PN-ABW-785

95664

Small Applied Research Paper No. 10

A HEALTH SUBSIDIES ALLOCATION MODEL FOR CHILE

Submitted to:

The Division of Health Services
Office of Health
Bureau for Research and Development
United States Agency for International Development

By

Jorge CLARO M.
Gabriel BITRÁN D.
Bernardo LUQUE L.
Consultants, Abt Associates Inc.

NOVEMBER 1993

HEALTH FINANCING AND SUSTAINABILITY (HFS) PROJECT

Abt Associates Inc., Principal Contractor
4800 Montgomery Lane, Site 600
Bethesda, Maryland 20814 USA
Telephone: (301) 913-0500 FAX: (301) 652-3916

Management Sciences for Health, Subcontractor
The Urban Institute, Subcontractor

AID Contract No. DPE-5974-Z-00-9026-00

ABSTRACT

This paper discusses the organization of the Chilean health system, and analyzes a new system proposed to maximize coverage and improve efficiency. The discussion begins with a history of public health provision, and with this background proceeds to describe the present public health system, using physical statistics and financial information. The authors then analyze the private health sector, in terms of the evolution and overall efficiency of the ISAPREs (Health Insurance Institutions) in the marketplace.

The most important and final section of the paper outlines the design of the proposed system and how it will operate. The new system relegates a lesser role to the State in the health care sector. This balance between the State and private businesses will ideally generate increased competition and efficiency, and be financed through both public and private sources. The authors conclude by recommending a pilot plan to generate the experience necessary to make the system more efficient.

CONTENTS

LIST OF EXHIBITS v
LIST OF GRAPHS vi
LIST OF FIGURES vii
LIST OF ABBREVIATIONS viii
FOREWORD ix
PREFACE x
EXECUTIVE SUMMARY xi

1.0 BRIEF HISTORICAL REVIEW OF THE CHILEAN HEALTH SYSTEM 16

2.0 ANALYSIS OF THE PUBLIC HEALTH SYSTEM 19

2.1 DESCRIPTION OF THE SYSTEM 19
2.1.1 The Ministry of Health 20
2.1.2 Health Services 20
2.1.3 National Health Fund (FONASA) 20
2.1.4 Free Choice 25
2.1.5 Services and Beneficiaries of the System 25
2.1.6 Principal Services 25
2.2 PHYSICAL STATISTICS ON THE PUBLIC SECTOR 26
2.2.1 Population Covered by the Public Health Sector . 26
2.2.2 Medical Consultations 26
2.2.3 Examinations in the Public System 30
2.2.4 Physician and Paramedical Staff of the SNSS . . . 31
2.2.5 Hospital Beds 36
2.3 FINANCIAL INFORMATION ON THE PUBLIC SECTOR 38

3.0 ANALYSIS OF THE ISAPRE SYSTEM 52

3.1 DESCRIPTION OF THE ISAPRE SYSTEM 52
3.2 LEGAL FRAMEWORK 53
3.2.1 Current Legislation 53
3.2.2 Regulatory Bodies (Board of ISAPREs) 55
3.2.3 Proposed Applicable Legislation 56
3.3 ANALYSIS OF THE ISAPRE MARKET 57
3.3.1 General Evolution 57
3.3.2 Evolution of the Market 58
3.3.3 Evolution of Prices 69
3.3.4 Statistics on the Demand for Services in the ISAPREs 69
3.3.5 Statistics on the Cost of Services Provided by the ISAPREs 70

CONTENTS, continued

4.0 CONCEPTUAL DESIGN OF THE PROPOSED SYSTEM 83

4.1 GENERAL PRINCIPLES OF THE PROPOSAL 83
4.1.1 Objectives 83
4.1.2 General Organization of the Health System 84
4.1.3 Role of the State 86
4.1.4 Participation of Private Businesses 88
4.1.5 Competition and Control of Monopolies 88
4.1.6 Targeting of Subsidies 89
4.1.7 Temporary Worker's Disability Insurance 90
4.1.8 Ownership Structure of the Medical Infrastructure 90
4.2 ORGANIZATION AND OPERATION OF THE SYSTEM 91
4.2.1 Operation 91
4.2.2 How would the system operate? 92
4.2.3 How would a subscriber be served? 94
4.2.4 Financing 96
4.2.5 Calculation of Subsidies 97
4.2.6 Competition 100
4.2.7 Incentives to Improve the Efficiency of the System 101
4.2.8 Supervision 102
4.2.9 Pilot Plan 103
4.3 HEALTH SERVICE COSTS 106

LIST OF EXHIBITS

EXHIBIT 2-1 POPULATION COVERED BY THE HEALTH SECTOR 27

EXHIBIT 2-2 CONSULTATIONS PERFORMED BY PHYSICIANS 28

EXHIBIT 2-3 CONSULTATIONS PERFORMED BY NON-PHYSICIANS 28

EXHIBIT 2-4 PER CAPITA CONSULTATIONS PERFORMED BY NON-PHYSICIANS 30

EXHIBIT 2-5 EXAMINATIONS 31

EXHIBIT 2-6 PER CAPITA EXAMINATION 31

EXHIBIT 2-7 PERSONNEL 32

EXHIBIT 2-8 PERSONNEL PER 1,000 INHABITANTS 36

EXHIBIT 2-9 AVAILABLE BEDS 37

EXHIBIT 2-10 HOSPITAL OCCUPANCY 37

EXHIBIT 2-11 PUBLIC HEALTH SECTOR REVENUES 39-40

EXHIBIT 2-12 PUBLIC HEALTH SECTOR EXPENDITURES 42-43

EXHIBIT 2-13 TOTAL AND PER CAPITA BUDGET ALLOCATION 46

EXHIBIT 2-14 TOTAL AND PER CAPITA PUBLIC HEALTH EXPENDITURES 47

EXHIBIT 2-15 TOTAL AND PER CAPITA GNP 48

EXHIBIT 3-1 PHYSICIAN CONSULTATIONS 71

EXHIBIT 3-2 LABORATORY EXAMINATIONS 71

EXHIBIT 3-3 RADIOLOGY 72

EXHIBIT 3-4 HOSPITALIZATION 72

EXHIBIT 3-5 CLINICAL AND DIAGNOSTIC SUPPORT PROCEDURES 73

EXHIBIT 3-6 SURGICAL INTERVENTIONS 73

EXHIBIT 3-7 EXPENDITURE ON MEDICAL DISABILITY AS A PERCENT OF AVAILABLE REVENUE 74

EXHIBIT 3-8 ADMINISTRATIVE EXPENDITURES 74

EXHIBIT 4-1 COSTS OF THE PRINCIPAL SERVICES PROVIDED BY THE PUBLIC HEALTH SYSTEM 107

EXHIBIT 4-2 COMPARISON OF THE COST OF HEALTH SERVICES BETWEEN THE PUBLIC AND PRIVATE HEALTH SECTORS 107

EXHIBIT 4-3 COMPARISON OF THE COST OF HEALTH SERVICES BETWEEN THE PUBLIC AND PRIVATE SECTORS 108

LIST OF GRAPHS

2-1 Physician Consultations - Public Sector vs. ISAPRE 29
2-2 Examinations - Public Sector vs. ISAPRE 33
2-3 Physician and Paramedical Personnel - Thousands of Personnel 34
2-4 Physician and Paramedical Personnel - Personnel/1000 Beneficiaries 35
2-5 Public Sector Health Revenues - 1974–1991 41
2-6 Public Sector Health Expenditures - 1974–1991 44
2-7 Budget Allocation per Beneficiary - Public Health Sector 45
2-8 Expenditures per Beneficiary - Public Health Sector 49
2-9 Per Capita GNP - 1980–1991 50
2-10 Health Expenditures - As a Percent of GNP 51
3-1 Open ISAPREs - Subscribers 59
3-2 Closed ISAPREs - Subscribers 60
3-3 Open ISAPREs - Beneficiaries 61
3-4 Closed ISAPREs - Beneficiaries 62
3-5 ISAPRE System - Charges per Subscriber 63
3-6 Annual Growth - Subscribers to the ISAPRE System 64
3-7 ISAPRE System - Number of Institutions 65
3-8 Market Share (Subscribers) 66
3-9 ISAPRE System - Average Monthly Subscribers 67
3-10 Open ISAPREs - Average Monthly Subscribers 68
3-11 Physician Consultations - ISAPRE System 75
3-12 Laboratory Examinations - ISAPRE System 76
3-13 Radiology - ISAPRE System 77
3-14 Hospitalization - ISAPRE System 78
3-15 Clinical Support Procedures - ISAPRE System 79
3-16 Surgical Interventions - ISAPRE System 80
3-17 Expenditures on Medical Leave - As a Percent of Available Revenue . . 81
3-18 Administrative Expenditures - UF/Beneficiary/Year 82

LIST OF FIGURES

2-1 ORGANIZATIONAL CHART OF THE MINISTRY OF HEALTH 21

2-2 ORGANIZATIONAL CHART OF THE HEALTH SERVICES 22

2-3 SUBDIRECTOR FOR MEDICAL SERVICES 23

2-4 SUBDIRECTOR FOR ADMINISTRATION 24

4-1 CALCULATION OF THE PAYMENT 95

4-2 SYSTEM OPERATIONS MECHANISM 96

4-3 FLOW OF FINANCING FOR THE HEALTH SERVICES PROVIDED BY THE PUBLIC SECTOR 99

4-4 ORGANIZATIONAL CHART OF THE NEW MINISTRY OF HEALTH (MINSAL) 105

LIST OF ABBREVIATIONS

AFP	Pension Fund Administrator
CEBAST	Central Supplies Administration
DIPLAP	Office of Planning and Budget
FONASA	National Health Fund
HU	Health units
ISAPRE	Health Insurance Institution
ISP	Institute of Public Health
ISPS	Selective Index of Health Prices
MIDEPLAN	Ministry of Planning
MINSAL	Ministry of Health
PAI	Expanded Program of Immunizations
PASIS	Lack resources, and receive assistance pensions
PNAC	National Supplemental Nutrition Program
PROTINFA	Protection for Children and Adolescents
SIMCE	National System for Measuring the Quality of Education
SNS	National Health Service
SNSS	National System of Health Services
SUBCES	Layoff subsidies
SUF	Family subsidies
UF	Development Unit (Chilean monetary unit that is maintained at a constant real value by being readjusted automatically as a function of inflation)

FOREWORD

The Health Financing and Sustainability (HFS) Project provides technical assistance and training, conducts applied research, and disseminates information to developing countries in health economics, health sector policy development, and health services management. The Applied Research (AR) component of the project provides opportunities to increase knowledge of the complex issues underlying health financing problems, and augments the supply of qualified individuals who can contribute to policy analysis and reform. HFS is emphasizing the following policy areas for applied research activities: cost recovery, productive efficiency, social financing, and private sector development in the health sector.

As part of the project's AR component, HFS will complete up to 30 small applied research (SAR) activities over the life of the project, from 1989 through 1994. These include studies undertaken by developing country researchers, HFS researchers, or academics at universities in the United States. The objectives of the SAR program are to carry out practically-oriented research in developing countries, and to encourage the development of local capacities to undertake research.

Most SAR activities are initiated through proposals to the HFS Project. The proposals are evaluated by HFS staff, including criteria such as: practical policy orientation, resource and time requirements, and appropriateness to the HFS research agenda. Most proposals for SAR activities accepted by HFS undergo several revisions, as the researchers refine their research objectives, hypotheses, and methodologies, based on suggestions and comments from the HFS staff. Once approved, SAR activities are overseen by HFS task managers, who work closely with principal investigators to monitor the timeliness and quality of the work, and facilitate logistics.

Other small applied research studies are done in conjunction with technical assistance or major applied research activities of the HFS Project. In these cases, the SAR contributes to the technical guidance provided to clients, or adds to the body of knowledge on topics of health financing and economics.

As with all HFS research, drafts of small applied research reports are reviewed by HFS staff. Drafts are then evaluated by external technical reviewers selected on the basis of area of substantive and/or geographic expertise.

Holly Wong
Applied Research Coordinator

PREFACE

The right to health care has been proclaimed from various angles and points of view. In Chile, this right is constitutional in nature ("The State protects free and equal access to health promotion and recovery activities and the rehabilitation of the individual"[1]). The routes to achieving this objective, however, are not so obvious, and are therefore the subject of wide debate. For this reason, the appropriate selection of the best alternatives and their application requires a detailed and systematic analysis.

This study is intended to be a contribution to the solution of these problems, by performing an analysis of what it would mean for Chile to implement a health system based on the allocation of subsidies to individuals, and in which the presumptive providers of health services would be private firms participating in competitive markets.

[1] Political Constitution of the State, Republic of Chile, 1980.

EXECUTIVE SUMMARY

This study is divided into four parts. The first part consists of an analysis from a historical perspective of the organization of the various public health systems that have operated in Chile. The second part is a study of the organization, operation and implementation of the Chilean public health system. The third part consists of an analysis of the organization and performance of private health care institutions, and how these have evolved over time. The fourth and final part considers the conceptual design of the proposed system, and briefly analyzes the elements that will have to be included in the feasibility study of its implementation in the light of the data that have been discussed in this study. The following presents a very brief synopsis of the analysis and conclusions of each of the chapters described above.

Brief historical review of the Chilean health system

This chapter consists of a description of the evolution of the Chilean health system from the beginning of this century to the present. This chapter seeks to describe the bases on which the current structures have been built.

The history of the Chilean health sector can be summarized on the basis of the events that took place during two large, clearly differentiated periods. The first of these periods runs from the beginning of this century to 1981. This period was characterized by a growing concern on the part of and participation by the State in the provision of services related to the health requirements (preventive and curative) of the Chilean population. Many institutions were created and implemented during this period that were dedicated to these objectives and oriented to various population groups.

The second, much more recent period, begins in 1981 with the creation of the Health Insurance Institutions (ISAPREs). These agencies were created as a complement to important insurance reforms carried out in 1980, and with the parallel objective of unburdening the state apparatus and increasing the efficiency of the system by optimizing the health coverage of the population, which had been underutilizing a single health system that did not satisfy its requirements.

In the ten years of existence of this system, 2.5 million people have been enrolled, who represent approximately 20 percent of the population of the country. However, in spite of the success achieved by the private health insurance system, a significant increase in its coverage is not likely. The large majority of people who have not joined this system have not done so because they have not been able to afford on their own the cost of this health insurance. These individuals can only become part of the private system if the State provides that, together with these individuals, the resources that today finance the infrastructure of the Health Ministry are also transferred to the private system.

Analysis of the public health system

This chapter considers the public system, describing its organization, the health plans and programs it offers, the coverage it has achieved, and its physical infrastructure and personnel resources. Statistics on examinations and services have been compiled, as well as the occupancy of hospital capacity. In this chapter certain comparisons with the private or ISAPRE system are presented in order to obtain an idea of the differences and similarities among both sectors. Finally, a summary is provided of the sources and purposes of the health expenditure budget, and the per capita contribution of the State to this program.

The following are conclusions resulting from the analysis presented in this chapter:

a) The Chilean health system is mixed in nature, with the participation of public and private entities. It encompasses two fundamental components: the National System of Health Services (SNSS), and the Extrasystem. The first, whose basic normative structure is the Ministry of Health, is, fundamentally, State administered, and is in principal decentralized. The second is not ruled by the policies of the Ministry of Health, but is related to the first through Free Choice health care agreements. The National System of Health Services (SNSS) is comprised of 27 Health Services throughout Chile (26 oriented to individuals and 1 metropolitan environmental agency) comprising all of the health agencies that are governed by ministerial policies. The financial organ of this subsystem is the National Health Fund (FONASA). At the regional level the Ministry of Health is organized into Regional Ministry Secretariats, whose purpose is to adapt national policies to the regional situation, advise the regional manager relative to the issues of the sector, and perform control and evaluation functions.

b) The beneficiaries of the system can be classified into two categories: the families inscribed in a formal insurance system (who have 7 percent of taxable income deducted for health care) and low-income families who are uninsured and receive free care.

c) Currently the beneficiaries of the public system total some 8.5 million people, a figure similar to that for 1974. There are 2.6 million people inscribed in the private system (ISAPRE). Finally, there are another 2.3 million people who are not covered.

d) On average the public system performs 2.15 medical consultations and 1.6 non-medical consultations per beneficiary per year, while 2.71 examinations per person have been provided. The figures on examinations per beneficiary are very similar to those observed in the system of open ISAPRE agencies, as well as for total consultations. The trends, both for examinations and consultations per beneficiary, are growing in the public system. With respect to professional staffing, there are 0.6 physicians, 0.24 nurses, and 2.23 nurses' aides for each 1,000 beneficiaries.

e) Forty percent of the public system is financed through the State budget, some 38 percent through transfers (primarily through the contributions of workers, whose importance in relative terms has grown from the 1974 level of 26 percent), some 9 percent through operating income, and some 14 percent from other sources. The per capita budget contribution grew to US$ 37.48 (1991), which has recovered from its lowest level in 1986 of 21 dollars per person. The improvement is attributable to greater budgetary allocations and to a smaller number of beneficiaries, given that a significant proportion of the latter switched to the private system. In Chile, health expenditures have grown to 4.4 percent of its GNP.

Analysis of the ISAPRE system

This chapter begins by defining the two categories of ISAPRE that are considered by the Law: open programs (oriented to the general market), and closed programs (institutional). The following provides a summary of the legal framework that regulates this sub-sector, its supervisory bodies and the new bills that are being discussed in the legislature. Also presented are an analysis of the industrial organization of the institutions that operate in this market, their growth since their creation, the participation in the market of the various ISAPRE institutions, the premiums charged and their evolution. Statistics on the demand for various health services and their evolution over time are also presented.

The following conclusions to the material analyzed in this chapter can be cited:

a) The open ISAPREs have been developed in a continually expanding market, where cost reductions and the increase in service provision have been ongoing forces toward new equilibria. The annual growth of the sector has been greater than 20 percent for all years that the system has existed, and was 24.31 percent in 1989, 22.29 percent in 1990, and 24.04 percent in 1991, and reaching 1,070,813 subscribers in December 1991. In recent years this growth has been based on the growth in employment (on the order of 5 percent per year), and the incorporation of individuals with lower and lower incomes. The number of beneficiaries as of December 31, 1991 was 2.4 million in the open ISAPREs and 213 thousand in the closed ISAPREs. The six primary ISAPREs encompass some 81.7 percent of the market, and the largest of these boasts 22.4 percent.

b) The prices of the open ISAPREs reveal a clearly descending trend over time, while those of the closed ISAPREs show a development in a clearly contrary direction. Both with respect to medical consultations and examinations there is a clear difference between the open ISAPREs and the closed ISAPREs, with the latter showing much higher usage rates. At the same time, administrative expenditures are clearly higher in the closed ISAPREs, which could be an indication of the levels of efficiency achieved by the open ISAPREs as a result of the competition they face in order to enroll clients.

Conceptual design of the proposed system

This chapter constitutes the nucleus of this study since it contains the bases of the new proposed health system. The organization of the public health sector is redefined by assigning to the State a role that in the judgment of the consultants should properly be subordinate. A framework is designed in which the new private health service provider agencies and insurance providers will participate, analyzing the levels of competition that are to come, the regulation of natural monopolies that will arise, the allocation of subsidies and their targeting. In addition, ownership plans for the new systems are proposed that consider the investment in human capital that this kind of service will necessarily entail. As a first approximation the following will be designed: the way in which the proposed system will operate, the way in which it will be organized, the means by which it will be financed, the incentives toward efficiency that will be created, and the supervision mechanisms that will have to be instituted. The implementation of a pilot plan is also proposed in order to test the operation of the new system. Lastly, a brief comparative analysis is made of the costs of the public and private systems, for a selection of representative health services from the services normally provided, with a view to a preliminary conclusion on the financial feasibility of this new plan.

The proposed system would be financed through workers' health insurance premiums, by progressive State subsidies for those who cannot cover by themselves the cost of their health care, and by employer contributions, without regard to the contributions freely provided by businesses and workers that may result in greater coverage than the system. The State subsidy would be supplemental, that is, added to the health insurance contributions, it would permit the financing of the cost of a basic health plan. These subsidies would be targeted and provided to individuals (the claimants), being allocated directly by each family in its individual health care decisions upon choosing a primary care provider where they would normally be attended.

The role that would devolve to the State in the proposed system is delineated, and is divided into four fundamental tasks: a) guarantee access of the entire population to a minimum level of health care, b) take responsibility for large public health problems, such as epidemics, environmental contamination, and national campaigns to prevent epidemics or especially serious contagious diseases, c) control the achievement of the global objectives of the system, such as the quality of service, control of areas in which monopolies are naturally produced, and oversight of the roles played by the competing parties, d) report to the users so that they can orient their health care choices to those centers that offer the highest quality service.

It would be unwise to jump to conclusions about the financial feasibility of implementing this project on the basis of the little data that is available on the cost differences for the same services provided by both the public and private sectors. However, it is evidently possible that the current costs may not be so different for a private system that has been improving in quality and competitiveness for eight years, and a massive public sector that may have accumulated inefficiencies over time. On the basis of the foregoing, it could be assumed that the implementation of this new structure would not mean dramatic

changes in the budget that is allocated to public health by the State from year to year.

In order to further this study, and in some way exhaust this topic so that it can be properly presented with a strong foundation to the authorities of the Chilean public health sector, the real financial feasibility of carrying this reform plan forward would have to be simulated. Fortunately, there is rather good data available on public sector costs for these purposes, thanks to a recent study performed by the World Bank on this issue, part of whose results are related in this report. However, it would be necessary to compile historical data on comparable costs in the private sector that are methodologically compatible with those that are available for the public sector. At the same time, this would require the availability of reliable information on the frequencies of service provision in both sectors, in order to be able to model the volume of demand that the new system would be faced with.

We believe that the system that is proposed here could have very good prospects, especially considering that, in spite of the fact that the State has increased its budget for the health sector by 80 percent in 1992 over the previous year, the population continues to perceive that the system offers poor care, and demonstrates its continuing dissatisfaction on all of the periodic policy surveys that have been conducted with a view to the next presidential elections. It is thus possible to conclude that the quality of public health care in Chile is not only a problem of resources, but rather, to a much greater extent, of incentives for those who provide these services. This leads to the proposal described in this study, that is, to implement a new system that would provide the proper incentives to all of those who are involved in the provision of health services. In addition, by its nature, the system should incline toward greater efficiency and a better allocation of the resources that are currently dedicated to this area. The successful experience of Chile in the reform of its public education system should provide sufficient motivation to begin to consider this project among the social priorities for Chile over the coming years.

1.0 BRIEF HISTORICAL REVIEW OF THE CHILEAN HEALTH SYSTEM

This chapter consists of a description of the evolution of the Chilean health system from the beginning of this century through the present. The chapter seeks to describe the bases on which the current structures have been built.

The beginning of this century saw the initiation in Chile of a period of greater participation by the State in public health matters. In 1920, the first pre-payment system was created, and at the same time the General Health Administration was established, the first Health Code was issued, and the National Children's Board was founded. Later, around mid-century, Protection for Children and Adolescents (PROTINFA) was created, a public sector institution.

Pre-payment was based on the segmentation between laborers and employees, on the belief that the laborer faced greater disadvantages, and it attempted to fill the gaps inherent in the National Welfare Board. The Laborer's Insurance Agency was thus created, with a medical component that concentrated initially on outpatient care. This program resolved the problems of the laborer, his pregnant wife, and his children under two years of age. The rest of the children were treated through private medicine, government hospitals, the National Children's Board and PROTINFA, which was created precisely for this purpose. This insurance program negotiated agreements with welfare hospitals; that is, it did not invest in its own closed infrastructure, but rather basically developed the infrastructure of open (primary) care.

Employees, on the other hand, were initially treated through private medicine, and the funds that were created were principally dedicated to resolving pension problems, without becoming involved in medical care. In 1937, the Law on Preventive Medicine was passed, which established a mandatory annual health examination for workers. This obligation for laborers was assumed by the medical department of the Laborer's Insurance Agency; and, for employees, Sermena was created to provide these benefits.

Insurance reform was undertaken in Chile in 1952 with the creation of the Social Security Service and the National Health Service. The latter agency encompassed all of the public sector institutions: Welfare, the Medical Department of Laborer's Insurance, PROTINFA, the General Health Administration, and the Bacteriology Institute. This era saw the foundation of the Medical College of Chile, which was a product of union resistance to the reforms.

From the moment of its creation, the National Health Service (SNS) assumed complete (100 percent) responsibility for public health and prevention. The involvement of the SNS in curative medicine concerned indigents and beneficiaries of the Social Security Service. Employees had still not resolved their problem.

More recently, in 1968, the pre-payment system was implemented in the Sermena with the Law Concerning Curative Medicine for Employees. This law was put

into effect without involving the lender in investments in infrastructure. The fund allowed the beneficiary to access existing systems.

In 1980, as a product of the crisis in the insurance system, Chile undertook a profound reform, characterized by the participation of private firms in the administration of pension funds. The pension system ceased to be a distribution system and became an individual capitalization system.

In 1981, as a supplement to these insurance reforms, the Health Insurance Institutions (ISAPREs) were created, which were private entities empowered to administer legal health premiums. The ISAPREs constitute a different alternative to the solution of the health problems of individuals.

The creation of the ISAPREs achieved an opening of the health system to private institutions, with a view to unburdening the State apparatus, increasing the efficiency of the system, and optimizing the health coverage of a population that had been underutilizing the single health system, because it did not satisfy its requirements. The development was still insufficient, given that it only allowed access as beneficiaries of the private system to 20 percent of the population belonging to the highest income segment of the country.

The regulations that govern the ISAPREs, in force since 1981, were reviewed in 1990. Among other changes, a Board was created to control and oversee these institutions. The Congress is currently debating some new modifications to the system, and is seeking to make the system more transparent to users.

The workers who opt for the ISAPRE system enter into an individual contract with an institution where the form, modality and conditions of health services and benefits are established, which cannot be inferior to those received by a member of the National System of Health Services (SNSS). These minimum requirements, plus suspensions, exclusions, and the nature of the health statement constitute the parameters of the plan equation, and are subject to the strict control of the Board of ISAPREs.

The contract has an indefinite term, and can only be modified by the subscriber every twelve months, with the exception of violations as stipulated by the law. Nor does the contract lose its force if the individual comes to receive a subsidy as a result of a worker's disability, or a disability pension. This contract includes all legal dependents of the subscriber and extends to all new dependents.

In the ten years that this system has been in force, 2.5 million individuals have been incorporated, who represent approximately 20 percent of the population of the country. However, in spite of the success achieved by the private health insurance system, a significant increase in its coverage is not likely, because the large majority of people who have not become members of this system to date, have not done so because they are incapable of financing on their own the cost of this health insurance. They would only be able to move to the private system if the State provided that, along with their transfer, the resources that currently finance the infrastructure of the Health Ministry are also transferred.

In 1985, the current Health Law was written, and was promulgated on December 31 of that year. An addition was made to the stipulations of the Constitution of 1925 (the rights of individuals to health care) from the perspective of a different economic model. This addition consisted of the principle of the subordinate role of the State, assigning to the State the responsibility of satisfying the health problems of individuals in those areas where the private sector is not able or does not have the incentives to do so. The law also considers the freedom of individuals to choose the way in which they want to resolve their health problems, and provides for equal access to services by tearing down any artificial barrier that would segment the Chilean population with respect to health care.

2.0 ANALYSIS OF THE PUBLIC HEALTH SYSTEM

In order to be able to model the system that is proposed in Chapter 4.0, we begin with a description of the public and private health systems that operate in Chile. Chapter 2.0 considers the public system, describing its organization, the health plans and programs that are offered, the coverage that has been achieved, its physical infrastructure and human resources. Statistics on examinations, services provided, and hospital occupancy rates have been compiled. In this chapter various comparisons with the private or "ISAPRE" system are presented, in order to gain a preliminary idea of the differences and similarities between both sectors. Lastly, a summary of the sources and purposes of public health expenditures, and the per capita contribution by the State to health care are provided.

2.1 DESCRIPTION OF THE SYSTEM

The Chilean public health system is mixed in nature, with the participation of both public and private entities. It includes two fundamental components: the National System of Health Services (SNSS), and the Extrasystem. The first, whose basic normative structure is the Ministry of Health (MINSAL), is fundamentally State administered, and is in principle decentralized. The second component, which is not governed by the policies of the Ministry of Health, is related to the first through free choice health care agreements.

The public subsystem is responsible for implementing health promotion and protection activities for the entire population, and for attending to the recovery and rehabilitation needs of 80 percent of the population of the country.

The National System of Health Services (SNSS) is composed of 27 Health Services throughout Chile (26 oriented to individuals and one metropolitan environmental agency) including all of the health establishments that are governed by Ministry policies. The financial organ of this system is the National Health Fund (FONASA). At the regional level the Ministry is organized into Regional Ministry Secretariats, whose purpose is to adapt national policies to the regional situation, advise the regional manager relative to the issues of the sector, and perform control and evaluation functions.

In addition, the public subsystem also comprises the Central Supplies Administration (CEBAST), and the Institute of Public Health (ISP), which perform support functions for the health services.

The Extrasystem, defined as the group of health service providers that are not obligated to follow Ministry policies, not only comprises the private sector, but also includes the health establishments of the Armed Forces, universities, and public enterprises.

2.1.1 The Ministry of Health

Within the Ministry of Health, the Minister defines policy, the Subdirector for Health carries out this policy, and the Office of Planning and Budget (DIPLAP), consisting of technical experts and professionals, implements the policy. However, there is an informal structure within the Ministry that is just as important as the formal structure, composed of a body of advisors to the Minister and Undersecretary, called the Cabinet. This body does not always have the same criteria as the permanent personnel of the Ministry.

2.1.2 Health Services

The health services constitute the core of the SNSS, since they are responsible for implementing, through their establishments, the health activities relating to individuals and the environment within the programs of the Ministry.

There are 27 of these services throughout the country, which have administrative autonomy, their own personnel plans and budget resources, and relatively independent funding streams. The health services were created in order to foster administrative decentralization, as well as to strengthen management capacity and primary care services, by achieving greater autonomy in technical areas. These objectives have only been partially completed, with the health services still maintaining a high degree of dependence on the central level. In addition to the above, the health services have authority over the Commissions on Preventive Medicine and the Disabled (COMPIN), which administer medical leave for temporary workers' disability, and certain kinds of disabilities for workers who are not affiliated to the AFP system.

2.1.3 National Health Fund (FONASA)

The National Health Fund (FONASA) is the financial organ of the public health system, both for services authorized by the state establishments, as well as for the services provided to the members of the public system through the modality of free choice.

The FONASA receives the allocations by the State for the health sector, the health insurance premiums from individuals not inscribed in the ISAPRE system, the contributions from work accident insurance pursuant to the Law Concerning Work Accidents and Diseases. These resources are distributed among the agencies that comprise the SNSS, that is, the Health Undersecretariat, the health services, the Central Supply Administration, the Institute of Public Health, and through the free choice modality, to the professionals and institutions of the extrasystem.

