and 40 clinics throughout the country.

Private Sector Institutions

Private sector health care providers can be divided into two groups: for-profit institutions and individuals (private hospitals, laboratories, pharmacies, and physicians and other health professionals in private practice); and not-for-profit institutions (NGOs). The first group of providers is especially important in the provision of outpatient care in urban areas, whereas the impact of the services provided by the second group is felt primarily in rural areas, where the NGOs complement MOH care and provide preventive and basic curative health care to the rural poor.

Private for-profit subsector

Between 2,800 and 3,000 physicians are currently practicing in El Salvador, 66 percent in the department of San Salvador and 10 percent in the department of Santa Ana. These figures make it apparent that a very small number of physicians service other cities and the rural areas²². Almost 40 percent of the doctors work exclusively in private clinics, while a similar number work exclusively for the public sector, divided in equal parts between the MOH and the ISSS. Private clinics tend to be organized very simply, both in terms of personnel (fewer than 3 percent have a nurse) and equipment. Productivity is low, with an average of 1.18 consultations per hour.

In terms of volume and complexity, most hospital care is provided by the MOH and the ISSS. There are a small number of private hospitals and they tend to be small (less than 30 beds); 70 percent are located in the department of San Salvador, and eight of the fourteen departments in the country do not have any private hospital. The level of occupancy is low (53.5 percent) and the average stay is only 3.6 days. The procedures performed in these hospitals are not complicated. This reflects the epidemiological profile of El Salvador as well as the limited income levels of the users. Both characteristics, together with the fact that many people have access to the subsidized hospital care provided by the MOH and the ISSS, explain the low level of investment in private hospitals.

Laboratories (for clinical analyses, pathological tests, and radiological exams) are also included in this subsector. They occupy a relatively prominent place, both in number and in complexity, above all in San Salvador.

Pharmacies are an important part of the health system because they provide the easiest access to health care in the MASS and in other cities. The high proportion of the population that self-medicates (close to 50 percent), the consultations with pharmacists, and the purchase of prescription drugs without a prescription indicate poor functioning of the health system. Pharmaceutical products are sold in approximately 1,044 locations, which amounts to a ratio of 5,500 people per pharmacy. The pharmacies are supplied by 225 distributors and wholesalers who obtain their supplies from outside of the country or from the 30 pharmaceutical companies which have local production facilities.

²² ANSAL contracted for a study of the private sector to gather information on private medical practice. Although there were some problems and questions concerning the validity of the data, it is used here because of the lack of other data and its limitations are noted.

It is hard to obtain accurate data on the sale of pharmaceutical products in Latin America. The following estimates are based on figures from International Marketing Statistics provided during ANSAL interviews. The per capita value of pharmaceutical sales in the private sector was US\$11.09. Using estimated figures from the MOH and the ISSS on the use of pharmaceutical products, the total per capita value of pharmaceutical products in the private and the public sector was US\$16.05. This represents a high level of expense relative to the level of development of the country. Some of the expense may be unjustified. An analysis of the therapeutic value of private sector sales shows that:

- the 1991 sale of 35 subgroups of pharmaceutical products considered of doubtful therapeutic value totalled US\$10,250,000, or 20 percent of all sales in 1991 (US\$50,500,000);
- the sale of vitamins and other supplements amounted to an additional US\$3,800,000 or 7.5 percent of the 1991 total;
- diet products totalled US\$1,450,000 or 3 percent of the 1991 sales; and
- antibiotics, which have a great potential of being misused, amounted to US\$6,000,000 or 12 percent of 1991 sales.

To summarize, up to 42 percent of the sales of pharmaceutical products may have a doubtful effect, if not a negative effect, on the health of the users.

Non Governmental Organizations (private non-profit subsector)

There are approximately 100 NGOs dedicated to activities related to health. These NGOs provide a wide range of health services, from health education and training of midwives, volunteers, and health promoters to care in a hospital with 200 beds. In general, the NGOs are well integrated in the communities that they serve and their efforts are focussed on geographic areas of high risk. Approximately 71 percent have basic curative programs and 62 percent have preventative health programs.

The United States Agency for International Development (USAID) provides funding for many NGOs operating efficiently in the health sector. One important effort is the Project for Family Planning Services, which is implemented through the Salvadoran Demographic Association (ADS). Family planning services, maternal and child care, and medicine are delivered through a network of 12 clinics and community workers.

Another USAID project in the health sector is the Project for Maternal Health and Child Survival (PROSAMI). The purpose of this project is to improve the health of the rural and marginal populations through improved access to basic health care. The health services are provided by 36 NGOs. Project activities include: the delivery of maternal health and child survival services; NGO institution strengthening; coordination of NGOs; and the development of policies and research related to maternal and child health.

2.2 Health sector resources

The availability of resources for the health sector and their distribution have a significant impact on the functioning of the health system. Table 14 shows the distribution of resources by the institutions providing health services. The MOH represents more than half of the system's infrastructure, both in resources and in responsibility for care. Relative to the ISSS and the number of people covered, however, the MOH budget is

much smaller. This lowers its effectiveness, lessens its efficiency because it cannot compete for top managers, and causes inequity in the complexity, volume, quality, and accessibility of health services.

Table 14

RESOURCES OF THE INSTITUTIONS PROVIDING HEALTH CARE

Subsector	Institution	Resources			
		Establish-ments	Beds	Doctors	Total Personnel
Government	MOH	374	5,213	2,086	21,253
	ISSS	44	1,357	1,386	9,194
	ANTEL	8	83	98	406
	Bienestar Magisterial	Contracts with the private sector for all benefits			167 Administ.
	Military Health	2 hospitals and 40 clinics	300	n/d	n/d
	CEL	15 general health care clinics			
	ANDA	6 outpatient clinics. Other services are provided through the ISSS.			
Private	Private Medicine	36 hospitals	1,219	3,000 approx	---
	Medical Insurance	Contracts private services			
	NGOs	90 NGOs/MOH; 75 NGOs surveyed by Marcable			11,329 approx. 50 % are volunteers
	PROSAMI	451 promoters, 93 administrative officers and 127 technicians and doctors			671

Note: n/d = No data available

Source: ANSAL, 1994.

The geographic distribution of hospital beds in 1992 is shown in Table 15, where a high concentration of resources in the MASS (more than 50 percent of the beds) can be noted. This distribution is due to the high concentration of ISSS and private sector resources in San Salvador, which in turn is because of the large number of ISSS beneficiaries living there and the more affluent population in the case of the private sector services.

It should also be noted that in the case of a small country with good transportation services such as El Salvador, the concentration of complex services (e.g. hospitals) in urban areas is a rational use of resources.

Table 15

HOSPITAL BEDS BY REGION AND POPULATION

Region	MOH	ISSS	Others*	Private Hospitals**	Total no. of beds	Beds x %00
Metro-politan	1,962	1,092	283	890	4,227	28.6
Western	1,056	218	---	51	1,325	12.4
Eastern	1,234	115	100	128	1,577	14.1
Para-central	686	---	---	92	778	11.4
Central	275	---	---	58	333	4.7
Total	5,213	1,425	383	1,219	8,240	16.3

* Includes Military Health and ANTEL.

** Preliminary Data of Private Sector Study Financed by the World Bank.

Source: ANSAL Project -94.

2.3 Human resources

Availability and distribution of critical human resources in the health sector

One of the most important aspects to be considered in the analysis of the supply of health services is the quantity, the composition, and the distribution of human resources, both in terms of the institutions which make up the sector as well as the distribution by region or geographic area. The distribution of resources by institution is interesting because even though El Salvador is a small country, there are the many institutions and heterogeneous organizations involved in the health sector and many people work in more than one institution. Because original sources were not available, secondary sources were used to establish the distribution of human resources by regions and geographic areas. Though the MOH should have this data, it only has data pertaining to its own personnel.

Distribution of doctors and nurses by geographic area

Given that the MOH is the institution with the highest number of employees and most extensive health infrastructure in the country, it can be supposed that the data on the distribution of MOH personnel represents the approximate distribution of human resources on a national level, especially with regards to personnel in rural areas. There are still problems with this assumption, however, because even the MOH data on its own employees is deficient.

Most of the MOH reports deal with the number of positions established in the Salary Law. This is the law which regulates civil service employees; it has the number of positions for each category of professional and the corresponding salary level, but the number of positions recorded does not necessarily correspond to the number of employees. Furthermore, there are several categories of MOH positions such as contracts, regular

payroll, community organizations, etc., which distort the data because of a lack of specificity. In spite of these limitations, it is still interesting to analyze the distribution of the positions for MOH doctors and nurses because it does reflect the distribution of these resources at a national level.

Table 16

**DISTRIBUTION OF POSITIONS FOR DOCTORS AND NURSES
BY HEALTH REGION**

Health workers /population	Western	Central	Metrop.	Para-central	Eastern
Surface: 21,040 km ²	4,488.54 21%	3,669.46 18%	886.15 4%	4,267.33 20%	7,729.31 37%
Population: 5,047,925 inhab.	1,066,824 21%	702,698 14%	1,477,766 30%	685,201 13%	1,154,436 22%
Rural area:	61%	60%	30%	65%	
Establishments: Total: 362	85 23.5	60 16.5%	42 12%	66 18.2%	109 29.8%
Doctors: Total: 2,086	354 16.97%	255 10.79%	980 46.98%	161 7.72%	366 17.55%
Nurses: Total: 1,537	287 18.24%	169 10.74%	611 38.84%	158 10.04%	284 10.05%
Ass. Nurse.: Total: 2,993	565 18.87%	242 8.08%	1,172 39.15%	328 10.95%	623 22.95%
Doctor: 4.32/10,000 inhab.	3.31	3.20	6.63	2.34	3.17
Nurse 3.11/10,000 inhab.	2.69	2.40	4.13	2.30	2.46
Ass. Nurse. 5.92/10,000 inhab.	2.52	3.44	7.93	4.78	5.39

* No. of positions according to the Salary Law

Source: 1992/93 Memoir MOH,
Salary Law

The above chart shows that 12 percent of the health establishments and 46 percent of the doctors are in the Metropolitan Region, which has a rate of 6.63 doctors per 10,000 inhabitants. The doctor per 10,000 inhabitant rates for the other regions are all less than half of the MASS rate. All of the regions show unfavorable rates for the ratio nurse/doctor. This is an indication of the serious problems in the nursing profession. In almost all of the regions, there are more doctors than degree-holding nurses. A ratio of 4.5 nurses per doctor is recommended by PAHO/WHO.

Other sources were used to estimate the number of doctors by geographic area and by specialization. This data appears to confirm the data presented earlier. According to the Medical Profession Control Board (Junta de

Vigilancia de la Profesión Médica), in October 1993 there were 4,590 licensed doctors, of whom it is estimated that between 2,800 and 3,000 are currently working. The Medical Board (Colegio Médico) estimates that there are 2,758 physicians working in El Salvador.

A medical laboratory also kindly provided data on the number and distribution of doctors in its information system. Even though there may be some duplication of data(a doctor registered more than once), this would involve less than 5 percent of the doctors and would not distort the national picture. Based on this data, there are 2,085 practicing doctors, of whom 61 percent are in San Salvador and the other 39 percent are distributed throughout the country.

The figures are alarming when the ratio of doctors per 10,000 inhabitants is calculated. With the exception of San Salvador with 8.6 and San Miguel with 5.2 doctors/10,000 inhabitants, all of the regions have a rate of 2.7 doctors/10,000 inhabitants or below. According to PAHO/WHO, the rate should be at least 8 doctors/10,000 inhabitants.

A comparison of the data from the MOH (on the number and geographic distribution of its positions) and from the medical laboratory reveals that the distribution is similar, which implies that the figures are fairly accurate.

Table 17

DISTRIBUTION OF DOCTORS BY REGION

Regions/Depts.	Number of Doctors		
	Total Reg.	Total/Dept.	Rate/ 10,000 inhab.*
Western Region	293		2.7
Central Region	132		1.9
Metropolitan Region	1,271		8.6
Paracentral Region	89		1.3
Eastern Region	300		2.7
Total**	2,085	2,085	4.1

* Calculation based on the 1992 Population Census, General Statistics and Census Office.

** Includes 16 dentists

Source: *Registros de un laboratorio de medicamentos que trabaja comercialmente en el país (Records from a commercial medical laboratory in El Salvador)*, El Salvador, 1993.

MOH part-time doctors

An analysis of the distribution of doctors by region according to the number of hours they work for the MOH demonstrates interesting findings. In 1990 there were 310 doctors working two hours a day in the health regions; in 1993 that figure had risen to 690, an increase of 123 percent. The increase for hospitals was only 7.6 percent.

In 1993 the number of doctors working two hours a day constituted 56 of the total number of positions for doctors in the MOH. The four-hour and full-time positions accounted for 8 percent and 4 percent of the total.

Table 18

**DISTRIBUTION OF POSITIONS* BY CATEGORY OF DOCTOR
AND NUMBER OF HOURS WORKED**

Doc.	West. 90 93	Metrop. 90 93	Central 90 93	Parac. 90 93	East. 90 93	Total 90 93
Res.*		- 1		9 - 9	6 - 15	15 - 25
TC*	7 - 9	6 - 6	6 - 9	7 - 9	10 - 16	36 - 49
6 hrs	- 1	2 - 2	- 3	- 7	- 7	2 - 20
5 hrs		2 - 2				2 - 2
4 hrs	2 -	10 - 10	1 - 1	4 - 4	5 - 1	22 - 16
2 hrs	57 - 104	140 - 374	27 - 95	32 - 10	54 - 107	310 - 690
Int.*	101 - 91	171 - 191	30 - 31	60 - 73	56 - 56	418 - 420
Total	167 - 215	331 - 566	64 - 138	112 - 99	131 - 202	805 - 1,220

* Salary Law 1993.

Note: Some figures are partial and do not correspond to the figures published by the MOH; perhaps the criteria used was different. The total number of medical positions in the MOH is 2,086.

Source: *Salary Law 1993*.

Most of the institutions in the health sector hire doctors for varying number of hours worked per day. This topic deserves further study to determine if it has a negative effect on productivity and the quality of services provided. In general this system is used to hire specialists or for very small establishments where the consultations can take place for short periods. It is recommended that the minimum number of hours worked be four hours and in the case of hospital care, six to eight hours if possible.

Distribution of human resources by institution

The MOH distribution of positions has already been presented. In order to complete the picture for the whole country, data from other public sector institutions is presented as well.

The Salvadoran Social Security Institute

The ISSS is the second most important institution in the public sector; the ISSS and the MOH together generate the greatest number of positions for the health sector. In 1992 the total number of ISSS employees was 9,194, of whom 1,476 (16 percent) were doctors and dentists; 2,768 (30 percent) were technical and paramedical personnel; and 4,950 (53 percent) were administrative and service personnel (See Table 19). It is important to look at these figures given the frequent complaints from users about the excessively high number and the

inefficiency of administrative employees. There are also many complaints from users about the bureaucratic system which causes long waits and the rude manner in which treatment is given.

ISSS health care is provided mainly by university graduates (doctors, dentists, etc.) In 1993, the ISSS had 1,386 doctors, 571 nurses, and 1,228 nurses' aides. Of these, 67 percent worked in the MASS. The high concentration of establishments and health personnel in this region and other urban areas is due to the fact that most ISSS beneficiaries are residents of urban areas.

Table 19

ISSS ADMINISTRATIVE PERSONNEL
AND MEDICAL-HOSPITAL SERVICES, 1992

Year	Total	Administration			Medical-Hospital Services			
		Total	Adm.	Serv	Total	Doc./ Odon.	Tech. Phar.	Serv. Adm.
1956	523	149	127	22	374	104	148	122
1960	650	149	128	21	501	120	198	183
1965	1,004	201	155	46	803	212	308	283
1970	1,959	329	257	72	1,630	323	632	675
1975	3,041	628	514	114	2,413	510	972	931
1980	4,063	844	703	141	3,219	538	1,282	1,399
1985	4,780	1,009	804	205	3,771	734	1,414	1,623
1990	5,781	1,272	1,081	191	4,509	992	1,691	1,826
1992	9,194	1,815	1,226	589	7,379	1,476	2,768	3,135

Source: *Statistics Bulletin, ISSS.*

The ISSS salaries for professionals are better than those offered by the MOH. It also has better support for diagnosis and treatment of patients and more resources for medicine and equipment.

Bienestar Magisterial

This institution was created in 1968 because of pressure from the teachers union; it began as a department within the Ministry of Education to provide medical care to teachers. It does not have its own health establishments and it contracts for health services directly with individuals and organizations in the private sector. It covers approximately 140,000 beneficiaries, which is the equivalent of 2.8 percent of the population.

Contributions from the beneficiaries do not cover even 5 percent of the expenditures of Bienestar Magisterial (BM), and thus the institution depends almost totally on the Ministry of Education. The system is not well managed and there is no control of the utilization of services; this is exacerbated by the payment method to the providers which entails a fee for each service provided. Costs rise each year and the program has serious financial difficulties. Payments to the providers are frequently delayed and the salaries are low relative to

equivalent jobs with other institutions, which discourages BM professionals. The number of professional medical personnel is small. Contracts are signed with each professional and there is a tax on consultations and other medical services. BM currently has contracts with 214 doctors, 12 dentists, 5 psychologists, 12 anesthesiologists' assistants, and 2 respiratory therapists.

2.4 Financial resources

In this section the total expenditures of the health sector are presented, including the source of funding and how the funds are spent. One way to measure the financial effort made by a society to cover its health needs is to look at the total expenditures in health care. Even when the resources are far from sufficient to cover health needs, it is important to have a relative idea of the sufficiency of the resources.

Total operating cost

The financial resources spent on health can be analyzed in terms of how the total expenditures relate to the size of the whole economy (measured in terms of the Gross National Product or GNP). In general, less developed countries (per capita GNP lower than US\$500) spend less than 3 percent of their GNP on health care. More advanced countries (with a per capita GNP greater than US\$7,000) tend to spend close to 7 percent of GNP on health care²³. Health costs for intermediate developing countries generally represent between 4 and 8 percent of GNP. El Salvador is considered in the category of intermediate development, though it is located in the less developed group of countries. The total operating cost is estimated by adding together the direct costs incurred by households and the operating costs of the public institutions that provide health care.

The 1991 national household survey carried out by MIPLAN provides data to calculate the total expenditures on health care by households. The survey was limited to urban areas. The findings indicate that the average household expenditure on health care was 1,342 colones per year, which constitutes 4.2 percent of the total household expenditures.

According to this survey, urban households spent approximately 720 million colones on medical care in 1991. Assuming that the distribution of health costs in rural areas relative to urban areas was similar in 1991 to that determined by the REACH survey in 1989 (31.6 percent), it is estimated that the total amount expended by households on health care was 950 million colones in 1991²⁴. If these figures are adjusted for inflation during 1991 and 1992 (according to the Consumer Price Index), the figure rises to 1.09 billion for 1992. In order to calculate the total expenditures for 1992, to that figure the following must be added: 1) MOH expenditures (net user fees) - 464 million colones; 2) ISSS expenditures on medical care - 405 million colones; 3) total payments made by private insurance companies - 18 million colones; 4) ANTEL - 40.7 million colones; 5) Bienestar Magisterial - 35.8 million colones; and 6) CEL - 29.7 million colones. Based on these calculations, the total operating cost of the health sector in 1992 was 2.03 thousand million colones²⁵.

²³ The U.S. is an extreme case in which 14.5 percent of GNP is spent on health care.

²⁴ These totals are for operating costs and do not include GOES investment, loans, grants, or international technical assistance.

²⁵ This figure underestimates total expenditures because it excludes all of the subsidized care provided by NGOs (including health services provided free-of-charge). It is included here, however, because it is the best estimate available.

Based on this estimate, it can be said that health care expenditures in El Salvador in 1992 were equivalent to 3.71 percent of the GNP. The two most important public sector institutions, the MOH and the ISSS, spent 42 per cent of the total or 1.6 percent of the GNP. In most Latin American countries, the ministry of health alone spends more on health care relative to GNP than the MOH and the ISSS spend in El Salvador. In other countries in the region, health care expenditures represent between 5 and 7 percent of GNP. From all of the above, one can conclude that the financial resources devoted to the health sector in El Salvador are insufficient. In part, this is corroborated by the dependence on foreign assistance to cover the operating costs of the MOH and the NGOs.

Distribution of expenditures

Based on the figures mentioned above, the distribution of health expenditures can be determined as follows:

- Private/households: 53.1 percent
- MOH: 22.0 percent
- ISSS: 19.6 percent
- Other public services: 5.3 percent

These figures clearly show the discrepancy between the responsibility for coverage of the different institutions and their financial resources. The low level of financing for the MOH is of particular concern. With only 22 percent of the resources, it is expected to provide services to 50 percent of the population (those who fall below the poverty line). This is even more disturbing if one considers that the population which the MOH covers is most likely to have health problems and which, according to all indicators, has the worst health conditions. Furthermore, the MOH network of services is open to any person with a health need, and it provides hospital services to 75 percent of the entire population. This just sharpens in inequity in resources mentioned above.

ISSS beneficiaries constitute 12 percent of the population. The difference between the population covered and the resources available to provide services between the ISSS and the MOH is enormous and results in great differences in the services provided to the two groups of beneficiaries. In 1992, the ISSS provided approximately 4.88 medical consultations per beneficiary. In contrast, the MOH only provided approximately 1.5 consultations per beneficiary (50 percent of the population). The ISSS thus provided three times the number of medical consultations per person than the MOH did. In terms of hospital care, the ISSS had close to 2.4 times the number of hospital admissions the MOH did: 10.5 versus 4.2. The ISSS spent six times more per person than the MOH: 698 colones compared to 116 colones.

The ISSS beneficiaries have more resources available to them than the MOH beneficiaries, while the health programs of other public sector institutions have more resources per person than the ISSS. The ANTEL and CEL programs have high costs per beneficiary. In 1992, CEL spent 2,052 colones per beneficiary, the highest of all of the subsectors under discussion and three times the rate of the ISSS. The inequalities in the resources and services per person in relation to the ISSS and the MOH can be determined by using a standard measure of the relative costs of each program; the health costs per person of each institution is measured in relation to the MOH per person costs. By dividing the costs of the other institutions by the MOH costs, a relative measure of the inequity is obtained. For each colon spent per person by the MOH, Bienestar Magisterial spends 2, the ISSS spends 6, ANTEL spends 11, and CEL spends 18.

The inequity in the distribution of resources can also be seen in terms of geographic area. As seen in Table 20, almost two thirds of total health sector expenditures are made in the MASS. Except for the MOH, the other public institutions and the private sector providers concentrate their resources in the Metropolitan Region. The result of this concentration of resources in San Salvador is great inequity in access and use of health services.

The goal is not to have a perfectly equal distribution of resources. The MOH hospitals in metropolitan San Salvador receive referrals from all over the country and have higher operating costs²⁶. It is in the distribution of the resources of the other institutions (78 percent of the total), where the imbalance is created to the detriment of other urban areas and rural areas.

Table 20

CONCENTRATION OF HEALTH SECTOR FINANCIAL RESOURCES
IN SAN SALVADOR

Financial Resources	MOH	ISSS	Quasi-public*	Priv.	Tot.
Percentage of own budget in San Salvador	42	73	70	70	
Percentage of total budget of the Sector	22	20	5	53	100
Percentage (by institution) of the total health resources in San Salvador	9	15	4	37	65

* "Quasi-public" includes ANTEL, CEL, and Bienestar Magisterial. It is estimated that 80 percent of Bienestar Magisterial is in San Salvador.

Most of the private sector resources are spent in the MASS. One study of the patients who receive health services from the private sector in the MASS concluded that only 30 percent come from outside of the MASS, mainly from other urban areas. This imbalance in the geographic distribution of resources demonstrates a marked lack of access to services for the 50 percent of the population residing in the rural areas. Even when rural residents have easy access to San Salvador or other urban centers, the cost of the services available to them is often prohibitive. Within the health sector, both the MOH and the NGOs are trying to correct this imbalance. It is a factor to be considered in the development of policies in health.

MOH financing

Earlier sections of this document presented the marked insufficiency of MOH financing for health care, both in relative terms (compared with the resources available to beneficiaries of other institutions) and in absolute terms (colones per beneficiary). This section will explain the low level of financing as a function of the historical means of financing the MOH. The MOH has six different sources of funding, with varying levels of importance and supervisory and control systems. They are:

- Ordinary Budget of the GOES; main source of funds.
- Extraordinary Budget of the GOES, which consists of foreign loans.

