CHILE

PROFILE OF THE HEALTH SERVICES SYSTEM

(12 March 1999)

PROGRAM FOR ORGANIZATION AND MANAGEMENT OF HEALTH SYSTEMS AND SERVICES

DIVISION OF HEALTH SYSTEMS AND SERVICES DEVELOPMENT

PAN AMERICAN HEALTH ORGANIZATION

EXECUTIVE SUMMARY

Chile is a unitary State with a democratic government. The government and administration of the State are the responsibility of the President of the Republic. Chile's territory is divided politically and administratively first into regions (13), then provinces (51), and then again into districts (342). Each region is governed by a Superintendent and each province by a Governor, both close to the President. The municipal authority is the mayor, appointed from among popularly-elected aldermen. In 1998, the country had a total population of 14,821,714 inhabitants, with 83.5% residing in urban areas. Chile ranks 30th on the Human Development Index and 44th on the Gender-Related Development Index. In 1996, 23.2% of the population was considered poor. The ratio between the incomes of the highest and lowest 20% of the population is 14.4. The illiteracy rate is 5% (1994).

Coordination of the social sectors is the responsibility of the Social Committee of Ministers (Education, Health, Housing, etc.), and health policy is part of the government's Social Agenda. The major political and social problems affecting health status and the performance of the health services are: a) a population in which 23.2% (1996) is poor, and 5.8% indigent; b) the concentration of 40% of the population in the Metropolitan Region; c) the weakness of the health services network; d) inadequate coordination among public and private service providers. In 1997, the per capita GNP was US\$4,886. Total public expenditure was 21.01% of GDP, public expenditure in the social sector was 14.10%, and public expenditure in health was 2.5%.

The health sector is a mixed system. The *public system* or National Health Services System (SNSS) consists of the Ministry of Health (MINSAL) and its subagencies: the 29 Health Services (SS); the National Health Fund (FONASA); the Public Health Institute (ISP); the Central Supply Clearinghouse (CENABAST); the ISAPRE Authority, and the network of health primary care facilities under municipal administration. The *private system* is made up of: the health institutions (ISAPREs), employer mutuals, institutions providing nonprofit services and for-profit service providers. The public health system has 9.14 physicians and 3.83 nurses for every 10,000 beneficiaries.

The prevailing biomedical model is changing to a family health model with greater ability to respond in outpatient care and openness to social participation.

MINSAL exercises management and sectoral regulation and health authority through the SS. The public system is financed with: i) tax contributions, 49.5%; compulsory contributions, 31.5%; income from operations, 8%; and others, 11% (external borrowing, donations, etc.). In 1997, national health expenditure per capita amounted to Ch\$114,770 and total health expenditure was 21% of public expenditure. Of this,

12% went to primary care and 88% to secondary and tertiary care. With regard to insurance, 61% of the population is covered by FONASA (public insurance) and 28% by ISAPREs.

At the primary care level, 1.2 medical visits are provided per inhabitant. There are 1,078,478 hospital discharges in the public system and 390,197 in the private system, with no significant differences in occupancy rates or length of stay.

The Quality Improvement Program has trained all technical and administrative teams in hospitals and at the primary care level. More than 20 hospitals have joined the Friendly Hospital Program, and various local programs are designed to improve the care provided to users and the compassion with which they are treated. Noteworthy are the bilingual information services for assistance to the Arauca Indian population in the Araucanian region, and the Patient Care Services, designed to greet and accompany patients and their families from admission through hospital discharge.

The health sector reform (HSR) of the 1980s handed primary care over to the municipal authorities, decentralized the SNS into 27 Health Services (now 29), delegated some functions to the hospital level, and created private health insurance (ISAPREs). Health sector reform was redirected starting in 1990 and in 1994 was included in the government's proposal on modernization of the State. Since that time, the HSR agenda covers three stages: i) recovery of the public health system (1990-1994); ii) modernization of the public health system (1994-2000); and iii) reform of social security in health (2000 and beyond). This development agenda has been based on established stages. Noteworthy in the content of HSR are: universal and comprehensive right to public health insurance; creation of special programs to increase coverage (emergency primary care services; program on acute respiratory infection; short-stay hospital wards; waiting list program; program to strengthen primary care; replacement of facilities with new types of facilities: CRS and CDT); separation of financing and insurance functions (FONASA and ISAPREs), service delivery (SNSS, Municipios and private care) and regulation (MINSAL, ISAPREs Administration and ISP); implementation of the Diagnosis-based Payment System in hospitals; redefinition of the health care model; implementation of management commitments at the different levels; third-party service purchasing and selling power; adaptation of human resources planning and management; and training of health workers. In the course of HSR, hospitals have reduced the average length of stay, increased the number of discharges per bed, increased the use of surgical wings, and know costs per day for hospitalization and outpatient care. Development and Employer-Employee Committees have been created to strengthen social participation. The medium- and long-term sustainability of programs and services is guaranteed in terms of both health and financial policy decisions.

CONTEXT

Chile is a unitary State with a democratic government. The government and administration of the State are the responsibility of the President of the Republic.¹ Chile's territory is divided politically and administratively first into regions (13), then provinces (51), and then again into districts (342). Each region is governed by a Superintendent and each province by a Governor, both close to the President. The municipal authority is the mayor, appointed from among popularly-elected aldermen.