FIGURE 2-1
ORGANIZATIONAL CHART OF THE MINISTRY OF HEALTH

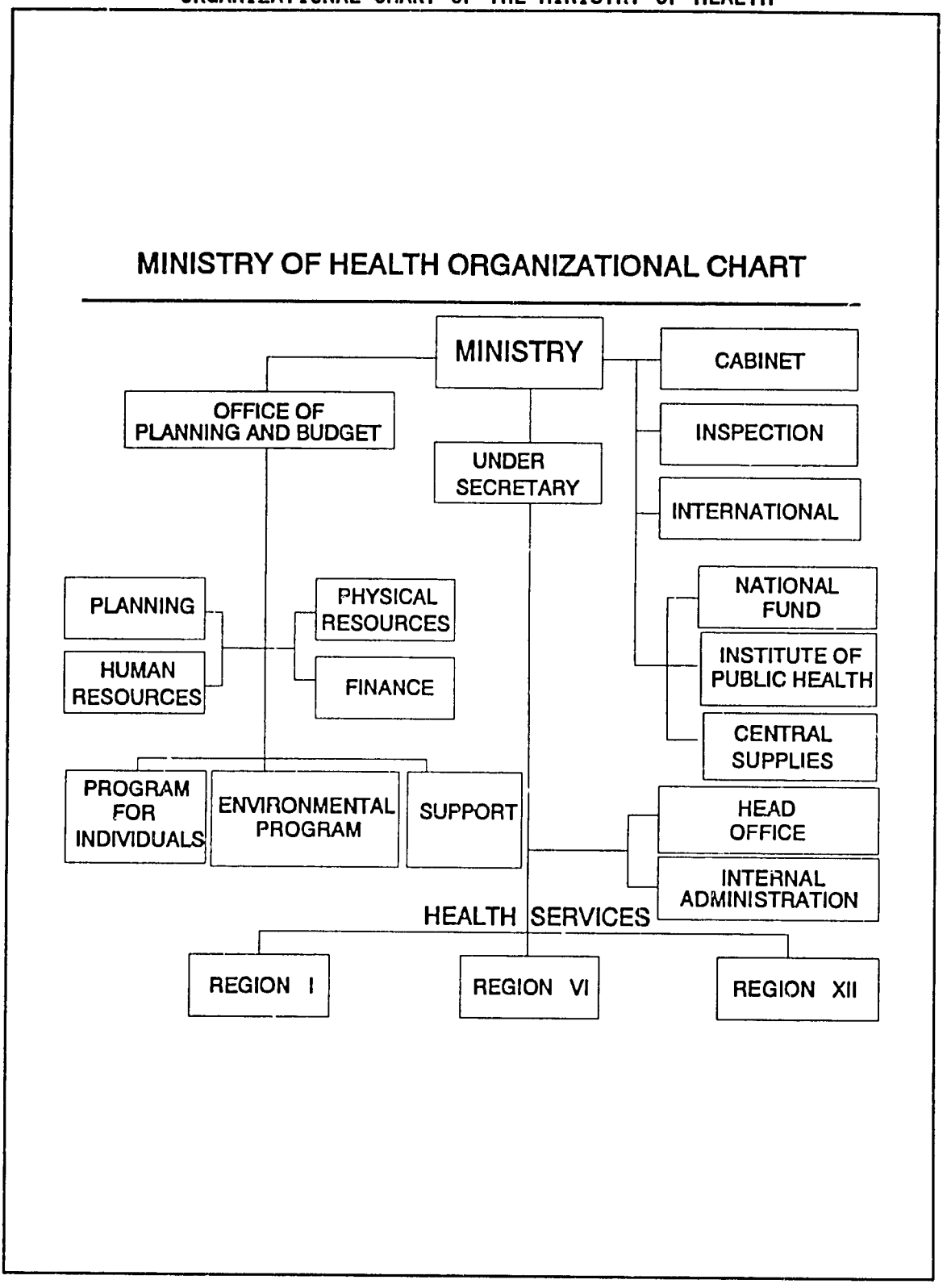


FIGURE 2-2
ORGANIZATIONAL CHART OF THE HEALTH SERVICES

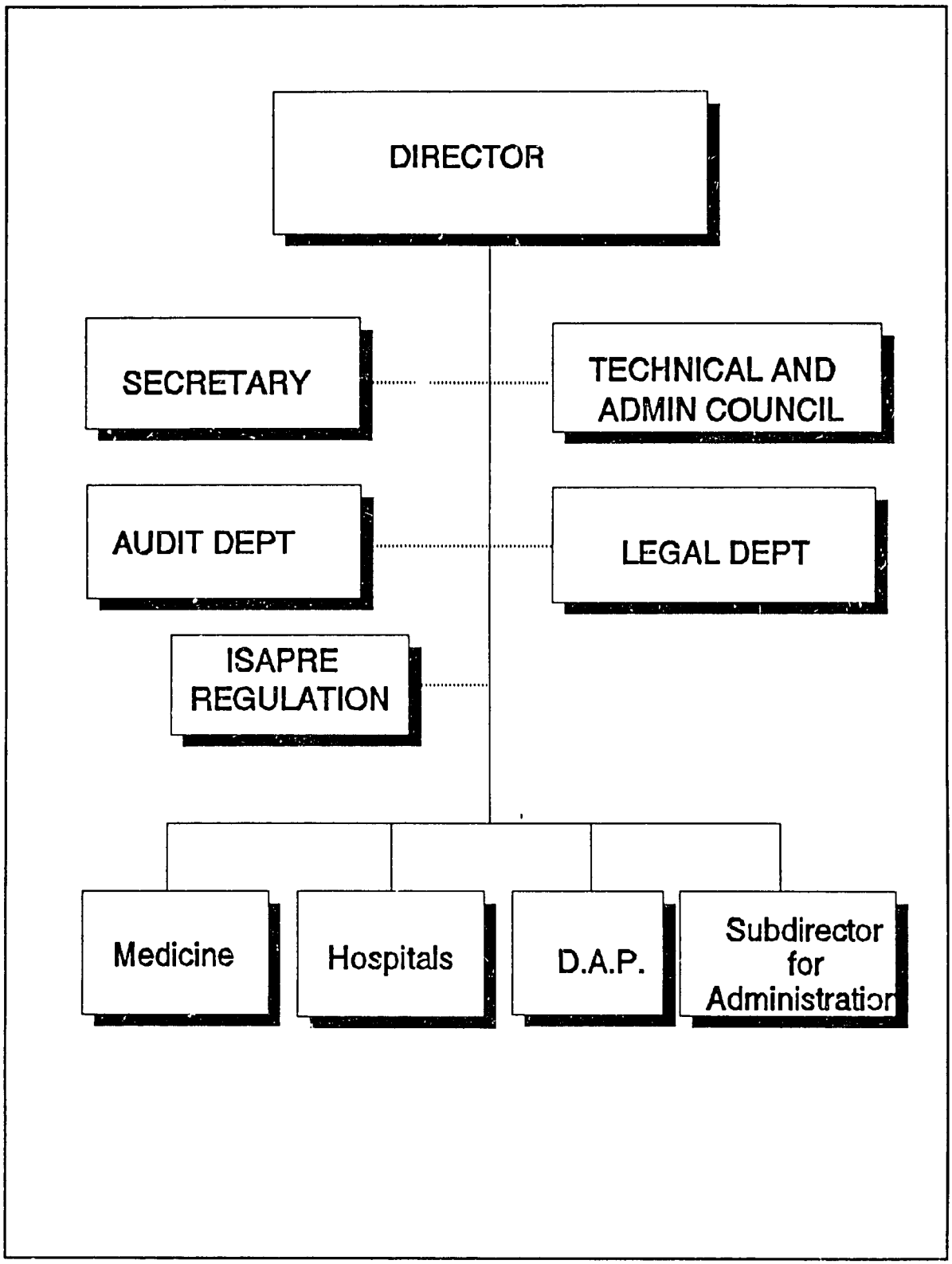


FIGURE 2-3
SUBDIRECTOR FOR MEDICAL SERVICES

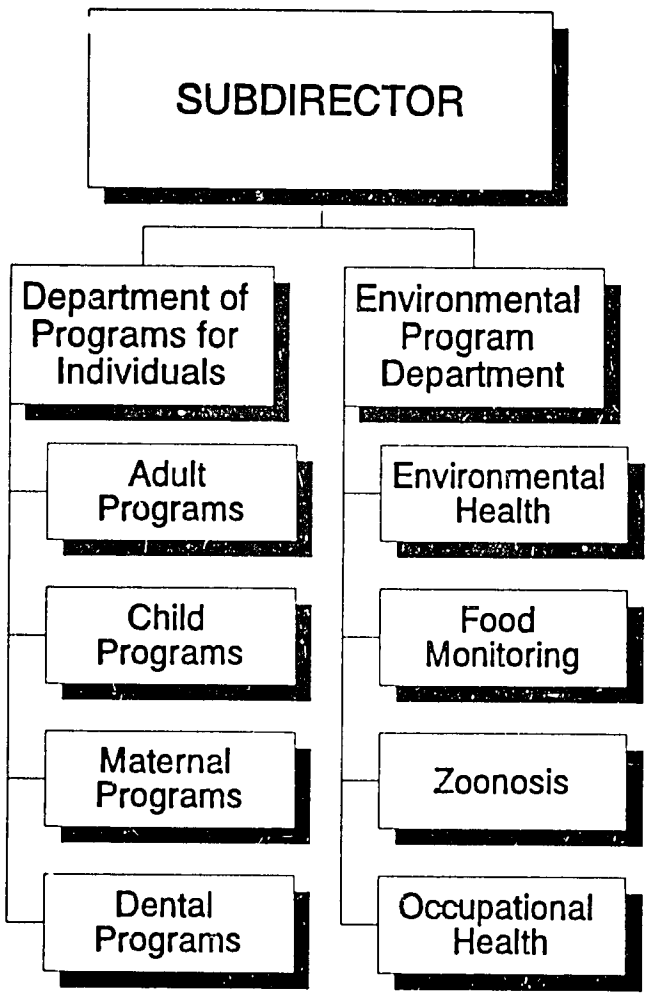
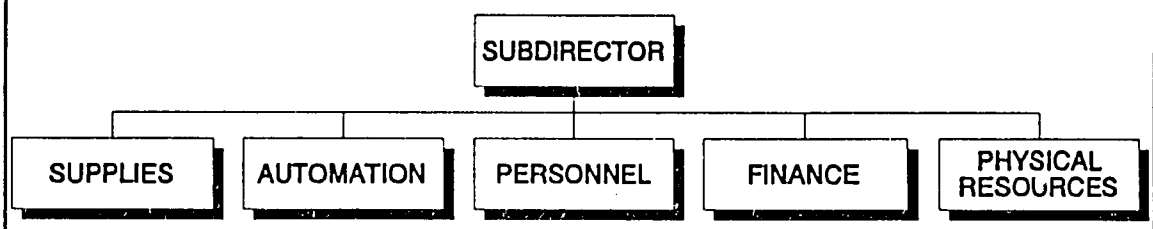


FIGURE 2-4
SUBDIRECTOR FOR ADMINISTRATION



2.1.4 Free Choice

Pursuant to the Law on Health, beneficiaries in the State system may choose the free choice system, that is, they may choose the service provider (physician or institution) where they wish to be attended, from among those who have reached agreements with FONASA. They receive 50 percent of the allowable fee for medical services approved by the Ministry.

2.1.5 Services and Beneficiaries of the System

The health service claimants can be classified into two categories:

1) Families that are enrolled in a formal insurance system. These families may consist of employees or retirees who receive pensions or subsidies for workers' disability, requiring the deduction of at least 7 percent of their available income. The voluntary members of the AFP are also included.

2) Families that are not members in the insurance system, for the most part low-income families, which receive free care. These families lack resources, and receive assistance pensions (PASIS), family subsidies (SUF), or layoff subsidies (SUBCES).

With respect to care received in the SNSS, claimants have been classified in accordance with their income into groups A, B, C and D, where groups A and B receive a 100 percent reimbursement for the cost of service, group C receives a 75 percent reimbursement, and group D a 50 percent reimbursement. All pregnant women and children under 6 years of age receive free services from the system.

In addition, preventive medical services such as those for tuberculosis, sexually transmitted diseases, glaucoma, cancer, diabetes, cardiopathies, renal failure, plus other health promotion and protection activities, such as immunizations, among others, are also provided free to all.

2.1.6 Principal Services

"In order to carry out its activities, the public system has 180 hospitals and approximately 32,850 beds (76 percent of the total beds in the country), 329 general clinics and 995 rural health posts. Each year the SNSS provides some 19,600,000 medical consultations and 1,100,000 hospitalizations."[2] Of this total approximately 90 percent of primary care services are provided under the auspices of municipal administration.

---

[2] Ministry of Planning (MIDEPLAN), Social Development Report, 1991.

The three most important programs are the following:

1) Maternal-Perinatal Program: includes care during pregnancy, and childbirth and newborn care.

2) Child and Adolescent Program: includes control activities for healthy children from 0 to 6 years of age, and the control of morbidity in this entire age group, including educational activities.

3) Adult and Adolescent Program: includes activities oriented to morbidity control, with specific subprograms for the control of chronic diseases such as hypertension and diabetes.

Other programs include the Expanded Program of Immunizations (PAI), which is targeted to the child population of the country, the National Supplemental Nutrition Program (PNAC), which supports maternal and child programs, and consists of the provision of foods to pregnant women, wet nurses, and children under 6 years of age controlled by the SNSS. Programs targeted to specific diseases such as tuberculosis, sexually transmitted diseases and AIDS are also conducted.

2.2 PHYSICAL STATISTICS ON THE PUBLIC SECTOR

2.2.1 Population Covered by the Public Health Sector

Exhibit 2-1 shows the calculation of the population effectively covered by the public health system. In order to arrive at this estimate, the population under 6 years of age that is covered by programs of the Ministry of Health has been used. From this total it is then necessary to subtract the population enrolled in the ISAPREs, thereby deriving the number of individuals that are truly covered by the public system. The progressive decline in the covered population can be seen, along with the growing numbers of people enrolled in the ISAPREs.

In all of the calculations deriving from per capita variables, the covered population, calculated in the above table, will be used as the relevant population.

2.2.2 Medical Consultations[3]

The frequency of medical consultations can be seen in *Exhibit 2-2*, varying between 1.5 and 1.6 consultations per year, and is significantly less than the figures for the population enrolled in the ISAPREs, which surpasses three consultations per person per year. These differences can be explained by two factors:

[3] Source: Social Development Report, 1991. Ministry of Planning (MIDEPLAN).

EXHIBIT 2-1
POPULATION COVERED BY THE HEALTH SECTOR

YEAR	TOTAL POPULATION[1]	PUBLIC SYSTEM[2]	ISAPRE SYSTEM[3]	NOT COVERED
1974	10,185,781	8,810,701		1,375,080
1975	10,350,411	8,953,106		1,397,305
1976	10,509,669	9,090,864		1,418,805
1977	10,663,112	9,223,592		1,439,520
1978	10,816,362	9,356,153		1,460,209
1979	10,975,041	9,493,410		1,481,631
1980	11,144,769	9,640,225		1,504,544
1981	11,327,271	9,736,430	61,659	1,529,182
1982	11,518,800	9,799,455	164,307	1,555,038
1983	11,716,769	9,892,438	242,567	1,581,764
1984	11,918,590	9,944,240	365,340	1,609,010
1985	12,121,677	9,939,670	545,581	1,636,426
1986	12,327,030	9,743,037	921,284	1,662,709
1987	12,536,374	9,339,599	1,205,004	1,991,771
1988	12,667,593	9,171,337	1,450,175	2,046,081
1989	12,956,800	8,970,382	1,756,169	2,230,249
1990	13,177,100	8,800,623	2,108,308	2,268,169
1991	13,401,146	8,528,268	2,566,144	2,306,734

[1]*Source:* National Institute of Statistics.
[2]*Source:* Financial indicators for the Public Health Sector. 1974-88. Ministry of Health. May 1989.
Covered population = Total Population x % Coverage - ISAPRE Beneficiary Population
% Coverage = (Population Under Control < 6 Years) / (Total Population < 6 Years)
[3]*Source:* Board of ISAPREs.

EXHIBIT 2-2 CONSULTATIONS PERFORMED BY PHYSICIANS				
	1986	1987	1988	1989
TOTAL	14,461,447	13,896,444	14,382,822	14,599,118
PER CAPITA[1]	1.48	1.48	1.57	1.63

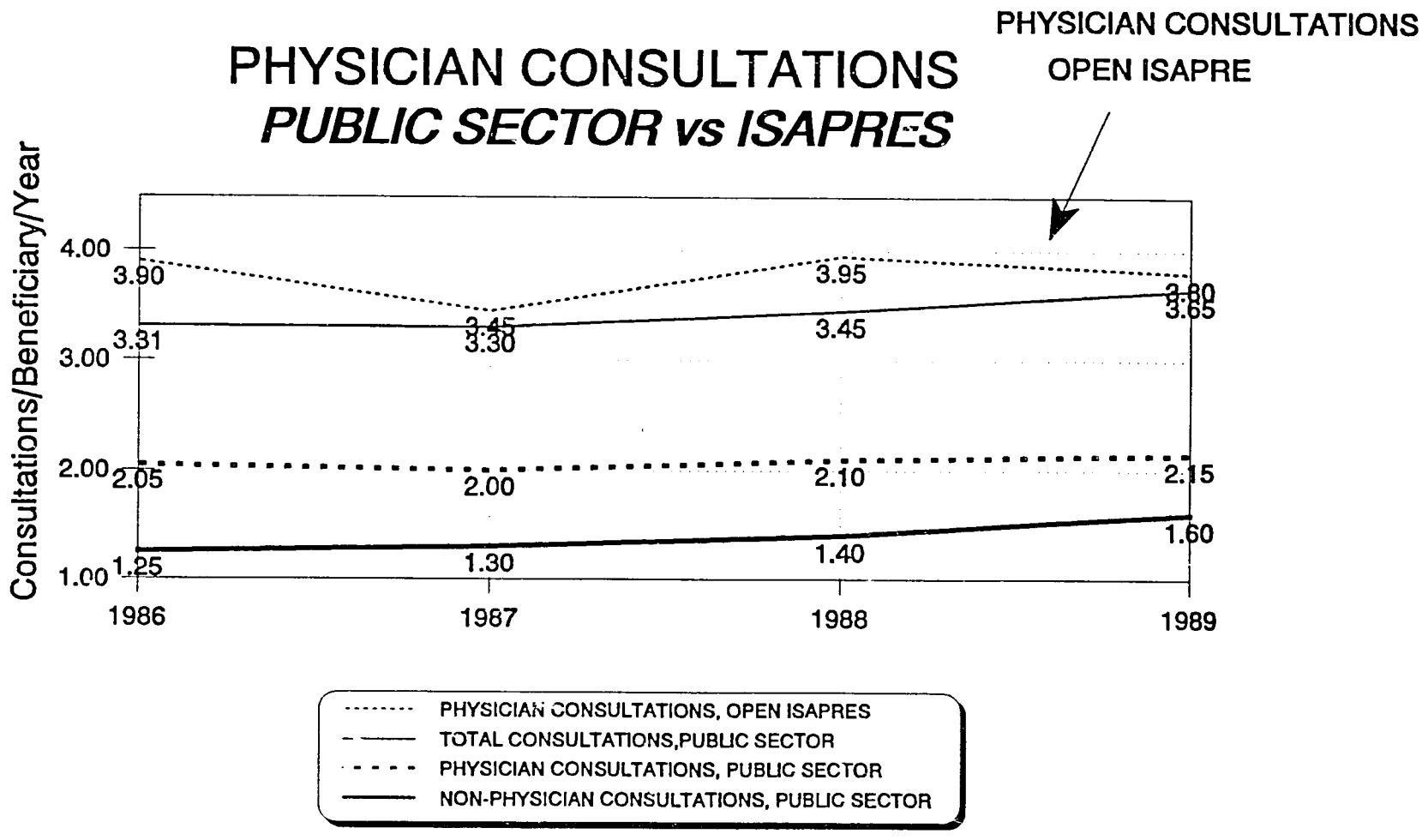
[1]Developed on the basis of the population covered by the Public Health Sector calculated in point 2.

- A large proportion of the preventive medical consultations are performed by non-physician staff in the State system, while in the ISAPREs, these functions are performed almost entirely by physicians. If we add the consultations performed by physicians and non-physicians, they total close to the three consultations per year observed for the ISAPREs.

- A percentage of the demand from the public sector remains unsatisfied due to the lack of the material resources to satisfy it.

EXHIBIT 2-3 CONSULTATIONS PERFORMED BY NON-PHYSICIANS				
	1986	1987	1988	1989
NURSES	0.45	0.46	0.48	0.52
MIDWIVES	0.41	0.43	0.47	0.55
NUTRITIONISTS	0.14	0.15	0.15	0.17
AIDES	0.25	0.28	0.28	0.36
DENTISTS	0.17	0.17	0.18	0.20
TOTAL	1.42	1.49	1.57	1.80

As can be seen in *Exhibit 2-4*, the consultations performed by non-physician staff, including consultations performed by dentists, have maintained a growing trend, from 1.42 consultations per beneficiary per year in 1986 to 1.80 consultations per beneficiary per year in 1989. Of the 0.38 consultation increase, only 0.03 pertains to dentists, who in 1989 reached 0.20 consultations per beneficiary per year.


PHYSICIAN CONSULTATIONS
PUBLIC SECTOR vs ISAPRES
PHYSICIAN CONSULTATIONS
OPEN ISAPRE
Consultations/Beneficiary/Year
4.00
3.00
2.00
1.00
3.90
3.95
3.80
3.65
3.31
3.45
3.30
3.45
2.05
2.00
2.10
2.15
1.25
1.30
1.40
1.60
1986
1987
1988
1989
PHYSICIAN CONSULTATIONS, OPEN ISAPRES
TOTAL CONSULTATIONS,PUBLIC SECTOR
PHYSICIAN CONSULTATIONS, PUBLIC SECTOR
NON-PHYSICIAN CONSULTATIONS, PUBLIC SECTOR

Graph 2-1

Graph 2-1 shows the comparative evolution of physician consultations for both the public sector and the ISAPREs. In the first place, one should note the total consultations performed by physicians in the public sector, including an estimate of the consultations performed through the free choice subsystem with individual physicians[4]. Secondly, non-physician consultations in the public sector are presented, from which dental consultations have been subtracted because they are not included in the ISAPRE statistics. Finally, the sum of both figures is presented, which is compared with the consultations per beneficiary for the ISAPREs, noting the similarity in their levels.

EXHIBIT 2-4
PER CAPITA CONSULTATIONS PERFORMED BY NON-PHYSICIANS

	1986	1987	1988	1989
NURSES	0.45	0.46	0.48	0.52
MIDWIVES	0.41	0.43	0.47	0.55
NUTRITIONISTS	0.14	0.15	0.15	0.17
AIDES	0.25	0.28	0.28	0.36
DENTISTS	0.17	0.17	0.18	0.20
TOTAL	1.42	1.49	1.57	1.80

2.2.3 Examinations in the Public System[5]

The accelerated growth in examinations per beneficiary is indubitable, and they are growing at a greater rate than physician consultations. During the period analyzed, examinations grew from 1.74 to 2.71 examinations per beneficiary per year, which is an increase of more than 50 percent in only four years. With respect to volume, laboratory examinations increased the most, while with respect to percentage growth, radiology led the way, increasing by more than 70 percent.

It is important to emphasize that the frequency of laboratory examinations per individual in the public system is similar to the frequency in the ISAPREs. In the case of radiology, the values observed in the public sector are only half those observed for the ISAPREs.

---

[4] On the basis of the 4.5 million consultations financed by FONASA in 1991, for a covered population of approximately 9 million beneficiaries, a ratio of 0.5 free choice consultations per beneficiary has been calculated. This figure is added to the consultations performed directly by physicians in the public sector.

[5] Source: Social Development Report, 1991. Ministry of Planning (MIDEPLAN).

EXHIBIT 2-5 EXAMINATIONS *(Expressed in thousands)*				
	1986	1987	1988	1989
LABORATORY	15,340	18,719	20,074	21,828
RADIOLOGY	1,201	1,460	1,714	1,870
PATHOLOGICAL ANATOMY	455	552	635	636

EXHIBIT 2-6 PER CAPITA EXAMINATIONS				
	1986	1987	1988	1989
LABORATORY	1.57	2.00	2.19	2.43
RADIOLOGY	0.12	0.16	0.19	0.21
PATHOLOGICAL ANATOMY	0.05	0.06	0.07	0.07
TOTAL	1.74	2.22	2.45	2.71

Graph 2-2 provides two comparisons between the public sector (SNSS) and the private sector (Open ISAPREs), corresponding to both laboratory and radiology examinations. It can be seen that laboratory examinations per beneficiary are not only of the same order of magnitude as those performed by the ISAPREs, but are slightly greater in three of the four years studied. There is, therefore, no lack of these services in the public sector. With respect to radiology examinations, the current figure presented for the ISAPREs is more than double that for the public sector, which indicates the lack of resources in general suffered by the public sector in this area.

2.2.4 Physician and Paramedical Staff of the SNSS[6]

Exhibit 2-7 presents the number of physician and non-physician staff of the SNSS between 1978 and 1988, and it can be seen that in aggregate terms, total positions have declined by more than 1,200, fundamentally a result of a reduction of almost 1,000 nurses' aide positions. When the figures per beneficiary are compiled, the decrease has been less, from 3.12 staff per 1,000 beneficiaries in 1978 to 3.05 in 1988. From this point of view, while physicians have increased

[6] Source: Social Development Report, 1991. Ministry of Planning (MIDEPLAN).

from 0.56 to 0.58 per 1,000 beneficiaries, both nurses and nurses' aides have shown decreases in their per capita staff positions.

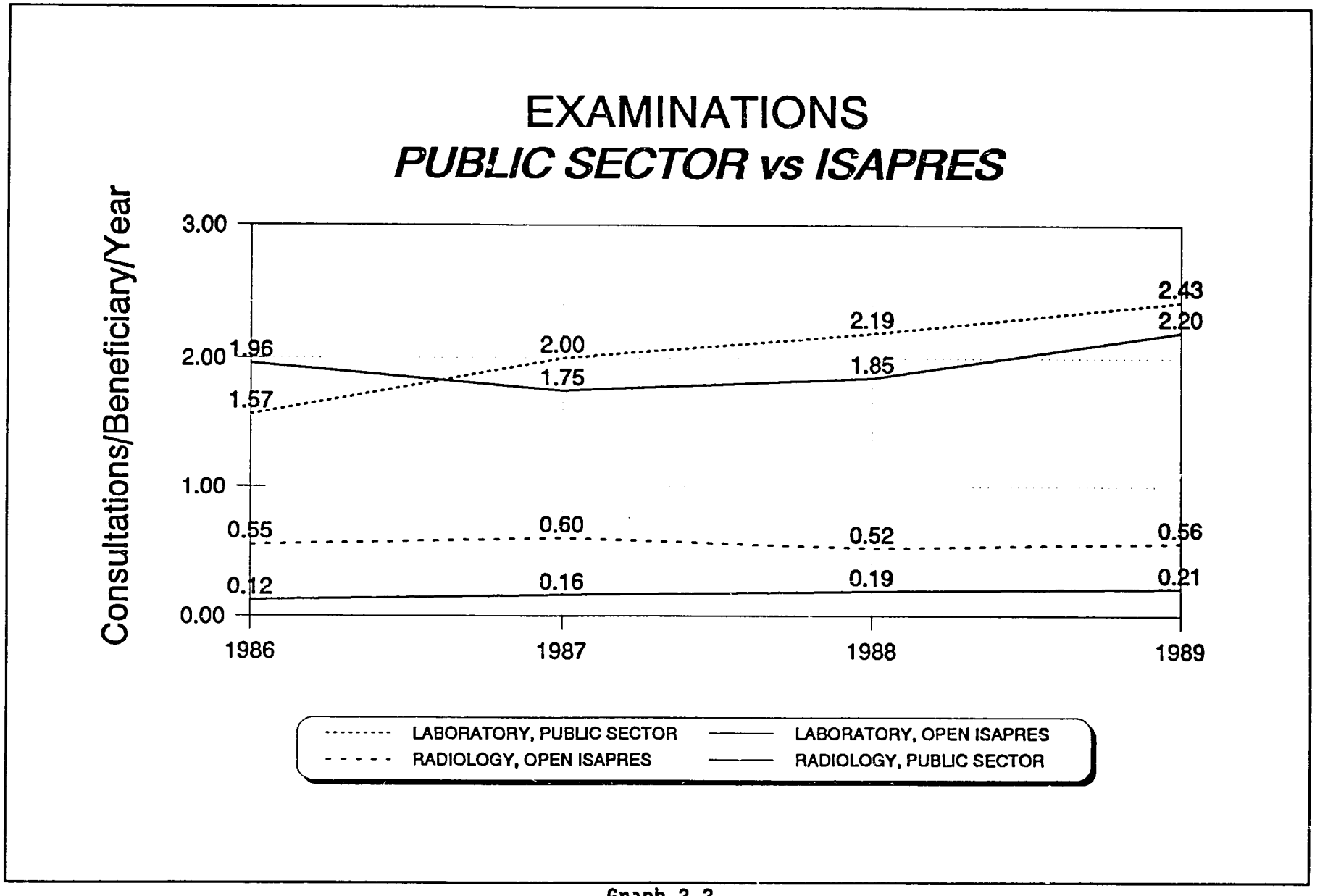
It is important to note that the population covered by the public system also has access, through the free choice system, to private sector care, which in 1990 consisted of 4,523,108 additional consultations beyond those directly provided by the physicians of the public sector. In addition, it should also be noted that, according to the records of the Medical College of Chile, there were 14,203 physicians, equivalent to 1.07 physicians per [1,000] inhabitant[s].

Graphs 2-3 and 2-4 present the evolution in the allocation of staff to the SNSS on both a total and per capita basis. In general terms it can be seen that the total number of individuals working remained constant, while the number of nurses' aides declined over the last two years. Both physicians and nurses show similar levels.

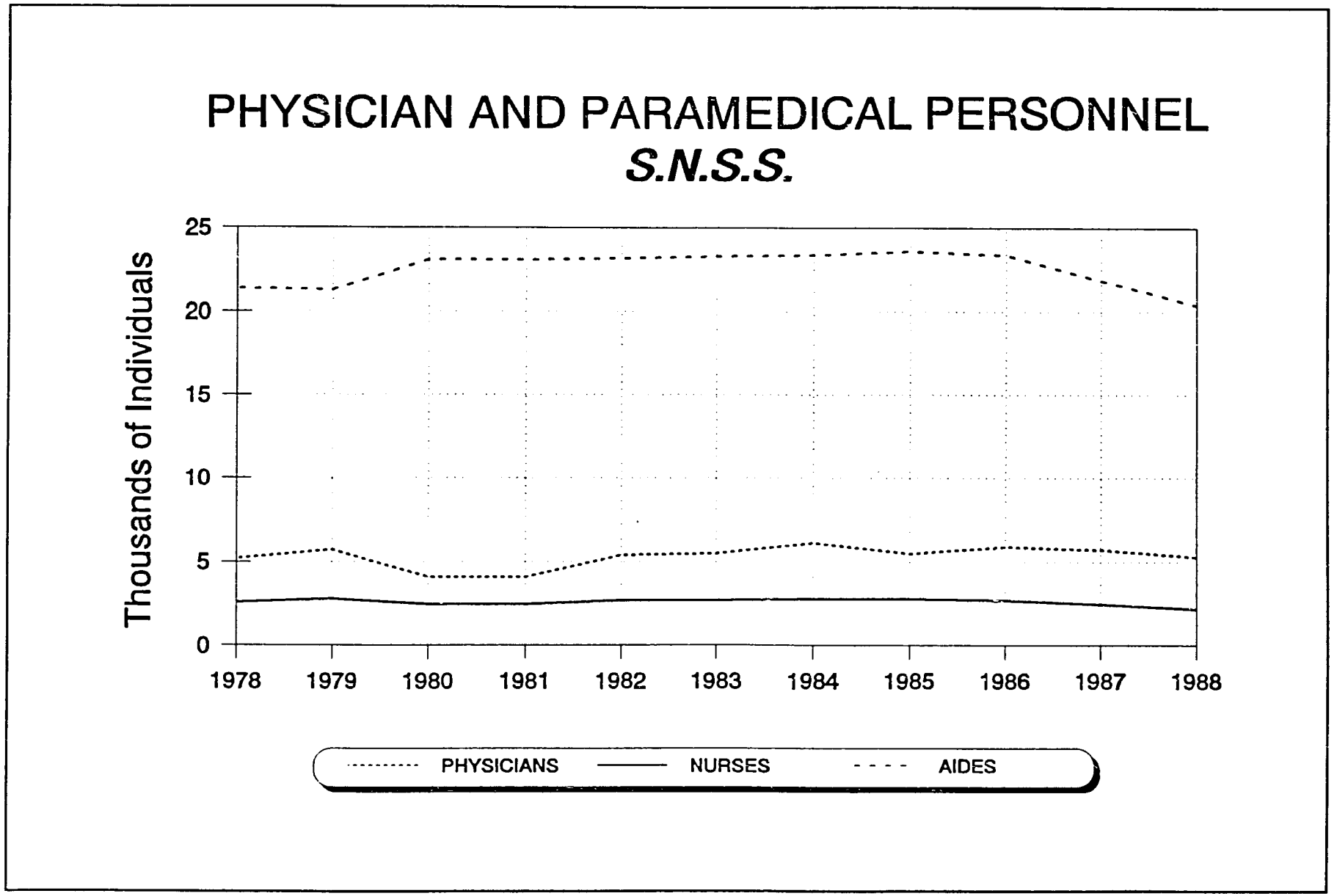
With respect to the values per beneficiary, the changes have been still less, due to the fact that the gradual decrease in total staff has been similar to the decline in the number of beneficiaries in the public sector.