²⁶ It is generally believed that most MOH hospital patients in San Salvador come from other parts of the country. The rate of MASS residents, however, is 84 percent of outpatient care and 83 percent of hospital care at the Maternity Hospital, and 74 percent and 67 percent at the Rosales Hospital, and 86 percent and 62 percent at the Bloom Hospital. This suggests that a high proportion of MOH hospital resources is being spent on San Salvador residents.

- Direct financial assistance for the MOH, which consists of foreign loans and grants for ministry projects; this is the second largest source of funds.
- Technical assistance, which consists of bilateral and multilateral technical support provided directly to the beneficiary (the MOH receives no funds).
- Charges for outpatient care paid by the users (through a system of community health boards)
- Charges for hospital services paid by the users.

The relative importance of these sources can be seen in Table 21 below.

Table 21

SOURCES OF TOTAL OPERATING COSTS OF THE MOH
(in thousands of current colones)

Source of Funds	1991		1992	
	Total	%	Total	%
International assistance: all projects	138,334	23.5	120,032	19.4
Operating costs financed by the MOH- GOES (general funds)	424,204	71.9	463,994	75.1
Charges to users: outpatient services	21,964	3.7	26,901	4.4
Charges to users: hospital care	5,163	0.9	6,816	1.1
Total MOH operating costs	589,665	100.0	617,743	100.0

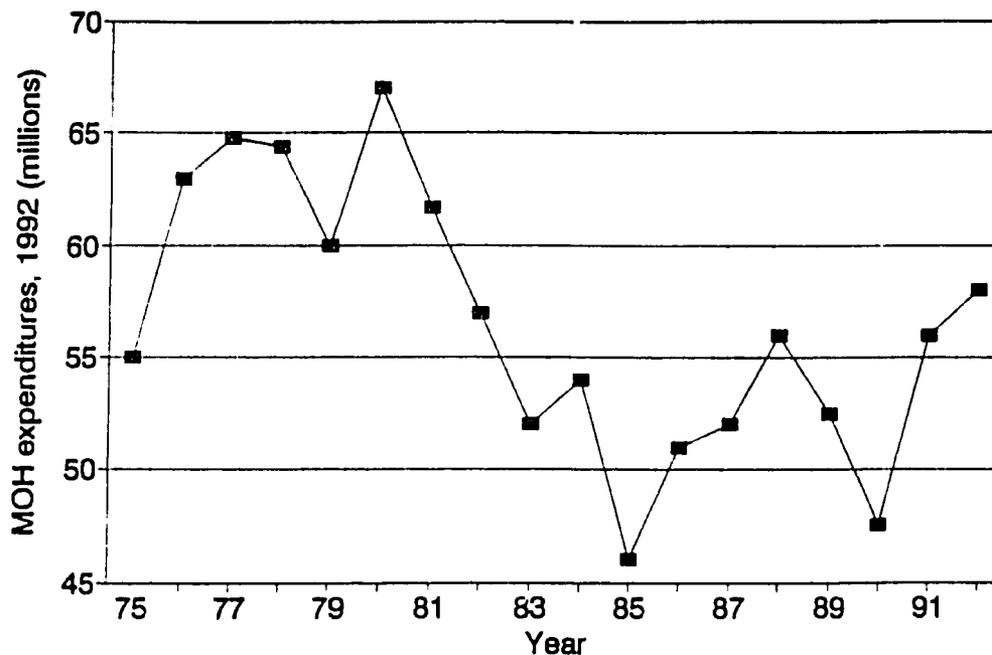
The data from the FAO is based on an estimate made by the International Technical Cooperation Office of MIPLAN that the program had used 60 percent of its average annual budget.

The data from the World Bank Project come from unedited reports on the expenses of the Project Implementation Unit. The data from USAID come from unedited reports from SETEFE, MIPLAN.

The figures on user charges are real income, which normally match the expenses (95 to 98 percent).

The Ordinary Budget is the main source of financing for the MOH. The figure which follows demonstrates the extent to which this source has decreased its MOH funding over the period 1975-92.

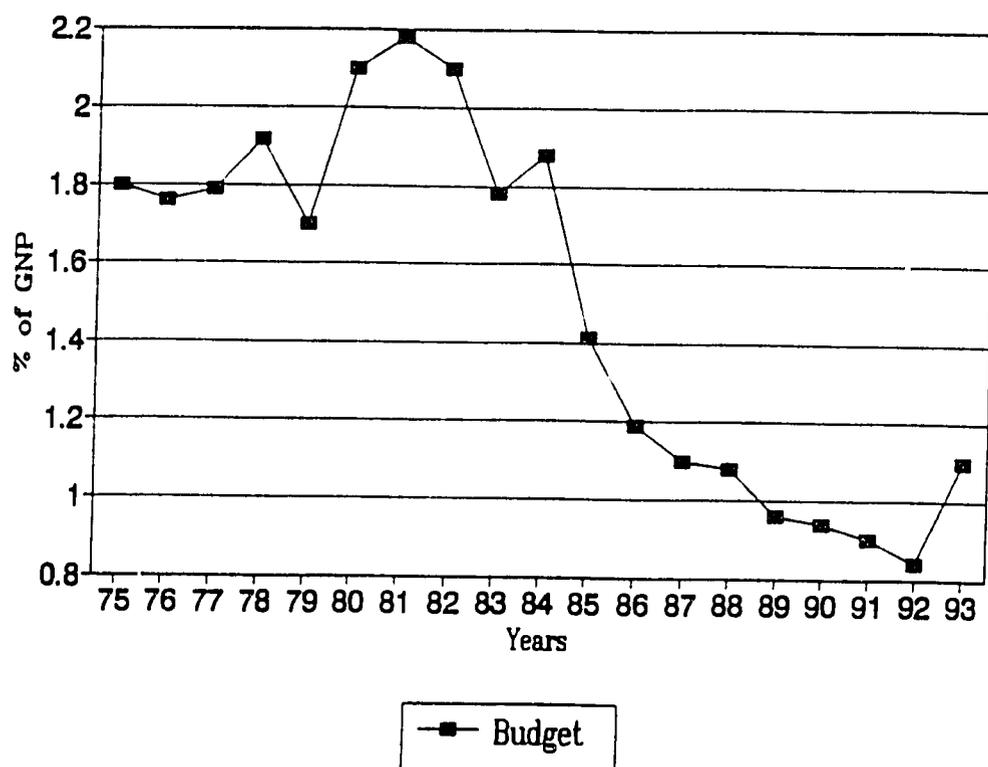
REAL EXPENDITURES OF THE MOH
(In 1962 colones)



Four periods are shown: 1975-80; 1980-85; 1985-90; and 1990-93. The first period was characterized by an increase in spending which averaged 4.1 percent per year. The second period (1980 to 1985) was very different; spending dropped dramatically and the MOH had a negative annual growth rate of 7.2 percent. For 1985-90, spending was erratic and showed almost no growth over the five-year period. Since 1990, spending has registered a real increase and the growth rate has average 15.4 percent annually. The erosion of spending by the MOH which occurred at the beginning of the 1980s has been halted and in the last three years real growth has occurred. Calculated on the basis of the population served and in real terms (1962 colones), however, MOH spending in 1993 (14.5 colones per capita) was still below the 1976 level (18.1 colones per capita).

Another way to measure the significant financial decline experienced by the MOH is to look at its spending relative to the size of the national economy (measured by the GNP), as shown in the following figure.

EXPENSES OF THE MOH AS A PERCENTAGE OF THE GNP

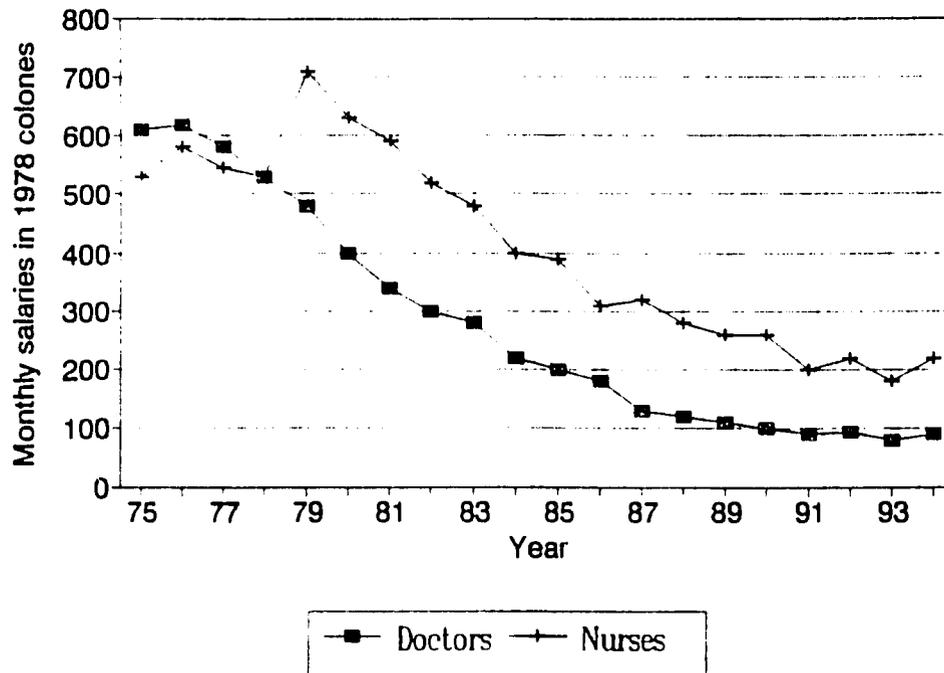


When looking at this figure, it should be remembered that the size of the economy decreased dramatically at the beginning of the 1980s. In constant terms, the economy only regained the size it was in 1978 in 1993; during all of the intervening years the GNP was lower than it was in 1978. If the increase in the size of the population is added to this, the relative size of the economy in terms of per capita GNP is still smaller in 1993 than it was in 1978. The figure above shows how MOH spending dropped from close to 2 percent of GNP in 1980-81 to less than 1 percent in the period 1989-92, that is, to less than half of what it was, in an economy which had contracted by 22 percent. If one takes into account the population growth, then the drop in MOH spending is even more alarming.

Accumulated as it was over a ten-year period, the shrinking of the MOH budget had a significant impact on MOH activities and programs. The MOH has only been able to maintain an acceptable level of performance over the past three years because of the recent recovery of the economy, the increase in real MOH beginning since 1991, the efforts of MOH personnel to carry out their responsibilities in spite of poor working conditions, and the massive foreign assistance which the MOH has received, mostly from USAID and more recently from the World Bank.

Given the significance of human resources in the delivery of health services, it is important to note the impact of the drop in MOH spending on salaries. The salaries of MOH personnel have been affected negatively by two factors; first, by the leveling of the salary scales, and second, by the erosion in purchasing power. The most drastic consequences have been experienced by doctors and nurses, as shown in the following graph.

DROP IN REAL SALARIES OF MOH DOCTORS AND NURSES



The current salaries of doctors and nurses have decreased in real terms to one sixth and one third of their respective 1978 values, corresponding to the deterioration of the financial situation of the MOH during the same period. The decrease in the number of hours worked, the difficulty in fulfilling the assigned tasks during the assigned period, the drop in productivity, the increase in labor conflict, the exodus of the most able employees, and the limited appeal of MOH jobs for qualified professionals are all consequences of this policy which should be reversed as soon as possible.

Destination of health sector funds

An excessive proportion of health sector spending is devoted to financing curative health care; this occurs primarily in the private sector, the ISSS, and the health programs of public corporations. In the MOH and in the NGOs, though expenditures on curative care predominate, preventive health care also receives significant funding relative to the total budgets. The household survey carried out by MIPLAN provides interesting data on private sector spending, as reflected in Table 22.

Table 22

HOME HEALTH EXPENSES, 1991

Type of expense	Colones	Percentage
Medical consultation	337.60	18
Eyeglasses and ophthalmology	65.88	5
Odontology	11.28	1
Other medical services	397.44	30
Medicine	629.64	47
Total	1,341.84	100

Note: Average expenses in health services, by family, by year.

Source: MIPLAN, Income and expense polls of homes at a national level, 1991.

Medicine is the most important category of expense and accounts for an average of 47 percent of all household health expenses. Taking into account the observations made earlier about the doubtful value of many pharmaceutical products purchased in El Salvador, it appears that this category is a source of inefficiency in the health system. The other major categories are payments made to private doctors and other health services, which reflects the importance of private outpatient medical care.

MOH spending represents 22 percent of total spending in the health sector. It is difficult to make an accurate calculation of the MOH expenditures for the health centers (which are really regional hospitals) since they are included in the total figure for each region, but an estimation was made. This figure was then added to the MOH hospital expenditures; the total for all MOH hospital expenditures including the health centers was calculated and came to 75 percent of all MOH spending. This demonstrates the emphasis which the MOH puts on curative care. All of the expenditures for health units, health posts, and other basic health services including preventive care only total 25 percent of the total MOH budget.

The ISSS has begun to incorporate some preventive care activities into its programs but only at a very limited level. None of the other health programs of the public corporations or other ministries (Ministries of Education and Defense) appear to devote any significant effort to preventive care.

To summarize, the most significant factors which affect health sector financing are: insufficient funding levels, particularly of the MOH; marked inequities in the system in terms of access to the institutions providing care, area of residence, and socio-economic level; excessive dependence on foreign assistance, especially by the MOH and the NGOs; and the low percentage of funding devoted to basic curative and preventive health care.

2.5 Services provided

Given El Salvador's epidemiological profile, it is interesting to review the delivery of basic health care and preventive care services by sectors and by institutions. The 1993 National Survey on Family Health (FESAL-93) provides valuable data on the coverage and location of service delivery, as detailed below.

Prenatal care

According to FESAL-93, 69 percent of pregnant women had at least one prenatal care visit²⁷. The proportion of women who are monitored during their pregnancy is lower in rural areas and is in direct relation to the educational and socio-economic level. As an example of this, 56 percent of women with a good level of education were monitored during pregnancy, whereas only 20 percent of those who were uneducated had any pregnancy control.

The MOH is the principal provider of prenatal care, followed by the ISSS. Of the women who had at least one prenatal visit, 71 percent were attended by MOH services, 14 percent by the ISSS, and 12 percent in a clinic or with a private doctor. The greatest proportion of women attended by the MOH were women living in rural areas with a low socio-economic level and with little or no education. The profile of the women receiving prenatal control from the ISSS and private sector providers was exactly the opposite of this.

Delivery services

Approximately 51 percent of the deliveries were in private or public hospitals; this proportion is higher for pregnant women from the MASS (81.7 percent), with high socio-economic status (79.5 percent), and with a high level of education (85.5 percent). An additional 36.4 percent of the deliveries were assisted by midwives, mostly in the home; this is most frequent in the case of women in rural areas with a low socio-economic level and little or no education²⁸.

Most deliveries are handled in MOH establishments, with the exception of mothers who reside in rural areas, those who have less than four years of formal education, and those who have a low socio-economic level; the deliveries of half of these women are assisted by midwives. The ISSS handles 10 percent of deliveries, while the private sector handles 3 percent. For both, the delivery services are concentrated in the MASS, and for women who have a good level of education and who have high socio-economic status.

Growth monitoring and development (well child)

Of all children under the age of five years, 80 percent had at least one well-child control visit. These figures change substantially if the timing of the control is taken into account; only 18 percent of the newborns had been monitored by the end of the first month of life, and 60 percent by the end of the second month. Only 50 percent

²⁷ This isolated figure could lead one to think that the coverage for prenatal care is satisfactory. In general terms, 31 percent of pregnant women had no care. The data suggest that those who had no care were those with the highest risk. Only one third of the pregnant women received care during their first trimester or had at least four care visits. In general, coverage of prenatal care falls into three groups: one with a satisfactory level of care; one with incomplete care; and one without any prenatal care. Unfortunately, the level of coverage and the quality of the prenatal services are inversely proportional to the risk of the pregnant women receiving the service.

²⁸ The MOH has trained close to 3,500 midwives; because of the training and experience of the midwives, the quality of the care they provide is high. In many hospitals of the MOH, the ISSS, and the private sector, however, the attention during delivery is often not adequate; the high caesarian rate is evidence of this.

of the children residing in rural areas, with a low socio-economic level, and with an uneducated mother, however, had been monitored by the end of the second month.

MOH institutions are the prime providers of growth and development monitoring for children under five year of age; of all the children who had been monitored, 80 percent had been attended by the MOH. The proportion of children who take advantage of this service varies from 53 percent of the children who live in the MASS to 71 percent who live in rural areas, from 37 percent of those whose mothers have ten years or more of education to 69 percent of those with uneducated mothers, and from 43 percent of those children with a high socio-economic level to 71 percent of those with a low socio-economic level.

In general terms, one can say that maternal and infant care coverage of the population in El Salvador can be divided into three equal categories: a satisfactory level of coverage; inadequate coverage; and no coverage. The MOH has the most predominant presence in the delivery of maternal and infant care, although the NGOs provide significant levels of care (impossible to measure) in rural and marginal urban areas. The private sector, the ISSS, and other health programs cover approximately 20 percent of the population, which consists of women and children with high socio-economic levels, with a high educational level, and residing in the MASS.

3. Demand for Health Services

When health policies are developed, more emphasis tends to be put on the supply rather than the demand for health services: on health personnel, the health establishments, equipment and other supplies, pharmaceutical products, etc. It is important to remember, however, that health systems are also defined by the demand for health services (what the consumer wants, believes, and does)²⁹. Many interacting factors influence the demand in a given population. This section analyzes these factors, that is, the characteristics of the consumers and the health providers which have an impact upon the delivery of health services.

3.1 Perception of health problems and treatment

The perceptions people have of health problems and health services are important elements in determination of the demand. ANSAL carried out interviews in 120 households in rural and marginal urban areas in order to identify these perceptions. In the technical sense this was not a representative sample because the households were not selected on a random basis, but the results are valuable because they provide information about topics and areas for which very little data exist. The design of the interview instrument and the interviews were carried out by a medical anthropologist who was a member of the ANSAL team.

Salvadorans accept a group of health symptoms as a normal part of their lives, especially in the case of rural residents. They do not see any need to seek treatment for certain common health problems and just use home remedies or purchase medication at a pharmacy. Among these mild symptoms are: headaches, runny nose, mild diarrhea, indigestion, common colds, etc. The mild symptoms are treated with a variety of herbal remedies, typically boiled or drunk as teas or applied as an ointment, sometimes in combination with some form of analgesic purchased in a pharmacy or grocery store. In general, the more severe symptoms are treated initially

²⁹ The demand for some health services depends on the offer that is not seen in other services. In the ambulatory attention, the actions following the medical consultation and the total of services in hospital attention, are determined in a great number by the doctors indications. The preventive and basic curative services show a demand with a higher independency, in which the user decides what services to consume.

with home remedies, but if the problem persists most people seek out professional help quickly. This strategy of health problem resolution is most common among those Salvadorans with low incomes.

Table 23

**SELECTIVE TREATMENT BY INCOME LEVEL
IN THE METROPOLITAN AREA OF SAN SALVADOR (in %)**

Level of income in percentage	Self Treatment	Public Facilities	Private Facilities	Others
20% Low	51.56	28.55	9.14	10.74
20-40%	47.84	28.03	15.12	9.02
40-60%	43.94	26.75	20.70	8.61
60-80%	40.60	27.57	24.32	7.51
20% High	35.48	21.18	35.62	7.72

Source: REACH Survey

The demand study carried out by REACH (Table 23) shows that the proportion of the population using home treatment increases as the income level decreases. The rate of home treatment for the poorest fifth of the population is 52 percent, while the rate for the highest income group is only 35 percent. Since home treatment is so common in El Salvador, it is important for people to be able to identify when the medical problems are serious and require professional medical attention. Health education programs can be effective means to inform the population of the criteria to be used, and health promoters should be trained to identify the differences between mild illnesses and more serious medical problems.

Given the prevalence of maternal and infant diseases, it is important to know the attitude of women towards health services. It is often assumed that those people with low incomes and no formal education know very little about how to treat or prevent diseases. The majority of people in rural areas in El Salvador accept and use traditional approaches such as amulets, special diets, or herbs to prevent or treat health problems. The traditional practices are not considered incompatible with modern concepts and practices which include better health conditions, balanced nutrition, vaccinations, and medical consultations; there is a syncretistic approach to treatment of disease in which people look for treatment wherever they consider it to be effective. Salvadoran mothers generally accept the concept of vaccines as an important "treatment" for children.

Not all preventive measures are as widely accepted as vaccines. In the sample with 120 households, almost half of the women responded that they had never had a Pap smear³⁰. Of those who had had the test, very few had had it on a regular basis. The study also showed low rates of birth control use and prenatal control. Of the women who had been monitored during pregnancy, the majority had only one or two visits and had only been monitored during one pregnancy, even though they had had more than one child.

The respondents either considered family planning as a dangerous and mistaken practice or they did not pay much attention to it. Many of the women responded that family planning, and in particular sterilization, weakened women and made them ill; this was probably in reference to the side effects of some birth control method. Prenatal monitoring and care during childbirth were not viewed with the same socio-cultural bias. It is likely that the low rates of prenatal attention and delivery care are due to the lack of information and limited access to these health services. The most common reasons stated for not using the services of a midwife were: "I don't know any midwife" or "When the moment came there was no time to fetch anyone" or "That is too expensive". Finally, the attitude of the rural women towards pregnancy and childbirth is that since they are not health problems, they do not need to be treated.

The most serious barriers in the way of women receiving prenatal care are the lack of information and the limited access to health services. The majority of women included in the ANSAL study had to walk for more than an hour to reach a health unit. It does not seem reasonable to expect pregnant women to walk such distances towards the end of their pregnancies, particularly if they feel well.

3.2 Perception of the health services

Both the REACH and the MIPLAN studies asked the respondents: "If you were sick during the last 15 days, where did you receive the health services?" Unfortunately, rural and low-income residents do not distinguish clearly between the different health establishments. For example, when the question was "What did you do the last time someone in your home was sick?", the answer commonly given was "I went to buy some medicine" or "I went to see the doctor".

The various categories and institutional affiliations of the health establishments are not as well differentiated by the users of the system as by the policy makers. For rural patients, the store or the pharmacy (*botiquín*) are similar but not equivalent resources; the pharmacy is perceived as being more specialized because it has a wider variety of pharmaceutical products that are stronger than the products offered in a store. The users usually do not have any problem differentiating between a health post and a hospital. The differences between the diverse intermediate level establishments, however, such as health centers and NGO units and clinics, cannot be identified. The users simply see these as places where there are doctors, and they are commonly referred to as health units. The difference between private physicians and public sector clinics is clear; users recognize that private doctors are more expensive but that they have more convenient schedules. In some cases, members of a community are able to associate a health promoter or a health post directly with a NGO, whereas in other cases, they are not sure if the people providing the services are from the MOH or from a NGO.

It is important to understand the distinctions made (or not made) among health services by the users, because this reflects which elements are the most important for them. In the majority of cases, the following are considered of greatest importance: convenient location; regular hours of service and convenient schedules;

³⁰ The sample of 120 homes is not representative in the study of FESAL 93; only 32 percent of those surveyed did not have the exam.

personnel trained to identify and treat medical problems; and availability of medication (accessible location and reasonable price).

Role of the health promoters

With El Salvador's epidemiological profile, the distribution of the population, and the scarcity of health professionals (doctors and nurses), the health promoters are key in the delivery of first level health care to the high risk population. They have the potential of becoming a very useful force for improvement of the health situation. Generally they are respected members of the community who have been chosen by other community members to receive training and to serve as promoters. The performance, influence, and recognition of the promoters vary considerably. In some communities the promoters develop their full potential and deliver a wide range of health services including epidemiological control, health education, and basic curative care, whereas other promoters are hardly noticed in the community and provide limited services. Improvement of the delivery of services by the health promoters and other local providers will be an essential part of the strategy to increase prenatal monitoring and the use of other basic health services.

The MOH and the NGOs have made a concerted effort to train basic health service personnel. The MOH has trained more than 3,000 midwives in prenatal and obstetric care and 1,500 promoters in basic knowledge and skills for the delivery of basic health services. The promoters receive a 12-week course on community participation and health promotion. The topics covered include: latrines, water, garbage disposal, hygiene, growth monitoring, vaccinations, ARIs, family planning, control of diarrheal diseases, and pre and postnatal care.