The Ministries (19) are agencies that collaborate with the President in the administration of the respective sectors and are distributed territorially through the Regional Ministerial Secretariats (SEREMI). Collective needs are satisfied through public services,² autonomous State enterprises, fiscal corporations, and private entities.

The financial resources of the State are administered by the Ministry of Finance and proposals for national development, in global, sectoral and regional terms, emanate from the Ministry of Planning and Cooperation (MIDEPLAN), in coordination with the other ministries.

The horizontal coordination of social sectors is carried out by the Social Committee of Ministers (Education, Health, Housing, etc.), which proposes the principal outlines of social policy to the President of the Republic. Health policy is part of the government's Social Agenda, which incorporates the development proposals promoted by the Ministries.

The major political and social problems affecting health status and the performance of the health services are: a) a population in which 23.2% (1996) is poor, and 5.8% indigent; b) the concentration of 40% of the population in the Metropolitan Region; c) the weakness of the health services network; d) inadequate coordination among public and private service providers.

Economic Context: per capita GNP grew by 35.2% between 1991 and 1997, when it reached US\$4,886. During the same period, total public expenditure and public expenditure in the social sector increased between 1.5 and 1 percentage points, respectively, a significant increase given the 7% economic growth per annum.

Economic and Social Indicators

Indicator	YEAR							
	1991	1992	1993	1994	1995	1996	1997	
Per capita GNP (US\$)	3,613	3,860	3,981	4,187	4,612	4,664	4,886	
Total Public Expenditure as a % of GNP	19.52	20.18	20.75	20.57	19.70	20.91	21.01	
Public Expenditure in the Social Sector as a % of GNP	13.10	13.30	13.90	13.80	13.30	14.20	14.10	
Public Expenditure in Health as a % of GNP	2.15	2.30	2.46	2.55	2.36	2.53	2.50	

Source: FONASA - Research Dept.: "Evaluation of Management in the Public Health Sector"

The financial contribution of the various economic sectors to GDP in 1996 was: Manufacturing, 19.2%; Trade, Restaurants and Hotels, 12.9%; Personal Services, 12.0%; Financial Services, 10.9%; Construction, 7.4%; Mining, 7.0%; Transportation and Communications, 6.8%; Livestock–Forestry, 5.2%; Housing Property, 3.7%; Public Administration, 3.5%; Electricity, Gas, and Water, 3.0%; Fishing, 1.4%.³

Social Context: In 1998, the country had a total population of 14,821,714 inhabitants,⁴ with 83.5% residing in urban areas. Chile ranks 30th on the Human Development Index and 44th on the Gender-related Development Index.

The population living in poverty fell from 45.3% (1987) to 23.2% (1996), varying from 40.9% to 14.8% from region to region, a situation associated with higher concentrations of indigenous peoples and rural areas. Poverty declined from 14.2% (1982) to 5.8% (1996). In the country's agricultural regions (VI to IX) figures are close to 30%, and pockets of poverty remain in marginal metropolitan areas.

The unemployment rate fell from 10.4% in 1986 to 5.4% in 1996 and is expected to be 10% in 1999-2000 (as a result of the international economic crisis). There are no national data on employment in the informal sector, although social surveys indicate that 10% of households have some family member with paid employment without a work contract.

Ethnic minorities live in all parts of the country. According to the 1992 Population and Housing Census, the Arauca population represents 7% of the total and is concentrated in the Metropolitan Region (MR) and Regions VIII and IX; the Aymará (0.37%) are concentrated in Region I and in the MR; and those from Rapa Nui are concentrated in the MR and Valparaiso.

There is a 14.4 ratio between incomes in the first and the fifth quintiles, falling to 8.6 thanks to the channeling of social spending.⁵

The adult illiteracy rate is about 5% (1994). Of school-age children (6 to 13 years of age), 99.92% regularly attend primary schools; 74% of young people from 14 to 17 years of age attend secondary schools; and 19% of young people from 18 to 24 years are receiving higher education.

2. HEALTH SERVICES SYSTEM

General Organization: The health sector is a mixed system. The *public system* or National Health Services System (SNSS) consists of the Ministry of Health (MINSAL) and its subagencies: the 29 Health Services (SS); the National Health Fund (FONASA); the Public Health Institute (ISP); the Central Supply Clearinghouse (CENABAST); and the ISAPRE Authority. Also part of the system is the network of

primary health care facilities under municipal administration, with the technical assistance and supervision of the SS.

MINSAL is charged with ensuring the constitutional right to health protection, assuming the government's regulatory role, formulating policies, and supervising the operation of the agencies that make up the system. The <u>SS</u> are responsible for health services delivery in specific geographical areas and for actions related to health promotion, protection, and recovery in their territories through a health care network made up of facilities with different degrees of complexity. These are connected through patient referrals and cross-referrals, and there are regional, supraregional, and national facilities, depending on the specialty and the demand for services. The modality whereby public facilities purchase health services from the private sector is in its early stages and addresses the need to provide timely care to beneficiaries, particularly for specific pathologies or specialties where long waiting lists can compromise a patient's health status. The public health sector is the largest employer of human resources in Public Administration (68,000 employees, plus 17,000 in the PHCs delegated to the municipalities in 1998).