EXHIBIT 2-7
PERSONNEL

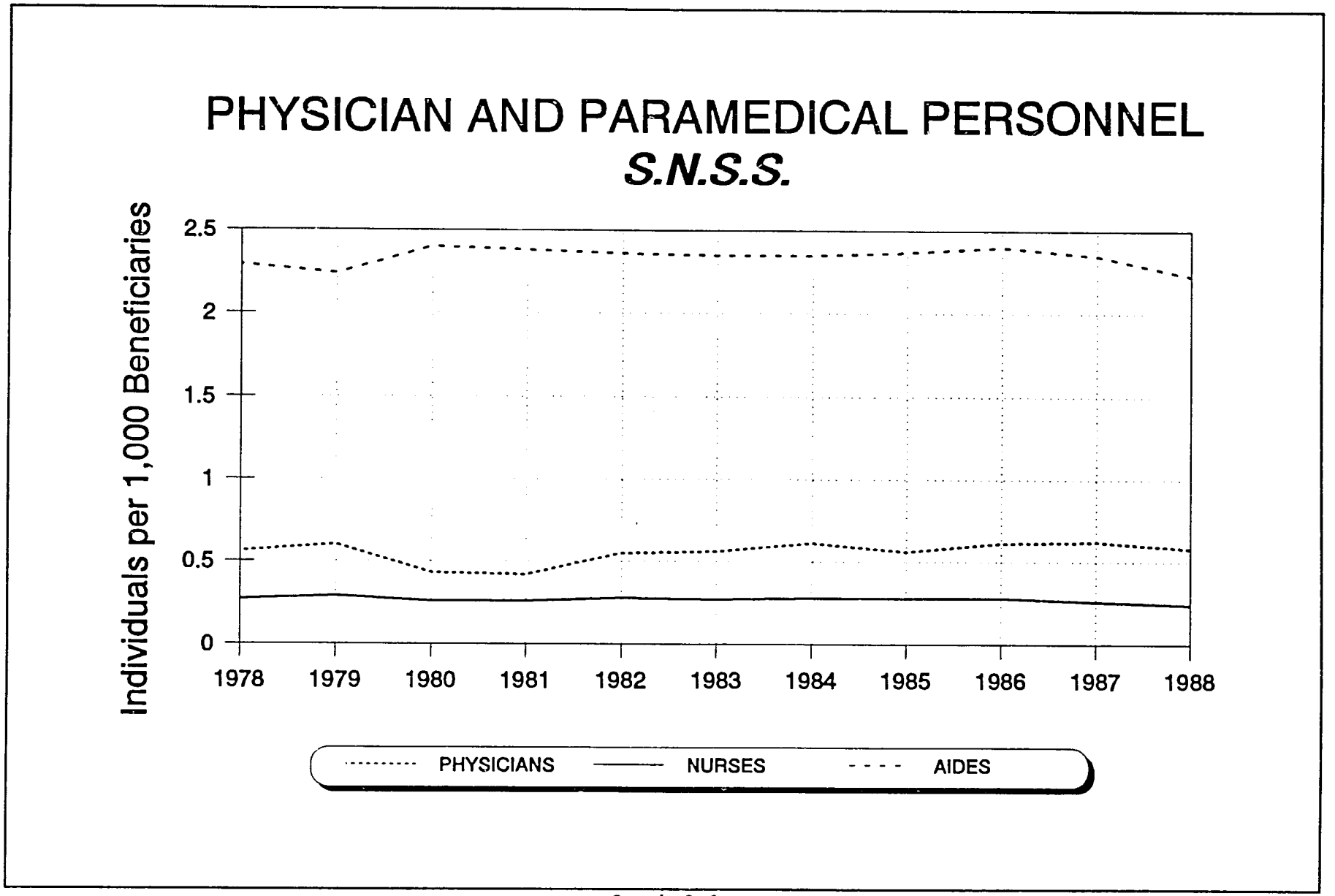
YEAR	PHYSICIANS	NURSES	AIDES	TOTAL
1978	5,248	2,550	21,389	29,187
1979	5,671	2,780	21,286	29,737
1980	4,128	2,509	23,136	29,773
1981	4,128	2,509	23,136	29,773
1982	5,416	2,717	23,172	31,305
1983	5,527	2,710	23,277	31,514
1984	6,067	2,777	23,346	32,190
1985	5,549	2,800	23,589	31,938
1986	5,928	2,715	23,377	32,020
1987	5,744	2,461	21,943	30,148
1988	5,348	2,186	20,418	27,952


EXAMINATIONS
PUBLIC SECTOR vs ISAPRES
Consultations/Beneficiary/Year
3.00
2.00
1.00
0.00
1.96
1.57
2.00
1.75
2.19
1.85
2.43
2.20
0.55
0.60
0.52
0.56
0.12
0.16
0.19
0.21
1986
1987
1988
1989
LABORATORY, PUBLIC SECTOR
LABORATORY, OPEN ISAPRES
RADIOLOGY, OPEN ISAPRES
RADIOLOGY, PUBLIC SECTOR

Graph 2-2


PHYSICIAN AND PARAMEDICAL PERSONNEL
S.N.S.S.
Thousands of Individuals
25
20
15
10
5
0
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
PHYSICIANS
NURSES
AIDES

Graph 2-3


PHYSICIAN AND PARAMEDICAL PERSONNEL
S.N.S.S.
Individuals per 1,000 Beneficiaries
2.5
2
1.5
1
0.5
0
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
PHYSICIANS
NURSES
AIDES

Graph 2-4

EXHIBIT 2-8 PERSONNEL PER 1,000 INHABITANTS				
YEAR	PHYSICIANS	NURSES	AIDES	TOTAL
1978	0.56	0.27	2.29	3.12
1979	0.60	0.29	2.24	3.13
1980	0.43	0.26	2.40	3.09
1981	0.42	0.26	2.38	3.06
1982	0.55	0.28	2.36	3.19
1983	0.56	0.27	2.35	3.18
1984	0.61	0.28	2.35	3.24
1985	0.56	0.28	2.37	3.21
1986	0.61	0.28	2.40	3.29
1987	0.62	0.26	2.35	3.23
1988	0.58	0.24	2.23	3.05

2.2.5 Hospital Beds[7]

Exhibit 2-9 presents the evolution of hospital resources measured in terms of the number of available beds. As can be seen from the average figures for 1970-73 and 1989, the number of beds has declined by more than 1,000 over this period. These figures do not say anything about the condition of the infrastructure, nor about the quality of medical services provided in them, nor about the demand for beds per beneficiary, which has undoubtedly declined in recent years due to advances in medical treatments.

Exhibit 2-10 shows the high hospital bed occupancy rate, which surpasses 75 percent in almost all years. This aggregate figure hides hospitals with occupancy rates of almost 100 percent, and others with much lower occupancy rates, which is to say that this indicator varies widely. In addition, the number of hospital days per year for each 1,000 inhabitants is approximately 1,000 (the equivalent of one bed day per individual per year), which is much higher than the same figure for the ISAPREs, where the average does not exceed 400 bed-days per year per 1,000 individuals. Including the closed ISAPREs, they do not exceed 700 bed-days per 1,000 beneficiaries per year.

[7] Source: Social Development Report, 1991. Ministry of Planning (MIDEPLAN).

EXHIBIT 2-9
AVAILABLE BEDS

YEAR	TOTAL BEDS	BEDS PER 1,000 INHAB.	TOTAL BED-DAYS
70-73	33,847	NA	12,354,155
74-77	33,613	3.73	12,268,745
78-81	33,698	3.53	12,299,770
82-85	33,694	3.41	12,298,310
86-89	32,840	3.53	11,986,600
86	33,101	3.40	12,081,865
87	32,594	3.49	11,896,810
88	32,850	3.58	11,990,250
89	32,815	3.66	11,977,475

EXHIBIT 2-10
HOSPITAL BED OCCUPANCY

YEARS	DAYS PER STAY	PERCENT OCCUPANCY	BED DAYS USED	BED DAYS PER 1,000 INHABIT.
70-73	11.2	80.4	9,932,741	NA
74-77	10.6	76.5	9,385,590	1,041
78-81	9.4	75.6	9,298,626	973
82-85	9.5	75.7	9,309,821	941
86-89	8.3	75.1	9,001,937	967
86	8.5	74.8	9,037,235	928
87	8.2	73.8	8,779,846	940
88	8.3	75.9	9,100,600	992
89	8.1	75.7	9,066,949	1,011

2.3 FINANCIAL INFORMATION ON THE PUBLIC SECTOR[8]

As can be seen in *Exhibit 2-11*, the sources of financing for the public health sector have changed significantly in recent years. In 1974 the budget allocation represented more than 60 percent of the revenue to the sector, with transfers (whose principal component consists of the insurance premiums of the workers) being the second most important source.

The transfers surpassed the budget allocation in 1990, and thus became the principal source of revenue to the system. This development took place in spite of the movement of subscribers, beginning in 1981, from the public sector to the private sector, and because of an increase in health premiums, which grew from 4 percent to the current 7 percent of taxable income.

In 1991, as a result of a significant increase in the resources allocated by the Government to this sector, this development was reversed, with the budgetary allocation representing more than 40 percent of the total revenues. Operating revenues did not reach 10 percent of total revenue during the entire period considered.

The evolution of the composition of expenditures in the public health sector has also been significant. Expenditures for compensation constitute the highest expenditure component during this period. Their share of total expenditures declined from close to 40 percent in 1974 to slightly more than 30 percent in 1991. On the other hand, expenditures on goods and services have increased, absorbing the share of expenditures ceded by compensation, and growing from little more than 20 percent in 1974 to some 30 percent in 1991.

The per capita budget contributions were affected by the economic crises that affected the country in 1976 and 1982. Subsequently, this indicator recovered slowly (more slowly than the economy), on both occasions reaching the levels prior to the crisis. The 1974 level of US$35.55 per capita was surpassed for the first time in 1991, with a level of US$ 37.48 per capita. This value is substantially higher than the 1990 level, which was only US$ 28.40 per capita.

---

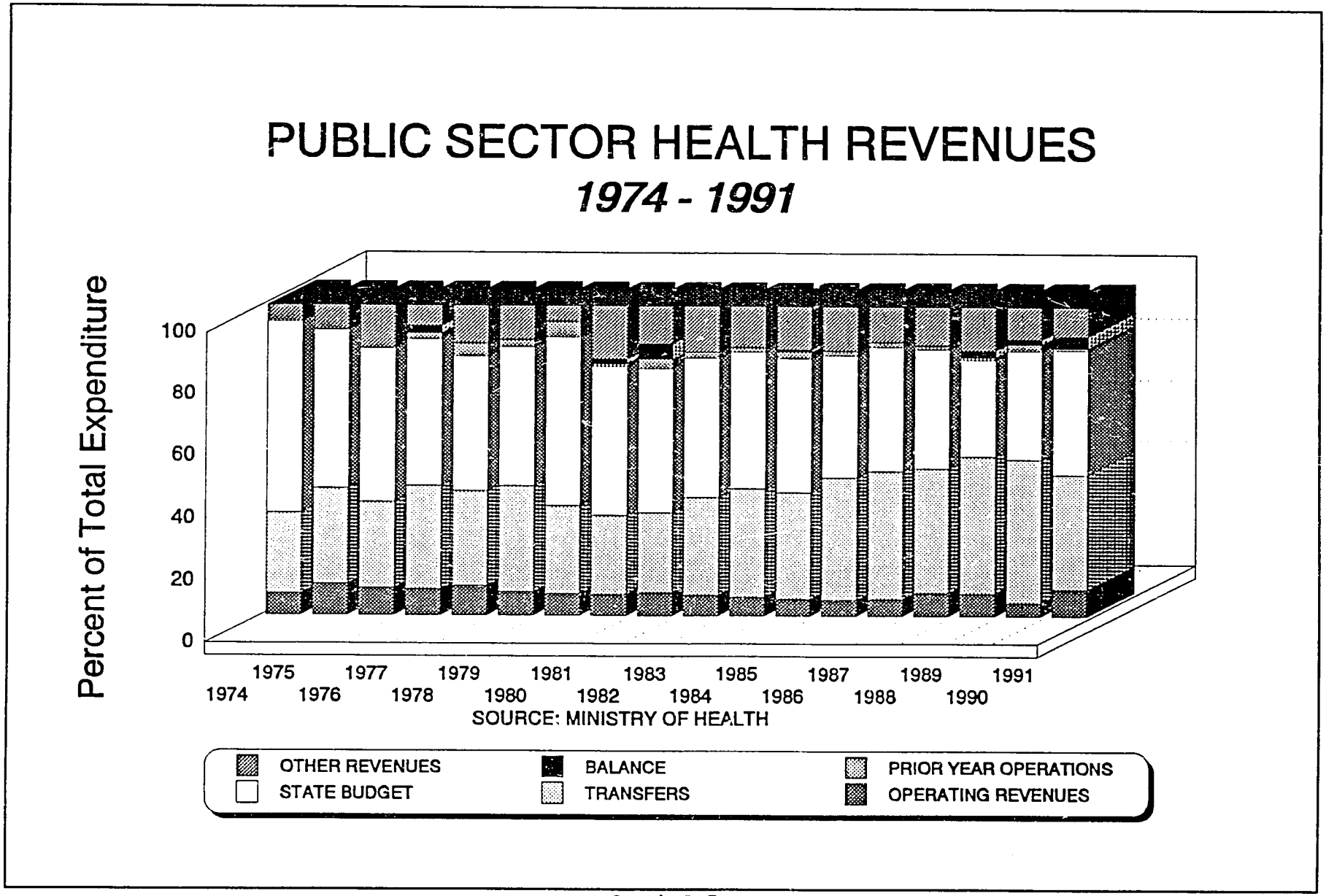
[8] Source: Financial Indicators for the Public Health Sector. 1974 - 1988. Ministry of Health, 1989, and the authors, based on historical data from the Ministries of Health and Planning.

EXHIBIT 2-11 (PART A)
PUBLIC HEALTH SECTOR REVENUES

Thousands of real US$, December 1990	1974	1975	1976	1977	1978	1979	1980	1981	1982
OPERATING INCOME	35,393	43,241	36,909	40,235	57,178	46,072	42,913	47,125	50,995
SALES OF ASSETS	3,539	1,491	1,495	1,341	1,676	4,572	370	992	2,014
LOAN RECOVERY									
TRANSFERS	132,724	128,977	114,868	156,859	180,654	205,909	174,390	174,234	179,352
OTHER INCOME	26,545	31,685	23,456	29,338	38,508	56,661	29,804	84,663	78,655
DEBT					1,403	4,395		2,233	3,161
PUBLIC BUDGET	313,229	216,205	206,279	224,755	258,722	271,891	334,672	327,644	319,925
PREVIOUS YEAR OPERATIONS				9,723	25,256	14,748	31,652	6,504	21,125
BALANCE				10,673				9,358	34,308
TOTAL	511,430	421,600	383,008	472,925	563,398	604,249	613,801	652,754	689,535

EXHIBIT 2-11 (PART B)
PUBLIC HEALTH SECTOR REVENUES

Thousands of real US$, December 1990	1983	1984	1985	1986	1987	1988	1989	1990	1991
OPERATING INCOME	38,962	34,381	28,877	27,487	29,016	44,403	49,626	30,805	68 ,036
SALES OF ASSETS	129	376	1,311	3,263	1,112	4,578	6,259	3,358	615
LOAN RECOVERY					2,200	2,200	2,640	2,422	1,627
TRANSFERS	183,255	197,574	180,881	210,492	217,848	210,871	296,024	325,057	294,401
OTHER INCOME	83,890	74,945	72,308	73,065	56,893	67,005	61,229	63,595	61,770
DEBT	2,255						24,657	4,079	9,527
PUBLIC BUDGET	263,692	250,356	228,682	210,061	212,716	230,786	211,867	249,962	319,647
PREVIOUS YEAR OPERATIONS	12,163	8,722	11,371	8,070	8,582	6,699	6,602	15,583	6,736
BALANCE			3,876			1,799	14,568	10,899	30,547
TOTAL	584,347	566,354	527,305	532,438	528,367	598,341	673,473	705,761	792,907


PUBLIC SECTOR HEALTH REVENUES
1974 - 1991
Percent of Total Expenditure
100
80
60
40
20
0
1974
1975
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
1989
1990
1991
SOURCE: MINISTRY OF HEALTH
OTHER REVENUES
STATE BUDGET
BALANCE
TRANSFERS
PRIOR YEAR OPERATIONS
OPERATING REVENUES

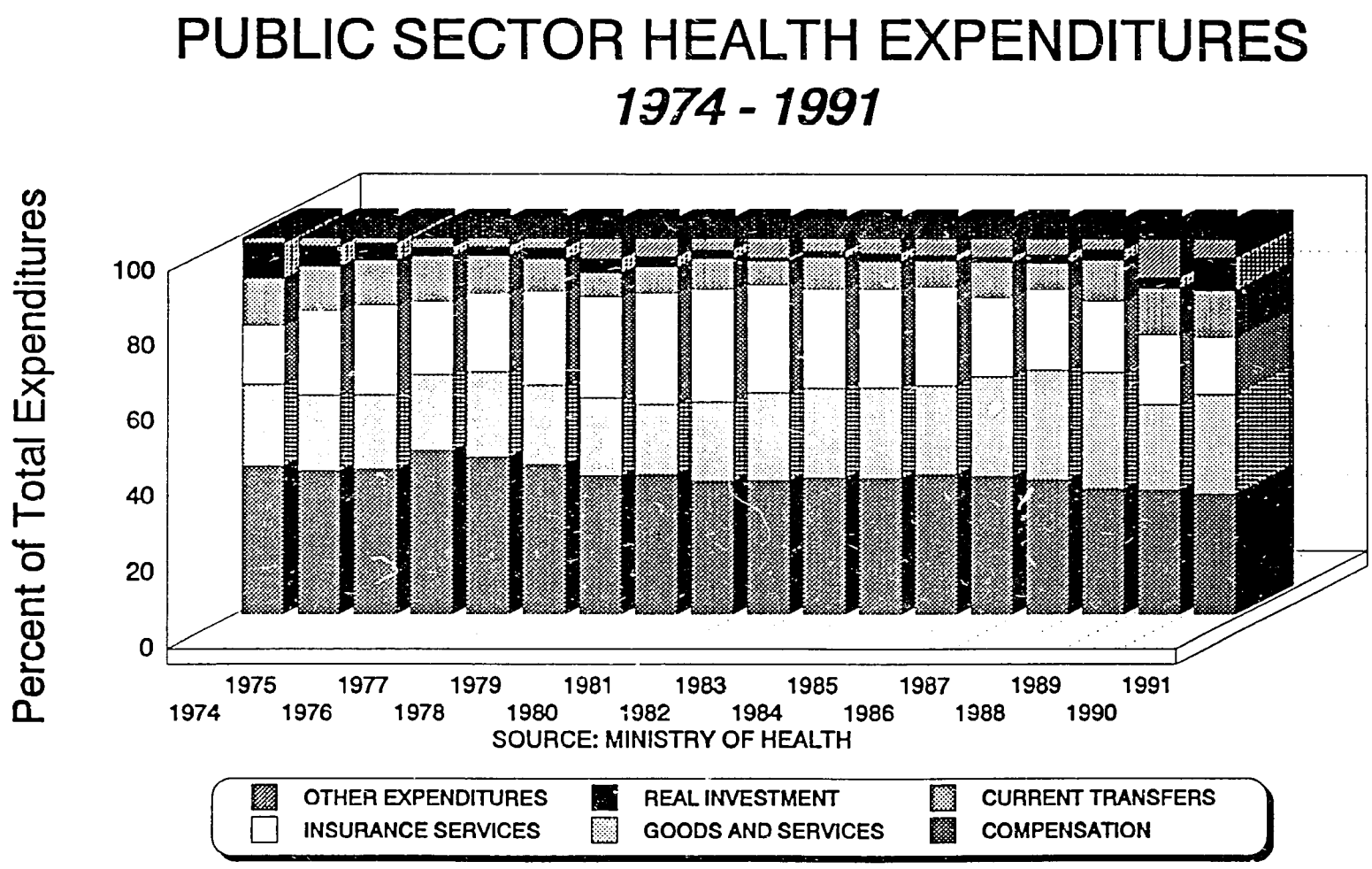
Graph 2-5

EXHIBIT 2-12 (PART A)
PUBLIC HEALTH SECTOR EXPENDITURES

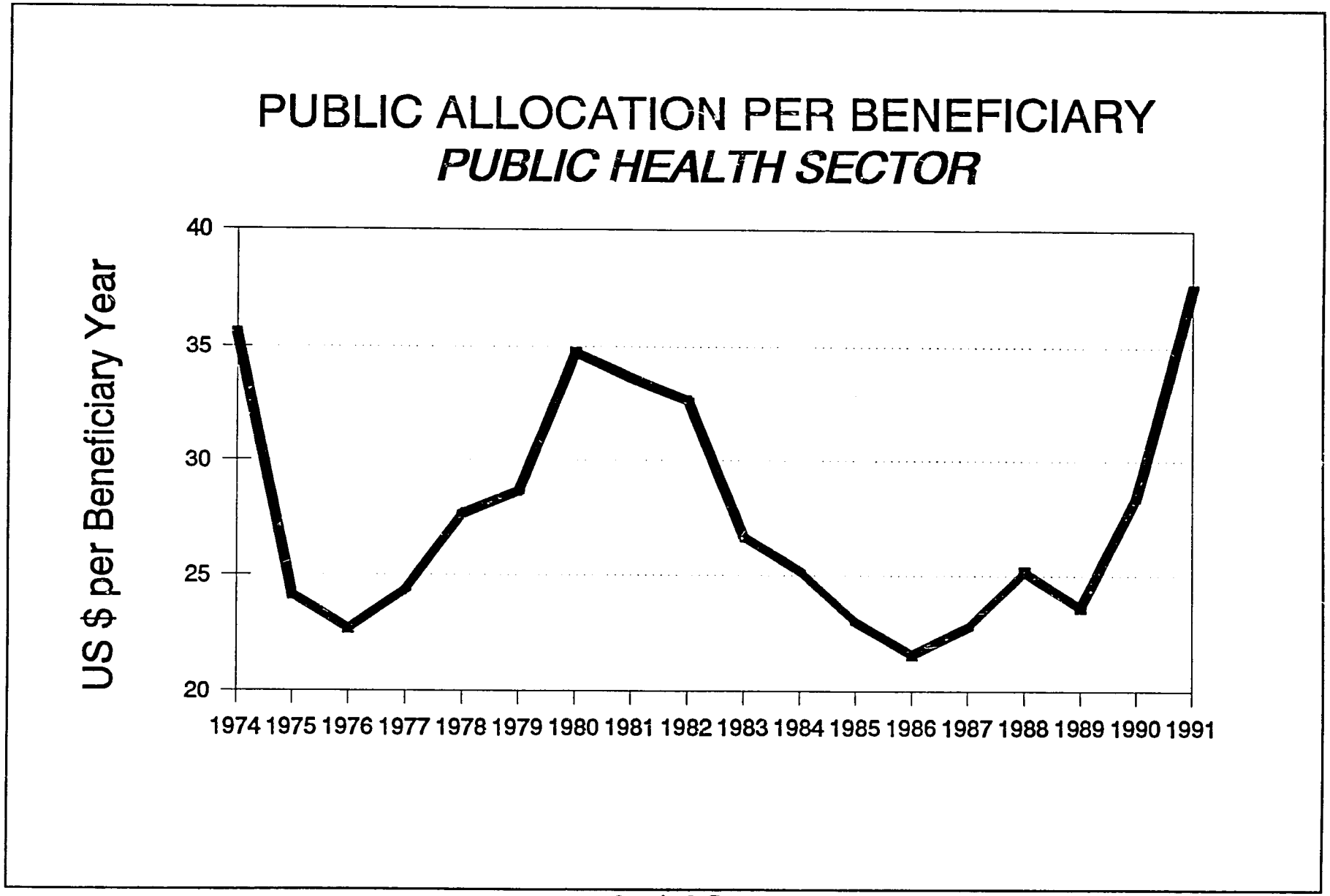
Thousands of real US$, December 1990	1974	1975	1976	1977	1978	1979	1980	1981	1982
COMPENSATION	203,510	168,864	163,965	199,609	225,983	239,918	219,216	241,440	247,329
GOODS AND SERVICES	113,258	89,464	84,627	93,993	123,593	127,598	124,478	122,714	148,565
INSURANCE SERVICES	83,174	101,020	103,944	90,919	115,486	154,616	162,564	195,325	214,102
CURRENT TRANSFERS	65,477	52,560	50,707	56,105	55,034	51,558	37,826	45,264	57,841
PROPERTY INVESTMENT	49,550	24,975	20,582	11,623	13,174	18,140	22,717	17,847	16,425
FINANCIAL INVESTMENT									
PRIOR YEAR OPERATIONS	7,079	9,319	5,289	10,785	11,849	15,102	32,652	24,741	19,881
OTHER COMMITMENTS IN PROCESS								6,522	1,130
PUBLIC DEBT									
TREASURY BALANCE									
SUBTOTAL	522,048	446,202	429,116	463,034	545,118	606,933	599,453	653,853	705,272
ADJUSTED DEBT (PNAC)									
SECTOR TOTAL	522,048	446,202	429,116	463,034	545,118	606,933	599,453	653,853	705,272

EXHIBIT 2-12 (PART B)
PUBLIC HEALTH SECTOR EXPENDITURES

Thousands of real US$, December 1990	1983	1984	1985	1986	1987	1988	1989	1990	1991
COMPENSATION	206,846	205,339	196,861	198,168	200,115	215,164	215,739	217,728	251,439
GOODS AND SERVICES	137,219	135,642	131,917	127,581	145,520	177,015	201,551	151,164	209,177
INSURANCE SERVICES	169,430	152,149	145,935	142,977	111,107	132,498	124,979	123,465	120,654
CURRENT TRANSFERS	37,481	48,329	39,984	36,915	51,611	40,987	70,805	83,383	98,898
PROPERTY INVESTMENT	4,857	9,765	12,550	8,609	8,363	14,677	18,094	18,837	70,100
FINANCIAL INVESTMENT				191	3,099	3,960	3,594	3,415	3,573
PRIOR YEAR OPERATIONS	28,771	17,529	21,068	20,762	18,384	20,699	13,126	25,323	19,973
OTHER COMMITMENTS IN PROCESS	1,482	1,194	107	2,041	4,780	835	1,767	1,635	1,110
PUBLIC DEBT	335	32	157	130	156	133	120	1,896	2,897
TREASURY BALANCE								36,266	11,626
SUBTOTAL	586,421	569,978	548,579	537,374	543,134	605,969	649,774	663,112	789,446
ADJUSTED DEBT (PNAC)				3,748					
SECTOR TOTAL	586,421	569,978	548,579	541,122	543,134	605,969	649,774	663,112	789,446


PUBLIC SECTOR HEALTH EXPENDITURES
1974 - 1991
Percent of Total Expenditures
100
80
60
40
20
0
1974
1975
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
1989
1990
1991
SOURCE: MINISTRY OF HEALTH
OTHER EXPENDITURES
INSURANCE SERVICES
REAL INVESTMENT
GOODS AND SERVICES
CURRENT TRANSFERS
COMPENSATION

Graph 2-6


PUBLIC ALLOCATION PER BENEFICIARY
PUBLIC HEALTH SECTOR
US $ per Beneficiary Year
40
35
30
25
20
1974 1975 1976 1977 1978 1979 1980 1981 1982 1983 1984 1985 1986 1987 1988 1989 1990 1991

Graph 2-7

EXHIBIT 2-13 TOTAL AND PER CAPITA BUDGET ALLOCATION *(real currency)*		
YEAR	TOTAL BUDGET Thousands of US$ December 1990	PER CAPITA BUDGET US$ December 1990
1974	313,229	35.55
1975	216,205	24.15
1976	206,279	22.69
1977	224,755	24.37
1978	258,722	27.65
1979	271,891	28.64
1980	334,672	34.72
1981	327,644	33.65
1982	319,925	32.65
1983	263,692	26.66
1984	250,356	25.18
1985	228,682	23.01
1986	210,061	21.56
1987	212,716	22.78
1988	230,786	25.16
1989	211,867	23.62
1990	249,962	28.40
1991	319,647	37.48

Public health expenditures, although affected by economic crises, are not affected as radically as public health budget allocations, and so have shorter recovery periods. In part, this is due to the evolution of other health financing components, such as, for example, the insurance premiums of workers, which as noted above grew from 4 percent to the current 7 percent of taxable income.

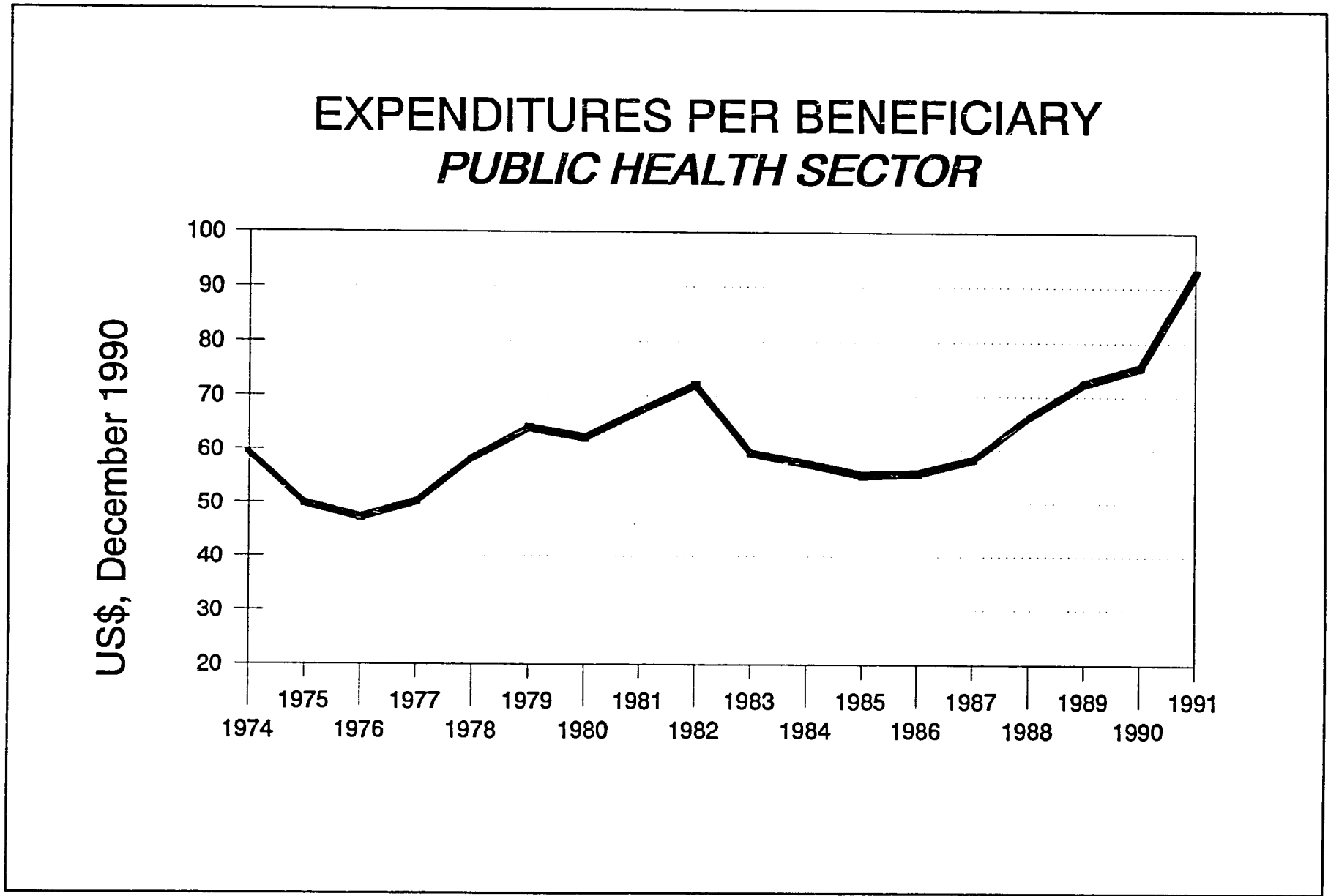
Thus the expenditures on health following the 1976 recession surpassed their 1974 level (US$ 59.25 per capita) in 1979 with a level of US$ 63.93 per capita. They reached a peak in 1982 with US$ 71.97 per capita. The system had to wait till 1989 for this level to be surpassed, with US$ 72.44 expenditures per capita.