The activities carried out by the promoters in the communities have not been documented nor analyzed to any great extent. The data from the MOH's Promoters' Management System³¹ show that during 1992 the promoters delivered approximately 400,000 talks on water and sanitation, latrines, garbage, and hygiene, and only 50,000 talks dealing with pre and postnatal care. To contribute to the reduction in the maternal and infant mortality rates, there should be greater support given to promoters to provide information, education, and health care services related to family planning, pregnancy, and the perinatal period.

³¹ Taken from the preliminary report *Evaluation of the Project of Support to the Health System (APSISA)* prepared by the Divisions of Population Health and Nutrition, USAID/El Salvador, 8 of December 1993.

Table 24
ACTIVITIES OF THE COMMUNITY HEALTH PROMOTER

Activity	Number of talks given by the promoter
Latrines	112,622
Water	102,001
Garbage	96,645
Hygiene	94,679
Growth monitoring	92,212
Vaccinations	86,326
ARIs	66,168
Family planning	66,344
Diarrhea	62,769
Pregnancy	33,006
Postnatal care	16,915

Source: APSISA Project Evaluation Report, 1993

The proportion of promoters who are male is 53 percent; this figure was even higher in past years. Male promoters feel more comfortable talking about water, sanitation, and latrine construction than about maternal and infant health problems. Promoters and members of the community mentioned that women feel uncomfortable discussing topics such as pregnancy, menstruation, and other female health concerns with a man unless he is a doctor. The proportion of male promoters could be a difficult obstacle to overcome in the delivery of preventive services or basic health services related to pregnancy and childbirth.

3.3 Access to health services

Access to health services depends on several factors, of which distance and cost are the most obvious. From the patient's point of view, the choice of health service depends on factors which can be grouped into two categories: access and quality. Access can be defined as the user's perception of whether or not the service is within his/her reach in geographic, socio-cultural, medical, or economic terms.

In the ANSAL inquiry of 120 poor households, the respondents gave a variety of reasons for not seeking health care: a lack of financial resources (32.5 percent); too great a distance to the point of delivery (7.75 percent); excessive wait time (3 percent); a lack of trust in the doctors (8.3 percent); and other unspecified reasons (40 percent).

Geographic access

The importance of geographic access for the user is affected not only by the distance between the home and the health establishment, but also by the perception the user has of the distance. The means of transportation, the quality of the road, the time the trip takes, and the difficulty in making the trip are all part of what is implied by geographic access.

Table 25

TRAVEL TIME BY REGION – RURAL AND URBAN AREAS
(in minutes)

Region	Approximate travel time/rural area	Approximate travel time/urban area
Western	84-178	34-136
Para-Central	59-185	48-172
San Salvador	59-189	38-135
Central	71--146	38-94
Eastern	57-112	46-12

Source: REACH survey

Table 25 shows the approximate travel time (in minutes) to health establishments for the urban and rural areas of each of the regions. In each case both the average time (left column) and the maximum time (right column) are presented. For the majority of the people in rural areas the average time to reach a health establishment is one hour or more. This would be a reasonable length of time if the trip were made only in the case of serious medical problems; most of the minor health problems could be resolved in the user's own community. As mentioned above, however, geographic access is also concerned with factors such as the means and cost of transport, the probability that the health establishment is open at any given time, and the availability of trained personnel.

Socio-cultural factors

Socio-cultural considerations such as the user's educational level play a role in his/her perception of the health services. One example of this occurs with self-treatment. The proportion of people who recur to self-treatment when ill rises from 39 percent of those who have at least thirteen years of schooling to 54 percent of those who have no formal education. There is also a factor of trust between the user and the health service personnel. Those users who have a very low level of formal education tend to be intimidated by health personnel, who at times have a brisk manner or who use words that the uneducated user cannot understand.

3.4 Quality of health services

The decision to seek health services is influenced by factors of access and quality, as mentioned earlier. In general terms, the concept of quality of attention consists of a technical component (measured by pre-established standards) and user satisfaction. The latter is influenced by the perceived technical level of the health personnel, the time the patient has to wait for treatment, the manner in which the patient is treated, the availability of personnel, and other factors such as the schedule of the health establishment.

Level of personnel or health establishment

The interviews carried out by ANSAL in 120 households provided interesting information concerning this point. The patients judged the health service by the qualifications of the personnel, the condition of the buildings, and the availability of equipment for diagnoses and treatment. People basically try to decide whether or not the health service is appropriate for the level of medical care needed (as determined by the patients themselves). In El Salvador, the distinction is made between mild symptoms, serious symptoms, or no symptoms, which explains why people seek only basic health services or a very high level of medical services. The users as well as the health personnel providing primary level health services should be provided with better information to identify symptoms of common health problems.

Waiting time

The amount of time a patient has to wait for treatment affects the decision of whether or not to seek treatment. ANSAL team members discovered that for persons with low incomes who depend directly on their daily work to satisfy the basic necessities of the home, the length of time in health establishments was crucial.

Table 26

WAITING TIME BY HEALTH ESTABLISHMENT (in minutes)

Establishment	Approximate waiting time in minutes
Hospitals	148.56 (2.50 hrs.)
Health units and posts	146.29 (2.50 hrs.)
Private for-profit	61.08 (1 hour)
ISSS	89.47 (1.50 hrs.)
Pharmacy	9.35
NGOs	101.56 (1.66 hrs.)

Source: REACH Survey, 1989

Table 26 shows that the waiting time is very long with the exception of pharmacies. If they know they will be seen by a doctor, the patients prefer to go to a private doctor or to a hospital.

Availability of personnel, pharmaceuticals, and supplies

During the interviews carried out by ANSAL, in which those who did not go to health posts or health centers were asked "Why don't you use the health centers or posts?", the most common answer was "The last time I went there wasn't anyone there" or "They didn't have any medicine so it would have been better to have gone directly to the pharmacy". In an ANSAL study on the supply of pharmaceuticals, the MOH establishments had the best supplies of medicines³². Thus the most important problem seems to be the absence of medical personnel. In rural areas many people are not aware of the schedules of the doctors or nurses in the health centers and health posts.

3.5 Quantitative demand analysis

In order to have a broader view of the demand for medical services in El Salvador, ANSAL did a second analysis of the data from the 1989 Reach survey and the 1990-91 MIPLAN study. The analysis only covered curative outpatient care. The conceptual approach was the following: the person who is ill or who has an accident should decide first if he will treat himself or whether he will seek formal medical services; and if he does seek care, he has to decide to which provider he will go.

In the analysis four factors were considered as having an influence on the decisions: the consultation fee, the cost of the medicine, the travel time to the health establishment, and the waiting time at the health establishment. Another factor is the patient's perception of the severity of his medical problem.

The population surveyed was divided into three groups for this demand analysis:

- * ISSS beneficiaries
- * Non-ISSS beneficiaries living in urban areas
- * Rural residents

Findings

Table 27 shows the providers chosen by the three population groups³³.

³² See the technical report from ANSAL on Pharmaceutical Products by D. Lee and J. Bates.

³³ Each line of the chart totals 100 percent. This represents a simplification of reality: in each group or market segment, "other service providers" has been eliminated because of the low numbers of observations.

Table 27

SELECTION OF CURATIVE CARE PROVIDER
(percentage distribution for each group of patients)

Category of patient	MOH Hospital	MOH Unit/Post	ISSS	Private sector	Self-treated
ISSS beneficiaries	---	---	22.7	8.7	68.6
Non-ISSS urban beneficiaries	3.6	4.3	---	4.0	83.6
Rural residents	3.2	4.3	---	4.0	88.5

Source: ANSAL, based on data from REACH and MIPLAN.

ISSS beneficiaries treated themselves in two of every three cases when they were sick. When they decided to use health services, two thirds chose the ISSS and one third chose private sector health services. The high proportion of ISSS beneficiaries who preferred to use private sector services is striking.

More than four of every five non-ISSS urban residents treated themselves when they were sick. This proportion of self-treatment is significantly higher than that of ISSS beneficiaries. Of those who decided to use formal health services, two thirds chose MOH facilities and one third went to the private sector. It is interesting to note that in spite of very diverse income levels, a large number of non-ISSS urban residents preferred to use the private sector services instead of the ISSS services to which they had access.

Almost nine of every ten rural residents treated themselves; this is the group with the highest level of self-treatment. Two thirds of those who chose health services go to the MOH and one third used private sector services.

Except for a higher proportion of people who treat themselves, the behavior of the rural residents is very similar to that of the non-ISSS urban residents. In both groups 66 percent choose MOH services, with a preference for MOH health units and health posts over MOH hospital services. When this behavior is analyzed in terms of the variables already mentioned (price, wait time, geographic distance, travel time, etc.), interesting patterns emerge.

The majority (72 percent) of the ISSS beneficiaries who used ISSS facilities did not pay for the consultation; the medication cost on average 2.3 colones; they had to wait for slightly more than an hour and a half to be seen by medical personnel; and it took them approximately one hour to reach the health care facilities. For those ISSS beneficiaries who decided to use private sector health services, they spent on average 47.6 colones on medication and doctors' fees; it took them one hour to reach the health services; and they waited for 45 minutes to be seen by medical personnel. The income level of the ISSS beneficiaries who chose private sector health services was approximately 25 percent above the other ISSS beneficiaries who were treated in ISSS facilities.

Most of the non-ISSS urban residents (66 percent) who sought formal health services went to MOH establishments, with equal proportions going to the health units/health posts and to MOH hospitals. Those who went to the health units/health posts spent less on consultations and medication and had a shorter travel time (half an hour), but they had to wait approximately two and a half hours to be seen. The people who chose private sector health services had to travel 45 minutes, but they had to wait only one hour to be seen. This subgroup is composed of people who are older and who have higher incomes and educational levels.

The behavior of rural residents is similar to that of urban residents; most of the non-ISSS rural residents (65 percent) who sought formal health services went to MOH establishments, with some preference for the health units and health posts. The time needed for travel and waiting was the same for rural as for urban residents who went to MOH facilities. Both groups spent the same approximate amount for doctors' consultations, but the rural residents spent 50 percent more on medication even though their incomes were much lower and the impact on the family budget greater; while urban residents spent .3 percent of family income on medical attention, the figure rose to 2.2 percent for rural residents.

The use of health services was analyzed not only in terms of the factors already mentioned (price, time, etc.), but also in relation to some characteristics of the users (age, sex, occupation, and educational level). The influence of some of these characteristics varied according to the segment of the market which is considered. One example concerns the user's educational level. In the rural areas, a higher level of education was associated with a higher percentage of people who treat themselves, whereas in urban areas, the higher the educational level the lower the proportion of those who treated themselves and who did not seek formal health services. Another example concerns family income. For rural residents, the higher the income the greater the probability that they would go to a MOH health unit or health post, whereas in the case of urban residents, the higher the income the greater the possibility that they would treat themselves, go to a hospital, or go to a private doctor. In consequence, only the poorest sectors of the population use the services of the MOH health units and health posts.

Conclusions

The most important findings and conclusions of this new quantitative demand analysis are summarized below.

- * The MOH health units and health posts deal with less severe health problems than the hospitals, which handle the most serious medical cases. It appears that the hierarchical system and the referral system of the MOH establishments are functioning adequately.
- * When the cost of the health services of health units and health posts is increased, fewer people use these services and those of the MOH hospitals. This indicates that both kinds of establishments are used in complementary ways and that the hospitals are being used for the purpose for which they were designed, that is, as a second level of care when the first level of care cannot resolve the medical problem.
- * In urban areas, the MOH health units and health posts are seen as "inferior goods" in the economic sense: the higher the per capita income, the lower the possibility that the user would select MOH establishments and the greater the possibility that the user would select either a MOH hospital or a private health care provider.
- * The price elasticity of hospital services is greater than that of the health units and health posts. At the same time, the health units and health posts function as substitutes for the MOH hospitals. Because of this, if prices were increased in equal proportions for all MOH establishments, then the demand for

hospital services would decrease and more users would go to the health units and health posts. If the prices were standardized for all MOH establishments, however, then the use of second and third level care facilities would be discouraged and the use of primary care services would be encouraged.

Rural residents have a greater tendency to treat themselves and show greater price elasticity than urban residents. If the prices of MOH services were increased in both rural and urban areas, then a greater proportion of rural residents would treat themselves and not seek any formal health care or they would choose a private provider. In order to have a similar effect on both population groups, therefore, the price levels in urban establishments should be higher than those in rural areas.

An increase in the price of health services has a greater impact on the choice of provider (private or MOH) than it does on the decision to seek formal health care. More than 90 percent of the changes in demand occur in the choice of the service provider.

- * The choice of which health provider is highly sensitive to the length of time that the patients are kept waiting, particularly in the health units and health posts. When the waiting time is shorter, then people tend to increase their use of these first level health care facilities. If the waiting time in these establishments were reduced by half an hour, their usage would increase by 50 percent.

In view of all of the above, in order to maximize the use of the basic health services offered by MOH establishments, the waiting time of the patients should be reduced and the price of these health services relative to other available health services should be low, particularly in rural areas. These changes would have a double effect: on one hand they would improve the equity of the rural users relative to the urban users, and on the other hand, they would promote the appropriate use of primary and secondary level health care establishments, thereby reducing the total costs of medical care.

V. CRITICAL ISSUES IN THE HEALTH SERVICES SYSTEM

This chapter analyzes the critical issues³⁴ which prevent the smooth functioning of the health sector and presents the most important recommendations to resolve the issues in summary form. The recommendations presented in greater detail in Chapters VI and VII.

The critical issues that affect the sector are concerned with: 1) the laws and regulations that apply to the health sector; 2) the policies or criteria that are used to guide decision-making; 3) the patterns of existing behavior; 4) the roles of various institutions; and 5) programs in the health sector.

All of the above categories were used in the ANSAL analysis. In order to facilitate understanding of the analysis, the issues were grouped into topics: organization of the system; financing of health services; human resources; maternal and child health; and water and sanitation. This same order is followed in this chapter; tables are presented which include a summary of the key issues and the corresponding recommendations.

1. Organization of the Health Services System

In the ANSAL team's opinion, the main obstacle to reorganization of the sector is the lack of an exact and realistic definition of the government's role in planning, financing, and providing health care. According to the Constitution, the government can, and in certain conditions should, fulfill these functions. Currently the GOES is involved in all three functions through various government agencies.

In the financing and delivery of services, the GOES has adopted varying positions which reflect decisions made at different times. For example, the government:

- finances and delivers all levels of health services to all socio-economic groups through the MOH;
- finances and delivers all levels of health services to those in the Armed Forces and their dependents through the Ministry of Defense;
- finances the delivery by private providers of a variety of health services to teachers and their dependents through the Ministry of Education;
- contributes, as an employer, to the ISSS system for health services to be delivered by groups of government employees; and
- contributes to the general financing of the ISSS through a fixed annual contribution for health services for workers in the formal sector.

The conclusions of the ANSAL team were that the GOES should focus on planning and guiding the health sector, on monitoring the quality of the health services provided, and on financing primary health care. In terms of the population groups to be protected, the government should focus its efforts on the lower income groups. All of these functions can be fulfilled through a strengthened and reorganized MOH.

³⁴ The terms "relevant aspects", "critical issues", "key topics", or other similar terms are used interchangeably in this report. Generally the expression "critical issue" has been used to facilitate understanding.

CRITICAL ISSUES OF THE HEALTH SERVICE SYSTEM

Issues	Recommendations
<p>1. Lack of definition of functions to be fulfilled by the government, fundamentally by the MOH, in the development of policies, in the financing of health sector activities, and in providing health services according to the level of care needed and the income level of the user.</p>	<p>1. The role of the government should be to:</p> <ul style="list-style-type: none"> a) Monitor the general health conditions of the population. b) Develop health policies and regulate, supervise, and finance health services. c) Ensure basic and intermediate health services for the poor and finance a specific group of services. d) Promote individual and collective responsibility in the protection of the environment.
<p>2. Lack of legitimacy, acceptance, and fulfillment of the policies and regulations established by the MOH on the part of the other public and private institutions that provide health services or that are somehow linked to the health sector.</p>	<p>2.1 The role of the MOH on this area should be to:</p> <ul style="list-style-type: none"> a) Develop health policies and ensure their implementation. b) Establish norms for the implementation of health programs. c) Develop an integrated health system. <p>2.2 A health advisory board should be created for issuing policies and norms. Its role would be to:</p> <ul style="list-style-type: none"> a) Facilitate coordination between public and private sector institutions; and b) Promote, consult, and develop consensus on health plans and programs.
<p>3. Lack of quality control of public and private health establishments and services. There are technical and operational weaknesses in the quality control systems for health establishments, health professionals, and medications.</p>	<p>3. The MOH should participate more actively in the control of health establishments, services, and medications, a function that is currently being fulfilled to a large extent by the CSSP. The responsibility for controlling health professionals should be kept by the CSSP.</p>
<p>4. Health service systems with a medical/hospital/pharmacological care model that emphasizes curative care, particularly in terms of the private sector services (with the exception of the NGOs), the ISSS, and other health programs of government institutions; this is not appropriate for the epidemiological profile of the country.</p>	<p>4. Concentrate government resources on PHC services; limit the participation of the GOES in the financing of higher level health services to a limited group of services.</p>
<p>5. Inequities in the access and utilization of services for the rural poor, which is the population group most at risk.</p>	<p>5. Focus government financing on providing services to the high risk population: rural residents with low incomes and educational levels; increase cost recovery through user fees for those who live above the poverty line.</p>
<p>6.1 Excessive centralization by the MOH of first and second level care, particularly in the delivery of PHC, and inadequate use of other sources of care (municipalities, pharmacies, NGOs, etc.)</p> <p>6.2 Inefficient management of hospital services particularly in MOH and ISSS health centers;</p> <p>6.3 Fragmentation of the management of the MOH because of foreign assistance.</p>	<p>6.1 Delegate authority for the delivery of health services to municipalities/municipal associations that would either provide the care directly or hire private organizations (NGOs, cooperatives, foundations, etc.);</p> <p>6.2 Establish efficiency and productivity criteria for hospital care and the production of health services and link financing to fulfillment of these criteria.</p> <p>6.3 Organize technical assistance according to MOH priorities and establish a management and accounting system.</p>

2. Financing Health Services

Health sector financing suffers from several problems: a notoriously inadequate level of financing for the current health conditions of the population; dependence on foreign assistance; and a poor incentive system for health workers that generates inefficiency and favors the existing inequities among the different sector of the population.

In the following table there are three important concepts which are part of the proposed reorganization of the sector:

- (1) **Mandatory health insurance:** all residents of the country would contribute and the insurance would cover services which are more complex than PHC and which can be delivered by any health service provider.
- (2) **Expanded package of services:** this refers to the set of specialized health care and hospital services (SHC) that would be covered by the insurance. It includes relatively complex care and procedures and it complements the services provided in the PHC or basic package.
- (3) **Managed care:** this refers to a new approach for providing medical services. It is based on the principle of using resources in the most efficient way, reducing costs, and maintaining or improving the quality of the services.

ISSUES IN HEALTH SERVICE FINANCING

Issues	Recommendations
1. Insufficient budget for the PHC needs of the country; incomplete coverage of the high risk population.	1. Increased government financing to cover the total cost of PHC (basic package) for low income population.
<p>2.1 Inefficient use of government resources for PHC because the MOH administers services directly and does not use alternative methods of health service delivery.</p> <p>2.2 Centralized PHC resulting in inappropriate decisions for the local level; little community participation.</p> <p>2.3 Little advantage taken of the mayors as important local resources for the resolution of problems; insufficient coordination and minimal usage of NGOs to provide PHC services.</p>	<p>2.1 Improve the efficiency of government resources for PHC by transferring some resources to community health organizations, either directly or through town governments. The amount of the transfers would be based on the size of the population to be covered and other factors affecting cost (distance, epidemiological profile of the population to be served, etc.)</p> <p>2.2 Change the technical and administrative approach for PHC services to make delivery more efficient and effective:</p> <ul style="list-style-type: none"> ● Delegate more authority to local levels. ● Implement a more effective referral and support system based on MOH health units (with doctors as part of the permanent staff) <p>2.3 Decentralization of PHC delivery to municipalities and NGOs.</p>
3. Inefficiencies from poor management and technical control of hospital services.	<p>3.</p> <ul style="list-style-type: none"> ● Promote the implementation and use of managed care instruments: usage control, access directed by specialists, use of lower cost personnel, use of generic medications, limited comforts. ● Promote the use of modern management techniques (strategic and financial planning, incentive programs, and others).
4. Inefficiencies from the prevailing medical model of care (medical-hospital-pharmacological model); increased emergency visits to solve health problems which could be handled at the local level.	4. Fully develop PHC services and decentralize PHC delivery: improve hospital management practices and privatize hospital administration.
5. Dependence on foreign assistance for operational expenses (mainly for PHC) and for PHC programs of the MOH and the NGOs.	5. Increase the financial resources for PHC allocated from the national budget.

3. Human Resources

Human resources is another essential element to be considered in the delivery of health services. This section presents the principal problems regarding human resources in the health sector and recommendations for their resolution.

The three main problems are:

- the lack of authority of the health personnel who receive the patients (nurses, nurses' assistants, health promoters, trained midwives, and volunteers) to provide basic health services (some types of contraceptives, wide-spectrum antibiotics for ARIs, etc.).
- the shortage and unbalanced geographical distribution of doctors, particularly family practitioners.
- the erosion of salaries for MOH doctors and nurses and a lack of incentives in the personnel system; the first discourages continued effort while the second provides no rewards for high productivity and commitment of professional personnel.

HUMAN RESOURCES ISSUES

Issues	Recommendations
1. Inadequate human resources relative to the needs of the country according to the epidemiological profile.	1. The government should provide incentives for the development of additional human resources (create positions, subsidize training, etc.) in accordance with the epidemiological profile of El Salvador: promoters, obstetrical technicians, technicians (diagnostic and therapeutic), nurses, and family doctors.
2. Lack of institutional capacity to develop human resources policies, to coordinate the policies among various organizations affected, and to implement the policies.	2.1 Create a technical unit in the MOH to develop and issue policies which would respond to the need to match the training of health personnel to the health needs of the country as defined by its epidemiological profile. The policies would be developed in coordination with public and private sector organizations. 2.2 Include as part of the responsibilities of the Health Advisory Board the coordination among institutions who employ health workers and the institutions in charge of training these resources.
3. Training of some health workers is done directly by the MOH, which distracts the Ministry from other more essential functions. In addition, many other institutions are involved in training health personnel and thus it is not a budgetary priority.	3. Transfer the administration of the nursing schools and the Health Training Center (<u>Centro de Capacitación Sanitaria</u>) to an autonomous entity.
4. Underuse of the MOH health promoters, trained midwives, and maternal and child care technicians in preventive care, basic curative care, and family planning.	4. Expand the decision-making authority of promoters and trained midwives to resolve basic health problems under certain conditions with effective supervisory mechanisms.
5. Inadequate resources, incentives, and salaries, all of which lead to: low productivity, unbalanced geographical distribution, inappropriate clinic schedules for the population to be served, and insufficient personnel.	5. Transfer the delivery of PHC and hospital services to communities, autonomous organizations, or the private sector, in order to have more flexible and more effective personnel policies with appropriate incentives such as salaries linked to the productivity and quality of the service delivered.
6. Centralized personnel policies in other public sector organizations with results similar to those above.	6. Decentralization of the management of health care workers, transferring it preferably to private sector organizations.

4. Maternal and Child Health Issues

The major health problems faced by El Salvador are currently concentrated in maternal and child health, and it is expected that this situation will continue for the next ten years. Improvement in the overall health situation of the country will only occur if the specific problems faced by mothers and children (particularly those under the age of five) are dealt with directly.

ISSUES IN MATERNAL AND CHILD HEALTH

Issues	Recommendations
1. Lack of focus on the areas of highest risk for maternal and child health.	1. Establish and use evaluation criteria to focus maternal and child health services, with priority given to services for rural areas.
2. No definition by the MOH of the top priority maternal and child health problems.	2. The priority areas in maternal and child health services to be included in the basic package of health services are: malnutrition; spaced pregnancies; child survival; pre- and post-natal care; and STDs including AIDS.
3.1 Insufficient number of promoters. 3.2 Limits in the decision-making authority of promoters and midwives regarding resolution of common health problems.	3.1 Increase MOH and NGO rural coverage using promoters, trained midwives, and other auxiliary personnel. 3.2 Increase the participation of promoters and midwives in integrated health care, including: prevention, detection, and early treatment of priority illnesses.
4. Insufficient coordination within the MOH between projects, programs, and departments related to maternal and child health.	4. Combine the different MOH programs and activities that focus on maternal and child health into one office at the central level.
5. Weak coordination of maternal and child health activities with other organizations in the health sector (mainly NGOs and the ISSS). This coordination is sometimes affected by non-technical criteria.	5. Coordinate efforts in the five priority maternal and child health areas among all institutions of the sector.
6. The need to integrate the different technical and management information systems already existing in the sector, even within the MOH.	6. Establish one information system for the sector which would help decisions to be made and which would include data to evaluate results at a sectoral level.
7. Poor national data on vital statistics, particularly from smaller municipalities with limited organizational capability.	7. Strengthen and restructure data collection activities concerning vital statistics.
8. Inconsistent application of herbicides by agricultural workers.	8. Application of current standards for herbicide use.