<u>FONASA</u> is the financial entity responsible for collecting, administering, and distributing fiscal resources and funds from the 7% compulsory contribution for health under MINSAL policy, and for funding the benefits provided by the SNSS or by non-SNSS individual or institutional providers through user choice mechanisms.

<u>ISP</u>, the National Reference Laboratory, must control the quality of drugs and other products subject to health control and produces biologicals such as vaccines and sera.

<u>CENABAST</u> is undergoing a transition toward mediation of the purchases of drugs and inputs for medical use in SNSS facilities.

The <u>ISAPRE Authority</u> (created in 1990) records and audits the legal and financial aspects of the health institutions and resolves disputes between them and beneficiaries.

All these institutions (with the exception of MINSAL) are public services with legal status and their own capital. They are functionally decentralized, with directors appointed by the President of the Republic. They answer to MINSAL, which monitors their operations, and must adhere to MINSAL's policies, standards, and general plans in the performance of their activities. MINSAL is broken down into SEREMIs. ISP and CENABAST are centralized, FONASA has decentralized the free-choice operation, and the SS have decentralized operations with their network of facilities.

Other government institutions and enterprises that provide outpatient and hospital care for their personnel are the Armed Forces and Law Enforcement; Prisons; the National Oil Company, and the University of Chile. These institutions are not part of the SNSS and thus have administrative and managerial autonomy

with respect to MINSAL. Mention should also be made of the Municipalities, which since 1981 have been responsible for the primary health care (PHC) provided by rural and urban health posts and rural general physician's offices under their administration.

The private health sector consists of:

Health Institutions (ISAPRE), private insurers with which affiliation is voluntary and which finance medical benefits and subsidies for occupational disability under individual or group health plans. In September 1998 there were 29 ISAPRES: 11 of them are closed (open only to workers from a specific company or group of companies) and 18 are open (to anyone). They provide benefits using their own or outside facilities and cover 28% of the total population. Their principal source of funding is health premiums (7% compulsory, plus an additional payment and/or subsidy to cover the cost of the plan) and co-payments associated with the plan. Finally, due to inadequate coverage for catastrophic illness, private insurance is being developed to finance this aspect.

Employer Mutuals (Chilean Security Association, Chilean Construction Chamber, and the Labor Security Institute) are institutions that administer insurance for work-related injuries and occupational diseases. They are responsible for preventing these risks, in addition to paying for medical care and rehabilitation for the injured and providing the respective subsidies to their contributors. They have an infrastructure of hospitals and clinics with varying degrees of technical complexity and ambulatory care centers throughout the country.

Nonprofit institutions providing health services are charitable institutions that primarily provide ambulatory care. These include the Red Cross, the Corporation for Assistance to Burned Children (COANIQUEM), the Corporation for Assistance to Children (CORDAM), the Institute for Child Rehabilitation, Churches of various denominations, NGOs and Employer Mutuals.

The <u>for-profit providers</u> include medical centers, clinics, hospitals, laboratories, pharmacies, specialized centers (radiology, dialysis, dentistry) as well as the offices of physicians and other health care professionals.

There is generally little coordination or joint effort among providers in the public and private sectors.

There is no national registry of human and technology resources available for health services delivery nor a detailed analysis of purchases of these resources.

In this decade, a decade for recovery and preparation in the public health sector to compete with and be complemented by the private sector, the hospital-centered biomedical model still prevails. This model is undergoing a transition toward a family health model, with a greater capacity to respond through outpatient care and openness to social participation.

System Resources:

Human Resources:

Human Resources in the Health Sector, 1991 - 1997

	YEAR						
Type of Resource	1991	1992	1993	1994	1995	1996	1997
No. of physicians (*) (2)	6,459	6,940	7,315	7,553	7,689	7,831	7,999
No. of nurses (*) (2)	2,683	2,790	2,896	3,016	3,131	3,226	3,354
No. of medical technicians (*) (2)	982	991	1,045	1,069	1,093	1,118	1,142
Physicians per 10,000 SNSS beneficiaries	6.86	7.90	8.57	8.74	8.90	9.03	9.14
Nurses per 10,000 SNSS beneficiaries	2.85	3.17	3.39	3.49	3.63	3.72	3.83

Source: (*) Employees in the S.N.S.S. (1) A.G. Medical School (2) INPERSAL (Information on Health Workers), MINSAL

The number of physicians for every 10,000 beneficiaries increased by 33% during the period and the number of nurses by 34%. The public system is the largest employer of human resources in health.

Drugs and other health inputs: There is a National Drug Formulary that includes 250 pharmaceuticals and 380 drugs, and this is revised every two years. Drugs are provided free of charge to 100% of the poorest beneficiaries of the SNSS and at a lower percentage to those with higher incomes. Drugs are totally free at the primary care level, provided that the patients are affiliated with public system facilities or are treated for specific pathologies. Pharmacists must be on staff at all private pharmacies and are found in the more complex hospitals of the SNSS. There is no information available on private spending on drugs.