EXHIBIT 2-14
TOTAL AND PER CAPITA PUBLIC HEALTH EXPENDITURES
(real currency)

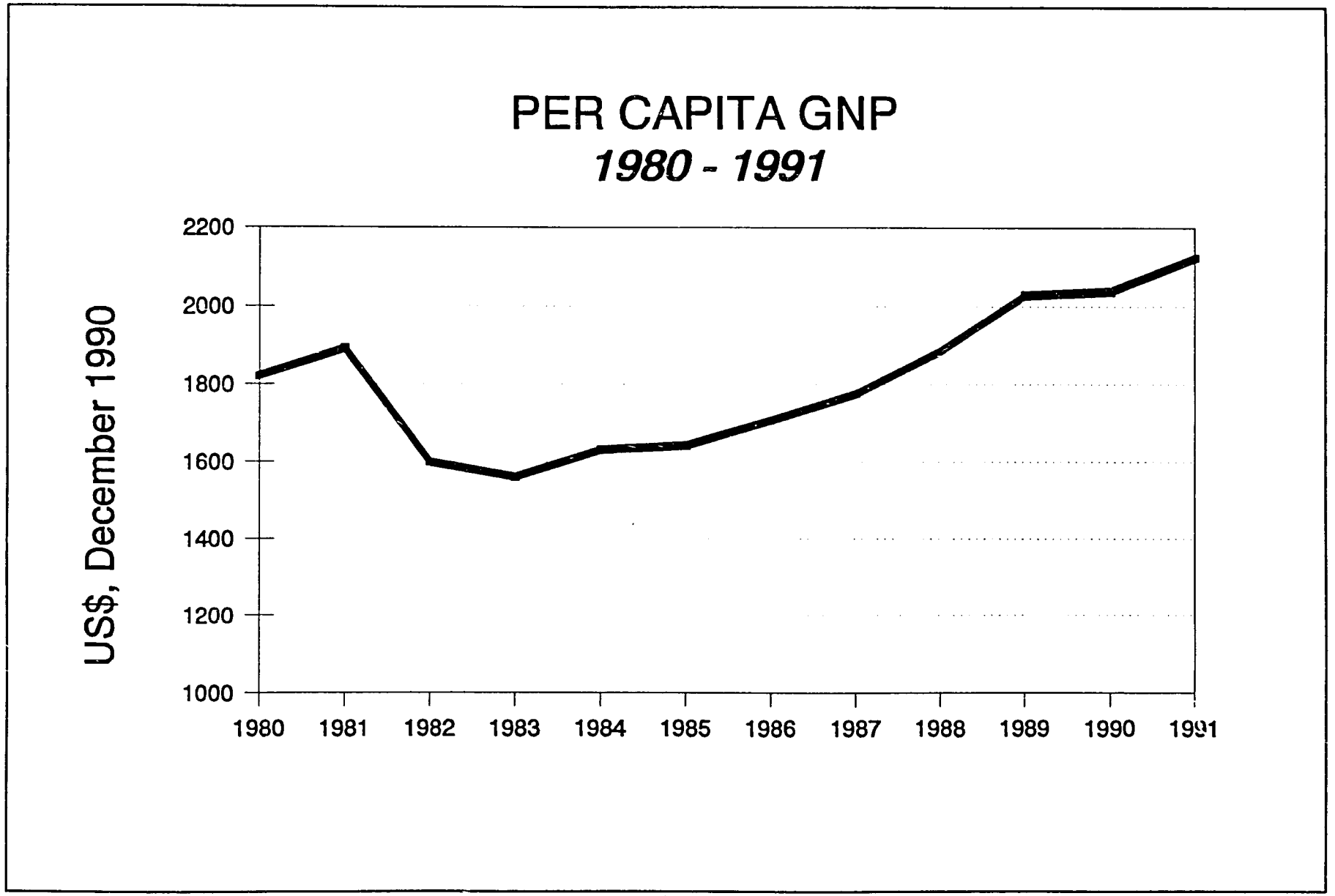
YEAR	TOTAL PUBLIC EXPENDITURES Thousands of US$ December 1990	PER CAPITA PUBLIC EXPENDITURES US$ December 1990
1974	522,048	59.25
1975	446,202	49.84
1976	429,116	47.20
1977	463,034	50.20
1978	545,118	58.26
1979	606,933	63.93
1980	599,453	62.18
1981	653,853	67.16
1982	705,272	71.97
1983	586,421	59.28
1984	569,978	57.32
1985	548,579	55.19
1986	541,122	55.54
1987	543,134	58.15
1988	605,969	66.07
1989	649,774	72.44
1990	663,112	75.35
1991	789,446	92.57

EXHIBIT 2-15 TOTAL AND PER CAPITA GNP *real currency)*			
YEAR	TOTAL GNP Millions of US$ December 1990	PER CAPITA GNP US$ December 1990	HEALTH EXPENDITURES AS % OF GNP
1980	20,310	1,822	3.41%
1981	21,433	1,892	3.55%
1982	18,414	1,599	4.50%
1983	18,283	1,560	3.80%
1984	19,443	1,631	3.51%
1985	19,919	1,643	3.36%
1986	21,046	1,707	3.25%
1987	22,254	1,775	3.28%
1988	23,891	1,886	3.50%
1989	26,278	2,028	3.57%
1990	26,841	2,037	3.70%
1991	28,452	2,123	4.36%

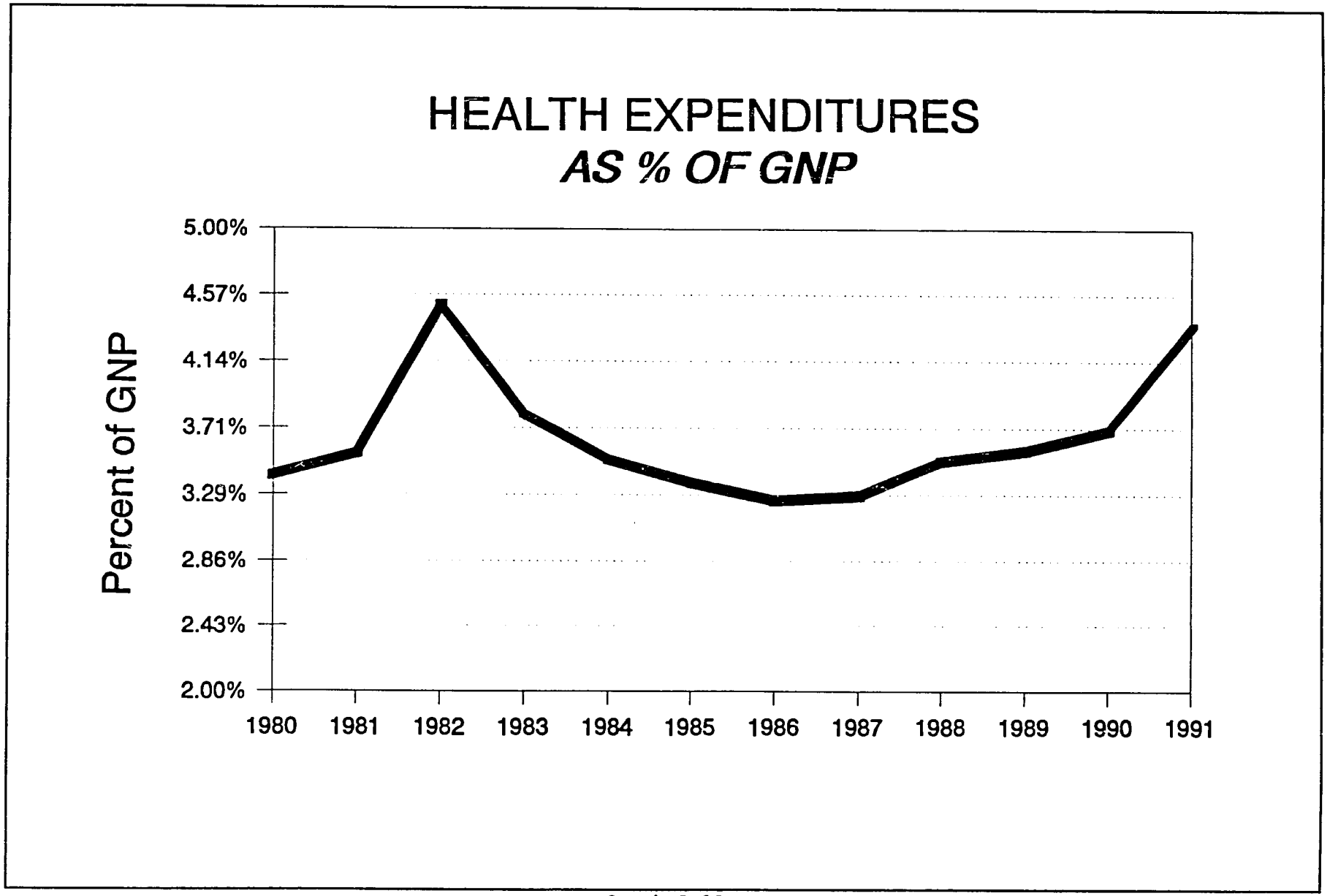
Expenditures on health as a percentage of the Gross National Product (GNP) have varied between 3.3 percent and 4.5 percent over the last 12 years. The sharp increase that can be seen in 1991 is the result of the greater expenditures on social programs undertaken by the new government, which came to power in March, 1990. However, in spite of the increased expenditures on health, the population continues to be dissatisfied with the perceived quality of health care, which shows that this dissatisfaction is not only a problem of resources, but also of quality and the magnitude of the incentives provided to those performing health activities.


EXPENDITURES PER BENEFICIARY
PUBLIC HEALTH SECTOR
US$, December 1990
100
90
80
70
60
50
40
30
20
1974
1975
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
1989
1990
1991

Graph 2-8


PER CAPITA GNP
1980 - 1991
US$, December 1990
2200
2000
1800
1600
1400
1200
1000
1980
1981
1982
1983
1984
1985
1986
1987
1988
1989
1990
1991

Graph 2-9


HEALTH EXPENDITURES
AS % OF GNP
Percent of GNP
5.00%
4.57%
4.14%
3.71%
3.29%
2.86%
2.43%
2.00%
1980
1981
1982
1983
1984
1985
1986
1987
1988
1989
1990
1991

Graph 2-10

3.0 ANALYSIS OF THE ISAPRE SYSTEM

This chapter begins by defining the two categories of ISAPREs that are considered by the Law: open programs and closed programs. The following provides a summary of the legal framework that regulates this sub-sector, its supervisory bodies and the new bills that are being discussed in the legislature. Also presented are an analysis of the industrial organization of the institutions that operate in this market, their growth since their creation, the participation in the market of the various ISAPRE institutions, the premiums charged and their evolution. Statistics on the demand for various health services and their evolution over time are also presented.

3.1 DESCRIPTION OF THE ISAPRE SYSTEM

The ISAPREs began in 1981 as a complement to the insurance reform carried out in 1980, and substantially modified the pension system from one based on the distribution of funds to one based on individual capitalization, and to one in which the pension funds are administered by specialized private firms.

The ISAPREs, for their part, replace the State health system, and for this purpose can collect mandatory health insurance premiums (7 percent of the taxable income of workers). These institutions are private entities that can provide services within their own infrastructure, or if not possible, finance the health expenditures of individuals according to a percentage stipulated in individual contracts. They are only required to fulfill the minimum requirements of the law with respect to preventive medicine, health controls, and the payment of subsidies for temporary workers' disability (medical leave). These minima, plus the suspensions[9] and exclusions[10], are set forth in the parameters of the plan, where the remainder of the services (curative medicine) are agreed to by both parties.

The ISAPREs have no legal obligation to enroll anyone who might want to pay their fees. They can, therefore, select their members in accordance with their own criteria. This latter feature has led to the existence of two types of ISAPREs:

1. Closed ISAPREs: ISAPREs that satisfy the needs of groups of individuals, who are generally related to a business or group of businesses, where the employers have played an important role in their creation, and which entail in general significant contributions per member (in some cases greater than the mandatory premiums paid by workers). In general, these ISAPREs do not restrict access to any

[9]Suspensions: Medical benefits that have been suspended or reduced for a period of time.

[10]Exclusions: Medical services that are not included in the health contract. These services are generally the product of diseases that already existed (preexisting) when the contract was signed.

worker that belongs to its target population. In addition, they implement a single health plan that is the same for all workers and their families, independently of their contribution to the health fund. At present, they represent less than 6 percent of the universe of members of the ISAPRE system.

2) Open ISAPREs: Open ISAPREs are oriented to the entire market, although in practice, given the products they offer, they are targeted to specific population segments by income and geographical location. In contrast to the closed ISAPREs, the open ISAPREs have available the mechanisms that allow them to select those who will become members in their health plans, since they can accept or reject a worker in accordance with criteria related to his health status. In addition, they can charge various premiums depending on the age and sex of the subscriber.

3.2 LEGAL FRAMEWORK

3.2.1 Current Legislation

Since their establishment in 1981, the ISAPREs have been governed by DFL No. 3 of the Ministry of Health, which provision was replaced in 1990 by Law No. 18,933. This law introduced important changes in the way in which the ISAPREs operate. In particular, the following were modified: areas related to the duration of contracts, the creation of a governing board, the legal nature of the ISAPREs, and the situation of retirees. The government and the association of ISAPREs agreed to test the new legislation for one year, before implementing new changes, with the intention of measuring the real consequences of its application. A new package of reforms to the system is currently being discussed in the Congress.

Law 18,933 seeks to make the contractual relationship more just, and establishes new conditions for conclusion of contracts. These modifications are related to the content of the contracts and their duration.

According to the new law, the contracts concluded between subscribers and the ISAPREs must specify the following areas at a minimum:

- contracted services and benefits;
- the percentage of coverage, and the values on which this percentage will be applied;
- the maximum amount of benefits;
- the period of reduction;

- exclusions, if any;
- the way in which the services and benefits can be modified through a variation in the minimum legal premium, derived from an increase or decrease in income; and
- the way in which premiums, services or benefits can be modified through the incorporation or withdrawal of legal benefits from the family group (increase in legal beneficiaries and the way in which the legal premium is determined).

These areas were already covered in instructions issued by FONASA (the controlling entity before the creation of the Board of ISAPREs), and have now been incorporated into the legislation.

Another area is related to the duration of the contracts. In the previous legislation, contracts had a duration of one year, and could be renewed or not pursuant to mutual agreement between the ISAPRE and the subscriber. For his part the subscriber could withdraw from the contract and change to another ISAPRE whenever it was convenient to him. Meanwhile, the ISAPRE could change the conditions of the contract, or withdraw from it at the end of a year without communicating the cause of this decision.

With law 18,933, contracts are changed to have an indefinite duration, and only the general conditions may be revised by the ISAPRE once per year. The health status of the subscriber is not considered in this revision. For his part, the subscriber can only withdraw from the contract one time per year, and must provide at least 30 days notice.

The greater stability of the subscribers and their contracts with the ISAPREs is balanced out in the new legislation by the reduced mobility of the subscribers (they can only change one time per year), and the monopoly power of the ISAPREs over the subscribers is increased at this time. On the other hand, the growth in the number of subscribers to the system should decline in the coming years. The principal source of growth is in new subscribers who have lower incomes, who are currently enrolled in the State system, and who are covered through health plans with lower costs and less freedom of choice. The experiences of the Compensación and Cruz Blanca ISAPREs could be indicative in this regard, which established health care agreements without free choice with the hospitals and principal schools of medicine in Chile, the University of Chile and the Catholic University.

In the case of collective contracts and the closed ISAPREs, in which permanent status within a business is a determinative condition of the contract between the ISAPRE and the subscriber, the law maintains the possibility of imposing an early termination of the contract if the worker should terminate his status as an employee of the business in question. In cases where the termination of the work relationship is a result of the worker receiving a pension, this condition is not applicable, and the ISAPREs must continue their contracts with such individuals.

Before the promulgation of law 18,933, retirees were, for all practical purposes, outside of the ISAPRE system, and, except in the cases of retirees enrolled in Banmédica and the ISAPRE of the Banco del Estado, these kinds of subscribers practically did not exist in the system. The new law makes it difficult for the ISAPREs to terminate their contracts with subscribers for reasons of age. This measure favors the current subscribers to the system because their permanent status is guaranteed, as long as they continue to pay the premium that the ISAPRE decides to charge all of its retirees. In this way the number of retirees will grow gradually in coming years, and should not experience large increases. This is due principally to the fact that the ISAPREs have not demonstrated any special interest. Thus in March 1992, the number of retirees in the system was still small, reaching 41,812 subscribers, which represented only 1.56 percent of the total number of subscribers.

As was explained in the previous point, the ISAPREs cannot terminate a contract with a subscriber when the latter receives a pension. In these circumstances the ISAPRE must continue the contract. However, the new legislation does not restrict a differentiation of the premiums that can be charged relative to the age of the beneficiary, so that the ISAPREs can protect themselves against increases in costs that are the result of age.

In general, pensioners have lower disposable income than active subscribers, so that their insurance premiums could be reduced, although at the same time the charges resulting from these subscribers would be reduced at the same time. On the other hand, the medical costs could increase. The alternative for both parties would be the conclusion of a new contract adjusted to the new income and expenditure conditions of the subscribers.

As is well known, the greatest health costs are associated with old age, and result from the certainty that all people who reach this age will incur them, so that it appears reasonable to establish savings mechanisms during youth, during which medical costs will be less. One suggestion to improve the operation of the system is that these savings be mandatory (with any additional savings being voluntary), and that they should finance the majority of health costs in old age. This provision could be managed by the administrators of pension funds, in individual accounts, which would be utilized to supplement the health care premiums for the elderly. This proposal was contained in the new reforms to the ISAPRE legislation that are currently in process; it was discarded, and is no longer contained in the bill being debated by the Congress.

3.2.2 Regulatory Bodies (Board of ISAPREs)

With the establishment of the Board of ISAPREs, the new law concerning ISAPREs became effective. This regulating body replaced the FONASA as the controller of the operations of these institutions, thereby resolving a conflict that some of them had with the control function of the FONASA, which at the same time was both a judge and a party to the conflicts between the subscribers and their ISAPREs, since theoretically it was competing for subscribers with the ISAPREs. In practice, the products offered by the ISAPREs have turned out to be more attractive than those offered by FONASA for the large majority of individuals who can afford to pay for them.

The Board is an independent body, dedicated exclusively to the oversight of the ISAPREs, and is lead by a president (superintendent), an official who is responsible exclusively to the President of the Republic. In its organic structure it contains an inspector general, who is responsible for monitoring the compliance of the ISAPREs with applicable norms. There are also three departments:

- Institutional Control, which monitors compliance with the instructions issued by the Board;
- Studies, which prepares the monitoring plans and proposes the instructions that are issued to the ISAPREs; and
- Finance and Administration, which is entrusted with the administrative and financial management of the entity, and maintains the registry of ISAPREs.

As the successor to the FONASA, the Board assumes responsibility for a series of functions carried out by the former institution, such as the registration of the institutions, and monitoring to ensure that the ISAPREs carry out the mission and coverages required by the law. It is also authorized to impose fines, which can rise to 100 UF and the cancellation of a license when a violation expressly calls for such a sanction according to the law.

The recently created Board adds a series of important functions to those carried out by its legal predecessor (FONASA). These powers are the following:

- Administrative interpretation of matters within its purview, including the laws, regulations and other norms that are applicable to the ISAPREs;
- Arbitration;
- Issue instructions of a general nature that provide for greater clarity to contractual stipulations;
- Publish informative reports on the system; and
- Issue instructions to the ISAPREs for the latter to publish in a timely manner historical information on their legal, economic and financial situation that may be of interest to the public.

3.2.3 Proposed Applicable Legislation

The Congress is currently discussing a proposed bill that would modify the current regulations governing the ISAPREs. The stated objective of this bill is to improve this ISAPRE system by overcoming current limitations and guaranteeing the development of the system over the long term. In this context, the bill attempts to solve certain problems that have not yet been confronted in a satisfactory manner, such as the transparency of the market. In addition, the bill

seeks to make more equitable the relationships between the ISAPREs and their subscribers.

With respect to the transparency of the market, the bill seeks to generate the legal and contractual mechanisms that would provide the user with the information necessary to make a proper selection of an appropriate health care plan and ISAPRE, which would occasion greater competition.

With respect to more equitable relationships between the ISAPREs and their subscribers, the bill seeks to improve the problem resolution mechanisms and safeguard the solvency and viability of the ISAPREs, in order to ensure the fulfillment of the obligations of both parties.

Thirdly, the bill seeks to broaden the health care coverage of the ISAPRE system, by decreasing and regulating the use of restrictions and exclusions on benefits, and the limitations on coverage of both declared and undeclared preexisting diseases.

3.3 ANALYSIS OF THE ISAPRE MARKET

3.3.1 General Evolution

The open ISAPREs have developed in a continually expanding market, where cost reductions and an increase in services provided have been ongoing forces toward the achievement of new equilibria. The annual growth of the sector has been greater than 20 percent for all years that the system has existed, and was 24.31 percent in 1989, 22.29 percent in 1990 and 24.04 percent in 1991, and reaching 1,070,813 subscribers in December 1991. In recent years this growth has been based on the growth in employment (on the order of 5 percent annually) and on the enrollment of individuals with lower and lower incomes. The latter development took place through so-called collective plans, and more recently, through certain more economical plans that did not include free choice.

The growth in subscribers will not be able to continue at these rates for much longer because the current growth in income and employment do not justify these rates. On the other hand, the insurance premiums of new workers with much lower incomes will have some difficulty financing the technical costs of the majority of the health plans of the ISAPREs currently operating, so that this route toward development will not be easy. This situation could bring important consequences for the characteristics of the ISAPRE market, which could become somewhat more hostile for new competitors, and even more so if current contractual conditions are considered, which limit changes among institutions by subscribers to one time per year.

From an analysis of the behavior of the open ISAPRE market we can deduce certain problems that the system as a whole presents, and which may constitute barriers to the development of this system. The plans of the ISAPREs in general have good coverages for the payment of physician consultations, and poor coverage for the provision of higher value services which are subject to caps. Thus the

so-called catastrophic heath problems do not receive adequate coverage, which essentially negates the concept of insurance. Therefore the ISAPREs should cover those high cost unexpected events against which individuals need to be insured. By covering only low cost services with a practically certain incidence, the ISAPREs are unnecessarily increasing the value of insurance premiums, without properly protecting the insured. Another concept that would be useful would be deductibles, through which the ISAPREs could become responsible for all services provided above a certain value. In this way, people would remain protected against high costs, which is why they really need insurance. This problem has not been confronted sufficiently, and is without doubt a problem that must be solved as soon as possible.

3.3.2 Evolution of the Market

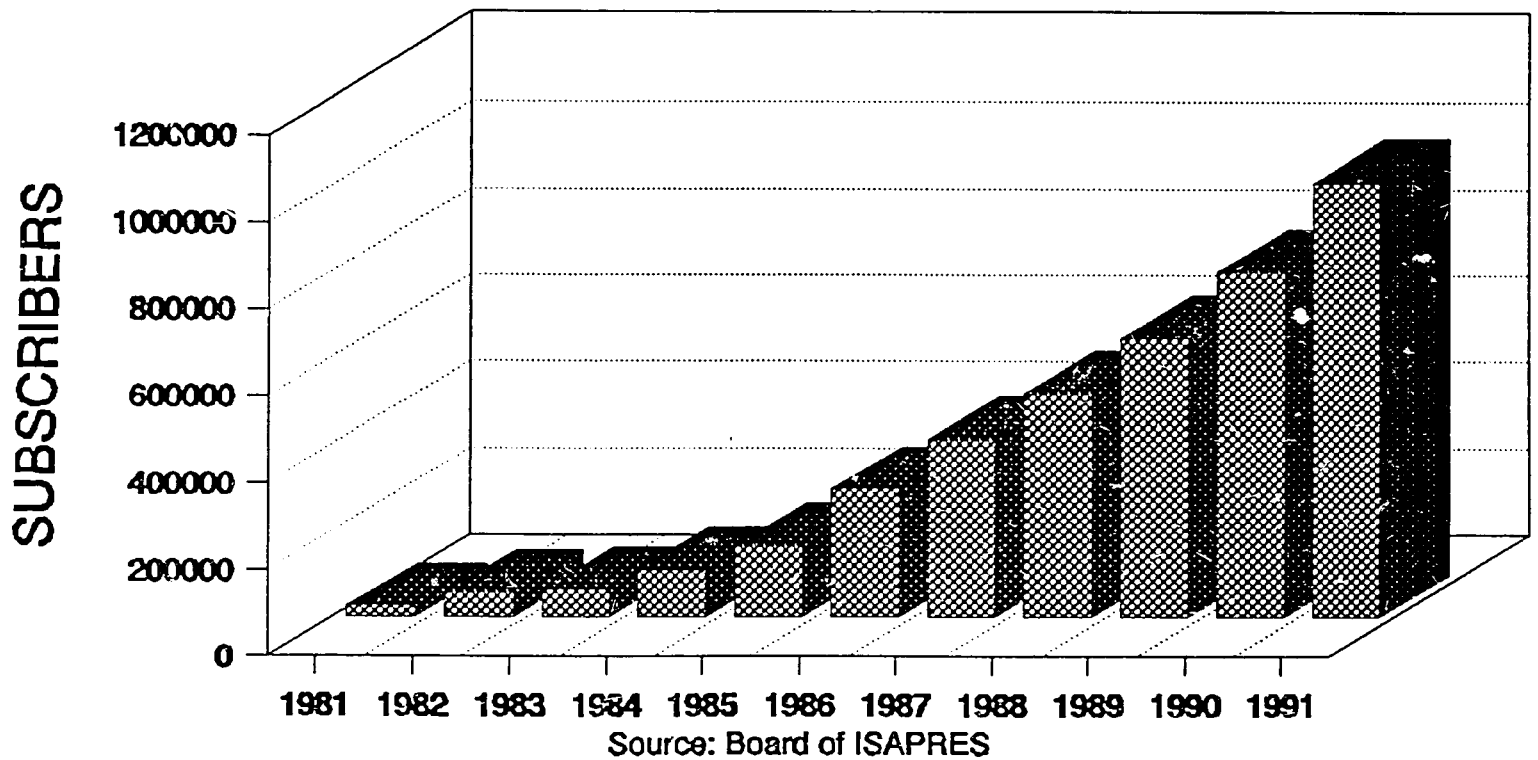
The following presents a series of graphs that represent the evolution of the ISAPRE system since its creation. *Graph 3-1* shows the evolution of the number of subscribers of the so-called open ISAPREs, which reached 1,004,611 subscribers as of December 31, 1991. *Graph 3-2* shows the same variable for the closed ISAPREs, which at 66,202 subscribers represent some 6.2 percent of the market of insureds in this system.

Graphs 3-3 and 3-4 show the evolution of the number of ISAPRE beneficiaries between 1981 and 1991 for open and closed ISAPREs respectively. The number of beneficiaries as of December 31, 1991 was 2,352,804 for the open ISAPREs, and 213,340 for the closed ISAPREs.

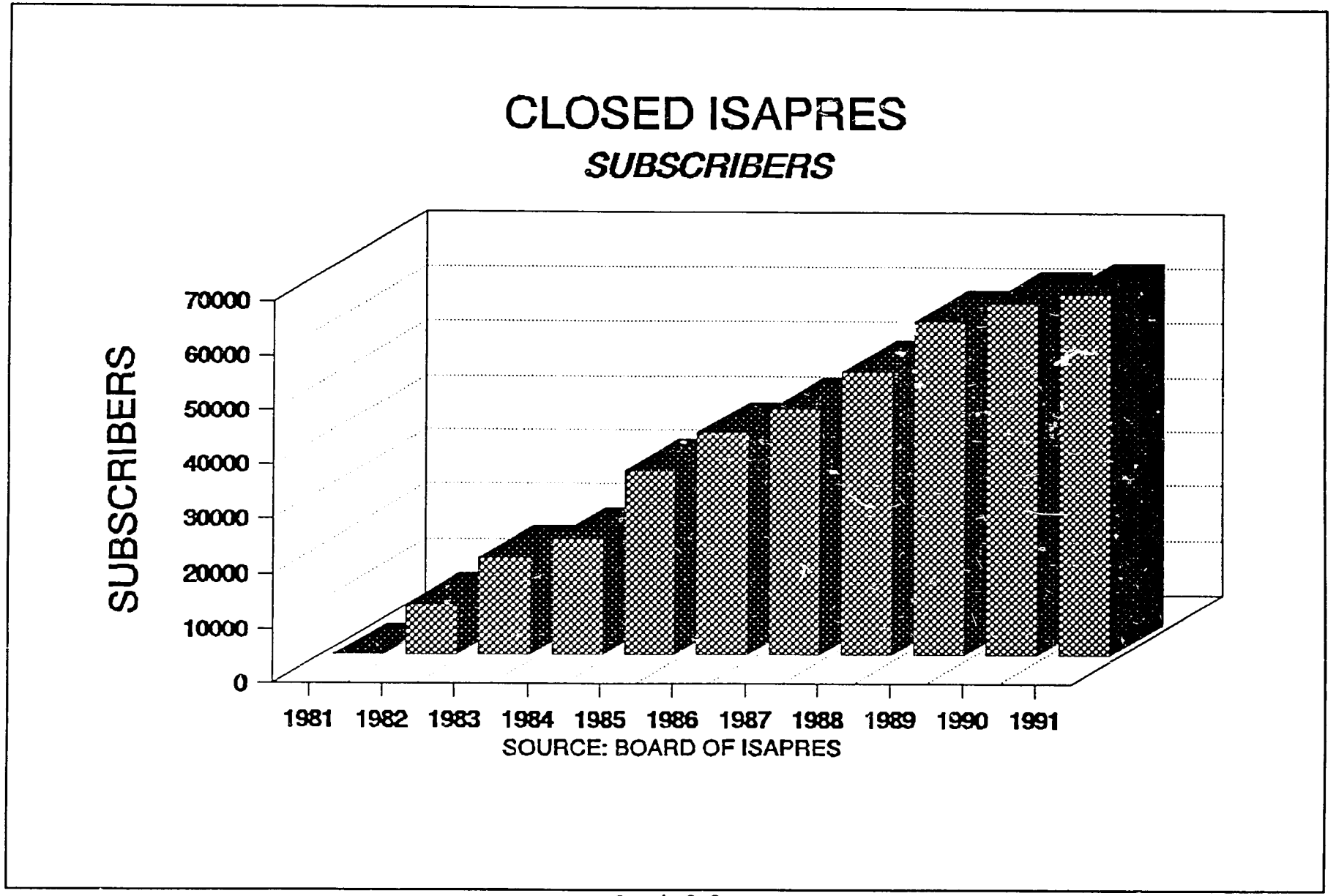
Graph 3-5 shows the evolution of the number of charges per subscriber both for the open and closed ISAPREs. In the case of the closed ISAPREs, this figure declined during the development of the system asymptotically approaching 2.2 charges per subscriber. The open ISAPREs had a lower figure than the closed ISAPREs, reaching 1.6 charges per subscriber in 1986, and later declining to 1.4 visits over the last two years. To both figures the subscriber needs to be added, so that the average beneficiaries per closed ISAPRE (size of the family group) totals 3.2, while for the open ISAPREs the figure reaches 2.4. This is not surprising given that the open ISAPRE have been oriented to higher income individuals with smaller family groups, as well as to single individuals.

Graph 3-6 shows the rates of growth of the system since 1982, both for open ISAPREs and for closed ISAPREs. The greatest dynamism of the system is strongly concentrated in the open ISAPREs, which have grown at slightly higher rates than the market average. Their participation grew from 78 percent in 1984 to 94 percent as of December 1991.