5. Health and the Environment

The diseases which are most common in El Salvador and which cause the most damage to human health are infectious diseases and parasites. To prevent them, the biological and physical contamination of the environment must be eliminated and potable water must be provided to the entire population.

ENVIRONMENTAL ISSUES

Issues	Recommendations
1. Inadequate sanitation services in both marginal urban areas and rural areas; inadequate water services in rural areas.	<p>1.1 Involve the most efficient public and private organizations in the delivery of potable water.</p> <p>1.2 Promote the participation of NGOs, municipalities, and community organizations.</p> <p>1.3 Promote improvements in the municipal water supply for the rural population (those still not covered) with the support of the Social Investment Fund (FIS) and the program Municipalities in Action (MEA).</p>
2. Inadequate treatment of water; chemical and biological contamination of water.	<p>1.1 Protect water resources through:</p> <ul style="list-style-type: none"> - sewage treatment, - water control, - penalties or fines for polluters, and - education. <p>2.2 Approve a water law which includes water quality standards for human consumption and for sewage in order to prevent biological and other types of water pollution.</p>
3. Frequent interruptions in water service and inadequate quality control of water due to lack of funding and inadequate maintenance programs.	3. Improve cost recuperation through a fee system to rationalize the usage and to allow coverage to be increased.
4. Confusion in the functions assigned to different government institutions (MOH, FIS, municipalities, etc.), particularly regarding the provision of potable water to rural residents.	<p>4.1 Reorganize the institutional framework and establish clear responsibilities for:</p> <ul style="list-style-type: none"> . integrated management of river basins, . urban water systems, and . rural water systems.
5. Insufficient financing and managerial capacity to operate adequate solid waste collection and disposal systems at the municipal level.	<p>5.1 Strengthen the capacity of ISDEM and COMURES to provide support to the municipalities in the design, implementation and financing of the solid waste management system.</p> <p>5.2 Design landfills to ensure that water sources are not contaminated.</p> <p>5.3 Ensure financing for an adequate system for the collection and disposal of waste (through taxes and fees).</p> <p>5.4 Promote efficient waste management systems through private companies, municipalities, or a combination of the two.</p>

Continuation: Environmental Issues

Issues	Recommendations
<p>6. Lack of disposal systems for solid wastes including hazardous wastes which are dangerous to human health, particularly hospital waste.</p>	<p>6.1 SEMA, the municipalities, ISDEM, COMURES and the MOH should develop regulations for garbage disposal to be approved within the Sanitary Code. 6.2 Design and implement a plan for the rational management of hospital waste from public, semi-public, and private institutions. 6.3 Design and implement a plan for the rational management of toxic or hazardous waste by the institutions which produce the waste.</p>
<p>7. Lack of air quality standards and a monitoring system to enforce them.</p>	<p>7. Issue and approve standards; develop and implement monitoring and control systems.</p>
<p>8. Inconsistent application of herbicides in the use of pesticides by agricultural workers.</p>	<p>8. Application of current standards for herbicide use.</p>

VI. STRATEGIC GUIDELINES FOR THE HEALTH REFORM

Even though El Salvador has improved its health situation, particularly in the last four years, it still faces many health problems. As seen in the previous chapters, these range from the overall health situation to the performance of health services. ANSAL refers to the group of changes necessary to resolve these problems as the health reform. The term reform is used because the assumption is that the changes will be profound and will have a great impact on the functioning of the health system.

This chapter is divided into three parts: 1) maintenance of the status quo; 2) general approach to the reform; and 3) factors affecting implementation of the reform.

1. Maintenance of the Status Quo

El Salvador's health indicators have improved in recent years. Some indicators have improved rapidly, such as the prevalence of immuno-preventible diseases, while others, such as the malnutrition rate, have improved slowly.

The health system is composed of institutions which are functioning relatively well; the general public does not feel any urgent need to change the health services, even though large sectors of the population give them a negative evaluation. According to the UNICEF study Our Childhood, Our Women, Our Future: Tell Me if I Can Count on You (Nuestra Niñez, Nuestras Mujeres, Nuestro Futuro: Dime si Cuento Contigo) published in February 1994, health is not one of the five areas in which Salvadorans want to increase government effort.

Any reforms to the system would have to overcome inertia and would risk the loss of some of the achievements already gained; the changes would have a political, labor, and technical cost.

In spite of these arguments, ANSAL believes that sectoral reform is a necessity. If changes are not made in the health sector, El Salvador will face a difficult situation: preservation of the existing inequities in health services; financial collapse; reduction in the quality of health services; general deterioration of the health situation for sectors of the population that are key to balanced socio-economic development; and increased costs of bringing about changes in the future.

1.1 Preservation of existing inequities

The health sector has four major problems: inadequate coverage and access to health care; inequities; inefficient institutions and systems; and a lack of financial sustainability. Given the distribution of income and opportunities currently in El Salvador, those people who live below the poverty line have very limited possibilities to advance themselves; the correction of the inequities must be part of social and political agenda of the country. If changes in the organization and functioning of the health sector are not introduced, then these inequities will be preserved.

The poorer sectors of the population rely on the health services of the MOH and the NGOs. The MOH has 22 percent of the total health sector resources, but it provides basic health services to over 50 percent of the population and provides 75 percent of all hospital care in the country. For each colon spent by the MOH on a beneficiary, the ISSS spends 6 colones, Bienestar Magisterial 2 colones, ANTEL 11 colones, and CEL 18 colones. Data on the relative expenditures of the Armed Forces or the private sector were not available.

These inequities in the amount spent per person covered are due in part to the different costs of the factors of production: e.g. different salaries for the same service provided in different institutions. They are also due to the varying levels of health service use; the MOH beneficiaries receive fewer services per person than beneficiaries of other public and private sector institutions.

This situation becomes even more important in light of the fact that the population served by the MOH is composed of precisely those people who have the greatest needs for preventive care and basic health services. Chapter Three clearly showed how the population with the worst health indicators (high rates of mortality, malnutrition, infectious diseases, parasitic infections, etc.) consists of rural residents with low socio-economic levels and minimal or no education.

According to the Constitution, good health is a right of all Salvadorans and is a necessary condition for learning and working. The inequities in the health system referred to earlier act against this right, but they also perpetuate social inequities because fewer resources are assigned to the people who need the services most. One striking example of this is goiter from a lack of iodine: the poor children who live in rural areas and who lack iodine in their diets are likely to have difficulty in learning. In El Salvador, as in other less developed countries, the level of education of the mother has a determining effect on the health conditions of her family, especially on the health of children.

These inequities and their repercussions throughout the society will not change unless there is a significant reallocation of government resources to the health sector.

1.2 Financial collapse

The health services of the MOH and the NGOs are subsidized by international organizations. The international financial support covers the operating costs of vital areas (medicines, supplementary food, in-service training, support for immunization campaigns, logistics, laboratory reagents, etc.). A high proportion of the international assistance covers the cost of preventive care and basic curative care; at the primary level of health care, it is equal to 50 percent of the total MOH expenditures.

In 1992 foreign assistance amounted to 24 percent of the operating costs of the MOH, while in 1993 the figure had dropped to 19 percent. Two projects, USAID's APSISA and the World Bank's Rehabilitation of Social Sectors, accounted for 15 percent of the operating costs; the first project ends in mid-1995 and the second at the end of 1995. The GOES or the users will have to make substantial increases in their contributions to the health system in order to maintain at least the current level of functioning with all of its weaknesses and problems.

In other countries the users have accepted increases in the payments they make for health services, but only when there is a corresponding increase in the quality of the services received. This was the case with the primary level health services in Bolivia.

The pressure to increase government funding comes mainly from discontent hospital personnel, particularly from MOH employees. The erosion of the salaries of doctors and nurses during the 1980s relative to their historic levels was significant. Competition for any additional resources allocated to the health system, therefore, will be between the hospital care sector and primary care services. Dedicating more resources to hospitals would alleviate political tension, whereas increased funding for primary health services would improve the overall health situation of the population.

Another source of financial complication concerns the ISSS³⁵. The problem is that the cost per beneficiary is increasing without any corresponding increase in contributions from employers and workers; furthermore, there has been no increase in the quality of the health services provided nor in the health conditions of the population served. The real health costs per beneficiary of the ISSS rose by 5 to 10 percent annually from 1989 to 1992; the cost went from 250 to 315 colones (1987 colones) between 1987 and 1992. In the same period the use of health services by the beneficiaries increased: both medical consultations and hospital services increased on a per capita basis.

Table 28

SERVICES AND COSTS PER BENEFICIARY

Year	Outpatient consultations	Hospital admissions	Days of hospital care	Cost	Cost
1988	3.70	100.6	496.3	342.4	285.8
1989	3.52	90.6	491.0	339.3	240.8
1990	4.04	105.3	557.0	473.3	270.9
1991	4.25	108.9	557.5	596.6	298.5
1992	4.19	105.0	573.3	697.8	313.9

Source: ANSAL Technical Reports

Note: Column 2 refers to medical consultations per person per year; Columns 3 and 4 refer to hospitalizations and inpatient days per 1,000 beneficiaries per year; columns 5 & 6 refer to expenses per beneficiary per year, column 5 in current colones and column 6 in 1987 colones

The ISSS does not restrict the kind of care provided nor does it limit the use of its health services. Towards the end of 1989 the children of beneficiaries were added to those covered by the ISSS, which could explain the increase in the number of consultations per beneficiary. This could not explain, however, the increase in the number of days of hospital care, which in a three-year period went from 500 to 570 days per 1,000 beneficiaries per year³⁶. In spite of this, the ISSS beneficiaries are still not happy with the access to health services and the quality of the services provided.

ANTEL, CEL, and Bienestar Magisterial programs have substantially higher costs per covered person than the ISSS; it is likely that they are experiencing increasing use of their services.

³⁵ The health programs of public enterprises and other ministries have the same problem of cost increases due to poor management. The general effect is less than the ISSS because their costs are relatively smaller, although on a per capita basis their cost increases are greater and therefore the programs are facing serious problems.

³⁶ As a reference point, pre-paid health organizations in the United States and in Uruguay, with an older insured population and with more risk of illness, use from 350 to 400 hospitalization days per year, with a tendency to decrease.

In summary, the public sector health services (including the ISSS) are inefficient, foster inequities, and are not financially sustainable. This situation requires changing the system so that the institutions providing the health insurance compete among themselves and therefore increase their efficiency. It also requires that new management techniques be introduced to control the quantity and complexity of the services provided.

1.3 Lowering of the quality of health services

If the health system is not changed, then the quality of the health services will suffer a gradual decline. There are three reasons for this: the population increase, the deterioration of infrastructure, and the loss in productivity.

The population of El Salvador is increasing at almost 2.2 percent per year, with the highest growth occurring among the low-income rural population. This means that the people who have the greatest need for preventive care and basic curative services provided by the MOH and the NGOs are those whose growth rate is higher than the rest of the population. Even if spending for primary care were to increase in proportion to the general population growth rate, it would be very difficult to maintain current levels of coverage for primary level services. Furthermore, centralized management of a health system with such a large number of employees spread throughout the country will be a more complex task as the system grows.

Changes in the demographic profile of the population exert pressure upon the health system as well. The expected reduction in the mortality, natality, and growth rates will be accompanied by changes in the dominant diseases in the medium term. These changes will not occur simultaneously throughout the population; the urban population, particularly in the MASS, will grow more quickly. There is a segment of the population, however, the size of which is growing disproportionately fast, which requires more complex health services to recover and maintain good health. This will create pressure on the ISSS, on the health programs of public institutions, and on MOH hospitals. Without improved management, the quality of the health services will drop.

The second reason why the health services will be affected negatively if the system is not modified is the deterioration of the buildings and equipment because of the lack of preventive maintenance. Maintenance has been neglected in both the public and the private sector. This problem is not unique to El Salvador; the limited financial resources, the emphasis on new construction, and the focus on the direct delivery of services have had a negative impact on the maintenance of health system infrastructure in most of the countries in the region. In spite of the efforts in recent years made by the MOH with the help of international organizations (GTZ, PAHO/WHO, and the World Bank), the level of deterioration of the primary care network of MOH buildings and equipment is approximately 35 percent. The deterioration from lack of maintenance is also a problem, though to a lesser degree, for the ISSS (7.5 percent) and for the private sector (5 percent).

Health sector institutions need better leadership and management for preventive maintenance to occur. This will be hard to achieve in a centralized system which does not have any incentive plan to motivate personnel and in which the managers are not directly responsible to the community of users. Because of this, one of the key elements in the health reform is decentralization.

Finally, the health services, the basic curative services in particular, will continue to experience decreases in productivity if changes are not made in the working conditions of doctors and nurses. Chapter IV explained how the salaries of doctors and nurses have been reduced to one fifth and one third respectively of their values fifteen years earlier. Another pattern which has emerged in the last three years in the MOH and the ISSS is that of part-time contracts for professional staff. In most cases, the contracts are for two hours per day. This pattern reduces the worker's identification with the institution as well as his/her productivity. In 1987-88, the average

number of consultations per doctor (full-time position) per year was 1,102; in 1990-91 the number of consultations (per equivalent of one full-time position) had dropped to 852. A recent study carried out by the MOH Statistics Unit found that in one hour of consultations the doctors produced less than half of what was expected according to institutional standards, and less than half of what an ISSS doctor produced in the same period. This low productivity could be due to the doctors' commitment to other activities such as supervision or administrative tasks. Whereas in other countries in Latin American there is a surplus of doctors, in El Salvador there is a shortage of doctors relative to the size of the population. Given this situation, the MOH must develop a new system to raise the salaries of medical personnel.

Any increase in salaries obviously puts pressure on the budget for health services. The pressure can be alleviated in part, however, through increased efficiency of existing human resources as the result of improved management in MOH and ISSS health establishments.

1.4 General deterioration of the health situation

El Salvador has made progress in the area of sanitation. Many problems have been resolved with relatively simple and low-cost measures, although there is still a way to go to overcome the pre-transition diseases. Without making any changes it is possible, but not likely, for the country to continue making improvements.

There are two major factors which could cause the situation to worsen: environmental pollution and infectious diseases. Other factors include cholera, AIDS, and psychological illnesses.

Population growth and industrial development have caused extensive environmental pollution. All of the water courses are biologically contaminated from garbage, industrial waste, and sewage. If there are not major changes, then the level of pollution will increase because of the population growth. There is a risk that the great progress made in ADDs, ARIs, immuno-preventable diseases, and malnutrition will be lost if there is not greater effort to eliminate the sources of pollution. A resurgence of these diseases is more likely if environmental pollution is not controlled, as is the case of cholera.

One of the most important parts of the recommended health reform is strengthening the MOH so that it can fully assume the role assigned to it in the Constitution to ensure the health of the entire population. The MOH has to more clearly define its responsibilities and improve its organizational capacity so that it can coordinate the implementation of priority programs by all of the institutions involved in the health sector. If the reform is not implemented, the MOH will face serious difficulties in effectively carrying out its role.

One situation which demands a strong governmental presence concerns the spread of AIDS. There are many people who travel to and from El Salvador to Honduras, which has the highest rate of AIDS infection in the region. In addition, the early initiation of sexual activity in El Salvador and the limited use of family planning methods increase the possibilities of the spread of AIDS. The MOH will be able to control this situation only if the specific responsibilities of the various health organizations involved with AIDS are clarified.

Other health problems requiring strong leadership on the part of the MOH are: the psychological scars from the civil war; traffic accidents; and the increase in various kinds of cancer and cardio-vascular diseases which will dominate the epidemiological profile of the country over the next ten years.

1.5 Future cost of the health reform

The systemic inequalities and the lack of efficiency throughout the sector make the sectoral reform a necessity. Resistance to change can hamper implementation of the reform and make it more costly at a later date. The sources of inefficiency are: unnecessary use of services; unproductive workers; investments which do not improve the health conditions; underutilized infrastructure and equipment; and a high percentage of patients who go to hospital emergency rooms for care which they could receive somewhere else at a lower level of care and at a lower cost to the system. Any improvement of this situation has to involve a change in behavior of both health workers and users of health services.

Time solidifies patterns of behavior and strengthens vested interests; if the reform is postponed, the political, social, and economic cost of making changes at some point in the future will only be greater. One example of this concerns the change the ISSS made three years ago when it began to contract providers from the private sector for ISSS outpatient consultations. At that time the only doctors who were allowed to participate in the new program were those who were already employed by the ISSS, even though it would have been more efficient to have allowed any qualified doctor to participate. If the ISSS were to decide now to open up the positions to all qualified doctors, then it would be much more problematic and costly than if it had been done that way from the beginning. Reform in general is that way: if it is delayed then the cost of implementation increases.

2. General Approach to the Reform

The ANSAL sector analysis had two main components: a) diagnosis of the problems and the formulation of recommendations; and b) discussion of the findings and recommendations of the study with a wide range of institutions and individuals both nationally and internationally.

During the same period that the ANSAL study was being carried out, the MIPLAN Economic and Social Advisory Group (GAES) worked together with the MOH on the health plan for the period 1994-99. It quickly became clear that the problems and possible solutions identified by ANSAL and GAES were very similar. The common points between the GAES health plan and the ANSAL health reform were accentuated and reinforced during the development of the ANSAL report.

Between January and March 1994 ANSAL held many consultations concerning the findings and recommendations of the study up to that time. Various strategies were used: written comments were requested from approximately 300 institutions and people; ten meetings for 40 persons each were held with community leaders and health personnel representatives; a two-day workshop was held at the Loyola Center with fifteen guests from a wide range of institutions and ideologies; and finally, a two-day seminar was held in Washington, D.C. with officials from the institutions which sponsored ANSAL and eight Salvadorans representing different ideologies and approaches.

The ANSAL team was able to clarify concepts and reorganize the data it had gathered through the consultation process. The process also facilitated the dialogue among people who shared the common objective of improving the health situation of the country, but who under normal circumstances did not have the opportunity to exchange opinions and ideas. As the result of the consultations, an agreement evolved between the Salvadorans and the ANSAL team concerning the need for a sectoral reform and the basic approach that should be taken. The approach was first presented at the PAHO meeting in Washington by one of the Salvadorans present and reflected an explicit consensus about how to bring about the desired changes.

2.1 Redefinition of the role of the government and the MOH

It was understood that:

- *"The government should concentrate its efforts on primary health care (PHC); it should emphasize maternal and child care, water, and sanitation."*
- *"The government should focus its efforts and resources on the poor, providing or financing the delivery of a basic package of services³⁷ and granting them partial or total subsidies, based on the level of poverty, in order to provide access to an expanded package of services."*

According to these guidelines, the role of the government would be essentially restricted to granting subsidies and would not necessarily include the direct delivery of services. The government's efforts would focus on primary health care services and the poor.

The subsidy would have the following characteristics: a) 100 percent coverage (with no charge to the user) of the poor for primary health care services included in the basic package; and b) 100 percent coverage of the expanded package of services to only the poorest segments of the population, with the subsidy decreasing in direct relation to the increase in income level. There would be no subsidy for those whose income was above the poverty line.

This proposal is compatible with the Constitution which establishes, in Articles 65 and 66, the main functions of the government regarding health care³⁸. The two main functions are: (1) to determine national health policies; and (2) to grant free health care to the poor and to those whose treatment would prevent the spread of infectious diseases. The Constitution does not establish that the government must deliver health services directly, but only that the government has to pay for health care under certain conditions.

It is important to note that the concept of an expanded package of health services has two implications: a) it includes those services which are at a higher level than PHC; and b) it establishes an upper limit in terms of the complexity and cost of the services covered. This means that there would be some care that although technically justifiable, would not be provided, even to the poor.

This approach is based on the necessity of using government resources in the most efficient way (focus on PHC) to correct the inequities in the system (emphasize care for the poor). Preventive care is emphasized and financed 100 percent by the government, and restrictions are put on curative services through the limits established by the definition of the expanded package of services. These criteria significantly modify the use of government

³⁷ The basic package of services is composed of a group of preventive care services and basic curative services which are part of the PHC strategy. In the proposal outlined in the next chapter, they are called "Basic Group of Health Services".

³⁸ Article 65 establishes that: "The health of those who live in El Salvador constitutes a public good. The government and the people must work for the conservation and recuperation of good health. The government will determine national health policies and will control and supervise their application."

Article 66 stipulates that: "The government will provide free health care to those who do not have any resources and to others when it is the most efficient means of preventing the spread of an infectious disease. In the latter case, all persons are obliged to receive treatment when deemed necessary."

resources for the health sector, fundamentally those of the MOH but also resources of the Ministries of Education and Defense. It also changes the government subsidies of the ISSS. The MOH hospitals, above all the establishments which offer the highest level of care, would be the most affected by this new policy. The level of impact would depend on the exact definitions of the basic and the expanded care packages.

2.2 Decentralization of health care management

It was understood that:

- *"Health services should be decentralized, especially PHC, in order to increase the capacity of local institutions to resolve health problems at the community level."*
- *"Community groups and local health care providers should become more involved in the management of health services."*
- *"The private sector should participate more actively in the production of health services; its efficiency should be encouraged through regulations which foster competition."*
- *"The functions of the various levels of the health system should be redefined so that:*
 - . *the central level defines policies, coordinates, sets standards, channels funding, supervises, and evaluates;*
 - . *the local level assumes responsibility for the organization and coordination of the delivery of services based on the needs of the local community and in accordance with national standards."*

This approach seeks to maximize the effectiveness and efficiency of health services by transferring decision-making power and management responsibilities to the organizations which are closest to the site of the production and delivery of the services. It would substantially change the way the MOH and the ISSS manage health services and has different implications for the various levels of health care.

In relation to PHC, the MOH would progressively transfer more responsibility for the direct administration of health establishments and primary health care personnel (health units, health posts, promoters, etc.) to the local level. This would open up opportunities for NGOs and a diversity of other organizations. Even though the Ministry is already involved in a process to decentralize the administration and delivery of health services, its efforts to date have not been enough to significantly increase the capacity of local organizations to resolve health problems at the local level.

As expressed by MOH personnel and local and international consultants, the difficulty with this policy stems from the practical problems encountered in its implementation. Most local groups, including both community groups and health establishments, are weak and need considerable support in order to be able to fulfill the roles expected of them under the reformed health system.

The experience of Bolivia, and to a lesser extent that of other countries, where primary health care for low-income groups is self-sustaining, shows that there needs to be a balance between systems and programs developed at the central level and decisions made locally. The ministry of health has to have the capacity to develop policies and standards (which the Salvadoran MOH has), and it has to have the organizational capacity to monitor fulfillment of these policies and standards by the implementing organizations (which the Salvadoran MOH does not have to a sufficient degree). The organizations responsible for the delivery of PHC to the population can have different legal and administrative relationships to the government health authorities, and they can range from public autonomous institutions to private and totally independent organizations.

The process of decentralization would produce the greatest impact in specialized and hospital care (SHC) provided through the MOH³⁹, the ISSS, and ANTEL. Management of these health establishments would be taken over by private sector institutions (both non-profit and for-profit). These private organizations would compete for patients covered by insurance (through the ISSS and others) and for the patients covered by the MOH.

It was understood that these private organizations must have a great flexibility in their management in order for them to provide high quality care at the lowest possible cost. They must have the freedom to determine how they will deal with issues concerning: personnel; supplies; financial management; technical organization; and the maintenance of buildings and equipment. The only restrictions placed on them would be those related to fulfillment of the policies and standards established by the MOH at the program level.

For the delivery of both PHC and SHC, the process of decentralization involves major changes in the financial relationships between the MOH, the ISSS, and other public sector institutions and the autonomous or private organizations that would deliver the health services.