Standardized treatment protocols are used. These are linked to a schedule of Diagnosis-based Payments (DBP) for prevalent pathologies, based on a standard set of benefits that permit resolution of a pathology and consider the progress and treatment of morbidity in the average patient.⁶

The SNSS network of blood banks (160) receives 230,000 donations per year (96% through replacement), produces 400,000 different component units, transfuses 300,000, and meets 97% of requests.

Equipment and Technology:

Availability of Equipment in the Health Sector, 1995

Subsector	Type of resource						
	Beds	Clinical	Blood Banks	Radiodiagnostic			
		Laboratories		Equipment			
Public							
SNSS	31,579	nd	160	nd			
National Defense	2,296	nd	nd	nd			
Other institutions	852	nd	nd	nd			
Subtotal	34,727						
Private (profit and nonprofit)	_	_					

Subsector	Type of resource						
	Beds Clinical		Blood Banks	Radiodiagnostic			
		Laboratories		Equipment			
Worker mutual associations	1,423	nd	nd	nd			
Others	6,978	nd	nd	nd			
Subtotal	8,401	nd	nd	nd			
TOTAL	43,128						

Source: MINSAL

There is no information available on the number of delivery rooms, clinical laboratories, or diagnostic equipment. There is no systematic information on the operating budget for conservation and maintenance of equipment and facilities, or on the characteristics of the personnel assigned to these functions.

The SNSS has a total of 648 intensive-care beds (1996), 180 of which are in neonatology; 159 in pediatrics; 180 are adult beds; and 103 are undifferentiated. There is no information on the private sector.

Functions of the Health System:

Steering Role: MINSAL exercises sectoral management and regulation, coordinating health activities, setting priorities, and guiding the development of the public and private sectors. It sets standards, defines the essential public health functions, formulates national plans and programs, and supervises, evaluates, and monitors their execution. Health authority is exercised by the SS, with powers derived from the Health Code.

Government funding of the sector is predefined jointly by the ministries of Health and Finance, with Congressional approval, and depends on the government's funding policies and health sector priorities, with control established for the State by ordinary regulation.

The rights and responsibilities of subscribers and beneficiaries who have chosen the public subsector are defined in the Law creating the Health Services Regime (Law No. 18,469), and MINSAL is responsible for their supervision and control, without diminishing the social control exercised by users. Private insurance (ISAPREs) is governed by specific regulations supervised by the ISAPRE Authority.

There are intersectoral programs that are reflected at the national level in programs on poverty, the environment, air pollution, etc. At the regional level, the authority responsible for coordinating and controlling compliance with these programs is the Superintendent.

The financial, demographic, and health activities information services are reliable, their timeliness is acceptable, and they are used in decision-making.

In the area of human resources, MINSAL has a unit responsible for policy formulation, planning, and

coordination, which has recently become more important with the creation of the Human Resources Division. However, although the Ministry of Education is responsible for regulating the training of collaboration and support professionals, there is no national system for continuous accreditation of the institutions that train health professionals.

The accreditation of health facilities in Chile began in 1992 with the development of standards, and the Hospital Accreditation System was implemented in 1994. To date, accreditation has been granted to 60% of hospitals (100% of the most complex hospitals), emergency services, intensive care units, and facilities authorized to perform highly complex diagnostic and therapeutic procedures.

The first Hospital Care Standards were established in 1950. They are currently being revised.

Financing and Expenditure: The information system on the financing of the expenditure of public health institutions is reliable and timely and is managed by FONASA.

Funding Sources for the Health Sector (in billions of Ch\$)

Tunuing Sources for the freatth sector (in billions of Chy)								
	Year							
Source	1990	1991	1992	1993	1994	1995	1996	1997 *
Public sector								
Tax Contribution	40,691	79,247	25,244	272,179	306,621	335,166	371,260	400,942
Contributions	159,898	167,292	183,688	198,788	212,259	222,101	240,383	255,256
Operating Income	21,210	23,688	31,758	34,991	43,194	45,978	52,519	64,343
Others	35,752	47,588	70,640	92,143	92,792	96,587	98,605	89,624
Subtotal	357,551	417,815	511,330	598,102	654,867	699,831	762,766	810,165
Private sector **	259,996	307,183	364,071	423,243	469,884	516,766	588,207	563,340
TOTAL	617,547	724,998	875,401	1,021,345	1,124,751	1,216,597	1,350,973	1,373,505

Source: FONASA - Dept. of Finance. Statistical Bulletin of ISAPRE System, ISAPRE Authority * Adjusted budget. ** Does not include copayments

Between 1990 and 1996, the public health sector increased its revenues by 127%. The tax contribution rose from 39% to 49% of the total, and contributions grew by 60% (although their percentage fell from 45% to 32%). Funding of the public and private systems saw increases of 90% and 117%, respectively. Given current international economic conditions, the growth rate is expected to moderate.