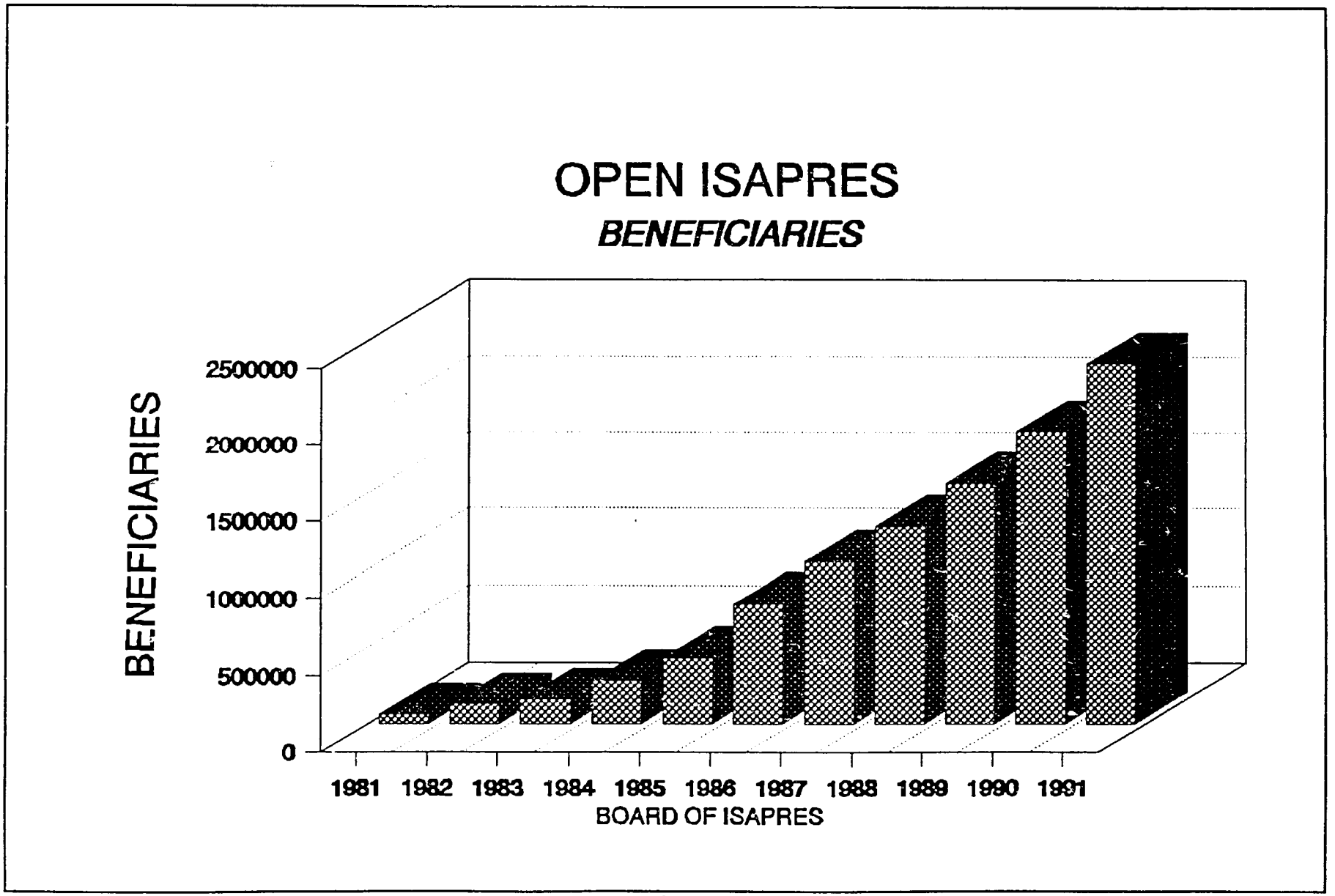
Graph 3-7 shows the number of institutions, which grew from five in 1981 (all open) to 34 in 1991 (14 closed and 20 open). *Graph 3-8* shows the market share of the six largest ISAPREs, which remains at approximately 77 percent of the total. As of December 1991, there were six ISAPREs with more than 70,000 subscribers.


OPEN ISAPRES
SUBSCRIBERS
SUBSCRIBERS
1200000
1000000
800000
600000
400000
200000
0
1981
1982
1983
1984
1985
1986
1987
1988
1989
1990
1991
Source: Board of ISAPRES

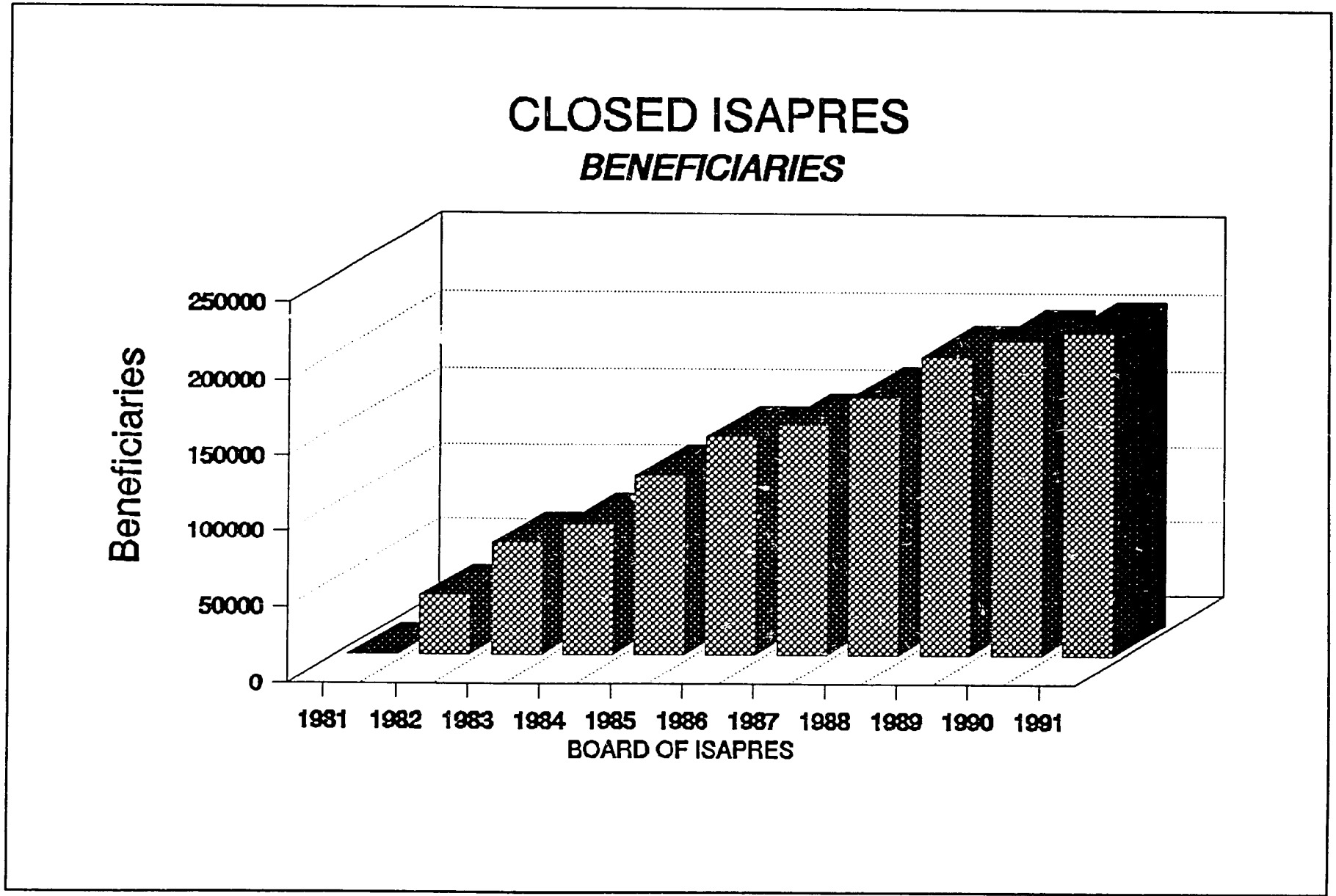
Graph 3-1


CLOSED ISAPRES
SUBSCRIBERS
SUBSCRIBERS
70000
60000
50000
40000
30000
20000
10000
0
1981
1982
1983
1984
1985
1986
1987
1988
1989
1990
1991
SOURCE: BOARD OF ISAPRES

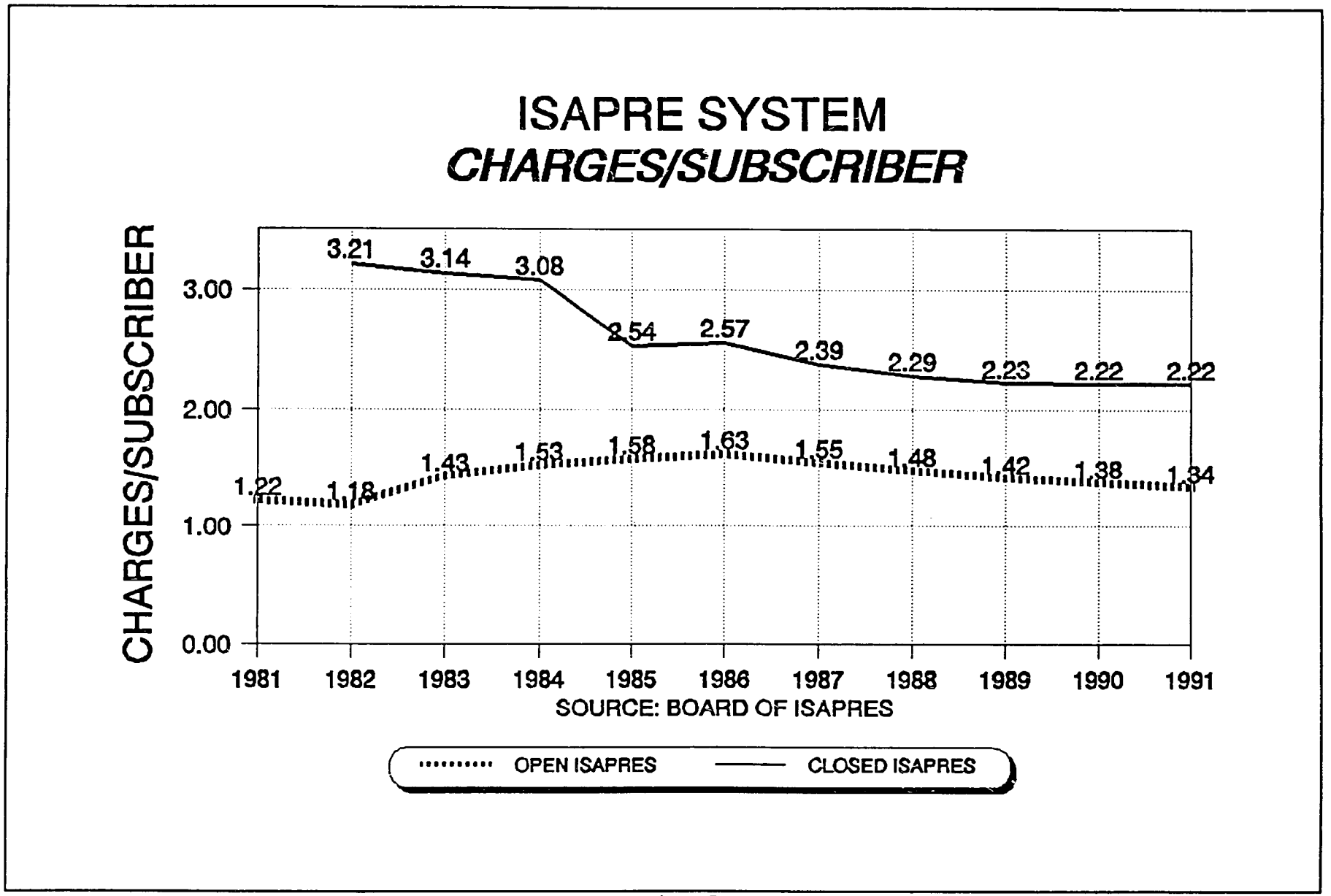
Graph 3-2


OPEN ISAPRES
BENEFICIARIES
BENEFICIARIES
2500000
2000000
1500000
1000000
500000
0
1981
1982
1983
1984
1985
1986
1987
1988
1989
1990
1991
BOARD OF ISAPRES

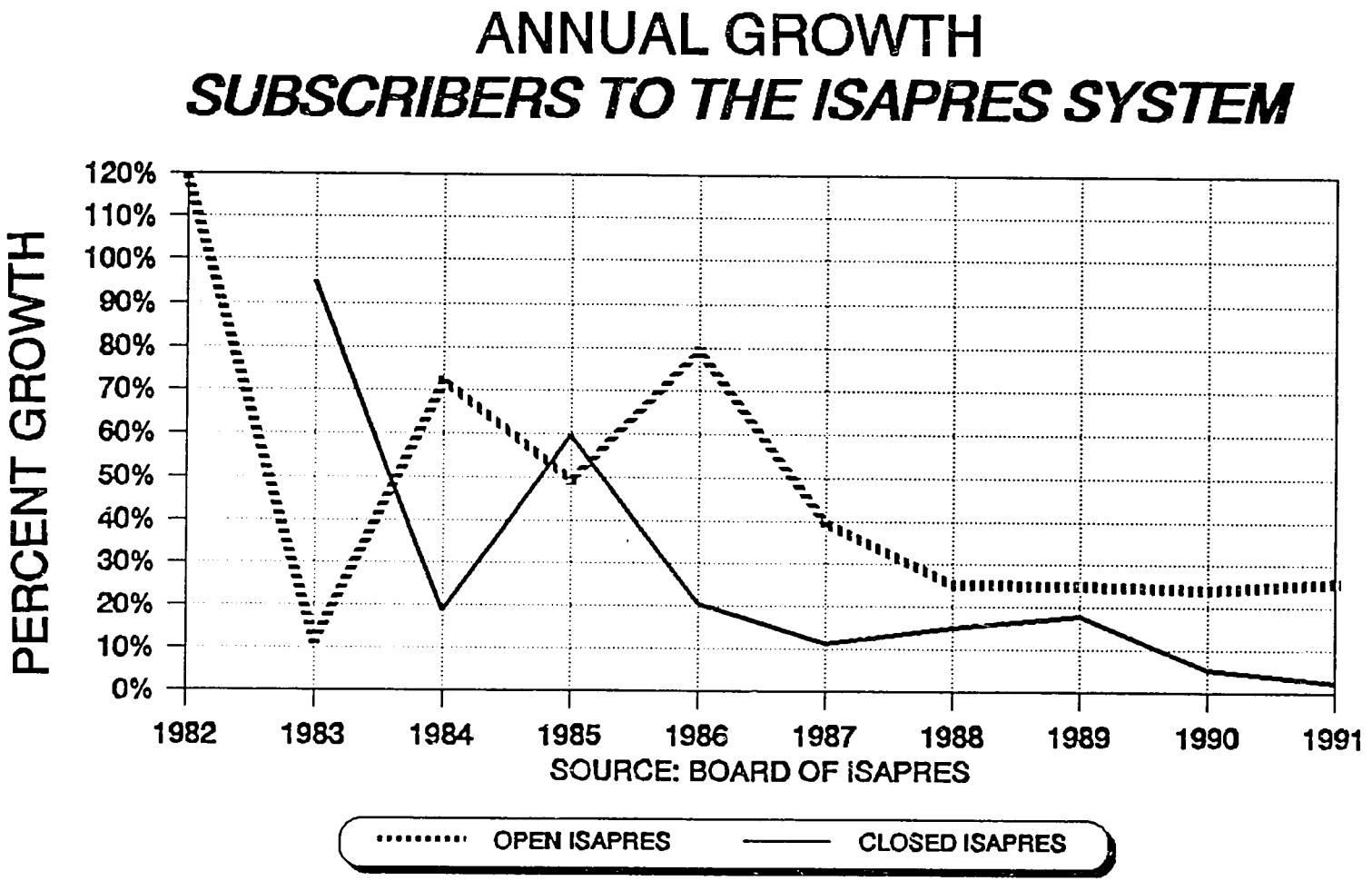
Graph 3-3


CLOSED ISAPRES
BENEFICIARIES
Beneficiaries
250000
200000
150000
100000
50000
0
1981
1982
1983
1984
1985
1986
1987
1988
1989
1990
1991
BOARD OF ISAPRES

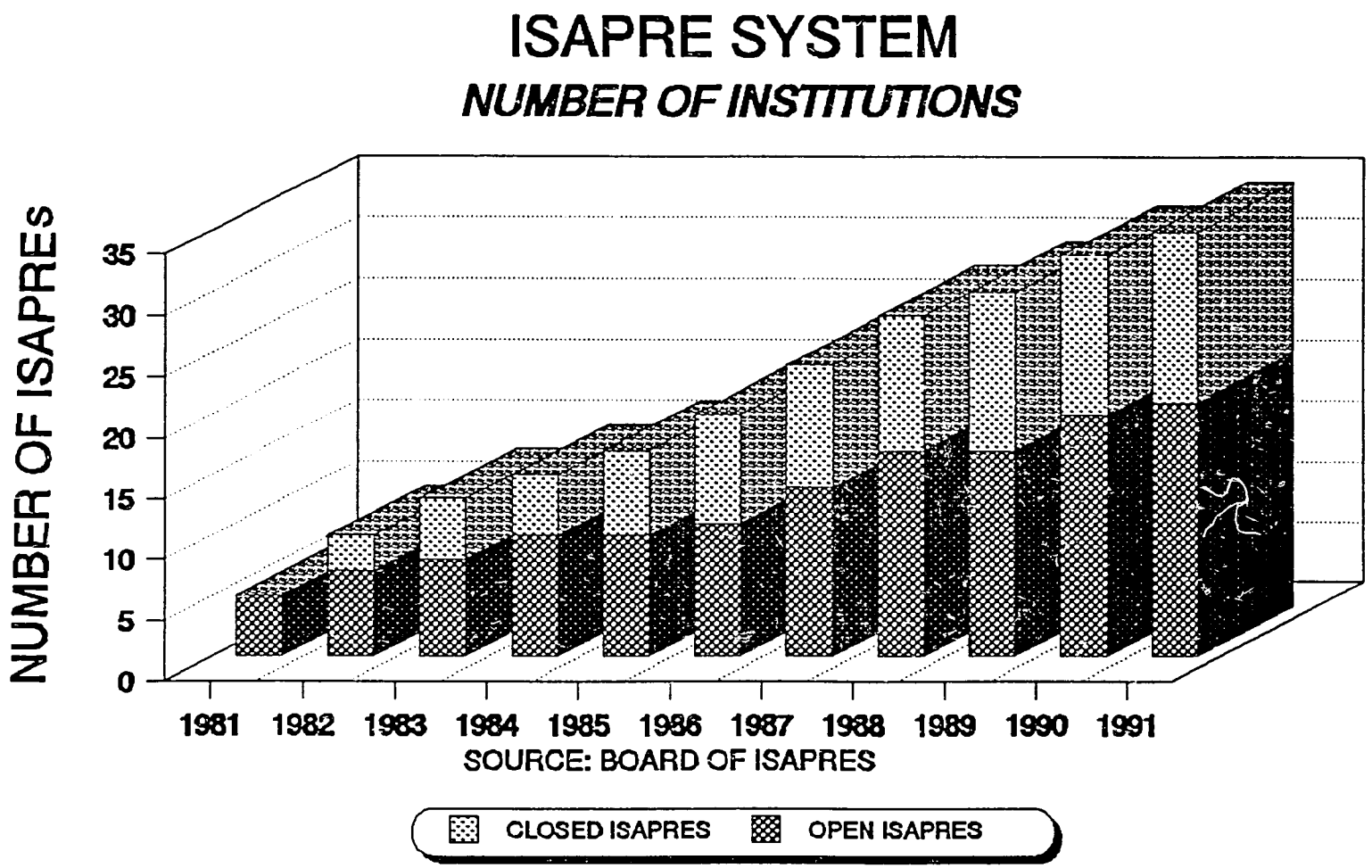
Graph 3-4


ISAPRE SYSTEM
CHARGES/SUBSCRIBER
CHARGES/SUBSCRIBER
3.00
2.00
1.00
0.00
3.21
3.14
3.08
2.54
2.57
2.39
2.29
2.23
2.22
2.22
1.22
1.18
1.43
1.53
1.58
1.63
1.55
1.48
1.42
1.38
1.34
1981
1982
1983
1984
1985
1986
1987
1988
1989
1990
1991
SOURCE: BOARD OF ISAPRES
OPEN ISAPRES
CLOSED ISAPRES

Graph 3-5


ANNUAL GROWTH
SUBSCRIBERS TO THE ISAPRES SYSTEM
PERCENT GROWTH
120%
110%
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
1982
1983
1984
1985
1986
1987
1988
1989
1990
1991
SOURCE: BOARD OF ISAPRES
OPEN ISAPRES
CLOSED ISAPRES

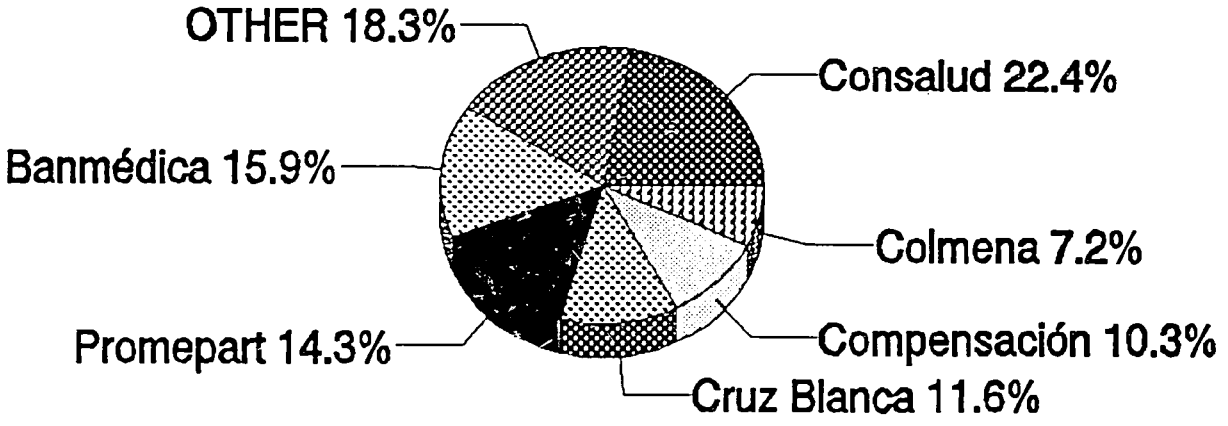
Graph 3-6


ISAPRE SYSTEM
NUMBER OF INSTITUTIONS
NUMBER OF ISAPREs
35
30
25
20
15
10
5
0
1981
1982
1983
1984
1985
1986
1987
1988
1989
1990
1991
SOURCE: BOARD OF ISAPRES
CLOSED ISAPRES
OPEN ISAPRES

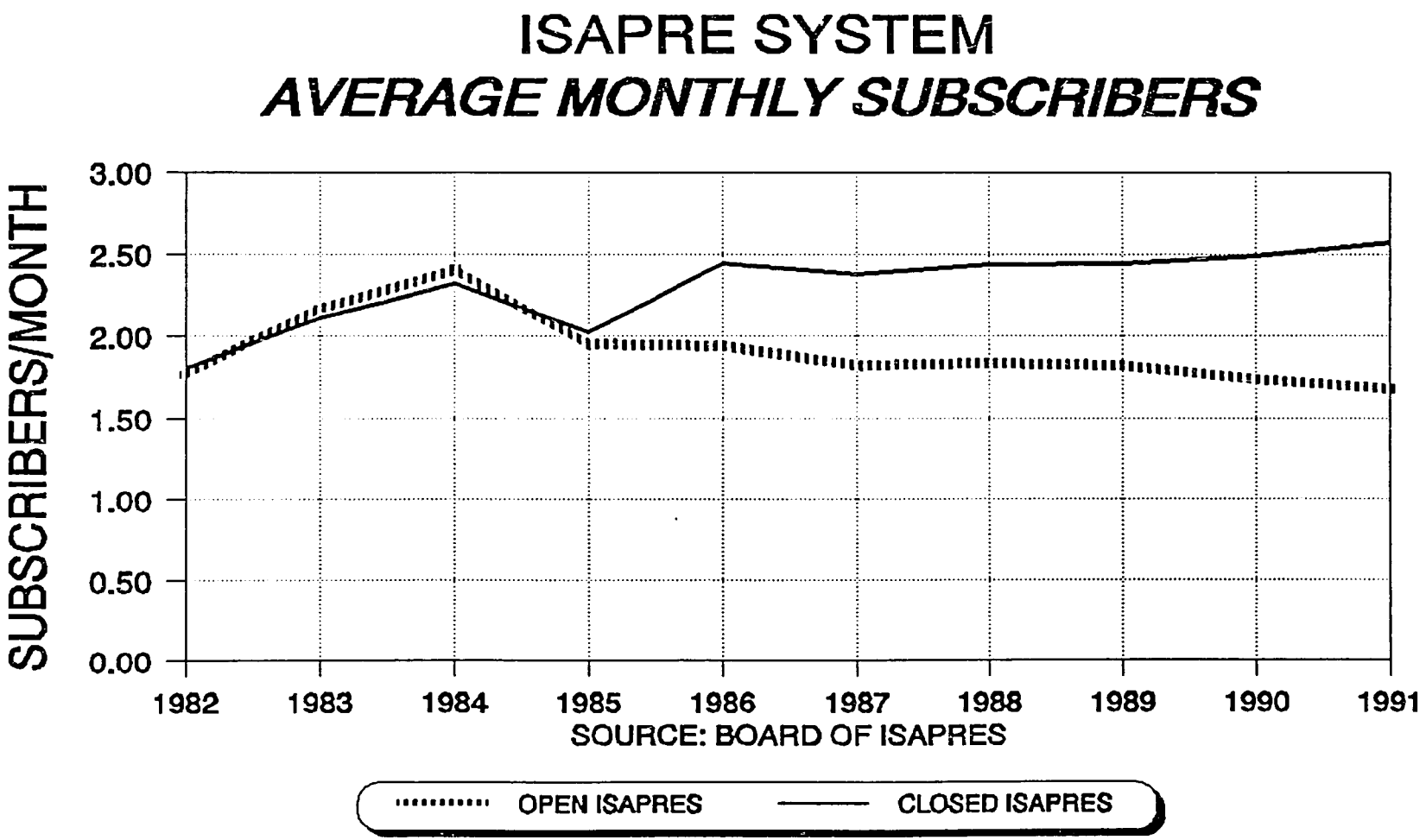
Graph 3-7

MARKET SHARE (SUBSCRIBERS)

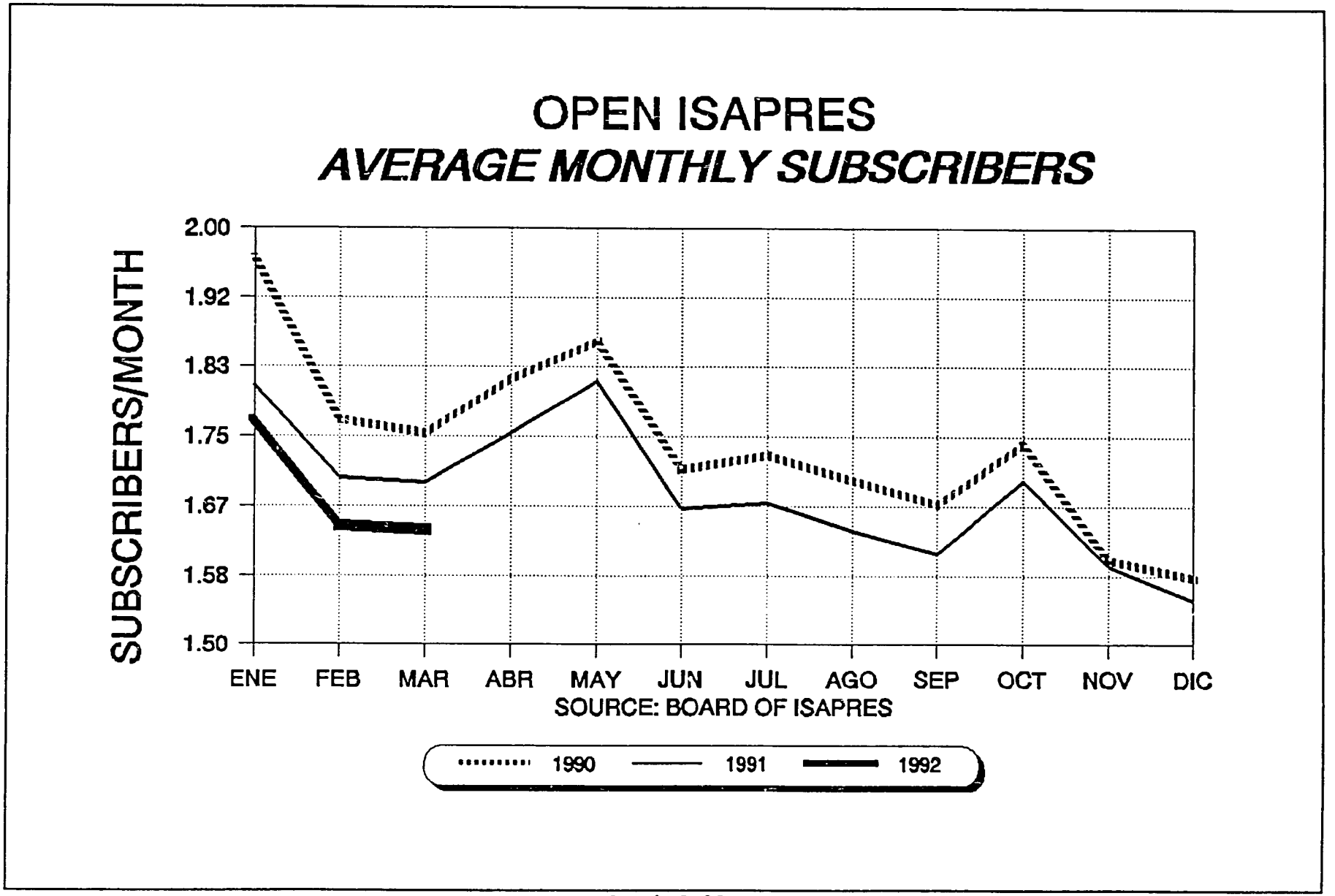
OPEN ISAPRES - DECEMBER 1991



Graph 3-8


ISAPRE SYSTEM
AVERAGE MONTHLY SUBSCRIBERS
SUBSCRIBERS/MONTH
3.00
2.50
2.00
1.50
1.00
0.50
0.00
1982
1983
1984
1985
1986
1987
1988
1989
1990
1991
SOURCE: BOARD OF ISAPRES
OPEN ISAPRES
CLOSED ISAPRES

Graph 3-9


OPEN ISAPRES
AVERAGE MONTHLY SUBSCRIBERS
SUBSCRIBERS/MONTH
2.00
1.92
1.83
1.75
1.67
1.58
1.50
ENE
FEB
MAR
ABR
MAY
JUN
JUL
AGO
SEP
OCT
NOV
DIC
SOURCE: BOARD OF ISAPRES
1990
1991
1992

Graph 3-10

3.3.3 Evolution of Prices

The following graphs are intended to show the principal trends in the evolution of the prices of services provided by the ISAPREs.

Graphs 3-9 and 3-10 show the evolution of the average monthly premiums expressed in UF. *Graph 3-9* shows the average annual value for this variable for both the open ISAPREs and the closed ISAPREs. The calculation was performed by dividing the annual premiums for the open ISAPREs by the average UF for each year and average number of subscribers for this period. The source of this data is bulletins of the Board of ISAPREs. As can be seen in the graph, beginning in 1984 there has been a declining trend that in 1991 reached 1.7 UF per subscriber.

Graph 3-10 presents the evolution of the same variable on a monthly basis for the open ISAPREs, from January 1990 to March 1992. This graph shows the same trend as the previous graph. The level reached in March 1992 was 1.64 UF per subscriber per month.

3.3.4 Statistics on the Demand for Services in the ISAPREs

Other historical data that are fundamental for the evaluation of the services provided by the ISAPREs are statistics on services provided by these institutions. The following is a synthesis of statistics that represent the principal health services. These include: physician consultations (*Exhibit 3-1* and *Graph 3-11*), laboratory examinations (*Exhibit 3-2* and *Graph 3-12*), radiology examinations (*Exhibit 3-4* and *Graph 3-14*), clinical and diagnostic support procedures (*Exhibit 3-5* and *Graph 3-15*), and surgical interventions (*Exhibit 3-6* and *Graph 3-16*). These statistics cover the period 1985 to 1991, except for the last two charts where the figures are only from 1988.

These figures have been presented for both the open ISAPREs and the closed ISAPREs because the results for these subsystems are clearly different from each other. This can be explained in general terms by the large differences in orientation between these two types of ISAPREs.