2.3 Increase in financing and establishment of an incentive system

It was understood that:

- *"A gradual increase in health financing is necessary."*
- *"There should be improvements in the efficiency and effectiveness of health services through reorganization and establishment of appropriate incentives."*
- *"Institutional and financial self-sustainability should be developed so that dependence on foreign assistance diminishes."*

These guidelines aim to correct the financial problems of the health sector: insufficient resources; low productivity; and excessive dependence on foreign assistance. The level of government resources committed to health care is low compared to other countries. Whereas other countries at a similar level of development spend approximately 4 to 8 percent of GNP on health, El Salvador only spends 3.7 percent of GNP. Furthermore, the low productivity of the health resources throughout the sector is recognized and is marked in the ISSS and other public sector health organizations.

This approach suggests that the reform of the health sector should include an increase in the funding in order to: 1) make the system self-sufficient and less dependent on foreign assistance; 2) to lessen the existing inequalities; and c) free up resources for an increase in preventive and basic curative care to match the population growth.

The funding increase should come simultaneously from three sources:

- Yearly commitments from the national budget
- Contributions from users either through user fees at the time when the services are received or through insurance payments through the ISSS or through the private sector
- Reassignment of resources generated from the increase in efficiency

³⁹ MOH inpatient care is provided in all of MOH hospitals and health centers.

According to the strategy discussed earlier (redefinition of the role of the government), the increased financing would support the delivery of services in the basic and in the expanded package of services. The basic package would consist of services determined in accordance with the needs of the population, whereas the services included in the expanded package would be determined based on the available resources and an analysis of the cost and use of services. The services of the expanded package, therefore, are directly related to the capacity of the government to increase its commitment to the health sector and the capacity of the health system to collect additional fees from users and improve efficiency.

The ISSS spends approximately six times more per beneficiary than the MOH. Let us suppose that through an aggressive policy of cost recuperation, the MOH hospital establishments raised income equivalent to 100 percent of the costs of the expanded package for those users above the poverty line and 75 percent of the costs of the same services for those below the poverty line. Taking as the base the package of services and costs of the ISSS, the MOH would have to increase its budget by 300 percent in order to subsidize equivalent benefits⁴⁰. This budget increase is not feasible and would not be appropriate in any case because it would not permit the MOH to provide additional support to other priority areas such as PHC and coordination of the health sector. The cost of the expanded package to the MOH would have to be lowered by excluding the services which have a lower cost/benefit ratio and by increasing the efficiency of the services to be provided.

Incentives connected to the level of compensation need to be established to improve the efficiency of health sector institutions. ANSAL was not able to obtain data on how the budgets of ISSS health establishments are developed, even though this is an important element to be considered in the reform. In the MOH the hospital budgets are based on the historical budgets of the establishments. Both the ISSS and the MOH need to change their systems so that the budgets of the hospitals are based on the production of services, the complexity of the services provided, and the efficiency with which they are produced and delivered. The methods which have proved most effective are based on: a) the number of persons protected, that is, those who have access to the system who pay according to their income; or b) payments per patient discharged (by category of diagnosis).

Finally, ANSAL strongly recommends that the users contribute to the cost of the services they receive. On one hand, this is a complicated aspect of the reform because no one wants to establish an economic barrier to essential services. On the other hand, it is clear that many people have the resources and are willing to pay for health care, as shown by the large numbers of people who use private outpatient clinics and pay for medication themselves.

Contrary to what is commonly believed, by charging fees for health care the system would be able to reduce existing inequities. This would be possible because currently a high proportion of the hospital care provided to the top two deciles of the population (in terms of income) is in MOH hospitals. If a system can be established by which such patients pay 100 percent of the cost of their treatments, MOH resources would be freed and used to subsidize hospital care for those who cannot afford to pay.

⁴⁰ The MOH spends 75 percent of its budget on hospital care, which is somewhat less than that spent by the ISSS on its hospital services. The proportion of the population classified as extremely poor is 12 percent, which is similar to the proportion of those insured by the ISSS. If the expanded package were similar to the package of services provided by the ISSS and its cost per service were the same, the MOH would have to commit all of the resources which it currently spends on hospital care to subsidize the expanded package of services to those who live in extreme poverty. Those who live in relative poverty constitute another 38 percent of the total population. Since this group is three times as large, in order to subsidize 75 percent of the cost of the expanded package to its members, the MOH would need two and a half times the resources estimated for the group in extreme poverty. That is, the MOH budget would have to be tripled.

2.4 Creation of an organized health system

It was understood that it was necessary to:

- *"Create an organized health system in which all of the different players (public and private) work together to plan and coordinate activities."*
- *"Develop a health system which favors equity, shared responsibility, solidarity, participation, and sustainability."*

The first statement emphasizes the importance of a pluralist system in which there is active participation by many institutions; one of the weaknesses of the existing system is the limited participation of many institutions directly involved in health sector activities.

Equity, shared responsibility, solidarity, participation, and sustainability are values which can be developed through different means. Some are individual values (shared responsibility and sustainability) and others are collective (solidarity and equity). The ANSAL reports do not specify exactly how these values would be fostered when the health system is reformed; the lack of specificity was explicitly recognized by the group and it was accepted that one of the tasks of the implementation phase was to determine how to bring these values into the health system.

2.5 Gradual change

It was agreed that:

- *"The changes should be gradual, rational and flexible, both in the organization of the system and in the delivery of services."*
- *"Implementation of the changes should take into account the preservation of the components of the system which work well and adjust them gradually to the new system."*

This responds to the conviction that caution should be taken to change only those parts of the system which do not work. The changes should be implemented in a flexible manner, and rationality and flexibility should be characteristics of the reform. Gradual in this case means in the long term, from ten to twenty years. The goal has to be established with clear targets.

3. Factors Affecting the Proposed Reform

Reform of the health sector is a complex task; some factors will facilitate the desired changes and others will make the reform more difficult to achieve.

3.1 Factors which facilitate the reform

In general, the current circumstances in El Salvador favor reform.

National climate of optimism

The economic recovery of El Salvador and the peace achieved two years ago have created a climate of optimism and trust regarding Salvador's capacity to respond to the challenges of development. At the same time, peace and growth need to be consolidated through changes which solve the vital needs of the population. This climate

of trust on the part of most Salvadorans in their own strengths favors the undertaking of such a major challenge as a restructuring of the health system.

Modernization of the state

Throughout Latin America, paternalistic and interventionist governments are regarded with disfavor and considered as inefficient. A profound process of transformation has begun in El Salvador, and in the economic sphere liberalization of the economy is occurring and the government has become less interventionist in the economy. With regards to the role of the government in the finding the solutions for social problems, however, there is still no clear definition. Some of the elements which have been proposed are: decentralization, individual responsibility, participation of the private sector in the solution of public problems, and participation of the community. In El Salvador the educational program EDUCO represents an audacious and innovative example of the modernization of the state.

Consensus concerning the health reform

In the previous section the conclusions of a small group of national experts concerning the health reform were presented. As expressed by the representatives from the international organizations that participated in the PAHO meeting in Washington, El Salvador is in a good position because it has been able to draw people and organizations together to arrive at a consensus about the need for health reform. Without diminishing the value of what has been achieved, it should be noted that the statements made and the conclusions presented by these individuals do not represent commitments on the part of the institutions. Furthermore, it is easier to arrive at a consensus concerning common goals than it is to agree on the specific strategies to achieve those goals. There is an emerging awareness of the need to deal directly with the organizational and functional difficulties of the health sector which remain in spite of the progress made in recent years. There is a consensus about the need to find solutions to the health problems which are still pending.

Support from international organizations

The World Bank's 1993 Development Report focussed on the topic of health in developing countries. The report proposed that countries reform their health systems, concentrating government efforts on the poorest sectors of the population and on the diseases which have the greatest impact and which are the lowest cost in terms of prevention or treatment.

In its 1994 Governors' Assembly, the IDB decided to devote 40 percent of its resources to projects in the social sector, with emphasis on health and education and with the mandate to resolve the problems of the poorest sectors of the population first. This is a new approach for the Bank and it favors integrated solutions which develop or strengthen self-sufficient and efficient systems. Although there is no specific recommendation concerning exactly what a health reform would involve, there is emphasis on the integrated nature of any solutions proposed.

The PAHO/WHO has adopted various resolutions urging its member countries to focus their efforts on the sectors of the population with the worst indicators. It has also recommended the development of local health systems (SILOS) as an effective form of decentralization, community participation, and coordination at the local level.

Among the four top priority strategies defined by the new USAID administration is the strengthening of programs of family planning and health, fundamentally preventive services and basic curative services for low-income groups.

The ANSAL project grew from the efforts of four international organizations to coordinate their activities in health in El Salvador. These organizations (USAID, the World Bank, PAHO/WHO, and the IDB) concluded that a full sector assessment was needed. Although none of them are bound by the opinions or recommendations formulated by ANSAL, it is clear that all four support strengthening the health sector and increasing its self-sufficiency, equity, effectiveness, and efficiency. If the Salvadoran authorities decide to implement a health sector reform and in general follow the guidelines put forth in this report⁴¹, the reform would receive strong support from the four institutions. This was publicly expressed by the representatives of the organizations during the PAHO meeting in Washington, although no definitive opinion or commitment would be given until the corresponding decisions had been made and the specific proposals developed.

This local and international support can be explained by the benefits that would come from these changes. As an example, it can be said that these respond to the basic needs for well-being of large sectors of the population, and as such, have a high ethical and political value; by increasing the capacity for learning and work for large segments of the population which to date have contributed to the country's development in a limited way, the country's possibilities for development are increased.

3.2 Factors which impede the reform

There are other circumstances which could hamper reform efforts.

Changes in the power structure

Health services are valued by the population and the delivery of health services is considered a source of power. There is some competition between institutions for the responsibility to provide health services. This has happened in the case of the relationship between some MOH services and NGOs. The ideological tendencies of some NGOs have brought them into a struggle with the government because of the use of NGOs as political instruments.

At the regional MOH level, some establishments have not paid attention to the policies set by the central MOH offices regarding coordination with NGOs, and in some cases there has been overt hostility between the two entities.

This is an aspect which should be considered in the decentralization of PHC. Decentralization would only be possible if two principles are followed: the acceptance by all parties of the MOH as the government authority responsible for directing the health sector; and the consensus of all the organizations involved not to bring any other motives into play in health sector activities. To achieve this, active participation of community groups is essential.

Decentralization is perceived as a loss of power by regional and central health offices. As is the case with any loss, there would be resistance on the part of those who have had the authority in the past. Special attention would have to be given to separating the arguments which identify real risks from those which are only brought forth in order to maintain the status quo.

⁴¹ This refers to the general guidelines and approach presented in the second section of this chapter which were agreed upon by the national experts who participated in the Loyola Center workshop and in the PAHO meeting in Washington.

Changes in the rights of ISSS beneficiaries

Improving of the equity of the system demands an increased effort on the part of the government to resolve the problems of the poor. As seen earlier in this chapter, the MOH budget would have to triple in order for the MOH to subsidize care for the poor at the same level as that of the ISSS beneficiaries. At the same time it is unrealistic to diminish the benefits currently received by ISSS beneficiaries. The inequities can be eliminated by improving the efficiency of the ISSS services and by assigning the funds to population groups that are not able to pay for the cost of the insurance.

Some of the methods used to increase efficiency through controls in the use of services could be perceived negatively by the beneficiaries. The introduction of co-payments, deductibles, limitations in the medications covered, and limited access to specialists could be seen as signs of a reduction in the quality of the services. The experience of organizations in the U.S. has demonstrated that in order for such measures to be accepted by the users, there has to be a perceived benefit, which generally is a reduction in the insurance payment.

Increase in the cost of the services

The financial viability of the health reform is based on major changes in the financing of the services. The result is that the government, the users, and probably the employers would have to increase their contributions to the health system. Depending on the growth of the economy and the speed at which the changes in the sector are introduced, the financial aspect of the reform could become a major obstacle to its success. The precise costs of the reform have not been calculated, and thus this report can only present a general estimate of the reform's cost.

At the end of the intermediate five-year period, the government should have increased its budget to cover: a) the cost of the goods and services currently financed through foreign assistance (15 percent)⁴²; b) access to PHC services for the 50 percent of the population below the poverty line during the first five years (12 percent)⁴³; c) the subsidy for the poor of the expanded package (the percentage would be determined in accordance with the definition of what is included in the expanded package--an initial estimate is 50 percent)⁴⁴; d) expansion of services to cover the larger population based on a 3 percent increase (16 percent); and e) strengthening of the central MOH bureaucracy. This represents an increase in government expenditures in constant values of 65 percent in five years or 10 percent per year for five years. This is a substantial increase in funding, but should be viewed in relation to the risky alternative, which is to eventually end up spending the same amount because of lobbying or public pressure but without any reorganization of the system.

The users would also have to increase their financial contributions to the system, and this may generate resistance. Currently 75 percent of hospital care is provided by MOH hospitals, and yet the cost recovery from these establishments only amounts to 4 percent of the total MOH budget. Once the reform has been implemented, 12 percent of the population (the extremely poor) would receive hospital services free-of-charge, 18 percent would pay 15 percent of the cost, 20 percent would pay 50 percent of the cost, and 25 percent would pay the full cost of hospital services. This is equivalent to increasing user contributions twenty times, which is an extraordinary increase. It should be noted that this increase comes from small increases for those below

⁴²The percentages here refer to the additional cost in relation to 1993 MOH costs. They are preliminary estimates which will have to be adjusted as the reform is implemented.

⁴³ This doubles current PHC expenditures which represent 25 percent of total MOH expenditures.

⁴⁴ The calculations are based on assumptions explained in section 5.2 of Chapter VII.

the poverty line and very large increases for those people with higher incomes who currently receive MOH hospital services almost free-of-charge.

Expanded package and medical personnel

The concept of health rationing based on the availability of financial resources is difficult for the general population and for doctors to accept. Within the Latin American culture in particular, explicit health rationing is hard to accept. The concept of an expanded package of services is based on explicit rationing of services, which involves the exclusion of certain services from the package of services covered by the government or the ISSS. If a patient does not have sufficient financial resources and there are no charities which would pay for the service, then the procedure would not be carried out. This plan has ethical considerations concerning the professional practices of medical personnel which can only be resolved through formal decisions made by the society.

Resistance by public employees

The MOH has approximately 21,500 staff and the ISSS 9,000. The decentralization of services and the transfer of authority to community organizations or private companies represents a change in the labor rights of these employees. The loss of rights could be compensated by improvements in salaries, but salaries increases are not possible at this time. As a result, those employees who are likely to have more difficulty finding a job outside of the MOH or ISSS (administrative staff, service personnel, etc.) would resist the change and could increase union pressure against the reform.

Losses from the correction of inefficiencies

In general, inefficient management allows some individuals and organizations to derive benefits otherwise not possible; changes that eliminate these benefits would generate resistance. One example concerns the rate of caesarian delivery. In some health establishments in San Salvador, 20 percent of the caesarian deliveries reflect not only technical needs but also the convenience of either those who provide or those who receive the service. The loss of efficiency is equivalent to the proportion of caesarian deliveries that are done for reasons other than strictly technical reasons. These could include: opportunity to learn medical techniques; shorter delivery time; elimination of the uncertainty of the birth date; and comfort of the mother. The correction of this source of inefficiency represents a loss for those who were receiving benefits for nonmedical reasons.

There are many inefficient situations to correct, such as: medicine of doubtful therapeutic value; consultations and exams with limited use; low occupancy rates in hospitals; and staff who work less than their scheduled hours. Any increase in efficiency may generate resistance on the part of those who are losing some benefits.

The distinction between the reasons which are technically legitimate and those which are not and the explanation of this distinction to the users will be key to controlling this source of resistance to the reform. Resistance to the correction of inefficiencies could become the biggest obstacle to any kind of change.

Lack of management capacity at the local level

The decentralization of the management of PHC and SHC services will face great limitations because of the weakness of the management capacity of local institutions. Substantial risks will be taken if the decentralization is not preceded by strengthening of the institutional capacity at the local level.

In the decentralization of PHC, special treatment has to be given to the programs which need a vertical structure: malaria control, immunizations, nutrition, and others. Another element to be considered is that there may be communities in which there are neither individuals nor institutions which are able to provide health services.

One of the current weaknesses of specialized care and hospital care is the lack of experienced hospital administrators, and this weakness will only be accentuated by the decentralization process. Hospital administrators should be trained and experienced before they take on major responsibilities under the new system. In a parallel way, the private companies to which new responsibilities would be transferred would also need to demonstrate a minimum level of experience before implementation of the reform. Measures should be taken to ensure the continuity of specialized and hospital services even when a company fails.

The specific components of the health reform are presented in the chapter which follows.

VII. REFORM OF THE HEALTH SECTOR

1. Introduction

El Salvador's health situation has improved over the last fifteen years in spite of adverse political and social circumstances. The most important health indicators have registered significant improvement especially during the past four years due to the economic recovery, the end of the civil war, and more effective MOH and NGO efforts in the health sector. The objective of the health reform proposed by ANSAL⁴⁵ is to correct structural problems in the health sector so that this improvement can continue at an accelerated rate and become self-sustaining.

The health sector has four main problems: low coverage and accessibility; lack of equity; ineffectiveness and inefficiency; and lack of self-sustainability.

- *Low coverage and accessibility* to basic preventive and curative services for the high-risk population (rural and low income population).
- *Inequities* which exist due to the inverse relationship between the need for services and the availability of resources to pay for them. The population with the worst health indicators and with the most limited access to health services is composed of rural residents with low socio-economic status and little or no formal education.
- *Ineffectiveness and inefficiencies* because of the low productivity of human and physical resources (few consultations per hour, low occupancy rate of the hospitals) as well as the model of care which is based on the medical/hospital/pharmacological approach inappropriate for the epidemiological profile of the population.
- *Lack of sustainability* due to the dependence on foreign assistance to cover recurring costs, above all in key components of basic preventive and curative care: nutritional programs, essential medications, and logistical support.

These problems need an integrated response consisting of specific strategies which complement each other.

- The inequities cannot be eliminated by reducing the benefits of those who are in a relatively good situation, but rather by improving the access to health services for the poor. The financial contributions that can be expected from the poorest segments of the population are very limited. Consequently, the reduction of the inequities demands an increase in government spending, the concentration of expenditures on the low income population groups who are at the highest risk, and a focus of attention and resources on PHC. This strategy is expressed in the reform through the financing and total subsidy of PHC services for those people who are below the poverty line and through the partial or total subsidy by the government of a more complex level of services for the same group.

⁴⁵ It was not a requirement of the Health Sector Analysis (ANSAL) to propose a reform of the health sector. It was to "analyze the sector and propose the changes needed for better development". At the same time as ANSAL was being carried out, the GOES began to develop the Economic and Social Plan for the period 1994-99 in coordination with the Ministry of Planning (MIPLAN). ANSAL coordinated its work with both MIPLAN and the MOH, and the consensus was that profound changes were needed in the organization and financing of the sector. For this reason ANSAL developed and presented its proposal for a health sector reform. ANSAL selected the most technically appropriate alternative which would not conflict with the approach outlined earlier in this document.

- Inefficiency can be reduced by the use of sanctions and rewards for high productivity. The current practice in both the MOH and the ISSS is to determine the budgets based on historical values and to establish salaries based on pay scales. This practice makes it difficult to reward those who produce the most or who work the most efficiently. The proposal in the health reform is to make management more flexible and agile by decentralizing the PHC services at the local level and transferring the management responsibilities for public hospitals (MOH and ISSS hospitals) to the private sector. The transfer of the management of health services from the government to the private sector introduces appropriate incentives to the providers through the substitution of the principle of authority and obedience for the principle of interest and convenience.
- The lack of sustainability of the sector demands increased funding from the government and the users. In the reform the government is assigned the financial responsibility for diminishing the inequalities. The correction of both problems (inequities and the lack of self-sustainability) cannot be the full responsibility of the government. Improvement of the sustainability of the health system, therefore, requires a major financial effort on the part of the users. This strategy is expressed in the proposed health reform by the elimination of the subsidy in specialized and hospital care for those who are not poor and who would have to finance their own use of the health services through cost recovery and a minimum mandatory insurance.

2. General Structure of the Health Reform

The health reform consists of four essential components and four supportive components; the first group is designed to correct the most important problems in the sector; whereas the second is designed to facilitate the implementation of the reform.

The four essential components are:

- **Institutional reorganization of the sector**
- **Reorganization of primary health care (PHC)**
- **Reorganization of specialized and hospital care (SHC)**
- **Strengthening of environmental health activities**

The supportive components are:

- **Promotion of health and prevention of diseases**
- **Institution strengthening**
- **Human resources: education, training, labor relations, and incentives**
- **Investment in infrastructure and equipment⁴⁶**

⁴⁶ The investment component has not been completely developed yet. The general strategy proposed has three aspects: (a) focus investment on the most needy population groups; b) recover the network of installations and investments; and c) place emphasis on the ongoing preventive maintenance programs.

The major components and supportive components can be seen schematically in the tables No. 1 through No. 3. The health reform requires ten years for full implementation. The institutional reorganization could be completed in three years, the reform of PHC in six years, and the reform of SHC in ten years. The fourth component consists of activities which support environmental protection; in one sense the fourth component is not part of the reform because it includes ongoing activities which should continue once the other three components have been completed.

The reorganization of PHC is based on the hypothesis that the management and delivery of PHC services would be more effective and more efficient if they were the responsibility of local organizations such as municipalities or NGOs. The central MOH offices would give the local organizations support and guidance in the form of financial resources, policies, standards, and supervision.

This component of the reform proposes defining a basic set of health services (basic package) centered on priority health programs, with activities in health promotion, prevention of common diseases, and basic curative care⁴⁷. The delivery of the services to the poor would be financed by the MOH through a transfer of resources to the municipalities. Depending on their size, stage of development, and preference of the community, the municipalities would either provide the services directly or would contract for the services through private organizations⁴⁸.

The health reform proposes a pilot program in decentralization for the first three years. Different models would be used in three departments and two marginal urban areas. Based on the results of the pilot program, the health authorities would decide how to expand the decentralization of services to other parts of the country. The initial preparatory period would last for 6 to 12 months; then there would be an experimental phase lasting from 18 to 24 months during which the basic package of services would be delivered to the selected municipalities; the evaluation of the experience and the decision concerning the extension of the decentralization model would take approximately 6 months; and finally, the expansion of the decentralization model to the rest of the country would take place over the following seven years.

The reorganization of specialized and hospital care (SHC) is based on the hypothesis⁴⁹ that management of this level of care is most efficient when the services are administered by the private sector and when the provider

⁴⁷ The basic package will include the following services: monitoring of child development and growth; pregnancy, delivery, and postpartum care; immunizations; nutrition education and supplementary food programs, control of infectious diseases such as malaria, cholera, tuberculosis, etc. The services in the basic package should correspond to the ten priority programs proposed by ANSAL: integrated prenatal, childbirth, and postpartum care; family planning; child survival; maternal and child nutrition; STD programs; prevention and control of major endemic diseases (malaria, tuberculosis, etc.); accidents and violence; physically and mentally handicapped war victims; access to potable water and liquid waste treatment; and collection and disposal of solid wastes. The last three are not part of the basic package of services.

⁴⁸ ANSAL considered the decentralization of the services directly to the organized communities as one alternative. The communities could form community health associations in the same way that the EUCO communities have education associations to manage the local schools. The ANSAL team preferred to recommend decentralization only to the municipal level in order to maintain the integrity of MOH leadership at the local level.

⁴⁹ This hypothesis has been proved in countries with private pre-payment systems for this kind of care such as the U.S., Uruguay, Chile, and other countries.

assumes the risk from the variations in the use and the cost of the services (that is, when the provider is paid per person covered and not by service provided). ANSAL proposes that the management of hospitals and specialized services be transferred from the MOH and the ISSS to private organizations such as foundations, NGOs, private corporations, and doctors' associations. The establishments transferred to the private sector would be autonomous in their management and would compete among themselves for delivery of the expanded package of health services to the entire population. The expanded package would consist of a set of services at a higher level of care than those of the basic package, though it would not include high cost services⁵⁰. Both packages of services together would cover 90 percent of the health problems in El Salvador.

The expanded package would be financed by the users and would be available to the whole population. The MOH would subsidize coverage for the poor. In order to facilitate the payments of the non-subsidized users, it was decided to include a mandatory health insurance program in the health reform. All residents of the country would have to participate in the insurance; the premiums of low income residents would be paid partially or totally by the MOH, while the premiums of everyone else⁵¹ would be paid individually to the National Health Fund (FONASA). The users would have the freedom to choose where they want to receive the services covered in the expanded package. Once the user has chosen the provider, the organization selected would have to establish an effective referral system with the establishment that provides PHC services to the user. This way the system of referral and counter referral would function more effectively.