The following connections exist between public financing and private health insurance: a) 2% State subsidy. Companies may increase their workers' contribution so that they opt for the ISAPRE health plans. This increase is tax-deductible; b) maternity leave (pre- and post-natal) is paid by the State, regardless of the beneficiary's health care affiliation; c) the State finances health benefits such as vaccines and food (through the National Supplemental Food Program); d) cross-subsidies from the public to the private sector for treatment of expensive (catastrophic) events; e) unplanned subsidies due to technical and regulatory inability to collect invoices for third party payers.

International cooperation in investments accounted for 51% of the total effective spending on investments between 1990 and 1996, with 85.3% for long-term reimbursable loans. Donations and nonreimbursable loans amounted to 14.7% of investments and only 0.47% of the total budget for the public health sector. Donations reached their highest levels between 1993 and 1994, declining to one-third in 1996. The major infrastructure and equipment replacement projects (World Bank, IDB, and German Credit) are in their final phase. Information on health expenditure comes from the budget execution of the SNSS institutions and is regulated by the Ministry of Finance and the Office of the Comptroller of the Republic. For the private sector, information on expenditure is governed by the regulations of the Securities and Insurance Administration, using equity accounting, audited by private firms. The public sector handles execution with a one-month time lag, and information on the private sector is disseminated through bulletins issued quarterly by the Administration.

Health Expenditure, 1990–1997

indicated in policitation (1990 in 1997)								
Indicator		Year						
	1990	1991	1992	1993	1994	1995	1996	1997
National per capita	50,336	59,402	73,576	85,611	92,575	100,118	112,205	114,770
health expenditure (in								
1997 pesos)								
Total health expenditure	595,848	711,648	867,376	1,024,710	1,140,007	1,241,535	1,400,991	1,450,232
*								
Total Public spending *	4,231,259	4,685,461	5,084,879	5,440,191	5,691,896	5,999,265	6,514,394	6,909,976
Total health expenditure	14.1	15.2	17.1	18.8	20.0	20.7	21.5	21.0
as a % of public								
spending *								

Source: FONASA - Dept. of Finance. Statistical Bulletin of the ISAPRE System, ISAPRE Authority. Department of Regional Development and Administration, Ministry of the Interior. * in billions of 1997 Ch\$.

From 1990 to 1994, total health expenditure as a percentage of total public expenditure increased from 14% to 20%, and then stabilized beginning in that year.

National Health Expenditure by Spending Agents (in billions of 1997 Ch\$)

Indicator	Year							
	1990	1991	1992	1993	1994	1995	1996	1997
Public	379,074	44,093	542,240	636,99	700,620	756,317	823,065	861,564
ISAPRE	210,420	258,268	311,713	370,297	419,113	467,602	560,725	570,988
Municipal	32,359	42,184	49,785	54,581	65,796	70,184	82,191	84,481
Total	595,848	711,648	867,378	1,024,710	1,140,007	1,241,538	1,400,996	1,450,232

Source: FONASA - Dept. Of Finance. Statistical Bulletin of the ISAPRE System, ISAPRE Authority Office of the Under-Secretary for Regional Development and Administration. Ministry of the Interior.

The percentage for public expenditure declines in favor of private expenditure. Public expenditure increased 2.2 times between 1990 and 1997; private expenditure increased 2.7 times; and municipal spending 2.6 times.

Public Spending in Health by Level of Care *, 1993–1997

YEAR	Primary		Secon Tert		
12.11	MMCh\$	%	MMch\$	%	Total
1993	41,433	10.70%	344,964	89.30%	386,397
1994	49,003	11.50%	378,865	88.50%	427.868
1995	54,903	11.80%	410,756	88.20%	465,659
1996	64,977	12.70%	445,685	87.30%	510,662
1997	66,801	12.20%	481,759	87.80%	548,560

Source: FONASA Statistical Bulletin. * Only the institutional SNSS modality

Spending on primary care has increased by 60% over 1993 and spending on secondary and tertiary care by 40%. Low growth rates are expected for all levels of care, with no change in the percentages. With respect to information on health expenditure in the private sector, the data available in the Bulletin of the ISAPRE Authority show only disaggregated figures by Health Services and Subsidies for Occupational disability. There is no disaggregated information on the allocation of private health expenditure.

Insurance Sixty-one percent of the population is covered by the public health subsystem through FONASA, and 28% of the population is covered by ISAPREs. This information is reliable, timely, and obtained with regularity. The remaining 11% represent members of the Armed Forces and Law Enforcement, and individuals who have no social benefits system. This last segment would tend to decline because it involves people with high incomes who will be using private insurance. The population living in poverty are beneficiaries of the SNSS.

Public insurance, operating through FONASA, offers the benefits provided under Law 18,469 establishing a health services regime. For its part, private insurance must offer at least the benefits provided by public insurance. The basic health programs have been operating for several decades, and their benefits are

available to all beneficiaries of the public system.