The closed ISAPREs are, in general, owned by the same businesses in which their subscribers work, because the reason for their existence is to provide health care for their subscriber-workers, and not a new business for the shareholders of these firms. Historically these institutions were born out of personnel departments that already administered the resources for health contributed by the companies, but which made poor use of the insurance premiums of their employees. The closed ISAPREs thus were formed in order to put these insurance premiums to better use. Thus these businesses in general do not have the mechanisms in their structure to control the excessive use of services by their subscribers. On the other hand, the closed ISAPREs do not discriminate on the basis of the health status of their employees, so that they enroll people with higher health care costs who the open ISAPREs may reject. In practice the levels of service provided by the closed ISAPREs are much higher than the levels provided by the open ISAPREs, a trend that has continued over time.

In the case of physician consultations (*Exhibit 3-1* and *Graph 3-11*), this situation is reflected in the fact that the closed ISAPREs have copayment levels by their subscribers that are less than those for the open ISAPREs, which results in less disincentives for the use of their services. In practice, the open ISAPREs have maintained an average service level of between 3.5 and 4.0 services per beneficiary per year, with a recent trend toward 3.5. Meanwhile the closed ISAPREs have moved in the direction of 5 services per beneficiary per year.

With respect to laboratory examinations (*Exhibit 3-2* and *Graph 3-12*), the ISAPREs as a group have experienced a significant increase in their frequency, which for the same reasons noted above for the closed ISAPREs, has been even more pronounced. The open ISAPREs have moved from 2 examinations per beneficiary per year to practically 2.5, which is in contrast to the decrease in consultations. The closed ISAPREs, on the other hand, moved from 3.5 to 4.5 examinations per beneficiary per year. This phenomenon is explained by the fact that the population is becoming more and more informed about the diagnostic possibilities of examinations, and a growing trend among physicians toward their use for this purpose.

The radiology examinations, (*Exhibit 3-3* and *Graph 3-13*) show a trend similar to that for laboratory examinations, with increases for both types of ISAPREs, but markedly increased for the closed ISAPREs.

The trend for hospital bed-days (*Exhibit 3-4* and *Graph 3-14*) is more stable for the open ISAPREs, which are continuing at levels of approximately 350 bed-days per beneficiary per year. The closed ISAPREs more than doubled this figure by reaching approximately 800 bed-days over the past three years. The explanation for this marked difference resides in the fact that some of the larger closed ISAPREs have their own hospitals where the cost can be integrally financed by the ISAPRE. This structure gives the beneficiaries no disincentive to utilize the infrastructure.

With respect to clinical and diagnostic support procedures (*Exhibit 3-5* and *Graph 3-15*) and surgical interventions (*Exhibit 3-6* and *Graph 3-16*), no significant trend can be discerned because of the small number of years for which the information is available (the information reported by the Board of ISAPREs for prior years is presented in a different form, making its comparison impossible). However, there is still a clear trend showing a larger number of service provisions among the closed ISAPREs.

3.3.5 Statistics on the Cost of Services Provided by the ISAPREs

The two exhibits with their respective graphs make it evident that there are certain differences between the performance of the open ISAPREs and the closed ISAPREs, and in the behavior of their subscribers. The medical leave authorized by the closed ISAPREs was between 50 percent and 100 percent of that recorded for the open ISAPREs, which indicates the greater level of control that the latter agencies exercise in order to control their costs and avoid abuses on the part of their clients. Even so, a clear and sustained increase in this

benefit in the case of the open ISAPREs can be seen, although the levels observed in the latter agencies always remain below those of the closed ISAPREs.

A comparison of the administrative costs between the two types of ISAPREs speaks eloquently of the greater efficiency achieved by the institutions that have to operate in a competitive market, as opposed to those which, by their nature, enjoy a captive market

EXHIBIT 3-1
PHYSICIAN CONSULTATIONS
(Physician Consultations per Beneficiary per Year)

YEAR	OPEN ISAPREs	CLOSED ISAPREs
1985	3.61	6.88
1986	3.92	5.69
1987	3.46	5.23
1988	3.97	5.46
1989	3.76	5.23
1990	3.46	4.51
1991	3.40	5.17

EXHIBIT 3-2
LABORATORY EXAMINATIONS
(Laboratory Examinations per Beneficiary per Year)

YEAR	OPEN ISAPREs	CLOSED ISAPRES
1985	1.91	3.62
1986	1.94	3.02
1987	1.79	3.48
1988	1.89	3.43
1989	2.11	3.79
1990	2.38	4.30
1991	2.43	4.59

EXHIBIT 3-3
RADIOLOGY
(Radiology Examinations per Beneficiary per Year)

YEAR	OPEN ISAPREs	CLOSED ISAPREs
1985	0.50	0.83
1986	0.54	0.93
1987	0.60	0.61
1988	0.52	0.73
1989	0.56	0.76
1990	0.56	0.78
1991	0.58	0.87

EXHIBIT 3-4
HOSPITALIZATION
(Hospital Bed-Days per 1,000 Beneficiaries per Year)

YEAR	OPEN ISAPREs	CLOSED ISAPREs
1985	267.20	706.80
1986	378.00	712.00
1987	326.00	718.00
1988	288.80	581.30
1989	392.40	785.70
1990	312.20	809.70
1991	315.80	787.10

EXHIBIT 3-5
CLINICAL AND DIAGNOSTIC SUPPORT PROCEDURES
(Clinical and Diagnostic Support Procedures per 1,000 Beneficiaries per Year)

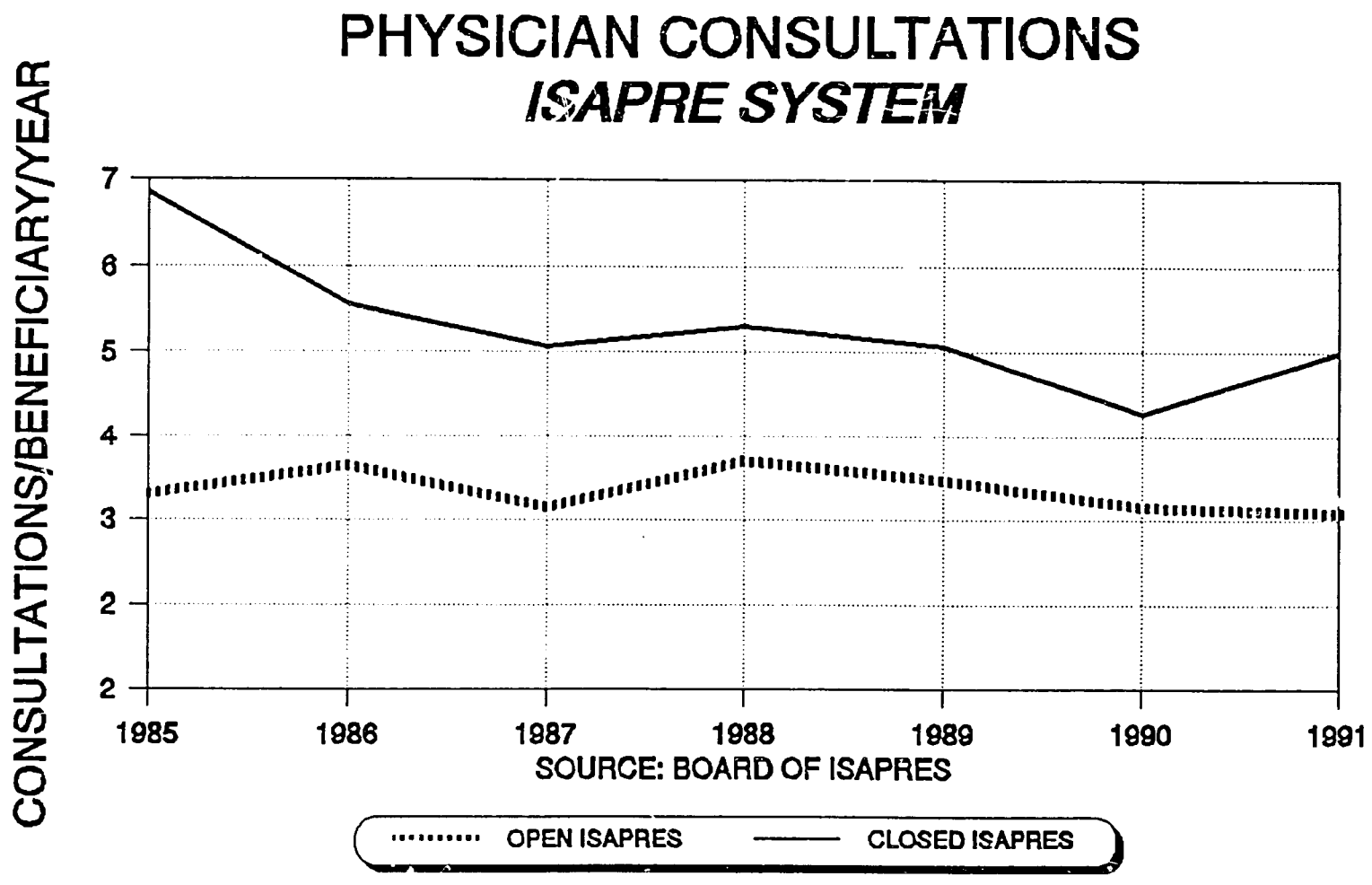
YEAR	OPEN ISAPREs	CLOSED ISAPREs
1988	1,383.00	2,693.00
1989	1,449.50	2,944.10
1990	1,487.50	2,876.00
1991	1,581.10	2,933.60

EXHIBIT 3-6
SURGICAL INTERVENTIONS
(Surgical Interventions per 1,000 Beneficiaries per Year)

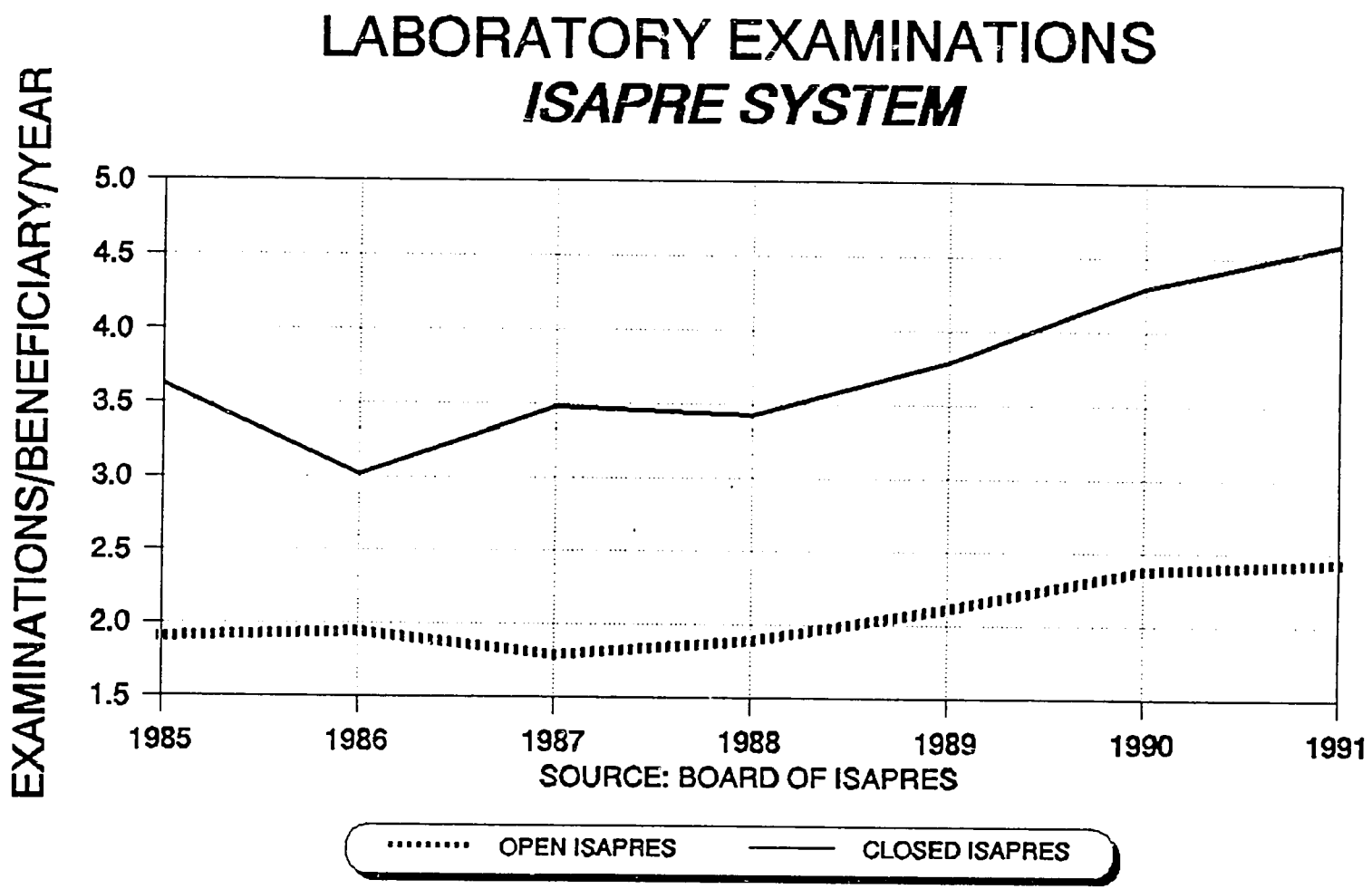
YEAR	OPEN ISAPREs	CLOSED ISAPREs
1988	171.30	134.30
1989	114.80	133.70
1990	79.80	96.50
1991	99.50	146.10

EXHIBIT 3-7 EXPENDITURES ON MEDICAL LEAVE AS A PERCENT OF TAXABLE INCOME		
YEAR	OPEN ISAPREs	CLOSED ISAPREs
1985	0.87%	2.03%
1986	s/i(*)	s/i(*)
1987	1.09%	1.92%
1988	1.15%	2.33%
1989	1.34%	2.14%
1990	1.32%	2.13%
1991	1.38%	2.13%

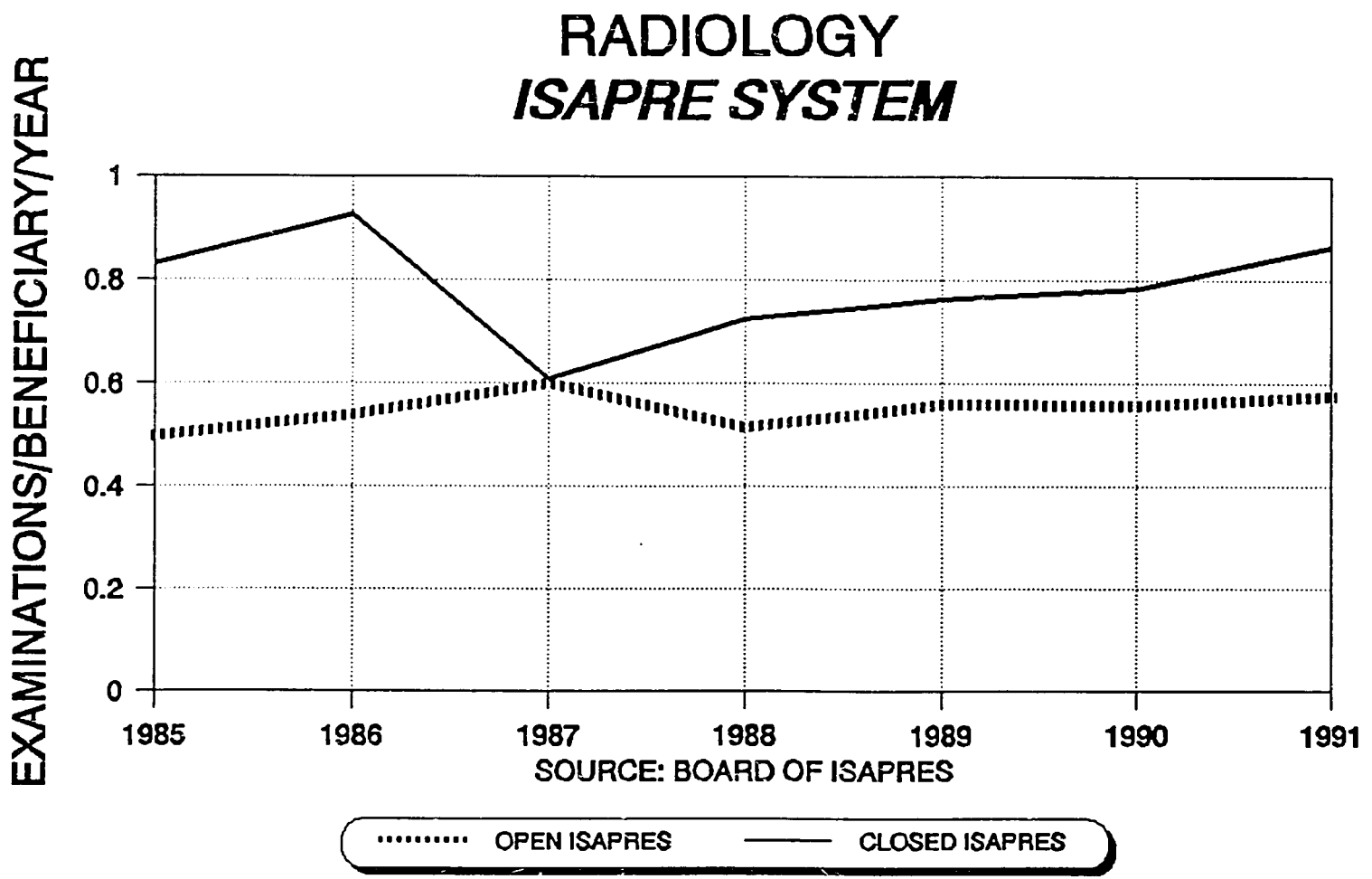
EXHIBIT 3-8 ADMINISTRATIVE COSTS *(UF per Beneficiary per Year)*		
YEAR	OPEN ISAPREs	CLOSED ISAPREs
1985	2.38	1.13
1986	s/i	s/i
1987	1.89	1.80
1988	1.75	2.23
1989	1.79	2.34
1990	1.91	3.05
1991	1.70	62.67


PHYSICIAN CONSULTATIONS
ISAPRE SYSTEM
CONSULTATIONS/BENEFICIARY/YEAR
7
6
5
4
3
2
2
1985
1986
1987
1988
1989
1990
1991
SOURCE: BOARD OF ISAPRES
OPEN ISAPRES
CLOSED ISAPRES

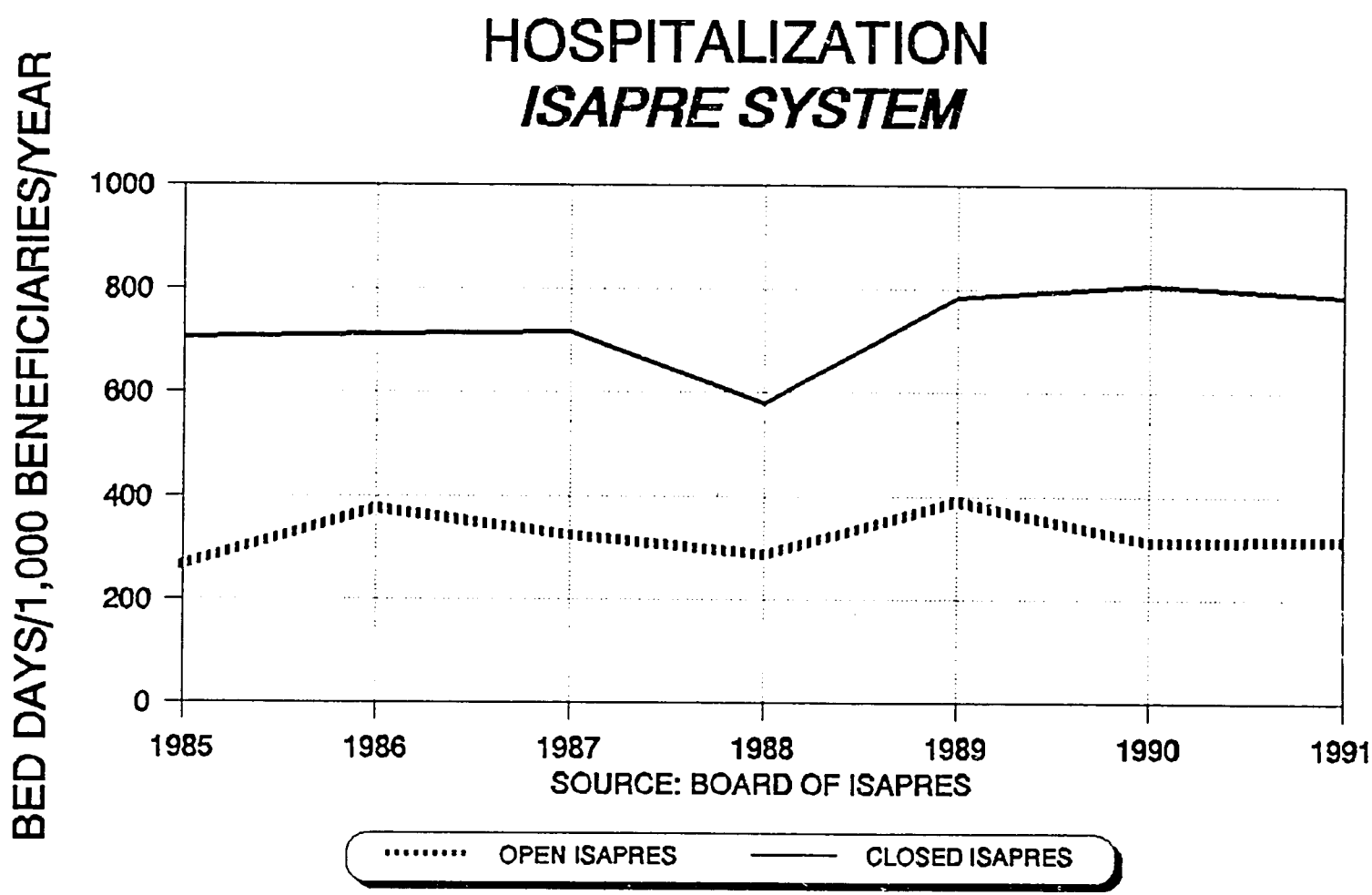
Graph 3-11


LABORATORY EXAMINATIONS
ISAPRE SYSTEM
EXAMINATIONS/BENEFICIARY/YEAR
5.0
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1985
1986
1987
1988
1989
1990
1991
SOURCE: BOARD OF ISAPRES
OPEN ISAPRES
CLOSED ISAPRES

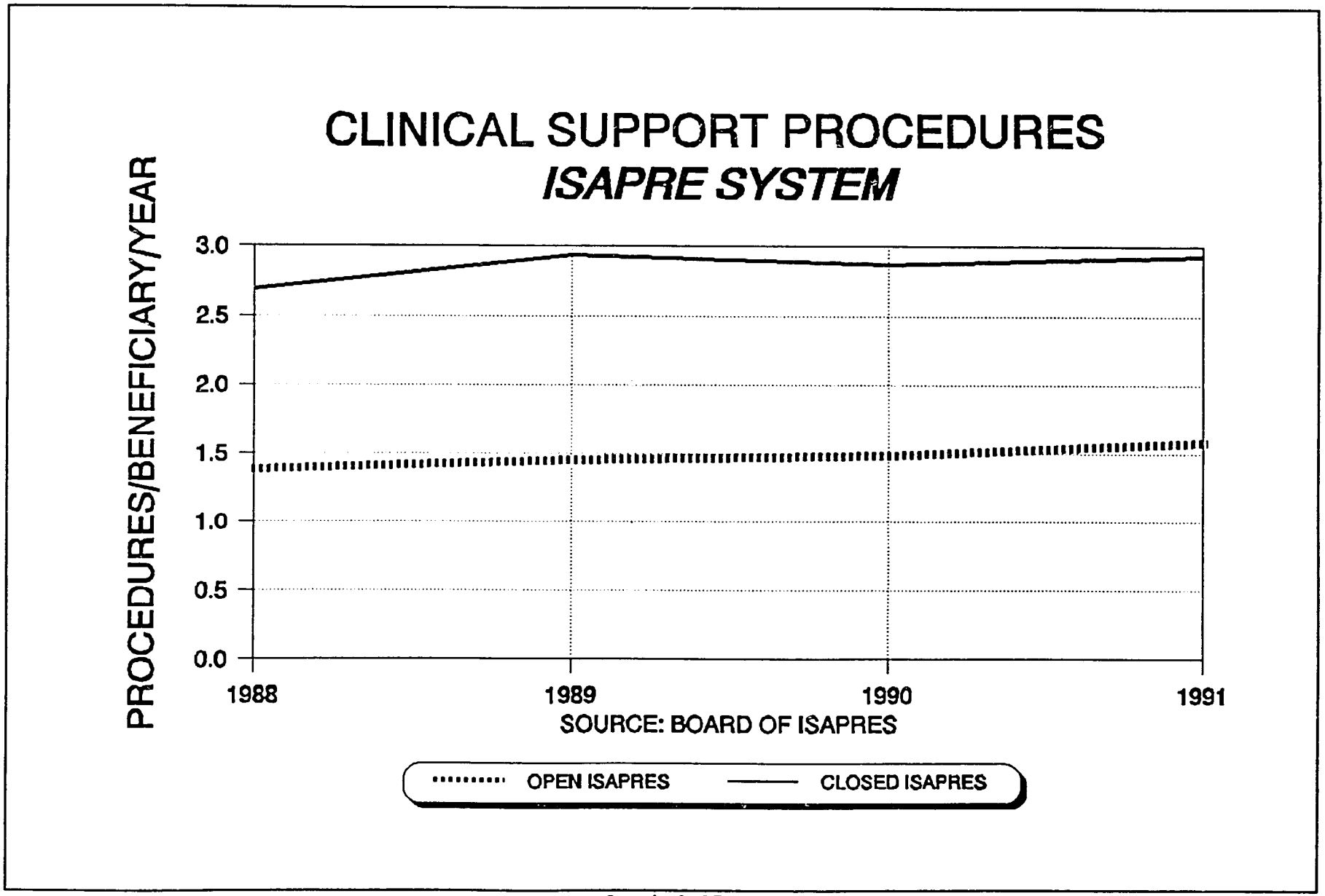
Graph 3-12


RADIOLOGY
ISAPRE SYSTEM
EXAMINATIONS/BENEFICIARY/YEAR
1
0.8
0.6
0.4
0.2
0
1985
1986
1987
1988
1989
1990
1991
SOURCE: BOARD OF ISAPRES
OPEN ISAPRES
CLOSED ISAPRES

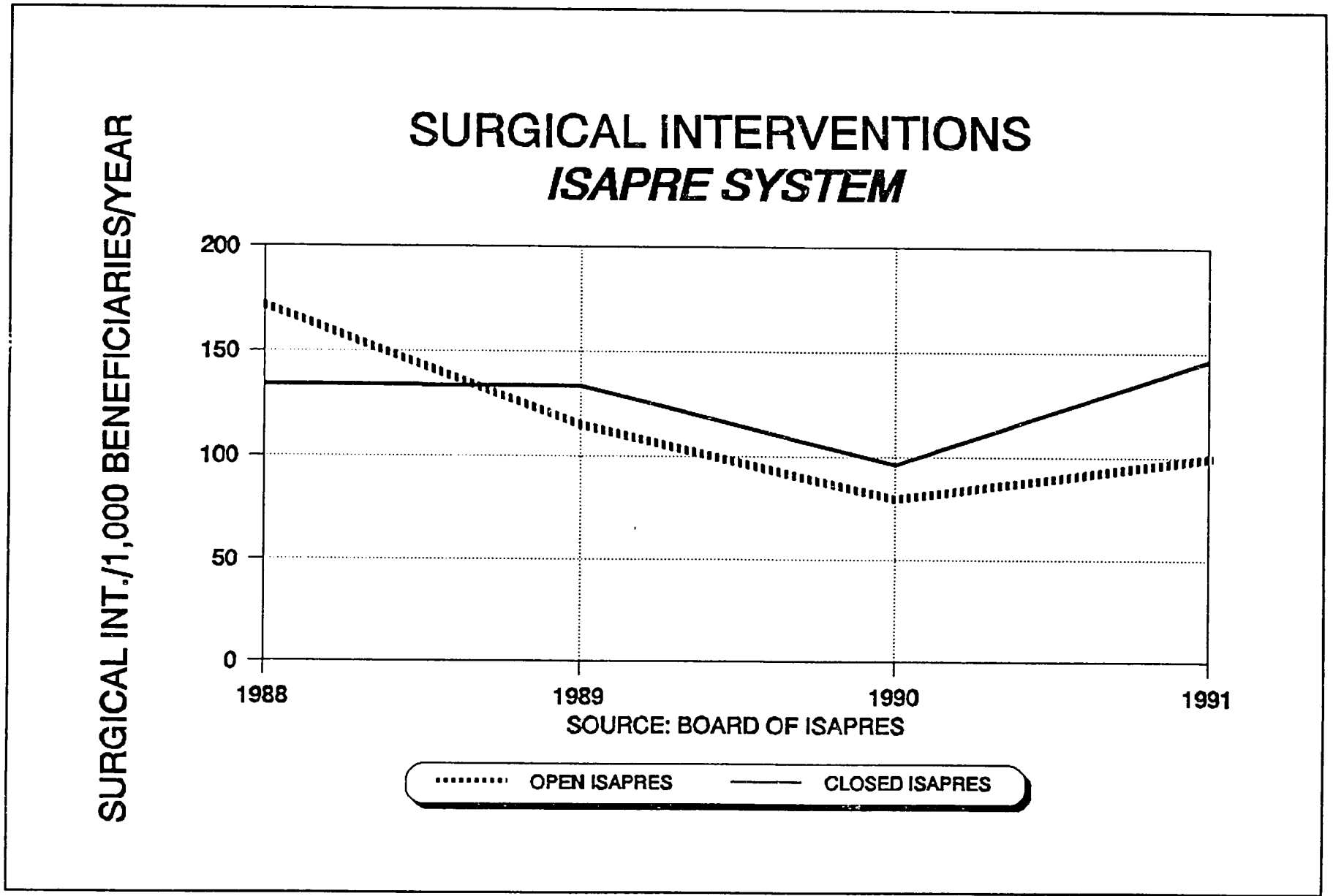
Graph 3-13


HOSPITALIZATION
ISAPRE SYSTEM
BED DAYS/1,000 BENEFICIARIES/YEAR
1000
800
600
400
200
0
1985
1986
1987
1988
1989
1990
1991
SOURCE: BOARD OF ISAPRES
OPEN ISAPRES
CLOSED ISAPRES