Improvement of the health system's efficiency is a goal of the sectoral reform, but it is also a means to ensure that the cost of the expanded package is compatible with universal coverage. ANSAL proposes two means to achieve this: payment per capita and managed health care. The proposal is for FONASA's payments to providers to be based on the number of people who have chosen that organization as their provider; the amount the provider receives would depend directly on its capacity to attract and keep users. Managed health care (MHC) consists of managerial instruments which limit the use of services to those that are necessary according to established guidelines. In MHC, efforts are made to prescribe the lowest level of appropriate health care without endangering the quality of the care. The health reform proposes that support be given to private organizations so that they adopt MHC practices and improve their efficiency.

The third essential component of the health reform is the institutional reorganization of the sector. This involves changes in the structure of the MOH and the ISSS based on the two components described earlier as well as the need to strengthen the MOH technically so that it can take on a strong leadership role within the sector. The plans are for the MOH to strengthen its planning department in the areas of economic, demographic, and management analysis. Through the formation of a new organization called the Health Advisory Board (CCS), the diverse group of organizations involved in the health sector (both public and private) would work together to assist in the formulation of plans, policies, and standards. Finally, the MOH would preserve, strengthen, and administer its vertical programs in PHC and health education. The responsibility for procurement of supplies and equipment for PHC would be transferred to an autonomous and self-sufficient organization.

⁵⁰ The expanded package partially complements the basic package of services. It includes services such as abdominal surgery, obstetric surgery, care of patients with infectious diseases referred from lower levels of care, and emergency care, but as conceived right now, it does not include high cost services such as chronic renal dialysis, kidney transplants, or heart surgery.

⁵¹ This population group should be able to pay separately for an insurance policy to cover the basic package of services.

Under the health reform the ISSS would give up the direct administration of its health establishments and its beneficiaries would pay insurance premiums to FONASA through salary reductions similar to the current ISSS system. The ISSS would have to separate its health program from its income maintenance; the former would be transformed into FONASA. The contributions of those people who are currently under the ISSS system would be reduced by the same proportion as represented by the reduction of benefits. It is estimated that this reduction would be near 50 percent. Beneficiaries would continue to make payments to the ISSS for the programs of income maintenance for disability, retirement, death, and illness. The benefits currently covered under the ISSS health system to be excluded from the expanded package of services should be included in a complementary insurance plan negotiated with the ISSS or private insurance companies.

Finally, the health reform includes the strengthening of environmental protection activities to eliminate, as far as possible, the sources of infectious and parasitic contamination. The formation of the Executive Secretariat for the Environment (SEMA) and its dynamic involvement in the sector make an institutional reorganization necessary. In specific terms, it is recommended that the MOH be released from the formulation of policies and the implementation of programs directly concerning the environment, while at the same time its capacity be increased in the areas of inspection and monitoring of potable water, sanitation, garbage disposal, air pollution, and the use and sale of insecticides and herbicides. Food inspection and handling would remain the responsibility of the MOH.

As mentioned earlier, this last component is essential to any improvement of the health conditions of the population, but it is not closely linked to the other components of the health reform. For this reason the main activities of this component are listed below and not in a separate section as are the activities of all of the other three components.

Potable Water

- *Reorganization of the institutional framework.* Establishment of a body to standardize, regulate, and define the responsibilities of various institutions to manage river basins, urban water systems, and rural water systems.
- *Legal framework.* Proprietary rights over water courses and springs should be eliminated in order to increase access to potable water in rural communities. Water should be considered a public asset and included as such in legislation.
- *Water service.* More efficient public and private organizations should become involved (companies, NGOs, municipalities, and community organizations) in providing potable water service.
- *Technical assistance.* Several organizations need to be strengthened so they can give technical assistance in the construction and maintenance of potable water systems. COMURES and ISDEM may be able to provide the technical assistance to rural communities, and CONIAPOS could perform an important role as an organization for technical assistance at the central level. It is also necessary to strengthen the technical assistance concerning the sources of pollution of storage and distribution systems to increase their effectiveness and to improve the quality of the water.
- *Initial cost of service.* It is recommended that the government pay for the initial development costs of water systems for communities in rural areas and that the communities pay for the maintenance of their systems.

Sanitation

- Continue latrine programs in rural areas, using latrines appropriate for the culture, the resources, and the geographic characteristics of the region.
- Study and develop plans of spent water treatment with appropriate technology.

Solid Waste

- Strengthen the municipalities through COMURES and ISDEM so that they can design and implement landfills and establish credit lines.

In the following sections the other three components are presented in greater detail. The supportive components are presented after each of the major components.

3. Institutional Reorganization of the Sector

Table No. 1 shows a schematic format for the different elements of this component.

3.1 Redefinition of the role of the government

Through the MOH, the government would become the leader in: the formulation of policies, plans, and programs; the determination of priority areas; the formulation and approval of standards; and the determination of how public funds are spent. The government would guarantee access to health services for the poor and would gradually transfer the administration of many establishments to other public and private organizations.

The central technical structure of the MOH would have to be strengthened in order for it to become a leader in the analysis and development of health policies. The health reform proposes that a multidisciplinary team be formed (economists, demographers, epidemiologists, and health administrators) to provide technical input to the MOH decision-making process. The team would be linked with the current Department of Planning and would have functions similar to those of the GAES within MIPLAN. In addition, other technical offices would have to be strengthened in the area of supervision of compliance with standards and norms.

As the leader and director of the sector, the MOH requires a means by which the organizations involved in the health sector can work together and coordinate their strategies and activities. ANSAL suggests the creation of a Health Advisory Board (CCS), composed of public and private organizations involved in the delivery of health services and health interest groups⁵². This body would only serve an advisory role and would be supported by the multidisciplinary team mentioned above.

3.2 Creation of an organized health system

The health reform proposes the reorganization of the health system to improve equity, effectiveness, efficiency, and competition. The reorganized system would be composed of the municipalities and private organizations that provide the basic package of services, the organizations that manage the health establishments which offer the expanded package of services, and FONASA, all under the technical and political guidance of the MOH. The ultimate objective is to organize the delivery of the services so that the entire population has access to health services independent of any individual's economic condition and residence. Coordination would be carried out through norms and specific contracting and financing mechanisms. The main characteristic of the system would

⁵² As an example, there should be participation by the ISSS, ANDA, SEMA, the Medical Board, other professional associations, pharmacies, educational institutions, health workers' unions, etc.

be the important roles played by the government in setting standards and by private organizations in health care delivery. Changes in the health program of the ISSS would be necessary in order to achieve this.

The services that the MOH and ISSS currently administer are to be transferred to private organizations that would provide services to the entire population. The services would be financed from the GOES contributions for the poor and users' payments, both of which would be channeled through FONASA. It would be inefficient duplication to maintain the financial administration system of the ISSS and create another parallel system in the MOH. For the MOH to be an effective leader in health policies, however, it must control the funds which the government and the users (through health insurance premiums) contribute for health care. In consequence, the health reform proposes that the ISSS's health program be separated and transformed into an autonomous entity called FONASA, with flexible operating procedures, while at the same time staying under the technical and political direction of the MOH. FONASA would administer government funds earmarked for the poor and the health insurance premiums.

Table 1

INSTITUTIONAL REORGANIZATION

INSTITUTIONAL ELEMENTS	SUPPORT ELEMENTS		
	INSTITUTIONAL STRENGTHENING	HUMAN RESOURCES	PROMOTION AND PREVENTION
<p>COMPONENTS</p> <ul style="list-style-type: none"> - Redefine the role of the government/MOH - Create the National Health Fund (FONASA) as a dependency of the MOH - Transfer the ISSS' health component to FONASA - Create an organized health system - Create an entity to provide advice and to coordinate activities with the MOH (Health Advisory Board) - Strengthen the technical capacity of the MOH; create the advisory health team (GAS) - Clarify the roles and responsibilities among: 1) the CSSP, the professional boards, and the MOH; and 2) SEMA, ANDA, FIS, the municipalities, and the MOH 	<p>The GAS should develop information and analysis systems dealing with health policies concerning: financing; personnel; infrastructure; technology, basic and expanded packages of health services, etc</p> <ul style="list-style-type: none"> - Create integrated financial and budgetary planning systems for the MOH and FONASA - Strengthen the statistics system and epidemiological control system - Design and implement models for the selection, evaluation, and updating of the problems and priority programs of the health sector - Create a financial administration unit in FONASA - Develop and implement a system to regulate the use of complex and expensive medical technology 	<p>Develop explicit human resources policies which match the formation of health sector personnel to the epidemiological profile of the country</p> <ul style="list-style-type: none"> - Emphasize the formation of planners, economists, administrators, health educators, and communications specialists - Transfer the administration of the nursing schools and the health training school to autonomous educational institutions outside of the MOH - Create a formal means of coordination between the institutions which educate health personnel and those which employ them - Develop a procedure to change the status of MOH and ISSS personnel whose positions will be transferred to the private sector - Approve a training budget for health sector human resources 	<ul style="list-style-type: none"> - Approve a budget for health promotion and prevention (social communication) in the ten priority programs - Work with the Ministry of Education to coordinate plans for health education and training of health personnel - Design and implement marketing strategies for the health reform

3.3 Description of responsibilities

The government has the ultimate responsibility for ensuring the quality of health services and goods provided in the country. The institutions involved in this quality control would be the MOH, the Public Health Council (CSSP), and the professional health boards, but the reform proposal has not spelled out the roles and responsibilities of each institution, such as which institution would be responsible for providing medical supplies, equipment, and pharmaceuticals to health facilities. Even though they are autonomous organizations, the budgets of the CSSP and the health boards are included in the MOH budget and their ability to monitor the health situation is limited. Additional research is needed to establish the appropriate roles and responsibilities for the various entities.

3.4 Institutional strengthening⁵³

The activities in this component are centered on building the institutional capacity of the MOH so that it can become a successful leader and coordinator of the health sector. The main activities proposed by the reform are:

- 1) Development of information systems in the following areas: health financing, personnel, infrastructure, medical technology, human resources, and the definition of the basic and the expanded packages of health services. Existing information systems would be strengthened and used in accordance with the quality of the available data. The creation of a multidisciplinary team described in section 3.1 of this chapter is a key element in the strengthening of the MOH.
- 2) Creation of a planning and financial system which would handle the MOH budget and the FONASA budget separately. The MOH would need to have complete data concerning the amount and the allocation of the contributions from the government and the users.
- 3) Improvement of the data concerning the health situation through strengthening of statistical systems and epidemiological monitoring and control. Improvement of the quality of the vital statistics would involve technical assistance to be given to the municipalities, either directly or through ISDEM and COMURES. Epidemiological control would be improved through additional support given to the MOH's Epidemiological Unit and better data gathering on the part of public and private organizations.
- 4) Design and implementation of epidemiological, clinical, and economic models which would allow the selection, evaluation, and periodic up-dating of the priority health programs⁵⁴. The objective is for all of the important actors in the health sector to be aware of the high priority health problems so that appropriate levels of resources are allocated for their prevention and control. Based on the analysis carried out by ANSAL, the team proposes ten priority areas.

⁵³ The implementation of each of the four major components requires various supporting activities. This report lists the most important of these activities which are grouped by category: institution strengthening, human resources, health promotion and preventive care, and investments. The categories are repeated at the end of the description of each major component.

⁵⁴ Epidemiological factors should interact in these models in order to measure the importance of the disease; clinical factors in terms of possible action to be taken, and economic factors which take into account the costs of prevention and control.

- 5) Transformation of the ISSS's health program into FONASA. FONASA would have autonomous management but would receive technical and political guidance from the MOH. It would be in charge of administering all government funds and users' contributions for coverage of the expanded package of health services.
- 6) Development and implementation by the MOH of a system to regulate the purchase and use of expensive technology. The purpose of the system would be to avoid unnecessary duplication on one hand and monopolistic situations on the other hand.

3.5 Human resources

For reasons already outlined in other sections of this report, El Salvador has not been able to develop and implement policies which promote the formation of human resources that respond to the epidemiological profile of the country. The health reform proposes the following measures to correct this situation:

- 1) Development of explicit human resource policies which ensure that the health needs of the country are taken into account in the formation of health sector personnel. The quality of the data on available human resources, productivity, and distribution needs to be improved, as does the analysis of this data. This is an area which could be developed by the multidisciplinary team referred to in section 3.1 of this chapter.
- 2) Creation and implementation of a formal coordination mechanism such as FEPADE⁵⁵ between the educational institutions responsible for the formation of health sector personnel and the organizations which would eventually employ these people. This body could be a specialized branch of the Health Advisory Board that would coordinate government funding for the training of health sector workers.
- 3) The administration of the Nursing School and the Health Training School (*Escuela de Capacitación Sanitaria*) distracts the MOH from its more important functions and should be transferred from the MOH to autonomous and self-sustaining training institutions.
- 4) Emphasis should be put on training planners, economists, administrators, educators, and social communicators for specialized work in the health field, provided that studies do not show a surplus of workers in these areas. Trained professionals would assist the MOH in the reorganization and redirection of the sector.
- 5) Development of a procedure to change the functional profiles and the labor relationships for the MOH and ISSS personnel who work in health establishments that would be transferred to the municipalities or the private sector. Mechanisms would have to be developed to ensure that the employees would not lose their retirement benefits and that implementation of the reform would not be affected by this issue.
- 6) Government financial resources need to be budgeted for the training of health sector personnel in accordance with the policies described in section 2 of this chapter.

⁵⁵ This is a private foundation supported by the government which tries to match the human resource needs of the private sector with the training capacity of the educational institutions.

3.6 Health promotion and prevention

Activities in this component focus on the creation of technical and financial conditions to favor the diffusion of communications related to the health sector.

- 1) Approval of legislation to: a) promote the diffusion of messages in the mass media directed towards health promotion and prevention of diseases; and b) prohibit the diffusion of messages which are harmful to health. Particular attention should be paid to preventing the promotion of violence and the consumption of alcohol and tobacco.
- 2) Coordination of the development and implementation of joint plans for health education among the MOH, the Ministry of Education, and other educational institutions. Health education should be part of the curriculum of primary schools and included in informal educational programs as well.
- 3) Coordination between the MOH and the Ministry of Education of the accreditation and supervision of the quality of the public and private health courses.
- 4) Earmarking of MOH funds for promotion and prevention activities related to the ten priority areas identified by ANSAL.

3.7 Investments

The specific needs for investment in infrastructure for the institutional reorganization component have not yet been identified. Some investment would be needed to equip various MOH units (the Policy and Development Unit and the Epidemiological Unit), FONASA, and other institutions.

4. Reorganization of Primary Health Care

Table No. 2 shows the elements included in this component.

4.1 Decentralization of primary health care services

The health reform proposes that the PHC services that are part of the basic package be managed and delivered by municipalities or NGOs in accordance with the preference of the community to be served. This combination of municipal and private organizations would be called a Community Health System (SALUCO)⁵⁶. When municipalities are so small that they do not reach the minimum population level for a SALUCO program, several municipalities could join together or could delegate their responsibilities to the departmental development council.

It is important to note that the preference of the community should be respected as much as possible in terms of its choice of health care provider. The PHC services of many rural and marginal urban communities are provided by the MOH or NGOs; if the communities decide that they want to continue with the same providers then the new system should try to accommodate their preferences.

⁵⁶ PAHO/WHO has promoted a similar concept called Local Health Systems (SILOS) which is going through an experimental phase and appears to be successful in El Salvador. The ANSAL proposal for SALUCOS is somewhat different because the structure would have not only the responsibility for coordination, but would also be responsible for the management and direct delivery of health services.

Under the reformed system, the MOH has the responsibility for establishing programs, policies, and standards; it is also charged with gathering sufficient data to evaluate the health conditions of the population and the delivery of health services. Within the legal framework set up by the MOH, the SALUCOs have the right to receive compensation for their work and to deliver health services in the way that they judge most appropriate for the population and the communities they are serving.

The entire population should have access to the basic package of services once the decentralization process is complete, but this will only happen if all of the rural and marginal urban populations are covered by a SALUCO. Low income groups should have access to the expanded package of health services through an efficient system of referral and counter-referral. Each SALUCO would have to establish formal relationships with the organizations providing SHC. One of the purposes of the decentralization is to introduce incentives for smoother functioning of the system. Through their mayors, community leaders, and town hall meetings, the communities should be able to influence the selection of the health workers who would provide local health services (physicians, nurses, health promoters, midwives, and rural obstetric assistants). The communities should also be able to participate in the planning and management of PHC services.

4.2 Changes in the MOH structure

It is estimated that 60 percent of the population (3 million people) would have access to the services of the basic package through SALUCOs. The basic unit of health care delivery for the SALUCOs consists of auxiliary personnel at the community level (health promoters, midwives, or others) and a health team with a staff doctor at a more central level (such as the existing health units). If each basic unit can attend an average of 10,000 people, approximately 300 units would be needed to satisfy the demand. The central and regional offices of the MOH would be too remote to provide support and supervision to such a large number of basic units. For this reason ANSAL recommends the creation of supervisory and support offices at the departmental level (and for the MASS). These seventeen (four for the MASS) departmental offices would not be involved in the financial management of the system—that would be handled by FONASA and the municipalities⁵⁷.

The departmental offices would provide technical support and logistical assistance for the implementation of the basic package by all of the SALUCOs in the department. They would also coordinate activities in which economies of scale would dictate organization of the activities at a level higher than the community. Another important function of the departmental offices would be the technical supervision of the delivery of the services included in the basic package. In this way the SALUCOs would be controlled not only by the communities in which they operated, but also by specially trained technical personnel. There does not appear to be any reason to maintain the regional offices of the MOH once the major components of the reform have been implemented.

There are some national MOH programs which should be preserved as vertical programs because of their economies of scale and efficiency. Some of these are: the malaria program; the food distribution component of the nutrition programs; immunization supplies; and the health education programs which use mass media.

Preventive maintenance of the PHC infrastructure of the MOH has been very limited. It is therefore recommended that this responsibility be transferred to the private sector. A second recommendation is to

⁵⁷ FONASA's primary responsibility would be to administer the mandatory health insurance, but it could also administer the contracts and the payments to the municipalities for the delivery of the basic package of services; within the health sector it is the organization best suited to this responsibility. Another alternative would be to develop an office within the MOH to manage the transfers to the municipalities and the SALUCOs.

transfer the MOH's purchasing and supply functions to autonomous organizations, preferably from the private sector. These organizations would be required to offer their services to the SALUCOs that requested them, but the SALUCOs would not be required to make their purchases through those organizations.

4.3 Increase in financing

More precise definitions are needed of the services included in the basic package and MOH programs in order to develop a realistic idea of the cost of the reform. It is estimated that 565 million colones (1993 value) are needed to cover the cost of the maternal and child care included in the basic package for the population under the poverty line (50 percent of the total population). This figure does not include the cost of food programs, preventive and curative care for the adult population, or the activities financed by NGOs. It exceeds the 230 million colones the GOES spent on these services during 1993, 130 million of which were provided by foreign donors. It should be noted that most of the foreign assistance is directed towards PHC and that the two major projects (APSISA and the Rehabilitation of Social Sectors) will finish by the end of 1995. ANSAL recommends that the level of government financing be increased gradually over the next three years in order to achieve the goal of providing access to PHC for the poor.

4.4 Increase in the authority of health promoters and midwives

The MOH regulations which prohibit the dispensing of prescription medicine by health promoters are delaying treatment and causing negative consequences for the health of the patients. Furthermore, the fact that the promoters and midwives are not allowed to distribute certain kinds of contraceptives is limiting the diffusion of family planning methods⁵⁸. The experience of the PROSAMI NGOs, which allow their promoters to give out wide-spectrum antibiotics for ARIs under technical supervision, has practically eliminated doubts about the convenience and safety of this practice. Finally, the widespread self-medication which occurs in El Salvador is evidence that many antibiotics are bought without a prescription.

The health reform recommends that trained health promoters and midwives be permitted to dispense a limited group of medicines and contraceptives and that they be given greater authority to make decisions concerning diagnostic procedures and curative care. This would benefit the general health situation by reducing the use of unauthorized prescription drugs.

⁵⁸ MOH health promoters are trained to give oral contraceptives under the following circumstances: (1) the person must have a prescription (from a health unit or post); and (2) the promoter only gives enough for three cycles, when the woman must undergo another checkup and renew her prescription.

Table 2

REORGANIZATION OF PRIMARY HEALTH CARE

INSTITUTIONAL ELEMENTS	SUPPORT ELEMENTS		
	INSTITUTIONAL STRENGTHENING	HUMAN RESOURCES	PROMOTION AND PREVENTION
<p>COMPONENTS</p> <p>Decentralize the management and delivery of MOH PHC services to municipalities which can deliver the services directly or contract private organizations (NGOs, cooperatives, foundations)</p> <ul style="list-style-type: none"> - Create departmental MOH offices to support and supervise the municipalities - Transfer the responsibility for maintenance of physical plant and equipment from the MOH to the private sector - Transfer the responsibility for procurement of supplies from the MOH to autonomous and self-sufficient entities; these entities would offer their services to the SALUCOs, but the SALUCOs would not be required to contract for their services - Keep certain programs within the MOH because of economies of scale, smooth functioning, and other reasons (such as the programs concerned with malaria, PAI, nutrition, health education, etc.) - Increase government financing for PHC to subsidize care for the poor - Increase the decision-making power of local nurses and midwives <p>Strengthen community participation in the planning and management of PHC services through the participation of municipalities and community leaders as well as open town meetings</p> <ul style="list-style-type: none"> - With guidance from the Health Advisory Board, define the services which make up the basic package - Develop the contents of the contracts between the MOH and FONASA and between FONASA and the municipalities which should include per capita payments, local authority to handle surplus funds, and budgetary line items for community health education programs - Develop a model contract between the municipalities and the SALUCOs - Develop and implement a system of referral and counter-referral 	<ul style="list-style-type: none"> - Evaluate, strengthen, and develop technical models for the delivery of the basic package of health services in rural and urban areas including personnel, supplies, procedures, equipment, vehicles, etc. - Develop and implement a system of accreditation for delivery of PHC services by municipalities, SALUCOs, NGOs and other organizations - Design and implement information systems for the municipalities/SALUCOs and the MOH/FONASA; the systems will cover budgetary data and delivery of health services - Develop departmental MOH offices to provide technical assistance to the municipalities - Develop a SALUCOs management system 	<ul style="list-style-type: none"> - Emphasize the training of critical human resources for PHC delivery: 1) general practitioners or family doctors, technicians, general nurses, and public health nurses, health promoters, midwives, and rural obstetric assistants; and 2) administrators of SALUCOs and local PHC organizations - Increase productivity through an incentive system for improved productivity and quality of health services. - Establish effective in-service training programs for PHC personnel. 	<p>Design technical educational models for health promotion and disease prevention to be implemented by the municipalities/SALUCOs in their community work</p>

4.5 Establishment of incentives

The decentralization of PHC creates two new relationships, the first between the municipalities and the SALUCOs and the second between the MOH and FONASA. The health reform recommends that contracts be drawn up outlining the rights and responsibilities of each institution. The contracts should include a description of the mechanisms to be used to stimulate effectiveness and efficiency in the production of health services. The content of the contracts should cover the technical and financial aspects of PHC delivery and as a minimum should include:

- * per capita payment adjusted to cost factors
- * global line items (not per capita) to finance community health education
- * flexibility to allocate excess funds to other health activities at the local level
- * technical specifications and content of the basic package of services
- * information on the production of services, the health situation of the covered population, financial status, etc.
- * area covered, total population, and the proportion of the population covered by the SALUCO
- * means of community participation

4.6 Institutional strengthening in PHC

In the PHC reorganization component, the activities of the reform center on strengthening the capacity of municipalities and SALUCOs to deliver health services. Many municipalities are small and do not have sufficient infrastructure to manage their own services, and some do not have the capacity to manage contracts with private organizations. The health reform proposes that the local technical and administrative resources of the MOH be used to strengthen the municipalities and the SALUCOs. The following specific activities are proposed:

- 1) Evaluation, strengthening, and development of municipal and community structures (town halls, community leaders, social action groups, churches, etc.) so that they can assume responsibility for the management and delivery of PHC services, specifically those services included in the basic package. There are two stages of the process: the first, before the decentralization is completed, when training modules would be developed and tailored to the needs of the organization to provide the health services; and the second, once the responsibility for the delivery of services has been transferred to the municipalities or the NGOs, when the MOH would develop guidelines for technical assistance and supervision⁵⁹.
- 2) Evaluation, strengthening, and development of organizational models for the delivery of the services included in the basic package, particularly for the rural and marginal urban areas. These models should include: specific services to be delivered; number and type of personnel (promoters, midwives, physicians, etc.); equipment and supplies; and technical and administrative procedures to be followed. The delivery of the services takes place at two levels: in the communities, with auxiliary personnel; and at the referral centers, with a health team that includes a staff physician. Each referral center would support ten or more communities; this figure would vary according to the size of the communities and the distances between them.