Service Delivery

<u>Public Health Services</u>: the SS provide public health services and are responsible for promoting healthy behaviors and protecting against risks. Most of these services are provided at the primary care level. There is intersectoral support, cooperation from the communications media, churches, and nongovernmental organizations, and health education content is included in formal primary and secondary programs. The following programs are under way with respect to specific prevention and early detection of certain pathologies:⁷

- Health Care Program for Older Adults in PHC (1996), whose objective is to maintain the remaining
 faculties of the elderly. The program, implemented countrywide, includes the training of health teams in
 care specifically for the elderly and educating community monitors to identify the elderly population at
 risk.
- The Program for Identification and Ambulatory Treatment of Diabetic Feet (1996), implemented in 155 physician's offices and 27 hospitals of the SNSS, has conducted 11,374 annual evaluations with positive diagnosis of 7.6% and has opened five polyclinics for diabetic feet to provide comprehensive care.
- Cardiovascular Health Program. Reorients the Hypertension and Diabetes programs to improve their
 effectiveness and coverage (51.5% in Hypertension and 61.9% in Diabetes), target research to risk
 groups, reduce dropout rates, increase the percentage of the population with normal blood pressure and
 normal blood sugar levels and increase coordination so as to identify and treat those who do not come in
 for care.
- Program for Early Detection of Congenital Hypothyroidism and Phenylketonuria. Begun in 1992, in 1988 this program achieved 100% coverage of institutional births, with an incidence of 1 out of every 2,488 newborns for hypothyroidism and 1 out of every 7,891 for phenylketonuria.
- Program for Early Detection of Breast and Cervical Cancer. These two diseases account for 22% of total deaths among women. Coverage for women aged 35 to 64 who are beneficiaries of the public system is 21.6% for breast examinations and 53% in the program for prevention of cervical cancer.
- National Program for Oral Health. Emphasizes the educational component, allocates 3% of dentistry
 resources to this task, and carries out national campaigns, including: systemic fluoride use, topical
 fluoride, sealants, healthy child dental check-ups, and the prevention of communicable diseases and the
 occupational risks of dental equipment.

Between 1991 and 1997, EPI coverage for children under the age of one exceeded 90%. Estimated SNSS

coverage of prenatal care is 90%, and delivery care provided by a professional is 99.7%.

<u>Personal health services:</u> Information systems for management in the public health sector are reliable and timely, and their use in management decision-making is increasing. Rural users continue to have little choice of health care provider, since the only health provider available is the SNSS. In this context, people with higher incomes have more options when they move to urban locations. There is no available information on changes in the ability to choose in the urban environment.

<u>For the primary care level:</u> public providers, considering the beneficiary population of the Municipal PHCs, cover 47% of the population, and a similar percentage is treated at the general physician's offices linked with type 3 and 4 (less complex) hospitals. There is no information on private providers.

In the public system, all health centers have a computerized information system due to the system's need for per capita enrollment of the population; this system was acquired in the period 1994-1995.

Activity	Number	Rate per 1,000 Pop.
Visits and check-ups with a physician (nonemergency) 1997	10,680,699	1,220
Visits and check-ups with a nonphysician (nonemergency) 1997	12,331,350	1,409
Visits or check-ups with a dentist 1996	2,629,444	0.300
Emergency consultations with a physician. Primary Level 1997	3,363,487	0.384
Emergency consultations with a nonphysician. Primary Level 1997	1,121,793	0.128

Source: MINSAL--Dept. of Coordination and Informatics.

There is no disaggregated information on the number of laboratory tests for the primary care level.

The most frequent causes of consultations in primary care are diseases of the respiratory tract (bronchitis, bronchiolitis, common cold), chronic diseases (hypertension, diabetes), and diseases of the digestive system.

The Health Centers schedule house calls for newborns, children under the age of 1, and high-risk pregnant women, bed-ridden older people, and chronic patients. These visits are made by professional staff (nurse, midwife, nutritionist) and trained paramedics.

<u>For the secondary care level:</u> There is no information on coverage by public and private provider networks. All hospitals with more than 50 beds have computerized information systems for administrative management, and a high percentage of these hospitals use their systems for clinical management and to increase the throughput of patient rooms and operating rooms and reduce unnecessary exploratory surgery and lag times.

Indicator	S.N.S.S.	Private Health System
Total No. of Discharges	1,078,478	390,197
Occupancy Rate	69.40	66.46
Average length of stay (days)	6.6	5.8

Source: MINSAL - Research Dept.

The outlays of the public system represent 73% of the total, and they are stable. In the private system (27% of total payments), the increase is greater (338,000 payments in 1990 and 370,000 in 1995).

The five most frequent causes of hospitalization for both subsystems, were: pregnancy, childbirth, and postpartum care (27.1%); diseases of the digestive system (11.4%); injuries and poisoning (10.1%); diseases of the respiratory tract (9.9%); and diseases of the genitourinary tract (6.7%).

Quality

Technical Quality: The Quality Improvement Program has trained all technical teams and administrators in hospitals and at the primary care level. Although there is no systematic information, there are pilot plans, such as the Quality Management Centers, operated by functional hospital units and the departments of the Valparaiso-San Antonio Health Services, providing a model for improving the quality of care that involves all administrators and staff members.

There is no record of facilities with ethics committees. However, some highly complex hospitals have implemented them to make decisions on clinical research and to limit treatment efforts in selected patient cases.

In 1997, cesarean sections accounted for 30.7% of total births in the SNSS and for 62.7% of total births in ISAPREs. This has not changed in recent years.