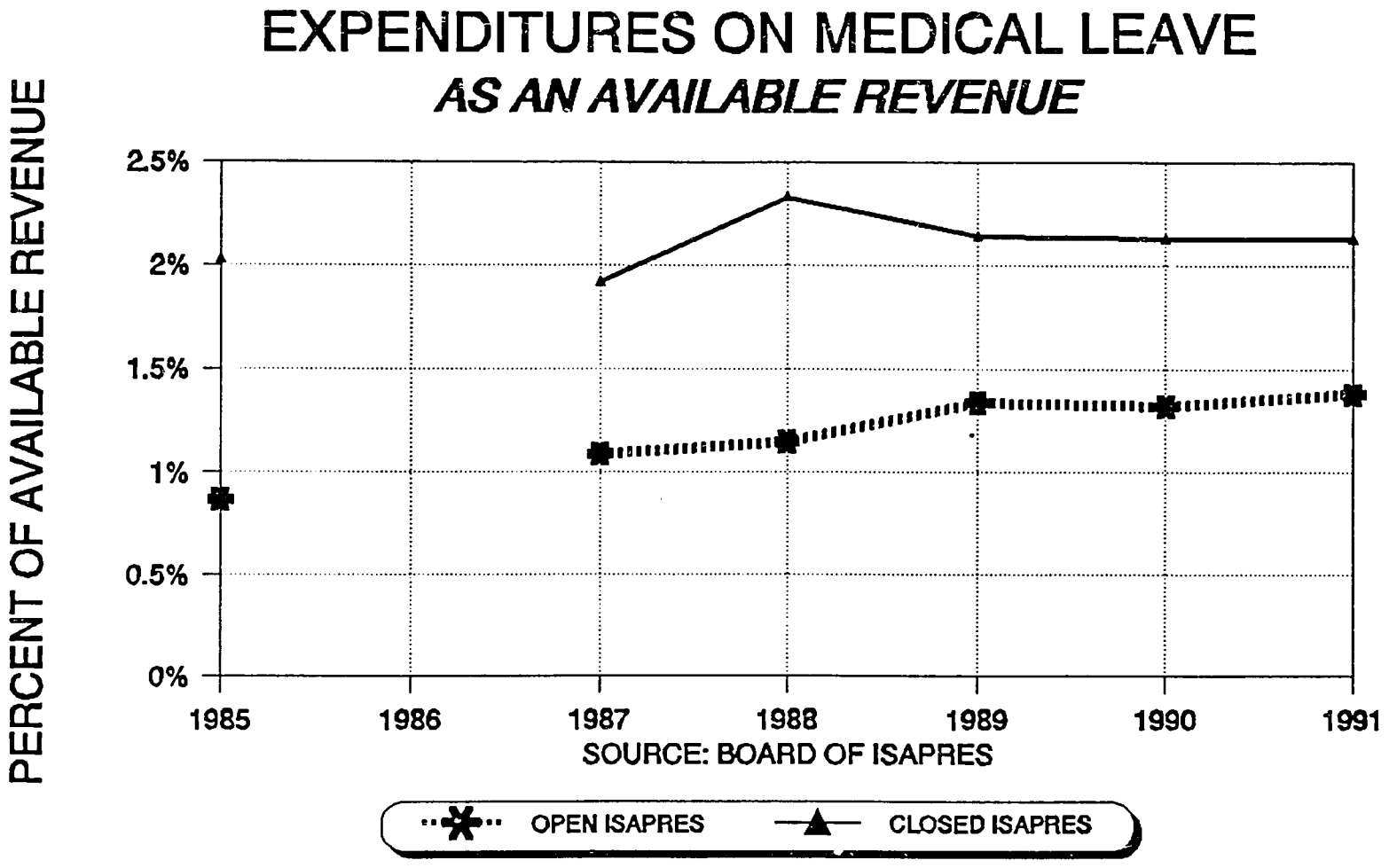
Graph 3-14


CLINICAL SUPPORT PROCEDURES
ISAPRE SYSTEM
PROCEDURES/BENEFICIARY/YEAR
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1988
1989
1990
1991
SOURCE: BOARD OF ISAPRES
OPEN ISAPRES
CLOSED ISAPRES

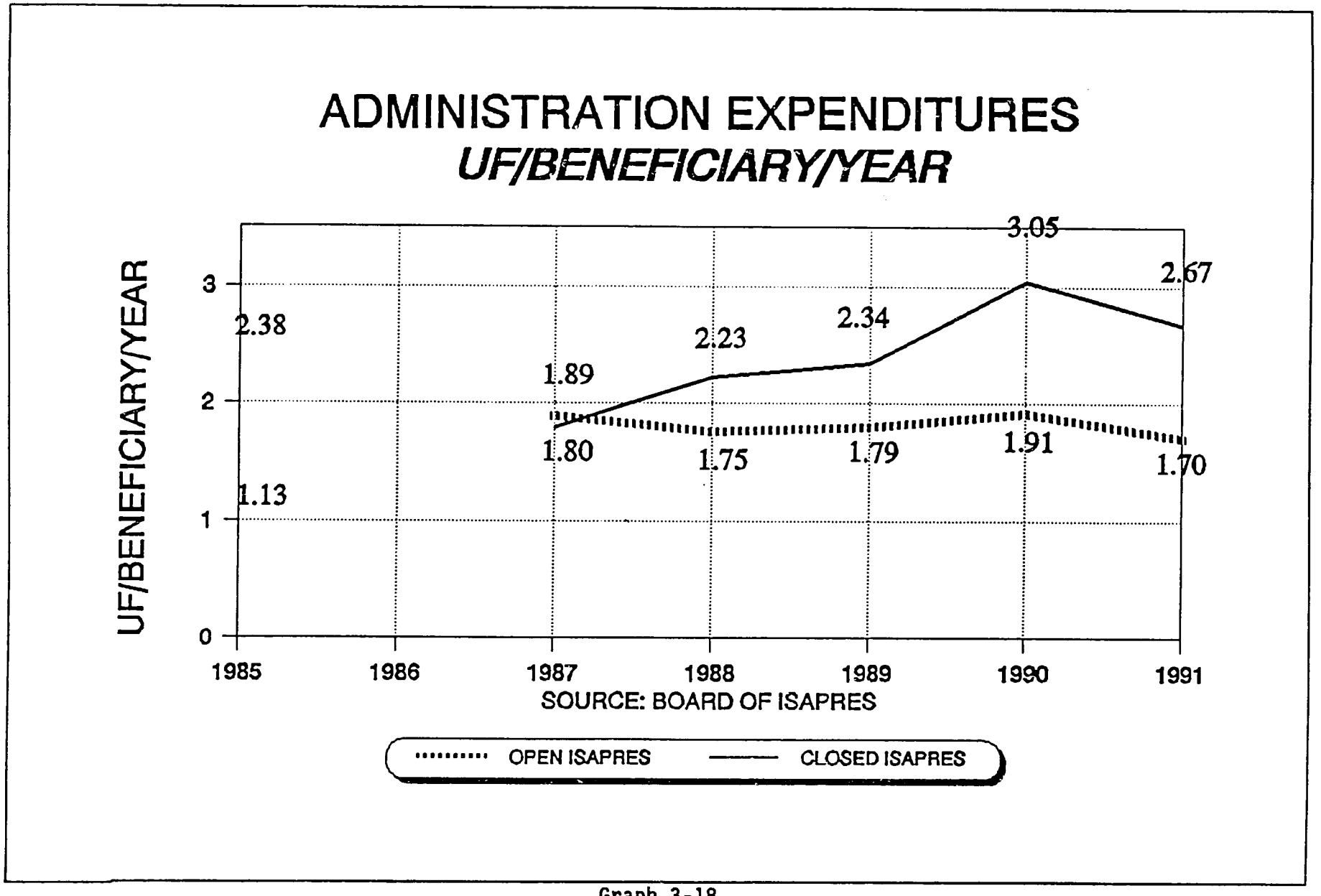
Graph 3-15


SURGICAL INTERVENTIONS
ISAPRE SYSTEM
SURGICAL INT./1,000 BENEFICIARIES/YEAR
200
150
100
50
0
1988
1989
1990
1991
SOURCE: BOARD OF ISAPRES
OPEN ISAPRES
CLOSED ISAPRES

Graph 3-16


EXPENDITURES ON MEDICAL LEAVE
AS AN AVAILABLE REVENUE
PERCENT OF AVAILABLE REVENUE
2.5%
2%
1.5%
1%
0.5%
0%
1985
1986
1987
1988
1989
1990
1991
SOURCE: BOARD OF ISAPRES
OPEN ISAPRES
CLOSED ISAPRES

Graph 3-17


ADMINISTRATION EXPENDITURES
UF/BENEFICIARY/YEAR
UF/BENEFICIARY/YEAR
3
2
1
0
2.38
1.13
1.89
2.23
2.34
3.05
2.67
1.80
1.75
1.79
1.91
1.70
1985
1986
1987
1988
1989
1990
1991
SOURCE: BOARD OF ISAPRES
OPEN ISAPRES
CLOSED ISAPRES

Graph 3-18

4.0 CONCEPTUAL DESIGN OF THE PROPOSED SYSTEM

This chapter constitutes the nucleus of this study since it contains the foundations of the new proposed health system. The organization of the public health sector is redefined by allocating to the State the subordinate role that it should play in the judgment of these consultants. The framework in which the new private health service agencies and insurance providers will participate is described, with an analysis of the levels of competition that will be created, the regulation of the natural monopolies that will arise, the allocation of subsidies and their objectives. In addition, ownership structures for the new systems are proposed that consider the investment of human capital that these types of services necessarily involve. As a first approximation, the manner in which the proposed system will operate is described, including the way in which it will be organized, the means by which it will be financed, the incentives to promote efficiency that will be created, and the supervision mechanisms that will have to be instituted. The implementation of a pilot plan is also proposed in order to test the operation of the new system. Finally, a brief comparative analysis of the costs of the public and private systems is made, on the basis of a selection of health services that are representative of the services that are normally provided, with a view to arriving at some preliminary conclusion on the economic feasibility of this new plan.

4.1 GENERAL PRINCIPLES OF THE PROPOSAL

4.1.1 Objectives

The principal objective of a health system is to achieve increasing levels of wellbeing for the entire population by means of health services. The system must also be efficient in the use of resources because of its high alternative social cost.

The right of individuals to enjoy good health is widely recognized. The World Health Organization declares that: "The enjoyment of the greatest degree of health that can be achieved is one of the fundamental rights of every human being, without regard to race, religion, political ideology or economic or social status."

In Chile, the private health insurance system has been an important development, and is currently satisfying the needs of 20 percent of the highest income population of the country. However, the expansion of the private health system to the remaining 80 percent of the population would necessarily mean the transfer of State subsidies that are currently provided to the State health services, to private health insurance firms.

This development, given that a large percentage of these individuals are not able to finance by themselves the costs inherent in private health insurance, would require State subsidies. Given the limitations on existing resources, it is also necessary to design a new insurance system that is different than the current ISAPRE system, that will provide for cost reductions while at the same time seeking the highest quality health care that can be achieved.

This study will develop a proposal for a health system which, through the allocation of demand subsidies, would allow access to the private health care system to the majority of the population that currently does not have such access, and achieve higher levels of service quality than those currently delivered by the State system. One test of the efficiency of the private sector operating in the social sphere can be found in the Chilean experience in the realm of public education. Approximately one decade ago close to one third of the public schools were transferred to the private sector, and these now currently obtain the same subsidy per student as is currently allocated to municipal schools. A particular test of the quality of education that was conducted every two years in Chile[11] has shown that the students in private subsidized schools have achieved, on average, higher academic performance than students that have remained in municipal public schools. This result is attributed to the natural competition that arises between the municipal and private schools, which provides the former with the incentive to offer better service (which definitely translates to a higher educational performance), with the goal of capturing students and thus being deserving of the subsidies associated with them.

4.1.2 General Organization of the Health System

The proposed health system is based on private businesses which, participating in competitive markets, would provide health services.

This system would be financed by health insurance premiums paid by employees, by progressive State subsidies for those who cannot by themselves cover the cost of health care, and by contributions by employers, without regard to the contributions that may be freely paid by businessmen and workers that might provide greater coverage than the system can. The State subsidy would be supplemental, that is, when it is added to the health insurance contributions, it would finance the basic health plan.

These subsidies would be targeted and provided to individuals (the claimants), and would be allocated directly by each family in their individual decisions on health care, by selecting the health provider where they would normally be attended.

An important element of the proposed health system is the existence of competitive markets in which an allocation of resources would be produced that would yield the optimum social benefit, including the subsidies that the State allocates to health care. Another very important element of the proposed system

[11] SIMCE, National System for Measuring the Quality of Education, 1980—1990.

would be that, although the allocation of resources would be made through the market, the State would not prescind from the health care needs of the population, and would be especially concerned with attending to the needs of the poorest sectors (targeting of the subsidy).

The system, although it would not include the free selection of physicians because such choice is considered too expensive for a structure on such a massive scale, would permit the free selection of a health service provider. This mechanism seeks to achieve a system that would be open to competition, but that would yield reasonable health care costs, and whose profitability, for those providing the service, would be based on the volume and regularity of payments rather than on high fees paid by few patients. In addition, it ultimately aims to replace the State as the principal direct provider of medical services.

A system of this nature should achieve significantly lower costs than a totally free choice system, as demonstrated by the experience of North American pre-payment systems and some Chilean ISAPREs that are oriented to this type of system[12]. This system would allow more direct control over costs by anyone interested in controlling them. The efficiency of the use of physician time (which constitutes one of the most expensive items in health care) could be improved because their time would be fully utilized and devoted to patients who really require their services. For these reasons, physicians should have part ownership of the health provider agencies, as is the case in many health centers oriented to high income groups in Chile. This is due to the fact that it is the physicians who would constitute the principal assets of the agency, with their professional preparation. Finally, we can say that a system such as the one described here would constitute an interesting work alternative for the youngest physicians, who are not so prestigious and therefore have lower expectations for income in the traditional system.

The nucleus of this proposed system would consist of outpatient medical care centers. These centers, administered by private executives, groups of physicians or municipalities, would be the first point of contact between the patient and the health system. In practice, the families would select the health center where they would be attended, and the health centers would compete among themselves with respect to the quality of their service and not with respect to price, which would be the same for all, given that the basic plan would entail a single payer.

The proposed relationship between individuals and their outpatient center should be rather stable because patients would tend to stay with centers in which they feel comfortable and well cared for. On the other hand, centers would be able to invest in preventive care to the extent that individuals remain affiliated with them for a long time. This hypothesis is based on the fact that healthier subscribers would entail lower costs for the medical center. The centers would not be able to withdraw from their contracts with their sub-

[12]The unit price of the services provided by the ISAPREs have declined some 14 percent over the last seven years. This trend is even stronger in the closed ISAPREs, in which the average price is approximately 40 percent lower than previous levels.

scribers. This restriction would be compensated for by the ability of the center to recalculate the premium of patients as they get older, or because of higher costs, such as, for example, those resulting from a chronic disease.

General hospitals would constitute the second level of care. These hospitals would attend all of the problems that require hospitalization, surgery or the use of hospital rooms. For these purposes, each outpatient center would be enrolled with a hospital, together with its entire affiliated population, and so transfer all of the risks of hospitalization, and the associated costs, to a unit of greater size, with a more numerous affiliated population (from several centers), and, therefore, with a greater capability for absorbing them both technically and financially. The outpatient centers would have to be affiliated with general hospitals through public bids in which the hospitals could compete, through price and quality, for the assignment of the various populations. In any case, there should be a maximum price that would be considered in the calculation of the standard or typical fee per patient that would paid by the State.

For their part, the general hospital would subcontract the services which, because of their high degree of specialization, would be too costly for the hospital to maintain, such as cardiovascular surgery, oncology, neurosurgery and other kinds of services. These services would be contracted to what will be called specialty centers (or hospitals). The type of contract would depend on the type of infirmity, and could range from collective insurance with a fixed payment to a simple agreement on special fees that would be paid on a case by case basis. Just as in the previous case, these services should be contracted out on the basis of public bids, and have a maximum fee that would be predetermined by the State in accordance with objective criteria of cost and frequency.

These specialty centers would be more technologically advanced units, possibly associated with universities, large institutions (large businesses, Armed Forces, etc.) or research centers. Because of the fact that there are few offerors of services of this kind in the country, it is very probable that the appropriate conditions do not exist for adequate competition. In no case would private financial agencies be discarded at this level, but preferentially they would be non-profit institutions or institutions with systems for technically setting fees on the order of a natural monopoly, simulating competition, in a manner that is analogous to the way that fees are set at marginal cost in the case of public services. This method has been applied successfully in Chile, as for example, in the generation and distribution of electrical power.

4.1.3 Role of the State

Independent of the health services provided under the aegis of private entities operating in competitive markets, the State should reserve for itself a series of responsibilities:

1. Minimum Health Care

The State should guarantee the free access to a minimum reasonable level of medical care for all persons. In order to achieve this the State should subsidize all of those who are unable to provide for their own medical care. This minimum level of care would depend on financial resources and on the traditions of the country, and should be carefully studied and defined in pilot tests of the new health system and during the transition stage between the current and new systems.

2. Public Health

There are problems that require a global vision on the part of the system. In general terms this perspective would apply to all of those problems that may involve large groups of people, such as, for example, epidemics, environmental contamination, national epidemic prevention campaigns, and especially serious contagious diseases.

3. Monitoring

The State should ensure that the objectives of the health care system are fulfilled, and that health resources are utilized in an appropriate manner. The State should, therefore, establish monitoring systems whose activities should fundamentally be oriented to the following areas:

- Control over the quality of services. The State should perform this function with the purpose of verifying compliance with minimum required norms, implementing the corrective actions that may be indicated, which should range from small monetary fines up to cancellation of required permits to operate as professionals or as businesses. In any case, the law should establish the mechanisms necessary to apply such sanctions.

- The controlling entity should emphasize control in those areas that have a strong tendency toward monopoly, such as rural areas, regional hospitals and specialized hospitals. In such cases prices and negotiation mechanisms should be regulated. Above all, anti-monopoly standards should be established for health professionals and for their professional associations.

- Monitor the proper operation of the system. If any distortion should be detected that might alter the objectives of the system, the monitor should perform the necessary studies in order to clarify the problem, and report in detail to the proper authorities in order to take corrective measures.

4. Information

Perhaps one of the most important tasks that the State should perform in the health system is that of reporting to the community on the various health service providers. This task would consist of gathering and

disseminating all relevant information for individuals to make an appropriate selection among alternatives. In order to perform this task the State would need certain objective quality measurement instruments, and the results achieved by the various health service providers.

4.1.4 Participation of Private Businesses

There are advantages to a structure where private companies operating in competitive markets provide health services, including both health insurance and the direct performance of health services.

This provision is valid for those individuals who cannot by themselves finance the cost of their health care (who include a high percentage of the population), considering that the role of contributing to this financing would be assumed by the State which, through direct subsidies, would guarantee "free and equal access" to health care for the entire population. In this case, private businesses can provide services to individuals, receiving as payment the health insurance contributions from these very individuals plus the subsidies provided by the State, as well as the possible contributions provided through freely chosen collective agreements entered into by workers with their employers.

There would be various types of companies to satisfy the needs of various groups of people. These companies can be classified into two principal groups: those specializing in medical insurance, and clinical service providers themselves. Although there may be entities participating in both sectors, the distinction is important because they concern businesses with cost structures that are essentially distinct.

4.1.5 Competition and Control of Monopolies

The inclusion of private enterprise is justified by the possibility of optimizing the use of resources, thereby obtaining better results with respect to the quality of health care and the achievement of lower costs than those incurred by the State as a provider of services.

In order for this statement to be valid it is indispensable that there should be adequate competition between the private entities which, by competing on the basis of quality and the cost of services, should guarantee the proper allocation of resources in accordance with the requirements and possibilities of demand.

In order to guarantee competition, the State should consider the creation of control agencies specialized in monitoring health service providers.

4.1.6 Targeting of Subsidies

As was noted above, the right of individuals to enjoy the best health possible is widely recognized, taking into account the limitations on resources available within each country.

On the other hand, the enormous scientific and technological advance in medicine has brought as a consequence the large increase in the cost of medical services resulting from the specialization of physicians and dependence on complex diagnostic techniques. One consequence of the above is that an important percentage of the population has become unable to finance the care of their health problems by themselves.

Therefore, in order to fulfill the objectives described above, the intervention and financial support of the State is required, which should finance with its own resources the portion that individuals cannot cover with their own means. The State should define the quality of the health plan that would insure the entire population, the costs of the plan, and the sources of financing.

The topic of subsidies requires deeper analysis. The activities that the State subsidizes and the levels of investment and quality must be decided. The response to these issues is not unimportant because unlimited resources are not available, which limitation imposes from the start maximum expenditures to be dedicated to health care. As a point of reference it is known that many countries finance their health systems with resources that represent between 4 percent and 6 percent of their GNPs[13], which reflects that, at base, health programs must be adapted to the economic and demographic reality of each country. This follows from the fact that greater coverage and quality of health care must necessarily be commensurate with greater economic development, which, in turn, often generates a significant increase, in absolute and relative terms, in the aging population, which incurs greater health care costs.

It would be reasonable for the health subsidies to be targeted to those individuals who are not able to finance their basic health care requirements by themselves or through insurance. This policy would imply subsidies by the State to the poorest sectors, which would decrease progressively until reaching zero for those groups that can finance this minimum by themselves. In order to be able to determine who the beneficiaries should be with precision, an objective instrument must be used that will allow the measurement of the poverty level of each family, which would make possible an efficient targeting of the subsidies to the truly poorest sectors. Some time ago this was practically impossible, but today, thanks to modern automated information processing technologies, this appears to be entirely feasible.

---

[13]The Economist, World Vital Statistics, 1990.

4.1.7 Temporary Worker's Disability Insurance

One area that should be treated in a special way is temporary worker's disability insurance. This kind of insurance seeks to finance the income of workers during periods when, because of sickness, they are temporarily unable to perform their work in a normal manner.

In order to finance permanent disability cases, there exists another type of insurance that is in Chile administered by the pension system.

The special treatment accorded to this kind of insurance would be based on the high frequency of abuses that such insurance is normally subject to, such as for example, medical leave that is too prolonged or simply without any real cause, which results in fraudulent insurance charges. For this type of insurance it is necessary to establish mechanisms that provide disincentives for individuals, health institutions and physicians to abuse the system, because implementing complicated control mechanisms in general turns out to be more expensive and very often inefficient. The majority of the costs of improperly used insurance are paid by all workers equally through higher fees.

In order to avoid abuse of this kind, this insurance should only partially cover the income of workers during their periods of temporary disability. In addition, an initial period that is not covered by insurance ought to be considered. It is proposed that such insurance only be effective beginning on the seventh day of inactivity, with partial coverage of 70 percent of the taxable income of the worker. With respect to the first six days, the first three should be the responsibility of the worker, while the following three should be the responsibility of the company. In this way the company would be able to design control mechanisms that would curtail abuses. Thus the company and the worker would share the cost of the insurance together with the institution that authorizes the medical leave obtained through the respective insurance premium.

4.1.8 Ownership Structure of the Medical Infrastructure

The structure of ownership and participation in the profits of health agencies should consider a fundamental aspect of this industry: the physicians contribute an important component of the capital necessary for the production function of these health care companies. This capital (human capital) should be reflected in the ownership of the companies.

From this perspective, the ownership of hospitals should consist of three types of stock shares. The first type would correspond to shares of the freely available physical capital, and would represent 51 percent of the total. The second kind would consist of the physicians' shares of the physical capital, which would be purchased by the physicians upon entering the corporation, in accordance with previously agreed upon mechanisms.

The third and final group of shares would consist of the physicians' shares of the human capital, which would belong to the physicians while they work in the

hospital, and which would be constituted as a function of their number of hours worked, years of experience and professional background. These shares would be allocated by a commission comprised of the physicians of the hospital and ought to constitute up to 25 percent of the total value of the entity. The objective of these shares is to provide incentives to the physicians with the greatest experience, in order to encourage them to continue to work in the hospital.

The allocation of the shares would impose a limit on the number of professionals, their experience and specialization, in order to maintain the number of shares of this kind within a ratio that is acceptable to the corporation. The physicians would receive a fixed salary that would not change with time, with the profitability of the shares discussed above providing the income and incentives that are acceptable to these professionals.

The physicians would also have to purchase shares of the physical capital, both of the unit in which they work, whether this is a clinic or a hospital, and of the ISAPRE headquarters of the entire system. The ratio could be one share of the individual unit to one share of the ISAPRE. With this provision, a part of the income of the professional would depend on the success of the whole, while another part would depend directly on the work of the team of which he is a part.

The physicians's shares of the physical capital would have to be sold by the physicians upon resigning from the hospital, while the physicians' shares of the human capital would be automatically lost upon resignation. The reason for the latter provision is this: upon resigning, the physician would take with him the intellectual capital that was the foundation for this stock participation, capital that would be restored by other professionals.

Another advantage of this kind of organization is that it would establish mechanisms to provide incentives to young physicians in aspects that are important to them, such as learning through interaction with patients and other professionals with greater experience. This aspect, together with the financial incentives generated by higher salaries than the State system provides, their participation in the earnings of the company as a function of their experience (physicians' shares of the human capital) and as a function of their participation in the ownership of the fixed assets (shares of the fixed capital), would comprise the system of incentives that should attract young physicians.

4.2 ORGANIZATION AND OPERATION OF THE SYSTEM

4.2.1 Operation

As was discussed above, the fundamental idea of this health system is that each head of household should be able to select, among a group of alternatives, the outpatient care center that his family will be attended by.

The outpatient centers would compete among themselves to capture clients, and as a result, receive the resources that would finance their costs. In order to avoid difficulties of access, the centers would have to accept any individual,

with only the subscriber being able to withdraw from the contract with some prior notice. The value of the payment would have to cover the costs of the true health risks incurred by the family group, at a level of quality that would be defined by the State for each particular service. In order to derive the amount, the calculation of the payment has been proposed in accordance with a group of variables that are representative of the difference in health risks of individuals, such as, for example, age, sex and the socio-cultural origins of the individual. In addition, for patients with chronic conditions and for other special cases, an additional subsidy to be determined on a case by case basis may be considered. The idea is to make all families equally attractive for outpatient centers, independently of their composition and health risks.

4.2.2 How would the system operate?

The first requirement for a system of this nature to be able to function is the existence of an adequate automated database for the entire group of subscribers to the new health care system that is financed by the State. The subscribers should therefore be properly identified. On the database of subscribers to the health care system, it would be useful to identify each through a unique code by family group, which would be the claimant unit for health services and which would receive the support of the State subsidy.

A second basic requirement is the production of reciprocal control over the information describing the characteristics of the families, exercised jointly by the owners of the health centers and the family groups, in a manner that would provide for timely and accurate updates to the database of subscribers to the State health care system.

The State should develop the monitoring and control mechanisms needed to avoid the under reporting of income on the part of the subscribers. The employers would be responsible for deducting the mandatory health premiums. The basis for calculating these premiums should include all kinds of remuneration received by the worker (base salary, commissions, assignments of title, etc.), with very few exceptions that do not constitute income (per diem travel, meals, etc.). The legal responsibility, in cases where irregularities are discovered, would remain with the employer so that the latter would have no incentives for under reporting income.

In addition, the calculation of the subsidies should be performed through the use of objective indicators of the levels of wellbeing of the population, based on a group of objective variables. This is especially relevant in the case of independent workers who, in order to receive the State subsidy would have to pay the total difference between the subsidy and the total cost of the basic health care plan.

Taking into account the above points, the head of household would have to visit the offices of the Ministry of Health responsible for the payment of subsidies. There he would provide the backgrounds of the entire family group that he heads, including information on pregnancies, chronic diseases, etc. The calculation of the payment requires this background information because the amount will depend on the age and sex composition of the family group. This information

would be gathered so that the risk associated with each family group would be the same for the outpatient center. This payment could be recalculated each time that significant changes occur in the family structure. The payment would be expected to cover all of the health care costs expected for the family group on the basis of statistical averages. The payment would include a line item cost allocated to each kind of service, such as consultations, laboratory examinations, hospitalizations, etc. Another piece of background information that is highly important concerns the members of the family group that pay premiums for the health plan, that is to say, those who work. The procedures for calculating and recalculating the payment may be performed by the outpatient centers themselves, and be controlled through the use of statistical sampling by the State. The calculation of the payment would be performed in accordance with *Figure 4-1*.

The payment would entail two types of information: 1) that which concerns the outpatient center, through a list of the names of all of its subscribers and the members of the family group that have a right to medical care, with the sums paid, and 2) that which concerns the subscriber, which is comprised of the same information on his family as described above, plus premiums paid, and the sum total of the subsidy contributed by the State.

The head of household would be enrolled with his entire family in the outpatient center of his choice, which he may change whenever he should wish to do so, having provided prior notice within a reasonable period of time. The outpatient care center would have to provide a package of basic services determined by the applicable law. The center would not be able to prevent the access of a subscriber to its services, nor terminate the contract unilaterally, except in special cases that would be described in the law, such as, for example, individuals who commit fraud or other kinds of crimes.

The center would assume all of the health care costs of the family group, although it would only directly perform the outpatient services. The subscriber would have to make a small copayment each time a family member is attended in an outpatient center, or when they may be referred to another center of greater complexity. The purpose of this payment would be to regulate demand by providing disincentives to access services for unjustified reasons.

Included in the coverage provided by the outpatient care center would be access to the center's associated hospital. In effect, each center would be affiliated with a general hospital for a fixed amount per individual, to be agreed upon between the parties. This affiliation would have to arrived at through a public bidding process where the hospitals would only be able to charge up to a cap that would be defined by what the Ministry had previously allocated for each service. The bidding process would be won by the provider that charges the least and that ensures the highest quality care. If offers do not come in under the caps, the State would be able to resolve the problem by using its own infrastructure or by allocating special resources that would permit this group access to health care. By definition, if the calculations of the payments have been performed well, this situation should only arise in isolated cases with populations that are very different from the general mean. In this way the outpatient care centers would transfer all of the financial risks implicit in higher cost services, such as hospitalization and surgery, to centers of greater

size and financial capability. These hospitals should cover the basic problems that require hospitalization, such as births, general surgery and certain treatments that require specialized supervision.

Finally, these hospitals would in turn be able to subcontract all services which, because of their greater complexity or cost, they cannot provide. This type of care could be performed, by way of example, through some type of collective insurance that is bid upon by specialty centers, in the same manner as in the above case. *Figure 4-2* shows the way in which the system would operate.

A final element consists of certain conditions that, because of their elevated cost or implications of an epidemiological nature, constitute risks that could be difficult for health insurance programs to absorb independently. In these cases it would be interesting for the State to take responsibility for dealing with these possibilities through the insurance or reinsurance of the entire population that is protected by the system with a State subsidy, and of those who pay for their own health coverage.

4.2.3 How would a subscriber be served?

Once a family group is enrolled in one of the new ISAPREs, all of its members would have access to all of the services that are financed by the basic health plan. These services would include both curative activities as well as preventive activities. To obtain these services, the head of household should have made the payment that would cover the health insurance costs of his family. The amount of the payment would have been determined in accordance with the characteristics and health risks of the family itself. The financing of the payment would be achieved through the insurance premiums for the family group, and supplemented by the State subsidy up to the full value of the payment.

When one of the members of the family group develops a problem that requires medical care, this member would visit the outpatient center where he has been enrolled. A small copayment would be asked of the patient prior to receiving service. He would then be seen, having a first contact with a paramedic who, depending on the observed symptoms, would refer the patient to a specialist physician or a general physician whose fees would be paid by the outpatient center pursuant to a prior agreement between the parties, providing that, as far as possible, these individuals would also be associates of the outpatient center. In certain simple cases the problem will be able to be resolved by the paramedic himself. All of the examinations and consultations that may be necessary for a proper diagnosis would have to be performed with institutions and professionals with whom the ISAPRE has agreements. The patient would also have to participate in the financing of these services through small copayments that would be adjusted to his financial circumstances.

When the diagnosis should reveal the need for a surgical intervention and/or hospitalization, the medical center would have to refer the patient to the hospital with which it has established agreements for the transfer of patients, in order to perform the necessary procedures. In this case, both the patient as

well as the medical center would have to make copayments, the purpose of which would be to avoid unnecessary referrals. If the patient has a condition that requires specialized care, the hospital would resort to its agreements with specialized hospitals in order to proceed with treatment.

With respect to the various support systems, such as laboratories and diagnostic centers, these can establish agreements with the various levels depending on the frequency and kind of requirements. These agreements may range from special discounts to fixed payments per individual. In any case, it is important to consider small copayments on the part of the patient any time he is referred to a diagnostic center or laboratory in order to avoid undue pressure to refer to such services.