⁵⁹ The departmental structure of the MOH is different from that of the departmental mayors' councils involved with municipal development. Without having a negative impact on the MOH, links should be created between the two structures.

- (3) Development and implementation by the MOH of an accreditation system for the municipalities/SALUCOS to determine whether or not they are prepared technically and in terms of management to take on the responsibility for management and delivery of PHC services. The accreditation should include factors such as the training of technical and management personnel; decision-making procedures; methods for increasing community participation; needs analyses for the communities and the delivery of services; and technical, financial, and management information systems. The accreditation system would be developed and established jointly by the MOH and FONASA, with the participation of municipal representatives and the NGOs which are participating in PHC; the system would be administered by the MOH departmental offices.
- (4) Development and implementation of standardized information systems to be sent by the municipalities/SALUCOS to the MOH/FONASA covering: the size of the population covered; the general health situation (or special cases of illness or death); access to health services; services provided; and financial administration.

4.7 PHC Human resources

El Salvador has ongoing training programs for PHC personnel. In the last three years the MOH and the NGOs have made significant progress in the training of health promoters and midwives. The Ministry tripled the number of promoters (to 1,500) and trained closed to 3,500 midwives. In order to successfully implement the component of the reform dealing with reorganization of PHC, the following is recommended:

- (1) Emphasize training of health care personnel involved with the management and delivery of the health services covered under the basic package, such as:
 - * family doctors; technicians; public health nurses and general nurses; health promoters; midwives; rural obstetrical assistants; and
 - * mayors; municipal personnel; members of the SALUCO community boards; SALUCO administrators; and PHC supervisors at the departmental level of the MOH.
- (2) Develop incentive programs to promote an increase in productivity of the personnel involved in the delivery of services at the community level and at the referral centers. The need to provide salaries high enough to attract qualified personnel to rural areas should be taken into account in the determination of the size of FONASA payments to the communities.
- (3) Establish effective training programs for the personnel that would participate directly in the delivery of the health services in the basic package. It is recommended that the mechanisms for departmental supervision be used to detect the needs which can be handled through courses, seminars, etc. and to provide in-service training.
- (4) Increase the decision-making authority of nurses, nurses' aides, health promoters, and trained midwives to resolve basic health problems, within a standardized framework and with effective supervisory mechanisms.

4.8 Health promotion and prevention

The MOH and the NGOs in El Salvador have been successful in focussing their health promotion and prevention efforts on primary health care, but unfortunately the rest of the sector has not displayed the same focus. The

health reform should support and not hinder activities related to promotion and prevention. ANSAL makes the following recommendations:

- (1) In coordination with representatives from the municipalities/SALUCOS, the central MOH offices should design technical-educational models for health promotion and prevention activities at the community level.
- (2) The low income population should be educated to recognize the symptoms associated with serious health problems. This would increase the proportion of cases referred opportunistically to health promoters, midwives, or community health personnel.

4.9 Investments

Reorganization of PHC requires changes in the infrastructure of the health system, either to replace the infrastructure that is no longer serviceable or to build new infrastructure needed because of population increases or migration. ANSAL carried out a general study and the MOH has detailed studies available. The ANSAL team concluded that the most urgent infrastructure needs were for equipment and supplies for PHC personnel at the community level.

According to the ANSAL study, approximately US\$13 million will be needed for MOH primary health care services over the next five years. This figure includes close to US\$2 million for preventive maintenance. The estimate developed by the MOH, however, amounts to US\$30 million. Neither of these estimates includes the cost of the transfer of the management and delivery of the basic package of health services to the municipalities and the SALUCOS. A study of the existing network of MOH, NGO, and ISSS establishments, currently undertaken by the MOH with the World Bank's support, needs to be completed to re-estimate unsatisfied needs.

Table 3
REORGANIZATION OF SPECIALIZED AND HOSPITAL CARE

INSTITUTIONAL ELEMENTS	SUPPORT ELEMENTS		
	INSTITUTIONAL STRENGTHENING	HUMAN RESOURCES	PROMOTION AND PREVENTION
<p>Transfer management of the MOH hospitals and health centers and the ISSS hospitals to private organizations (community organizations, foundations, cooperatives, NGOs, etc.). Change financing of SHC:</p> <ol style="list-style-type: none"> 1) Partial or total government subsidies to cover the poor 2) Recovery of costs from payments by the users 3) Mandatory, universal insurance for medical/hospital care <ul style="list-style-type: none"> - Define the health services to be covered in the expanded package. - Develop the content of the contracts between FONASA and the private organizations managing SHC: <ul style="list-style-type: none"> - The stratification of the subsidy system should be based on the user's capacity to pay. - Develop systems to classify users by income level - Establish the formula for per capita payments from FONASA to the private organizations providing SHC; it should be based on the actual cost of providing the expanded package of services. - Develop a system of referral and counter-referral for the SALUCOs. 	<ul style="list-style-type: none"> - Adapt instruments of managed health care in order to improve the effectiveness and efficiency of the delivery of SHC. These instruments include: usage control, use of appropriate personnel, use of generic medicine, clinical standards, and critical paths for patients. - Develop an accreditation system for the private organizations providing SHC (to qualify for FONASA payments). - Design and implement a standardized information system for the organizations delivering SHC, to include budgetary information and service delivery. - Adapt and implement hospital administration systems, covering personnel, procurement of supplies finances, and service delivery 	<ul style="list-style-type: none"> - Train a critical mass of hospital administrators and members of the boards of the NGOs. - Train clinical personnel (physicians, nurses, dentists) in the application of the managed care instruments such as usage control, treatment planning, application of clinical standards, and use of generic pharmaceuticals. - Promote an improvements in productivity and quality of health services through the introduction of incentives. 	<p>Relate the per capita amount of the FONASA payments to the development of health education programs for its beneficiaries which promote good health and disease prevention.</p>

5. Reorganization of Specialized and Hospital Care

5.1 Transfer of MOH and ISSS hospitals to the private sector

The principal element in the reorganization of this type of health care is the transfer of services from the MOH and ISSS to private organizations. The objective is to improve the efficiency and management of procurement, financial, and personnel matters⁶⁰. MOH hospitals have traditionally been semi-autonomous; in addition to the funding received from the government's annual budget, they have often received assistance from other sources. Historically the hospitals have received help from community organizations (*patronatos*) which collected funds to cover the hospitals' extraordinary expenses. Because of this practice, the communities were not able to contribute as much as otherwise possible, and in many cases patients were asked for "voluntary contributions" while in the hospital. Some *patronatos* still function and provide a significant level of support for certain hospitals, while others exist only as a term which refers to income from patients' fees.

The transfer of responsibilities from the government to the private sector could take place with or without the transfer of property ownership. If there were no transfer of property ownership, the government could set up a concession system which according to some people would be attractive to many organizations. These organizations could be the community organizations, foundations created especially to provide the health services, existing NGOs, or companies formed by the professional staff of the health establishments. If the sale of government property were part of the reform, it would create many obstacles related to: a) the difficulty in establishing the real value of the health establishments to be sold; b) the creation of oligopolistic situations in the department capitals and other rural cities where the only hospitals are those of the MOH and the ISSS; and c) the possible negative consequences of reducing the government's leverage to negotiate the delivery of specialized and hospital care services at a cost which is acceptable to FONASA and to the users who would be making co-payments.

The health reform envisions the rehabilitation of infrastructure and equipment, an increase in the funding level, and a change in how payments are calculated prior to any transfer of management responsibilities to the private sector. The change in the financing from a system based on a historical budget to payments based on the number of persons covered creates a strong incentive for more efficient management. ANSAL recommends that the reorganization begin with the health centers for several reasons. First, the health centers have the lowest occupancy rate relative to other establishments; and second, their lack of decision-making authority hinders the patients' access to this level of care, crowds the central hospitals, and discourages the placement of doctors in cities other than San Salvador.

5.2 Financing of specialized and hospital care

The inequity of the present system is exemplified by the difference in the per capita spending of the different providers. In 1993, the ISSS spent approximately 605 million colones to provide SHC health services⁶¹ to 600,000 beneficiaries. This amounts to slightly more than 1,000 colones per beneficiary per year. During the same period the MOH spent approximately 690 million colones on specialized and hospital care (health centers and hospitals). Surveys estimate that close to 75 percent of the hospital care in the country is provided by MOH

⁶⁰ The reform of the financial structure of health care would give the MOH and ISSS patients the opportunity to choose their own health providers. The change to a system of a per capita payment to the health providers would lead the providers to compete among themselves for the patients. The introduction of managed care will help increase efficiency without compromising the quality of the services provided. Existing hospital personnel would keep their jobs with the new administration if appropriate and if their productivity justified their staying.

⁶¹ This figure excludes the spending to cover a portion of the salaries of the beneficiaries when they are sick, which amounts to approximately 840 million colones and represents 28 percent of the total expenditures on health.

establishments, and thus the MOH annual per capita spending is estimated at 185 colones, 5.5 times less than the ISSS per capita spending on SHC⁶². The difference between MOH per capita spending on SHC and that of other government entities (CEL, ANTEL, and others) is even greater.

The health reform proposes changes to reduce these inequities. One major change would involve an increase in government spending on SHC with emphasis on the poor. At the end of a six-year period, MOH spending on SHC would amount to approximately 550 colones per capita per year (50 percent of ISSS per capita spending). A second change is the recovery of 100 percent of the cost of care for those people above the poverty line. The payments would be made by the patients through a mandatory insurance program. In order to reduce the motivation to be classified in low income groups which receive government subsidies, the payments would be made according to a sliding scale based on income level.

Table No. 4 shows the funding levels in the health reform needed for PHC and SHC services for the population currently covered by MOH hospital services. The estimates were made based on the 1993 expenditures of the MOH and the ISSS and are expressed in 1993 colones. The implementation period covers six years because beginning in the seventh year of the reform, there are no further major changes in the financing. The columns correspond to the following years: 0, 1, 2, 3, 4, and 6, while year 5 is identical to year 4. The rows are organized into five categories: implementation costs of the reform; PHC costs; SHC costs; total costs; and percentage increases. The breakdown is done by three categories: government, users, and foreign assistance.

The implementation costs of the reform, which would be funded by foreign assistance, come from investment in the following areas: adaptation and maintenance of the installed capacity of PHC and the hospital network (MOH and ISSS hospitals and health centers); technical assistance; the design of specific changes and support for their implementation; training and education; human resources in the health sector; and public awareness campaigns dealing with the health reform.

The implementation schedule for the health reform is as follows:

- Year 0 (1994):
 - Make the decision to implement the health reform.
- Year 1 (1995):
 - Begin the changes in PHC and SHC; increase investment in the existing network.
 - Prepare for the changes in the reorganization of the SHC related to: hospital administration; recovery of costs; mandatory health insurance; strengthening and restructuring of organizational systems and administration of health delivery; and development of managed health care instruments.
 - Increase government spending on PHC, taking into account a 20 percent drop in the level of foreign assistance relative to the previous year.

⁶² Although the difference per covered person for SHC is correct, the difference for episode of illness is overestimated to the benefit of the ISSS. Several factors tend to underestimate the MOH's spending on hospital care: the proportion of the population that actually uses SCH in MOH establishments is less than 75 percent; the hospitalization rate is lower among MOH beneficiaries (approximately half of the ISSS rate); the cost of the factors of production, mainly personnel costs, are lower in the MOH; and the ISSS patients tend to receive all of their services at ISSS establishments whereas some of the MOH patients also use private sector medical services.

- Year 3 (1997):
 - Complete the experimental stage of PHC decentralization; evaluate and extend the decentralized system, reaching 100 percent of estimated needs. Foreign assistance in this area would be reduced to 40 percent.
 - Implement the mandatory health insurance to facilitate recovery of SHC costs.
 - Establish government subsidies as follows:
 - Indigent population (12 percent of the population) - 100 percent subsidy
 - Poor, level 1 (18 percent of the population) - 85 percent subsidy
 - Poor, level 2 (20 percent of the population) - 50 percent subsidy
 - Non-poor (25 percent of the population) - no subsidy
 - Increase per capita expenditure on SHC by 100 percent, from 185 colones to 370 colones to approach the level of ISSS expenditure per capita.
- Year 6 (2000):
 - The government should cover 100 percent of PHC financing and foreign assistance in this area should be eliminated
 - Increase the SHC per capita expenditures by 300 percent in relation to year 0: from 185 colones to 555 colones.

Table No. 4 shows a 63 percent increase in government expenditures on SHC over the six-year period, with larger increases for the indigent population and the level 1 poor than for the level 2 poor. For those classified as non-poor users, the government contribution drops from 216 million colones in year 1 to zero in year 3 which reflects 100 percent cost recovery at this level⁴³

⁴³ The estimates in Table 4 are based on inelastic demand for health services by the non-poor users. This assumption is not totally correct, but does not have any significant impact on the estimates of government expenditures expressed in this table.

HEALTH REFORM: COSTS IN PHC AND SHC, 1994-2000***
(in 1993 colones)

Year	Year 0 1994	Year 1 1995	Year 3 1997	Year 6 2000
COST OF REFORM IMPLEMENTATION (foreign assistance)	0	361	661*	0
COSTS OF PHC:				
- Total:	230	300	565	565
- Government:	130	220	525	565
- Foreign assistance:	100	80	40	0
COSTS OF SPEC. & HOSP. CARE				
- Total:	690	690	1,380	2,070
- Government:	605	605	860	990
- Users:	45	45	720	1,080
- Foreign assistance:	40	40	0	0
COSTS OF SPEC. & HOSP. CARE (POPULATION STATUS):				
- Indigent pop. (12% pop.):				
- Government (100% subs.):	103	103	206	309
- Poor level 1 (18% pop.):				
- Government (85% subs.):	155	155	275	413
- Users:	7	7	49	73
- Poor level 2 (20% pop.):				
- Government (50% subs.):	171	171	179	269
- Users:	8	8	179	269
- Non-poor (25% pop.):				
- Government (no subs.):	216	216	0	0
- User:	30	30	492	738
TOTAL COSTS (PHC/SHC):				
- Government:	735	825	1,185	1,555
- Users:	45	45	720	1080
- Foreign assistance:	140	481	701	0
TOTAL GENERAL COST:	920	1,351	2,606	2,635
% OF COST INCREASE IN RELATION TO YEAR 0:				
- Government:	0	90	450	820
- Users:	0	0	675	1035
COST PER CAPITA (SHC) **	185	185	370	555

* In year 2 there will be a similar cost; ** in 1993 colones; *** For 75 percent of the population presently covered by the MOH.

Note: The figures in each column correspond to costs for that year.

The major changes proposed in SHC financing are:

- Progressive increases in spending for SHC which would bring it close to ISSS per capita SHC spending; in relation to year 0, an increase of 100 percent by year 3 and 200 percent by year 6. These increases would allow for coverage of more services in the expanded package, an improvement of the conditions of the health establishments, and improvement in the quality of the care provided.
- Partial and complete government subsidies to cover the poorest members of the population.
- Cost recovery through user fees. Because of the need to improve the SHC infrastructure and the functioning of SHC services first, user fees would not be introduced until year 3 of the reform⁶⁴. Experience has shown that any attempt to charge user fees for services that have not been improved will end in failure⁶⁵.
- Universal mandatory health insurance. The cost of treatment for an illness which requires SHC is greater than the capacity to pay of most users. The insurance is an appropriate mechanism to make possible this payment.

ANSAL proposes that the recovery of costs from the users be accomplished through a mandatory and universal insurance. By insuring people with different levels of risk, the mandatory aspect of the insurance introduces an element of solidarity into the health system, while the universal aspect responds to the concept of a basic network of social security services. In effect, the insurance confirms that the basic and expanded packages of health services represent the minimum level of health services to which all Salvadorans have a right⁶⁶.

5.3 Introduction of adequate incentives

The funds from the health insurance premiums would be administered by FONASA with MOH technical supervision, while the services covered under the expanded package would be delivered by private providers. Some kind of voluntary⁶⁷ contract would have to be developed to link FONASA and the private organizations. It is expected that with this change in the system, the hospitals would become more efficient. The need to agree on the FONASA payment to the private organizations for the expanded package of services is a critical matter within the health reform. The co-payments, deductibles, and other fees to be paid by the users for services covered by the insurance should be regulated. The hospitals need to be limited in terms of how much they can charge patients beyond what FONASA pays the hospitals on a per capita basis for the expanded package of services.

⁶⁴ Cost recovery can begin earlier in those hospitals which have already had their infrastructure and services improved.

⁶⁵ This system is based on an approximate cost for an episode of illness for the non-poor population of 53,950 colones in year 3 and 5,900 in year 6, which represents a high proportion of income. The average monthly incomes of homes in the 6th and 7th deciles in 1992 were 1,823 colones and 2,201 colones.

⁶⁶ Those people who are above the poverty level will have to pay for the services covered under the basic package in addition. In order to facilitate this payment, a complementary insurance program is proposed.

⁶⁷ Since this would be a voluntary link, the organizations which are managing the hospitals can refuse a FONASA contract if the FONASA offer is not attractive to them.

The contract between FONASA and the private organizations managing SHC should include at least the following points:

- An explicit description of the services provided in the expanded package based on available resources, common medical problems, and treatment costs.
- A clear system for stratification of the government subsidies according to the users' ability to pay.
- Development of a system to classify users by income levels.
- Establishment of a formula for the FONASA per capita payments to the private organizations based on the costs of providing SHC services.
- Clear explanation about how to handle surplus funds.

These are just general guidelines for the system; the details would have to be worked out at a later stage of development of the health reform.

5.4 Institutional strengthening of SHC

Institutional strengthening in this component focuses on supporting and strengthening existing institutions (MOH and ISSS hospitals) and developing private organizations with the capacity to manage complex health service systems. The main points are:

- (1) **Managed health care.** In order to achieve equity in SHC, there must be greater efficiency in the use of resources as well as increased government funding. The following instruments of managed care must be incorporated into the system.
 - Usage control: i.e., hospital admission plan, specifying length of stay
 - Use of appropriate personnel: i.e., prenatal and delivery care provided by trained midwives, except for high risk cases which would be handled by physicians
 - Use of generic medicines instead of more expensive name-brand products
 - Use of clinical standards: i.e., treatment plan for ARIs
 - Critical paths for patients: type of personnel and place for diagnosis and treatment of the most common diseases
- (2) The government is required to guarantee the quality of health services through health service quality controls for which the MOH is responsible. The accreditation of health services is a simple and low-cost mechanism to do this⁶⁸. ANSAL recommends that the MOH develop and implement an accreditation system for private organizations providing the services covered under the expanded package. The establishments which are not accredited should be excluded from the list of organizations that FONASA can contract to provide services for its beneficiaries.
- (3) Design and implementation of information systems which handle data on budget implementation, delivery of services, and the number of people covered. The data would be sent from the private organizations to FONASA and the MOH.
- (4) Adaptation and implementation of hospital administration systems for the private organizations managing the hospitals. The systems would cover marketing, personnel, purchase and storage of supplies, accounting, and service delivery.

⁶⁸ There are more efficient methods to ensure the quality of medical and hospital care, but they are more expensive and require more qualified personnel. For this reason they are not recommended at this time by ANSAL.

5.5 SHC human resources

This is a very important part of the health reform because 75 percent of the resources of the health sector are managed by personnel in specialized and hospital care. Three particular needs have been identified:

- (1) Training of a critical mass of board members, general managers, and other managers (personnel, procurement, and financial managers) of private organizations, as well as hospital administrators;
- (2) In-service training in managed care techniques for clinical personnel from these same organizations (doctors, nurses, dentists, technicians, and midwives); and
- (3) Increased productivity and improvement in the quality of services through personnel incentives.

5.6 SHC investments

The priorities for investment in SHC are centered around the rehabilitation of the buildings and equipment of the MOH health centers and hospitals and the implementation of preventive maintenance programs. It is believed that the investment needs of ISSS establishments are not as great as those of MOH establishments. The rehabilitation of the buildings and equipment and the implementation of the maintenance programs should occur before the responsibilities for hospital management are transferred from the government to the private sector.

ANSAL's assessment of the infrastructure and equipment needs is presented in Table 5.

Table 5

ESTIMATED INVESTMENT COSTS FOR SHC

Institution	Concept	Amount (millions of US\$)
MOH	Physical plant rehabilitation	42.3
	Equipment rehabilitation	17.3
	Physical plant maintenance	7.5
	Equipment maintenance	16.5
ISSS	Physical plant rehabilitation and construction	35.6
	Procurement of new equipment and rehabilitation of existing equipment	16.0
	Physical plant maintenance	6.7
	Equipment maintenance	14.2
Total		156.1

Source: Zúñiga, Alberto, *Health Sector Infrastructure*, ANSAL-94.

These estimates were based on existing physical infrastructure and are an approximation of the initial costs for the next five years. A more detailed analysis of each establishment would make this estimate more precise.

6. Health Reform: Global or Partial

The health reform can be carried out globally (all components implemented simultaneously) or partially (implementing one component first and at a later stage implementing the other components). Without taking into account the fourth component dealing with environmental health activities, two alternatives for partial reform are:

- (1) Implement the transfer of PHC services to the local levels first; or
- (2) Begin the reform with changes in the management of public sector hospitals, handling the MOH and ISSS hospitals separately or together.

There are important reasons for recommending implementation of these two key components at the same time. Unless another source of funding is identified, the decrease in the level of foreign assistance will signify a deterioration of the MOH health services, particularly in the areas of preventive and basic curative care. The kind of service provided (PHC) and the population to which it is directed (the poor who have minimum capacity to pay) practically exclude other sources of funding. Government financing of PHC provides an excellent opportunity to begin to carry out the health reform in this area. Given the fact that most foreign assistance will end by the beginning of 1996, this transformation should begin as soon as possible and should be implemented gradually, starting first in one geographic area and then moving to the rest. One option would be to start the reform in two departments, evaluate different alternatives after two years of decentralized functioning, and then apply the relevant experience to the other departments and complete the reform over a period of ten years.

Once the transfer of PHC management begins in one geographic area, the management of the MOH hospitals in the same area should begin as well. The MOH hospitals would become the referral centers to which the SALUCOs would send their complicated cases. Technically it would not make sense to decentralize primary care services if the higher levels of care to which complicated cases would be sent were still operating under a centralized system and had insufficient funding. In a country as small as El Salvador, aggressive policies of cost recovery by geographic area cannot be established without affecting the demand for services. For this reason, the implementation of a cost recovery system and the decentralization of MOH hospitals should occur simultaneously at a national level.

Improvement of the equity, efficiency, and sustainability of the health sector will only occur with global implementation of all of the components of the reform; if implementation is delayed then some of the existing problems in the sector could worsen.

APPENDIX 1. RECOMMENDATIONS

This appendix summarizes the major recommendations made by ANSAL consultants. The recommendations were made prior to the design of the health reform proposal, and therefore some of them do not concur with certain aspects of the health reform (i.e. the increase in the number of MOH promoters).

Recommendations Concerning Health Issues

Maternal child health

- * Concentrate resources on high risk groups (rural homes in which the mother has a limited education and low socio-economic level).
- * Strengthen maternal child (MI) health care programs through a committee of the Health Advisory Board (CCS).
- * Offer the basic package of MI services in rural areas where these services are currently not provided.
- * Design educational programs which emphasize priority areas and health risks.
- * Integrate the different programs and departments of the MOH that work in MI into one unit.
- * Strengthen supervisory capacity and focus on the resolution of problems identified through the supervision of MI activities.
- * Integrate coordination at the local level, using the local health system (SILOS) concept.
- * Increase the number of MOH and NGO promoters and midwives.
- * Increase the decision-making authority of promoters and midwives.
- * Integrate the various MOH information systems or at least make them compatible.
- * Improve the detection and reporting of infectious diseases, especially of HIV/AIDS.
- * Improve the collection of vital statistics at the municipal level.