All public hospitals have a functioning hospital infections committee. The overall rate of these infections is 3.5%, declining by 26% in the period 1985 to 1994. Furthermore, all deaths occurring at home, including infant deaths require an autopsy, and more than 70% of deaths in children and 100% of maternal deaths are investigated.

Perceived Quality: User satisfaction studies or surveys are conducted sporadically, based on local initiatives. There are national studies that demonstrate user dissatisfaction in both the public and private sectors, although for different reasons. More than 20 hospitals have joined the Friendly Hospitals Program, various local programs are directed to improving the compassion with which users are treated. Of note are

the Bilingual Information Services to serve the Arauca population in the Araucanian Region and the Patient Care Services designed to greet and accompany patients and their families from admission to discharge from the hospital. In Chile the arbitration commission system is not used.

3. MONITORING AND EVALUATION OF SECTORAL REFORM

Monitoring the Process

Monitoring the Dynamic:

The health sector reform (HSR) of the 1980s turned primary care over to municipal administration, decentralized the SNS into 27 SS (now 29), delegated some functions to hospitals, and created the private health insurance plans (ISAPREs). Parallel to this HSR, cutbacks in health spending led to: a) reduced access to health due to financial barriers; b) hospital crises due to occupational injuries in the industrial area and due to technological obsolescence; c) loss of the sector's position in environmental matters and, d) emphasis on a curative approach instead of prevention. However, the favorable trend in the traditional health indicators continued, although there were inequities and inefficiencies within the indicators. In 1990, HSR became part of the government's proposal on modernization of the State (1994), to which all public services, ministries, and ministerial agencies adhere, through the preparation of their own modernization commitments.

MINSAL has assumed leadership as the political and technical entity that can channel the work that will make HSR a reality, interacting with the ministries in the social sector, the Ministry of Finance, the Ministry of the General Office of the Presidency and with the health commissions and political groups of the National Congress. The HSR agenda involves three stages:

i) Recovery of the public health system (1990-1994): Aimed at improving people's access to health care, preventing disease, creating opportunities for discussion of environmental topics, and undertaking studies of HSR as such. During this period units were created outside MINSAL, such as the MINSAL-World Bank Projects Coordinating Unit (to design, negotiate, and implement such projects) and the MINSAL-IDB projects implementation unit. In 1994 these units were subsumed into the formal structure of MINSAL.

<u>ii) Modernization of the public health system (1994-2000):</u> To achieve complementarity and transparent competition between the public and private systems. The modernization of health institutions provides for strengthening MINSAL's regulatory role, the separation of functions, the adaptation of the model of care, financial reform, and programmatic reform. In January 1998, draft legislation was submitted ("Equity in Health") to turn FONASA into a single, collective, nondiscriminatory public insurance system, that would cover its beneficiaries without exclusions or preexisting conditions.

<u>iii)</u> Health reform under social security (Forward 2000): To reduce inequities in access and quality of care and increase the efficiency and effectiveness of the sector. Its principal features include universal health insurance and a guaranteed package of public health benefits and individual health services.

The design of this process has been the work of the technical departments of MINSAL and FONASA, which have conducted a series of studies with consultants and universities.

The financing of HSR has been the responsibility of the Government, with the cooperation of various international organizations: the World Bank, in the overall design of the project; the IDB, in a proposal for comprehensive strengthening of three SS; AID and Italian Cooperation, in the immediate improvement of PHC; British and French Cooperation in projects to support and share experiences in health care units; Japanese Cooperation in training and technical assistance plans; Spanish and Canadian Cooperation in training, and PAHO/WHO cooperation in the Group to Support Reform, Technology Assessment, and Accreditation, as well as other initiatives.

The HSR agenda has followed the stages established and their primary objectives, and its strategies are sufficiently flexible to be changed as necessary. Although the criteria were not previously made explicit, MINSAL is preparing an evaluation of the progress made in terms of the programming and results.

Monitoring of Content

Legal framework: There are no constitutional amendments associated with the HSR process, and MINSAL's general direction is to move ahead with implementation using current powers and to make legal changes when the advantage of the new way of operating has been demonstrated. Legal adjustments to private health insurance plans included the creation of the ISAPRE Authority; regulations to recognize the ownership of surpluses from compulsory contributions, and improvements concerning exclusions and preexisting conditions. In addition, civil servants were included under the benefits provided under the Occupational Injuries and Occupational Diseases Law. With regard to providers, a statute was passed for primary care personnel, functions have been delegated for certain types of contracts, and procedures for the decentralization of sectoral financing with regard to investments were established. Concerning human resources, there were improvements in compensation, and performance incentives were created for technical and administrative SNSS staff.

In addition to the pending legal initiative to modernize and improve FONASA, changes in the Organic Regulations on the Health Services are being explored.

Right to Health Care and Insurance: The Political Constitution of the State establishes that all people residing in Chile have the right to health protection and to free and equal access to health promotion

activities, health protection, recovery, and rehabilitation. This right is exercised when those who make contributions choose their insurance plan and health provider and when those who cannot make contributions receive free care in public facilities. In public insurance, the right is universal and comprehensive and is regulated according to the availability of resources, supply (list of FONASA benefits), and the length of the waiting lists. In the private insurance plans, the right depends on the plan contracted, which in turn depends on the ability to pay for the plan, plus co-payments. In any case, private health plans may not contain fewer benefits than the FONASA plan.