CALCULATION OF THE PAYMENT

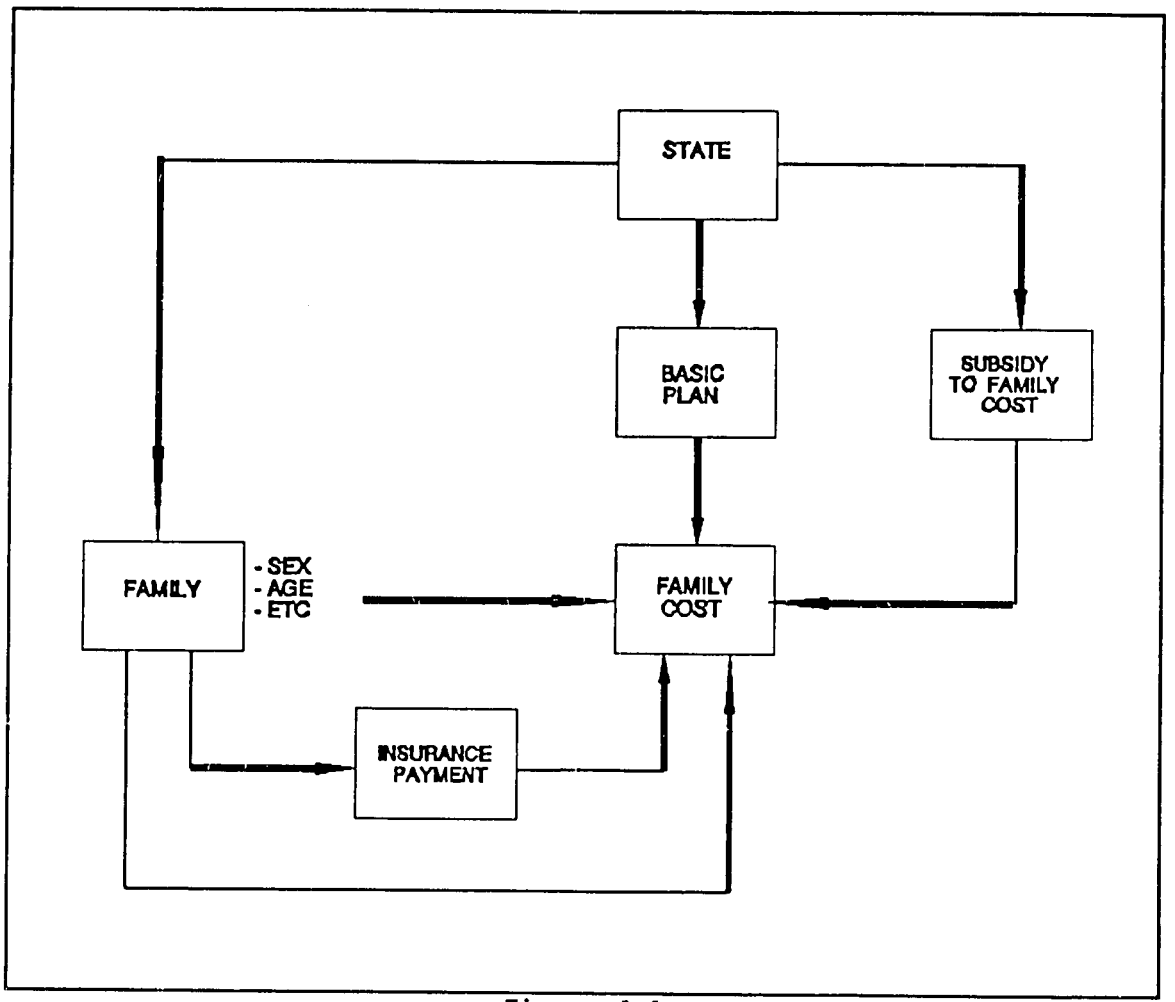


Figure 4-1

SYSTEM OPERATIONS

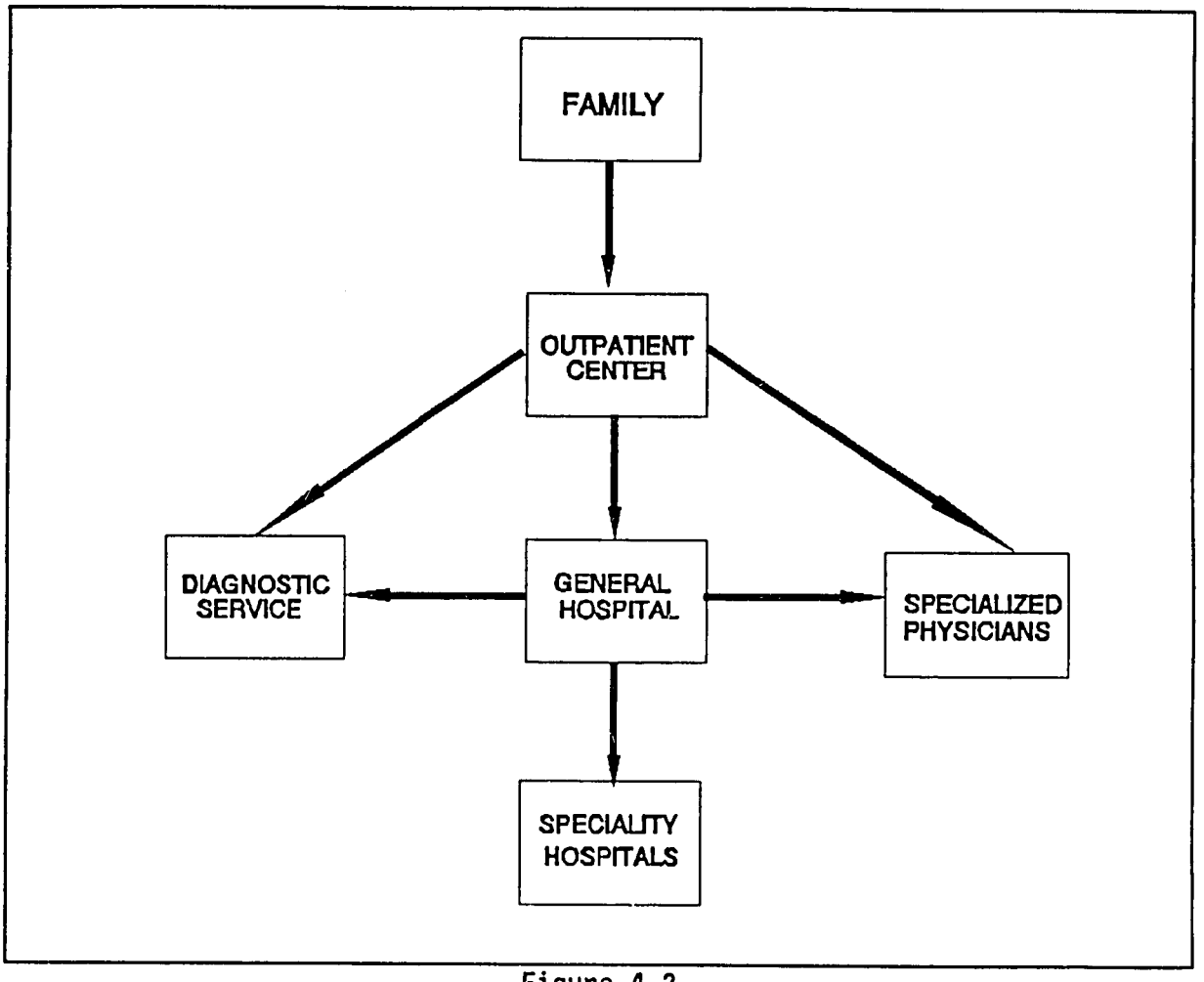


Figure 4-2

In general terms, the individuals incorporated into the system would have the right to receive all of the health services included in the basic plan, whether these services are provided directly by the health insurance provider company, or through agreements that the company may conclude.

4.2.4 Financing

The financing of the system would be based on a payment that reflects the total health insurance cost of a family.

This payment would be comprised of the insurance contribution that would be made by all of the individuals in the family group who work for pay, and would be supplemented by a State subsidy up to the full cost of the basic plan of health services. The contribution of the individuals would be on the order of

some 7 percent of taxable monthly salary (which is the premium that is currently charged by the private ISAPRE system).

One highly important factor for the development and survival of this system is the requirement of definite and ongoing support from the State, with respect to legislation and the continuity of allocated resources. This is even more important if the system is developed with the competitive participation of private capital in financing investment in the health infrastructure, such as in the cases of large hospitals.

In addition, the State should be able to purchase on the market insurance coverage for a period of five years at the least, to the benefit of the private investors that are operating in this health market, against a possible loss of the real value of the subsidies. This provision would have the single purpose of allowing reasonably secure access to investors, since this uncertainty could ultimately affect the quality of health care that this system would be able to deliver.

It is evident that the above will only be able to be implemented to the extent that the State becomes aware of its true role in a market economy, that is, its absolutely necessary normative role, as disseminator of information, and as provider of support to the poorest sectors through subsidies financed through tax revenues, utilizing the efficiency of competitive private companies in the work of providing these complex services in which the quality of care is fundamental.

Figure 4-3 shows the way in which the system would be financed.

4.2.5 Calculation of Subsidies

Based on comparative analyses of the morbidity of the population and the costs associated with this morbidity, by age, sex and socio-economic variables, a function can be determined that would relate the medical risks of each individual to some standard unit.

This is due to the fact that the cost of this basic plan will necessarily depend on these and other factors, such as the existence of chronic diseases in the individual. In this way a model can be designed that, based on a few variables, would determine the expected cost of health care for any individual in terms that are relative to the average cost of care. For these purposes a unit called a "health unit" (HU) is defined.

Definition

1 HU = The cost of the basic health plan for an adult man between 25 and 40 years of age, without chronic or disabling diseases.

In this manner it would be possible to assign an objective number of HUs to each family group. The final value of the health payment would be given by the number of HUs multiplied by the monthly value of the HU. This value could be

adjusted in accordance with a sector price index (for example, the ISPS, the Selective Index of Health Prices), which includes a selection of the most important component items of health costs). This HU value would reflect the true medical risks of the family group. However, efficient work on the part of the health center will result in lower effective risks and so will yield greater earnings for the medical center.

The number of HUs of a payment, calculated in accordance with the background of the family group in question, would be able to be recalculated each time new circumstances arise relative to the composition and condition of the family group. Such an adjustment would be able to be requested by the beneficiaries as well as the medical center they attend. In addition, information that would be received automatically by the State (births, deaths, etc.) would be included. This way of calculating the amount of HUs would make each family as attractive as any other to the medical center, independent of its composition and socio-economic level.

The basic plan so defined would exercise a primordial role in the regulation of the entire system, serving as a point of departure for the various plans that the private medical centers might provide. In general it can be said that, with competition, the various health centers will probably distinguish themselves by those health services that they deliver that go beyond the basic plan, and principally by their greater or lesser quality of service.

The basic plan discussed above would provide for the financing of all health services, both outpatient and hospital. The costs of these two types of services can be separated, therefore, with outpatient costs considered to be more stable than hospitalization costs (considered more random). It would be possible to deal with the latter costs through a health insurance system for the entire population.

The basic plan should incorporate in its costs the financing for certain basic medications, such as for example, those used in surgical interventions and a limited list of those medications that are considered technically essential (such as antibiotics), and whose cost could constitute a barrier to their acquisition.

Another important element that the basic plan should consider is basic dental insurance, which should include the initial cost of restoring dental health for the most urgent cases.

People present different health care requirements over the course of their lives. During childhood these differences decrease as the years pass, since children require less monitoring and care than newborns. These requirements reach a minimum level in adolescents, with medical needs maintaining a stable level for a period of time, and beginning to grow slowly thereafter. Among the elderly, medical care ceases to be a random phenomenon and becomes a certainty, since the elderly require more medical care with absolute certainty. The calculation of the subsidy thus becomes a function of the costs of health care in terms of the variables discussed above.

FLOW OF FINANCING FOR THE HEALTH SERVICES
PROVIDED BY THE PUBLIC SECTOR

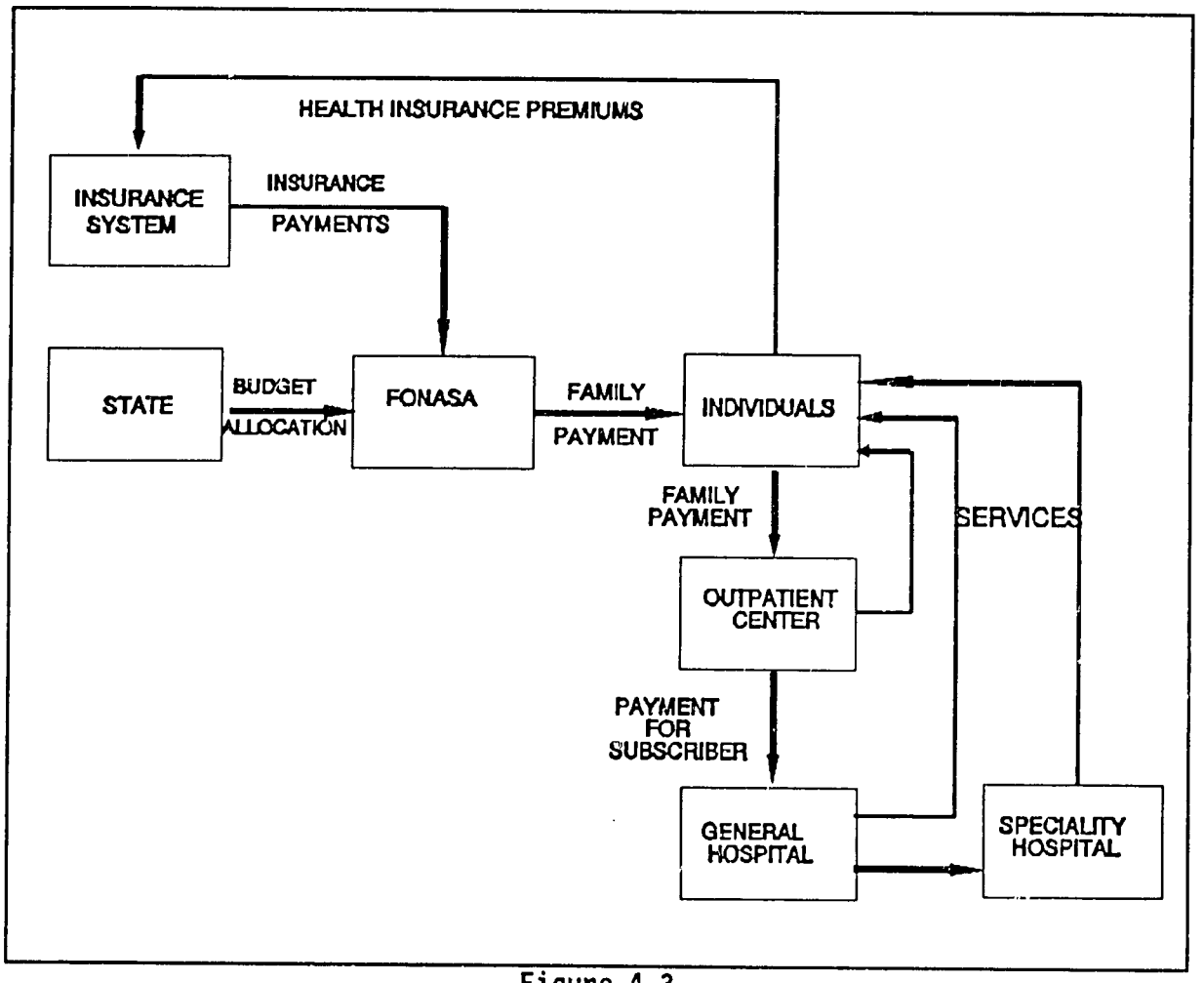


Figure 4-3

It can be predicted that the age variable will take on greater value for newborns and the elderly. Women of reproductive age would also have to be given greater weight than the young men of similar age, due to the health costs associated with maternity. And finally, with respect to educational level, level of income and wealth, or other socio-economic variables, it can be expected that as these indicators improve, the lower will be the value of the cost function.

It is also important to consider a special subsidy for other cases, as may be the case for chronic patients, and for those who require prolonged treatments, as for example psychiatric care, for which there would certainly be greater health care costs. Special subsidies could also be considered for populations with significantly higher risks than the mean. For these cases, the regulating authority would have to have available the objective tools to quantify the amount

of this special contribution, and the manner of controlling its delivery in order to avoid possible fraud.

4.2.6 Competition

As was mentioned above, one of the functions of the State would be the monitoring of competition between the various private companies that provide health services.

In this system, given that the total financing (the sum of the health insurance premiums and the State subsidy) would represent a fixed sum per person, competition will not be able to be produced through fees, but rather through the quality of the health "product", understood in terms of the satisfaction of the medical needs of the individuals. These individuals will be able to select any company that best resolves its problems in exchange for its payments. In this way the health service providers will be able to compete through quality in order to capture more subscribers.

In order to guarantee the proper selection of the health centers in which the subscribers to the system will be attended, it would be useful to provide incentives to make information available to the markets. For this purpose the State should report to the public on the basis of objective surveys in which relevant variables are measured concerning the results of the health care and subscribers' perceptions of the quality of service in their medical care centers.

There are certain segments of the market that require special attention due to the difficulties in attaining reasonable competition. These segments include primary care in areas with low population densities and care requiring a high degree of specialization.

In the case of primary care, there are certain mechanisms that could significantly reduce the problem of local monopolies. One of these consists of the establishment of minimum service quality standards that all of the health centers would have to comply with, which standards are observed in the majority of centers that do indeed compete, and on which objective information is available.

In other words, these values, which could be determined in accordance with the results obtained by the group of companies that operate in competitive markets, would serve as an objective standard of comparison. The calculation would have to correspond to the mean, reduced by some portion of the standard deviation in order to establish, finally, a minimum level of service quality that would be required by the State of public agencies or employees that administer rural clinics or clinics located in small towns.

Another mechanism to promote competition could be a special subsidy allocated to finance the cost of transportation from small remote localities to urban centers, increasing competition by means of incorporating these localities into the potential market of the nearest cities. This decision could be made on a case by case basis. The second group that presents problems for competition consists of the more specialized centers, which have the characteristics of a monopoly due to the fact that, in a small country such as Chile, the existence of more than

one or two of them cannot be justified economically. These centers correspond to monopolies of the natural variety, which would entail the technical setting of fees by control organizations through criteria that are also technical, and stable over time, as was explained above.

In some cases the contracting of certain services abroad could be justified, especially to neighboring countries. This would be valid for specialties that require populations even larger than that of Chile for their development, and for which the transportation costs would not represent a significant impediment in comparison with the cost of service delivery, and the benefits associated with this delivery.

4.2.7 Incentives to Improve the Efficiency of the System

In a national health system it is imperative to use resources appropriately for two fundamental reasons: 1) the system should guarantee a reasonable level of health care to the majority of the population and, because available resources are limited, the quality of health care will necessarily depend on the efficiency that is achieved in the use of these resources, and 2) the resources contributed by the State derive fundamentally from tax revenues, which have a high alternative cost in the sense that they could otherwise be used for consumption or investment.

It is reasonable to believe that the willingness to pay taxes will improve to the extent that the results obtained from these resources also improve.

The first element that would improve the efficiency of the system is, without doubt, the competition between the private companies operating in the health care markets. The relevance of competition and the State's role in guaranteeing it were already discussed in detail above.

In the second place, the system, because it is based on a fixed payment per individual, would transfer to the health center the responsibility for caring for individuals at a reasonable cost, without incurring excessive costs. Moreover, the most practicable way of reducing the health care costs of an individual is to keep that individual healthy, so that it would behoove the health center to invest in preventive care and so seek to reduce future costs.

One of the issues that merits special attention on the part of the Board of Health that is charged with oversight of the system, is the lack of attention that has been paid to pathologies as a mechanism to control costs, in that providers of medical services are currently able to refuse care to individuals who are enrolled in their plans. This issue would be controlled up front by the competition factor, since an individual who is unsatisfied with the care obtained from his health center can change to another that provides better service. The availability of information as encouraged by the State would be a decisive factor in ensuring competition through this control mechanism.

4.2.8 Supervision

It is proposed that the outpatient care centers be entities that, in addition to administering the State subsidy, would directly provide primary care services. These institutions would be controlled in their technical and administrative functions by the Ministry of Health through its various units.

For its part, the Ministry of Health should perform functions differently than it is currently, so that it will be necessary to restructure it in accordance with the new requirements. Within this framework, a new administrative structure is proposed. In this structure, the functions associated with the administration of medical services would take second place, emphasis rather being placed on the functions of monitoring and supervision, as well as those associated with providing information to the community.

In this context, a new organizational chart is also proposed for the new Ministry of Health (MINSAL). *Figure 4-4* shows the new organizational chart.

The new MINSAL would be divided into four principal areas. The first area would consist of FONASA, which would be responsible principally for the financial and administrative control functions concerning the private agencies operating under the subsidy system. This area would be concerned also with the financing of the other MINSAL units.

The second area would comprise the functions that the MINSAL should perform directly. Included in these functions, we may emphasize environmental health, the provision of information and education to the population, and the functions of the Institute of Public Health (ISP), which is responsible for various functions related to the control of foods and medicines. This area should also maintain a positive role in the control and prevention of epidemics.

The third area would include the regional secretariats, which would be responsible for the technical monitoring of the various private agencies operating under the subsidy system. These secretariats, which would constitute the backbone of the MINSAL, would have to report to the community on the various studies that have been performed, and above all publicize all of the information that might be useful for the population to select alternative health care providers.

The final area would be the administration of the health care infrastructure that is the responsibility of the MINSAL. The MINSAL would perhaps require something of its own infrastructure, such as that which would be necessary for the administration of specific programs, for example, supplemental nutrition programs. It would also be possible to consider a certain clinic or hospital with especially monopolistic characteristics. In any case, the administration of these assets should function through channels that are independent of the regional secretariats, since in order to obtain healthy competition, no special preference should be given to the State infrastructure over the private structure.

1. **Technical Monitoring**

It is proposed that the Ministry of Health, through its Regional Health Secretariats, should perform technical monitoring of the private and municipal institutions that would replace in their functions the SNSS clinics or the current municipal clinics. To provide for this function, each secretariat should develop medical audit, statistical and reporting departments, with the latter responsible for reporting to the community on the results of the research performed by the secretariat, or subcontracted by it to other agencies.

The health service providers should be required to submit periodic statistical reports on services provided, as well as vital statistics on the principal biodemographical indexes. The secretariats would also require compliance with technical standards, such as for example, the number of hours worked by the medical staff in relation to the beneficiary population; implementation of vaccination programs and other programs for individuals and the environment.

2. **Administrative Monitoring**

It is proposed that the National Health Fund (FONASA) undertake ongoing monitoring of the financial aspects of these institutions through audits of the areas that are most prone to errors. For example, FONASA should determine whether the health subsidy allocated to a family is correct with respect to the number of family members, or whether the number of subsidies corresponds to the real number of beneficiaries of the institution. A system of fines should be prepared to deal with these kinds of distortions. In addition, such a system should consider the possible suspension of an agency's authorization to operate as a health care provider with rights to subsidies, upon repeated lack of compliance with the standards established by law.

4.2.9 Pilot Plan

The implementation of a model such as the one proposed here would necessarily require a pilot test that would generate the experience necessary to make the system more efficient.

This pilot plan would be able to verify the real feasibility of implementing a model such as this one on a large scale. This is the case because, independent of the quality of information utilized in the evaluation, social reality is very difficult to model and will present issues that are impossible to predict.

For this pilot experience it is suggested that those integral primary care establishments that are chosen to test this method of allocating the State health care subsidy, be transferred in delegated administration. The transfer would apply to the same health care professionals that currently work in these establishments, who, for the purposes of administration, could be associated with third parties specializing in the complex area of health care administration. This commodatum would include the transfer of the goods, equipment, vehicles and

installations that would allow the entity to operate. It would be the responsibility of the center to make the repairs necessary to maintain the establishment, or any necessary improvements. In addition, the center would be responsible for paying all taxes and water, power, gas and telephone utilities. The purpose of this arrangement would be to simulate as faithfully as possible the operating conditions of the system.

The transfer in delegated administration of the health care establishment would include all of the professional medical staff that are employed at the time of transfer, and maintaining the staff structure, the compensation system and the insurance plan in effect in the respective health service provider. The latter provision is intended to provide job stability to the staff during this experimental period, without prejudicing any system of incentives that their new private administrators should decide to adopt.

This proposal of a pilot project outpatient center would last for a predetermined period, and the evaluation of its results would establish the possibility of implementing this system more broadly. In their final form, the outpatient care centers would be private companies that, under the technical and financial control of the Ministry of Health, would directly provide primary medical care, while subcontracting the more complex services, as explained above.

It would be very important for the clinic to be transferred to the same physicians and support staff who work in it, and that for the term of the pilot test there be a commitment to sell the clinic to these personnel. In this way the physicians would have greater incentives and a lesser degree of insecurity with respect to the future. In order to be able to determine the success of the pilot plan, parameters should be established in advance that would measure performance, and with which the results would be able to be evaluated in an objective way. It is also important that the conditions of sale of the clinic be known in advance, and that they be reasonable to all parties.

In order to simulate the system in a realistic way, the outpatient centers should conclude all of the agreements necessary for their operation. These agreements could be concluded with State or private agencies, while seeking the greatest flexibility possible. In any case, the evaluation should consider that the experiment would be a partial implementation of the proposal, so that the results would have to be adjusted in order to be extrapolated more generally.

As a second stage, it is proposed that the current clinics and hospitals operate by means of a system of subsidies for individuals, while still under the control of the State. The conditions for the new health insurers bidding on the services with the hospitals and laboratories should be simulated as best as possible. At this stage the system would be able to be tested at the national level.

ORGANIZATIONAL CHART OF THE NEW
MINISTRY OF HEALTH (MINSAL)

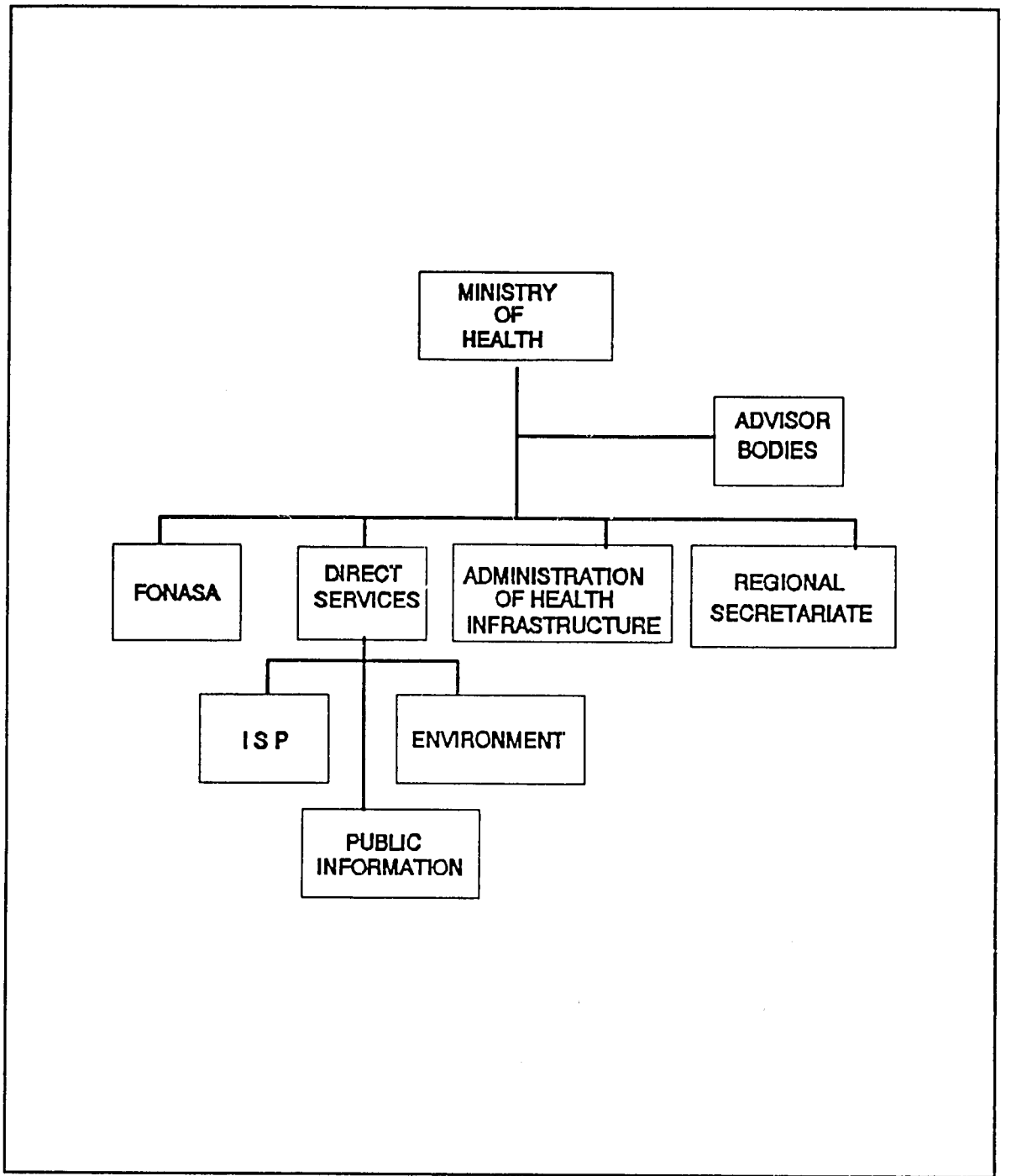


Figure 4-4

During this period it is proposed that the State system be reorganized in order to simulate the proposed plan as best as possible. At this stage the enrollment process can be implemented, and the automation processes can be completed, which should serve to standardize procedures once the system is put in place to its fullest extent.

Finally, once these preliminary stages have been completed successfully, the system in its totality should be implemented. The hospitals would have to transferred to the same physicians and support staff that currently work in them. These institutions should be transferred to other physicians or businessmen only if their transfer to their current staff should turn out to be impossible.

State health care agencies should be transferred to new private owners in conditions appropriate to the market and to business risk. The agencies should be sold through long term credits at market rates, where the treasury does not make a gift of its ownership, and the buyers pay prices that are close to the financial value of the assets.

It is highly important that monitoring and efficiency measures be established, simultaneously with the implementation of the system, on the part of the ministerial monitoring entities themselves. Thus the function of these entities would be oriented to controlling the quality of services, reporting to the public on service quality , controlling possible abuses that may arise within the system, monitoring those areas with a strong trend towards monopolies, monitoring the proper operation of the system in general, and controlling and sanctioning the improper practice of the medical profession and similar cases.

4.3 HEALTH SERVICE COSTS

For the design of a health system for the entire population that is currently covered by the State system, it is important that information be provided on the cost of the State system itself. This important information only became available beginning in July 1992, when the Ministry of Health and the World Bank conducted the study entitled the "Health Care Services Cost Study".

Based on the MINSAL background information noted above, the following exhibit was developed that summarizes the costs of the principal health services of the public system.

As the exhibit shows, the values presented are comparable, especially noteworthy being the similarity of costs for medical consultations between the MINSAL and the fees arrived at through agreements with Cruz Blanca.

With respect to laboratory examinations and bed-days, the prices of agreements concluded by Cruz Blanca S.A. are markedly less than the costs achieved by the MINSAL.

This relationship is reversed in the case of radiology examinations, which exhibit lower costs in the public sector. This can probably be explained by a

package of services of higher complexity that are offered by the private sector and not available in the public system.

EXHIBIT 4-1
COST OF PRINCIPAL SERVICES PROVIDED BY THE PUBLIC HEALTH SYSTEM[1]

SERVICE	US$/SERVICE
PHYSICIAN CONSULTATIONS1	1.7
LABORATORY EXAMINATIONS	5.0
X-RAYS	10.5
BED DAY	60.3
SURGERY	55.8
TRANSPORTATION	20.4
VACCINATION	4.5

[1]*Source:* Study of the Costs of Health Services, BIRF-MINSAL, 1992.

EXHIBIT 4-2
COMPARISON OF THE COST OF HEALTH SERVICES BETWEEN THE PUBLIC AND PRIVATE SECTORS
(*US$/service*)

SERVICE	ISAPRE CRUZ BLANCA[1]	MINSAL[2]
PHYSICIAN CONSULTATIONS	5.5	5.7
LABORATORY EXAMINATIONS	2.9	5.0
X-RAYS	18.5	10.5
BED DAY	33.3	60.3

[1]*Source:* Cruz Blanca, S.A.,health care agreements.
[2]*Source:* Financial Indicators for the Public Health Sector. 1974-88. Ministry of Health, 1989, and the authors based on historical data from the Ministries of Health and Planning.

With respect to surgical fees, hospitalization fees and the costs of interventions and procedures that were not included because of differences of calculation methodology, it has been estimated from the available information that the costs associated with the public sector are lower than those of the private sector.

Finally, an exhibit follows that compares the cost of the private system for both agreement and free choice modalities, and for the public sector for services whose cost calculation methodologies are comparable.

EXHIBIT 4-3
COMPARISON OF THE COSTS OF HEALTH SERVICES BETWEEN THE PUBLIC AND PRIVATE SECTORS
(US$/service)

SERVICE	ISAPRE CRUZ BLANCA[1] FREE CHOICE	ISAPRE CRUZ BLANCA[1] AGREEMENTS	ISAPRE ISPEN[2] FREE CHOICE	MINSAL[3]
Phys. consults.	9.5	5.5	11.9	5.7
Lab. exams.	3.3	2.9	5.0	5.0
X-rays	18.5	18.5	24.7	10.5
Phys. fees		12.1		
Room fees		149.6	110.9	
Bed day		33.3	63.2	60.3

[1]*Source:* Cruz Blanca S.A., ISAPRE (Open ISAPRE)
[2]*Source:* Ispen Ltda., ISAPRE (Closed ISAPRE)
[3]*Source:* Study of Health Service Costs. BIRF-MINSAL, 1992