Breastfeeding

- * Promote the approval of the breastfeeding law.
- * Include in the Labor Code regulations which allow breastfeeding mothers time to nurse their children.
- * Publicize norms and standardized procedures which foster/promote successful breastfeeding.
- * Implement policies to encourage immediate contact between the mother and her newborn, reduce the use of general anaesthesia, and reduce the time between delivery and sterilization.
- * Include information about infant feeding in the training of health professionals.
- * Educate the public on the benefits of breastfeeding during the first six months of life (it provides all of the necessary nutrients and promotes the development of the infant during this period).

Nutrition programs

- * Create a special committee of the Health Advisory Board for feeding and nutrition programs.
- * Improve the logistical arrangements for food delivery (at the local level there should be family packages) to ensure the continuity of food delivery.
- * Make nutritional programs regular programs of the MOH and the Ministry of Education.
- * Make sure that nutritional education programs are coordinated with food delivery and promote family and community responsibilities.
- * Develop information systems for the evaluation of nutrition projects.
- * Carry out quality control of the food being delivered.
- * Ensure financial sustainability of nutrition programs.

Family planning

- * Integrate family planning into reproductive health programs.
- * Increase the authority of the National Population Council and make it a committee of the Health Advisory Board so it can serve as a coordinator.
- * Evaluate the program to redirect assistance to the highest priority areas and to redesign the information system.
- * Increase the contraceptive options available.
- * Train health staff in the use of the IUD, the use of oral and injectable contraceptives, and the application of new technologies (i.e., Norplant), including training in possible side effects and risk factors.

STD/HIV/AIDS

- * Concentrate program activities in high risk geographic areas and population groups.
- * Combine intervention strategies to encourage a synergistic effect.
- * Train program staff in the use and interpretation of KAP (Knowledge, Attitude, and Practice) surveys.
- * Coordinate diagnosis and treatment of STDs, AIDS and cervical-uterine cancer.
- * Promote behavior change through communication strategies.
- * Organize and broaden the condom distribution network and condom quality control; distribute instructions on their appropriate use.
- * Ensure careful observation of high risk groups, such as commercial sex workers, and identify other high risk population groups, such as long-distance truck drivers, through on-site studies.
- * Provide equipment and supplies to the blood banks to accurately screen blood and to observe proper procedures for the handling blood.
- * Evaluate the social marketing of condoms program in light of a possible expansion of the program.
- * Promote the active participation of NGOs and other private organizations in MSC activities.

Physical environment

- * Reorganize the institutional guidelines for the management of river basins and for the administration of urban and rural water and drainage systems; consider the participation of other more efficient public and private organizations.
- * Promote the participation of NGOs, municipalities, and community organizations in water and drainage programs.
- * Approve the water law; the law should establish the standards for water quality and for dumps.
- * Increase cost recovery through rationalization of water use and expanded coverage.
- * Protect water resources through sanctions, fines for polluters, and educational programs.
- * Improve water supply of the rural population with the support of the FIS and MEA.
- * Design and implement a hospital waste disposal plan.
- * Design and implement a toxic and dangerous waste disposal plan.
- * Strengthen the capacity of COMURES, ISDEM and other entities to support the municipalities.
- * Design and build sanitary landfills in areas where there is no danger of contamination of river basins.
- * Obtain financing for garbage collection and disposal systems.
- * Draft (MOH and SEMA) regulations for garbage disposal.
- * Support the adoption of a national environmental strategy prepared by SEMA and other entities.
- * Support PAHO's "Plan Regional de Inversiones en Ambiente y Salud" (Regional Investment Plan for Health and the Environment).
- * Support health and environmental programs, such as MASICA (MOH/ANDA/SEMA).

Social sector

- * Support an inter-sectoral approach (MOH and MINED) to health education.
- * Promote literacy campaigns with the participation of the public and private sectors and volunteers.
- * Strengthen mental health programs, incorporating them into PHC.
- * Support community-based rehabilitation programs and self-help groups.
- * Promote multi-sectoral efforts to reduce poverty.
- * Focus health care on the poorest groups.
- * Support the health components of programs to reincorporate war victims into the society.
- * Make services for abused women and children a priority.
- * Strengthen family health programs and programs directed towards street children.
- * Support voluntary, private sector, and public sector programs for drug abuse prevention.

Death from external causes (homicides, violence, accidents)

- * Identify the contributing factors for deaths from external causes.
- * Identify the age groups most affected by specific causes of death.
- * Increase educational opportunities, alcohol prevention and treatment programs, recreational activities, and work opportunities.
- * Identify the importance of other categories of accidents such as drowning, fire, falls, poisoning, food poisoning, and asphyxia.
- * Identify the importance of accidents of young children (under five) in the home and propose corrective measures.
- * Design multi-sectoral programs to prevent or treat the problems mentioned above.
- * Encourage public and private sector institutions to participate in the launching of broad prevention, control, and rehabilitation programs.

Physically and mentally handicapped

ANSAL supports the recommendations of the workshop, sponsored by the MOH, USAID, and PROLIS, called *Development of a Strategy for the Total Rehabilitation of the War-Wounded in El Salvador*, attended by most of the public and private institutions who work with war victims.

USAID/El Salvador provided a draft (dated February, 1994) of the final report to ANSAL in which the strategy, coordinating mechanisms, and priorities are outlined, as follows:

- Finish all surgical interventions.
- Expand access and coverage of rehabilitation programs.
- Evaluate mental health needs.
- Provide temporary and permanent pensions.
- Update the national census of war victims.
- Establish a procedure for verifying and evaluating beneficiaries.
- Establish criteria for the technical evaluation team.
- Establish mechanisms for coordination and implementation.
- Develop a network of institutions and public and private organizations to join forces in providing ongoing care to war victims.

Recommendations Concerning the Health System

Health service system

- * The top priorities of the MOH should be: define and implement a sanitation policy and the National Health Plan; establish regulations for adequate health care for the population; monitor overall health status of the population; ensure basic and intermediate health care for the poor; and promote individual and collective responsibility for the maintenance of good health.
- * Implement a unified health system to be coordinated by the Health Advisory Board.
- * Focus government resources on PHC and determine a basic package of health activities.
- * Decentralize MOH decision-making power and administration and transfer to the municipal level.
- * Coordinate foreign assistance.
- * Separate the administration of the contributions of the riesgos diferidos of the ISSS from the health contributions of different institutions.

Financing

- * Develop a unique, universal, and mandatory health insurance program financed by contributions from all employers and employees.

MOH

- * Double PHC financing and focus services on low-income groups.
- * Increase user fees for specialized care and hospital care and develop other sources of funding.
- * Lower costs and improve efficiency.

MOH budget during implementation of the reform

- * Plan the budget on the basis of the needs of each service.
- * Develop a new formula for hospital budgets which is not based on historical data, but rather on actual costs and projected revenues.
- * Implement the decentralization of the services including training and control systems.
- * Break the budget down by municipality or department.

Human resources

- * Establish the MOH as responsible for defining policies for human resource development.
- * Coordinate MOH and educational institutions to ensure that the health needs of the population are considered in the training of health professionals.
- * Transfer the national nursing schools and the Health Training School (and its resources) to the education sector.
- * Emphasize training in deliveries for health personnel at the technician and assistant level.
- * Review the profile of MOH promoters and expand their decision-making authority.
- * Encourage the training of community health doctors.
- * Promote the training of nurses.
- * Review the technical careers in health so that there is a match between the careers offered and the country's needs.
- * Establish a rural residency program (three years) for doctors.
- * Strengthen the affiliation of nurses and technicians to the health services.
- * Promote six to eight-hour/day schedules for doctors, with a minimum of four hours.

- * Expand the schedule for health consultations to include the afternoon and early evening hours.
- * Standardize the assignment of personnel according to the model of care.
- * Increase the salaries of MOH professional and technical staff.
- * Provide positive incentives for MOH service providers.
- * Improve the supervision, continuing education, and follow-up for employees.
- * Ensure that the institution in charge of the licensing and control of health professionals is autonomous, with an independent budget and financial independence.
- * Require licensing of health professionals and update the list continuously.

Demand for health services and community perception

- * Strengthen the supervision and training of promoters and midwives; provide them with equipment and medicine to treat common health problems such as ARI.
- * Emphasize maternal and child health services in promoter activities.
- * Train a larger number of midwives to improve coverage in marginal urban and rural areas.
- * Establish an efficient patient referral system.
- * Hire local institutions for the delivery of PHC services.
- * Develop and implement marketing programs for PHC services.
- * Include pharmacists in the PHC system.
- * Provide basic community health services to marginal urban communities.

Administration of pharmaceutical products

- * Implement a national pharmaceutical policy based on essential drugs.
- * Strengthen the Public Health Council so that it can regulate and control drugs as established by law.
- * Implement the Central American free trade treaties for pharmaceutical products.
- * Verify the observance of the Buenas Practicas de Fabricacion (standards for the production of pharmaceutical products) of the WHO.
- * Request entry into the Esquema de Certification de Calidad de Productos Farmaceuticos (quality control system for pharmaceutical products) of the WHO.
- * Implement a computerized information system for drug registration.
- * Standardize the forms used for medication by public sector institutions, beginning with PHC medications.
- * Conduct an ABC analysis for the procurement of drugs by the public sector; analyze the feasibility of joint MOH and ISSS purchases for PHC pharmaceutical products.
- * Assess the feasibility of cost recovery for pharmaceutical products.
- * Share MOH and ISSS resources in the area of quality control to guarantee adequate quality control.

Infrastructure

- * Focus on maintenance of all existing infrastructure and equipment.
- * Avoid the construction of new hospitals in the next five years.
- * Limit the expansion of MOH infrastructure to primary health care.
- * Emphasize preventive maintenance programs.
- * Continue to support physical microplanning in the health sector.

APPENDIX 2. COMMENTS ON THE HEALTH REFORM

Comments on the Proposed Health Reform

On May 16, 1994, in San Salvador, ANSAL hosted a national seminar with the following objectives:

- To present ANSAL's findings, specific recommendations, and the proposed health reform.
- To solicit comments, criticisms, and ideas concerning the proposed health reform from the participants.

There were 99 participants in the seminar, including public sector leaders and officials from the MOH and the ISSS, representatives from the for-profit and not-for-profit private sector (NGOs), and representatives and officials from international agencies.

During the seminar three topics were analyzed:

- Institutional Reform of the Health Sector
- Reorganization of PHC
- Reorganization of SHC

The analysis took place in 5 work groups: 2 for each of the first two topics, and 1 for the third topic. The discussions and presentations of the groups' conclusions were organized according to discussion guides developed by ANSAL. The topic Institutional Reform of the Health Sector was divided into three subtopics: the role of the different entities in the sector, the transformation of the ISSS into FONASA, and the creation of an organized health system and a health advisory board. The topic Reorganization of PHC was divided into two subtopics: decentralization (which included responsibilities of the municipalities, SALUCOs, and community participation), and the basic package of health services (those services which were to be included or excluded, personnel, and the financial model). For the topic Reorganization of SHC, the participants were requested to identify the advantages and disadvantages of the proposal.

The conclusions of these discussions are presented below in the same format used for the presentations during the seminar. The conclusions of each group are followed by a summary and comments made by the ANSAL team.

Theme: Institutional Reform of the Health Sector

Group I

Subtopic I: Institutional Roles

MOH

- Leads and directs the public and private components of the health sector.
- Sets rules and norms.
- Supervises.
- Coordinates the system.
- Provides PHC services.
- Defines health policies.
- Develops health plans.
- Carries out epidemiological control.
- Coordinates foreign assistance.

- Is responsible for implementation of health-related laws.

Public Health Council

- Serves as an advisor to the MOH (name change, redefinition of its members and its role).

Oversight Groups

- The authorization and monitoring of health professionals should be the responsibility of the professional boards.
- The oversight and control of health establishments should be the responsibility of the MOH.

Institutions Working with the Environment

- MOH: sets norms and controls environmental issues that affect health.
- ANDA: sets norms and regulates water supplies and waste disposal.
- FIS: executes and finances health-related projects.
- SEMA: coordinates institutional activities related to the environment.
- Municipalities: Their technical, administrative, and financial capabilities need to be strengthened in order for them to assume, in coordination with community groups, the responsibilities for preserving the environment.

Private Sector

- Provides health services under contract.

Sub-topic II. Transformation of the ISSS into FONASA

The group thinks the proposal should be analyzed for:

- political viability
- technical and economic feasibility

A multi-disciplinary group should be created to analyze the two points identified above. The medical board (Colegio Médico) should participate.

The analysis should be developed in a progressive and rational form.

Sub-topic III. Creation of an Organized Health System and a Health Advisory Board

The group agrees with the creation of these entities. The members propose that the Health Advisory Board be formed from the Public Health Council.

Group II

Sub-topic I. Institutional Roles

MOH

- Formulates policies.
- Develops and implements standards.
- Has responsibility for oversight and control.
- Finances health services.

This implies changes in the legal framework and therefore the process should be gradual and participatory.

Public Health Council (CSSP) and the Oversight Groups

- Professional and institutional accreditation.
- Registers pharmaceuticals, cosmetics, and foods (production facilities).
- Evaluates publicity and advertising.
- Monitors raw materials and toxic products.
- Has the responsibilities established by the Health Code.
- The president of the CSSP should be the president of the CCS.

Institutions Working with the Environment

- SEMA: Develops and sets guidelines to protect the environment and for coordination with other institutions working to improve the environment (ANDA, municipalities, etc.)
- ANDA: Provides equitable potable water service to the entire population.
- FIS: a transitory entity which should continue in its current role.
- Municipalities: Strengthen them to be able to handle the new responsibilities under a decentralized system.
- Private sector: The private sector should use production processes which do not pollute the environment.

Private sector

- Delivers services.
- Provides inputs.

Sub-topic II. Transformation of the ISSS into FONASA

- The health insurance should be universal.
- The two ISSS funds (health and retirement) should be separated.
- The transformation is not possible at this time.
- Economic limitations exist.

Sub-topic III. Organized Health System and the Health Advisory Board

The group agreed with this as long as sufficient support and resources were provided for its implementation. They also agreed on the objective of health care for the entire population, with the goal of improving efficiency and effectiveness.

Doubts

- The organization proposed does not necessarily guarantee SHC to those people at lower economic levels.
- Transferring the responsibility for primary health care delivery to the municipalities does not guarantee effective nor efficient services.

Summary of the Groups' Conclusions and ANSAL's Comments

Complete agreement with ANSAL's proposal that MOH act as the leader and director of the sector.

SEMA should act as coordinator for environmental groups, while the MOH should set the standards for the environment when health issues are involved; ANDA should be responsible for supplying water nationwide.

The groups agreed that the transformation of ISSS into FONASA is a conflictive issue. This idea should be approached carefully, and before any decision is made, in-depth studies should be carried out and should deal with the technical, economic, and political implications of such a transformation.

Both groups agree on the creation of an organized health system.

Topic: PHC Reform**Group I*****Subtopic I. Decentralization of the Health Sector*****A. Decentralization to the Municipalities****Problems**

- Lack of capacity in most of the municipalities.
- Too many additional managerial functions in a short period of time (institutions will be overwhelmed by the new functions assigned and delegated to them by various ministries such as the ministries of health and education).
- Limited managerial capacity of municipal employees to identify and deal with health problems.
- Lack of legal framework that clearly defines the mechanisms for the distribution of financial resources.
- Lack of active community participation in decision-making processes.
- Possibility of interference by political parties.
- Lack of recognition of municipal government authority (implementation of new programs created at higher levels and given to the municipalities by central authorities without consulting the mayors).
- Limited knowledge of municipal planning methods and minimal use of such methods by local governments.

Solutions

- Coordinate with COMURES and ISDEM an analysis of capacity, evaluate the viability of the project, and program the appropriate level of resources so that the new functions can be carried out efficiently.
- Delegate functions to the municipal councils and other organized groups in the community.
- Assess and train personnel with easy-to-understand learning materials.

B. SALUCOs**Problems**

Some areas still need to be defined:

- System of referral and counter-referral.
- Inter-institutional and inter-sectoral participation.
- Stratification of the different social classes by purchasing power and their contributions to the system.
- Design of an efficient accounting system.

Solutions

- Make decentralization technically, administratively, and financially effective through the SILOS.

C. Community Participation**Problems**

- Limited participation by communities which are not organized.
- Limited active community participation in the detection of problems; currently supply dictates demand instead of the reverse.
- Limited capacity of the communities to solve their own problems.

Solutions

- Promote the participation of the communities in all stages of the planning for programs and projects.

Sub-topic II. Basic Health Care Package

- The group concluded that the following should be included:
 - Environmental protection through educational activities.
 - Adapt the basic health care package to local epidemiological profiles.
- The group did not identify any health service provided under the ANSAL proposal which should be excluded.
- The services provided in the basic package could be provided by the health care workers on the list and also by health inspectors and other community health care workers.
- Per capita payments and government subsidies: The group concluded that in order to avoid abuse, the payments should be based on a per capita calculation and not by the health services provided.

Group II

Sub-topic I. Decentralization of the Health Sector

A. Decentralization to the Municipalities

Problems

- Minimal management capacity in some municipalities.
- Possible bureaucratization at the departmental level (MOH).
- The reform could become politicized, especially at the local level.

Solutions

- Train municipal employees to take on new responsibilities.
- Create health commissions to support the municipalities.
- The municipalities should sub-contract some of their responsibilities.
- Give the municipalities sufficient decision-making power.
- Restructure the MOH; the departmental support group should have clearly defined responsibilities as follows:
 - supervision and support for the basic package of services
 - decentralized functions (i.e. in sanitation)
- Approve the health reform quickly and negotiate support from cooperating organizations to ensure full participation.

B. SALUCOs

Problems

- Possibility that the referral system for higher levels of care is not efficient.
- Inefficient information system.
- The local establishments have insufficient authority and autonomy.

Solutions

- Implement an efficient referral system to assure the patients' care.
- Train personnel for improved management practices.
- Develop an information system which covers health and financial data.

- Strengthen the health services through the provision of additional equipment, the training of personnel, and the transfer of decision-making authority regarding the administration and allocation of resources.

C. Community Participation

Problems

- There are community health promoters who provided or are providing health care without MOH recognition because they are not part of the MOH system.
- There is a lack of information for health promoters and midwives concerning the health reform.
- There are midwives who are providing care without any training.
- Curanderos (nontraditional healers) are not part of the system.
- Other institutions are not participating in the health reform.

Solutions

- Standardize the training of health promoters; provide training to the promoters who are currently not recognized by the MOH so that they can be incorporated into the system.
- Inform and train midwives and promoters about the health reform.
- Train all midwives in order to incorporate them into the SALUCOs.
- Train *curanderos* so that they can become part of the system.
- Obtain strong political support at the top levels and provide information about the health reform at all levels.

Basic Package

The group agreed that the following should be included:

- Newborn care (emphasis on this age even though it is included in the category of health care for children under one year old)
- Parents should be included in health education programs.
- Include promotion of the rights of children and women.
- PHC for the physically disabled.
- Care for the elderly.
- Dental care: fluoride treatment, cleaning, and education.
- Some kind of incentive program for food production.
- Training in the use of basic therapeutic drugs.
- Early infant stimulation should be included in growth and monitoring checkups.

The health services covered under the basic package can be delivered partially or completely by:

- health promoters with extensive training
- volunteers
- midwives
- mothers, fathers, and children
- curanderos
- nurses, to whom responsibility should be given for PHC and community health services
- doctors and paramedics

The health workers can be from the MOH or from NGOs.

- Per capita payments and government subsidies

Problems

- Internal migration especially during the harvest season.
- Government paternalism by giving free health services.
- It is hard to determine people's level of poverty.

Solutions

- Establish an information and referral system between SALUCOs.
- Minimum or symbolic fees for those who can afford to pay something, even for those below the poverty level.
- Define the poverty level based on:
 - house visits
 - indirect questioning

Summary of Group Conclusions and ANSAL's Comments:

Both groups expressed concerns about the decentralization process and the transfer of responsibilities to the municipalities because of the minimal management capacity at the municipal level and the difficulty in improving this lack of capacity in the short term. They were also concerned about the reactions of MOH employees who might be affected by the reform and who might lose some of the privileges which they currently have. Finally, the groups concluded that there was a possibility that the introduction of political factors into implementation of the reform would become a problem.

The groups proposed that the health services be autonomous and have significant decision-making power so that they could maintain the delivery of high quality services, even while depending on municipal governments that according to the group do not understand health issues. The groups also proposed that the implementation of the health reform be directed and controlled by a national group with representation from NGOs and all political parties. ANSAL's proposal does not envision the creation of such a group; it proposes that the Health Advisory Board serve as the forum for coordination and consensus-building for the reform.

The ANSAL team was in agreement about the formation of SALUCOs, although during the seminar the groups had some difficulty in distinguishing between SALUCOs and SILOS. ANSAL clarified that SALUCOs would operate with more autonomy and decision-making power than the SILOS which are currently functioning in El Salvador. The groups were concerned about access to higher levels of care for patients referred by SALUCOs, and ANSAL explained that there was an efficient system of referral and counter-referral included in the health reform.

Everyone agreed on the important of active community participation. The seminar participants proposed the creation of municipal health commissions, which was consistent with ANSAL's concept of community participation.

Another issue was the integration into the system of personnel heretofore not recognized by the system: health promoters, untrained midwives; curanderos; and volunteers. ANSAL considered that this issue was not part of the topic of community participation as conceived in the proposal.

None of the health services included in ANSAL's basic package were excluded by seminar participants, while some additional services which are compatible with the proposed level of care were suggested for inclusion. With regards to the idea of including environmental health activities in the basic package, ANSAL agreed to include them but excluded specific activities such as the construction of water systems.

The participants were worried that the creation of MOH departmental support groups would add more bureaucracy to the system. The group concluded that the functions of the support groups would have to be limited to technical areas so that the autonomy of the SALUCOs would not be affected (consistent with the ANSAL proposal). One seminar group suggested that the support groups could supervise basic sanitation activities at the departmental level.

The groups agreed that health promoters and nurses should have more responsibility and decision-making power in the delivery of the basic package of health services. It was also proposed that parents, children, *curanderos*, and volunteers be incorporated into prevention and health education activities, which is consistent with ANSAL's approach.

One of the groups identified two problems for consideration: the internal migration which creates referral problems between SALUCOs; and the danger of increasing government paternalism by providing health services free-of-charge to people who could make even a minimal payment for such services. Another concern was the methodology used to determine the users' poverty level. While home visits would be the appropriate methodology which would eliminate many concerns about the inaccuracy of verbal responses to questions concerning income levels, this methodology would not be practical.

Topic: Reorganization of Specialized and Hospital Care

Sub-topic I. Privatization of Hospitals

Problems

- Current legal restrictions
- Personnel
- Poor conditions of infrastructure and equipment
- Users' lack of education concerning the use of health services
- Instability of the health reform during changes in government and/or policies
- Resistance from political, university, and social (labor, education) sectors
- Generalized idea that privatization would be carried out for reasons of profit
- Politicization of the privatization
- Refusal to treat the very poor, the elderly, or patients in critical condition
- User rejection of the system

Advantages

- Decentralization and autonomy
- Cost recovery
- Training
- Administration by community groups (*patronatos*)
- Gradual implementation with technical and administrative support
- Increased coverage because of the insurance
- Better quality service
- Improved salaries, benefits, and incentives

Conclusions

- The beneficiaries and users are afraid of privatization.
- Approval was given for a mixed financing system, neither totally public sector nor totally private sector, to be implemented progressively.
- There is some concern about how the reform would be implemented.
- Coverage would be incomplete.

Sub-topic II- Expanded Package

This should include:

- General and specialized outpatient care
- Laboratory and radiology services
- Some specialized exams
- Hospitalization (taking into account the epidemiology of the country and of the hospitalizations)
- Emergencies
- Basic medications
- Rehabilitation

Summary of the Group Conclusions and ANSAL Comments

The group considered the advantages and disadvantages of the proposal and concluded that the method of implementation should be carefully analyzed. The word "privatization" and the possibility that the poor would lose access to necessary services not included in the expanded package could result in a negative public reaction. ANSAL's proposal will be accompanied by an information campaign on the privatization as envisioned by ANSAL. The limitations of the expanded package expressed by medical specialists may be a sign of the difficulty they would have in accepting it.

The group agreed that the expanded package should cover treatment of the most common medical problems in accordance with the epidemiological profile of hospitalizations as currently recorded. ANSAL proposes a balance between cost and the best possible coverage, taking into account that the health insurance for the poor would be subsidized by the government which has limited funds, and that even the people with incomes above the poverty line are limited in their capacity to pay for health services.

The participants agreed with the mixed system of financing (by the users and the government) proposed by ANSAL.