To increase coverage, specific programs have been developed, such as the Emergency Primary Care Services (SAPU) to bring emergency care from the hospital closer to PHC; the Acute Respiratory Infections (ARI) Program, and the Short-Stay Hospital Wards (SHA) to bring appropriate technology closer to the people; the Waiting List Program to reduce complications and improve access to benefits traditionally delayed; the Program to Strengthen PHC to improve its response capacity and thus, to promote access for the people; the program designed to increase neurosurgery, transplants, child chemotherapy, and other benefits; investments for the replacement of PHC facilities, for new hospitals in geographical areas with supply below the national average, for new types of facilities--such as the CRS--designed to improve PHC's response capacity in one or more districts and in the CDTs attached to highly complex hospitals, and to develop highly complex outpatient diagnostic and therapeutic procedures.

Steering Role: The central level is reviewing the exercise of the steering function in health and the operations of the agencies responsible for performing this function. Changes have been made in the organizational structure of MINSAL through the following Divisions: Health of the People; Primary Care; Environmental Health; Investments and Assistance Network, and Human Resources. The ISAPRE Authority was created, and its functions have been expanded twice. The ISP, in addition to registering medications and inputs for medical use and controlling their quality, has improved quality control in the laboratories. Environmental and labor regulations are being transferred to other sectors (National Commission on the Environment and the Ministry of Labor and Social Welfare), although a significant proportion of surveillance remains with the health sector.

The information supplied to the central level comes from local agencies; it is timely and of recognized quality, making it possible to set priorities and make decisions.

<u>Separation of Functions:</u> FONASA and the ISAPREs are responsible for funding and insurance for their beneficiaries; public (SNSS and municipios) and private health services are responsible for service delivery; and MINSAL, the ISAPRE Authority, and ISP are responsible for the regulatory and evaluation role.

MINSAL is responsible for formulating health and financing policies, directing the sector and ensuring the quality of benefits. To this end, it receives feedback from the local level on the operation of the model of care and on problems related to financing. In addition to its coordinating role, MINSAL sets priorities, defines standards, carries out epidemiological surveillance, and conducts inspections. The accounting controls are the general procedures for all public agencies and are analyzed and reviewed by the Office of the Comptroller of the Republic. Although there are no mechanisms for public accounting to the society at large, specific management commitments throughout public administration have been made in the past four years.

<u>Decentralization:</u> MINSAL developed a decentralization strategy in 1980 that included breaking the SNS down into 27 Health Services (now 29); moving PHC from the SNS to the municipios and since 1990, delegating powers to the SEREMI level for certain personnel contracts (health campaigns, etc.) and for procedures on Sectoral Investment of Regional Allocation (ISAR), which covers 7% of investments to date.

The creation of the Regional Governments (1975) preceded the creation of the SNSS. Although the latter does not have a close relationship with the provincial arena, it does with the regional arena. However, a scenario of progressive decentralization has been created at the regional level.

Functions, jurisdictions, and resources for planning, management, and decision-making within government have been transferred from the central to the local level and from the SS administrations to hospitals. This process was supported with participatory methodologies in Regional Workshops on Decentralization to prevent resistance to changes at the central and local levels. The SS are decentralized, FONASA has opened regional offices, the ISAPRE Authority has three regional offices. CENABAST and the ISP are centralized.

Social Participation and Control: This topic has been explicitly addressed in ministerial policies and is considered to be of the greatest importance. Social participation and control are expressed operationally in 283 Development Councils, in both hospitals and outpatient health centers and groups of municipios. These Councils--which will increase to 340 by 1999--include representatives from both inside and outside the facilities in order to determine how the facility is progressing, recommend priorities, and obtain contributions of additional resources. There is no exclusion of ethnic or gender groups in these Councils and, potentially, anyone can become an active member or participate in the appointment of representatives to these bodies. The Councils do not have their own resources and are not formal legal entities, although they were taken into account in the amendments being studied with the introduction of D.S.42/86 on the Organic

Regulations on the Health Services. The Employer-Employee Committees and the Quality Management Centers are also included as an example of social participation.

<u>Financing and Spending</u>: The year 1993 marked the beginning of several projects to computerize the information systems on financing and expenditure. The SS administrations and hospitals where the Diagnosis-based Payment (DBP) system has been applied now have the capacity to generate individual accounts by patient and diagnosis and to generate invoices for third-party payers. These information systems are reliable and comparable between facilities and between SS. FONASA consolidates this information, systematizes it, and calculates overall activity indicators.

The composition of financing, the evolution of public expenditure, its distribution by spending agents and components, can only be modified gradually after technical and political discussion. For example, the introduction of performance incentives for human resources of the SNSS was a matter of legal change, public debate, legislative consensus, and labor conflict.

<u>Service Delivery:</u> Service delivery is a reflection of the model of care, which is being redefined to restructure the health care network, to increase coverage and the problem-solving capability of outpatient facilities, to improve in-patient care, to improve efficiency in the use of resources, to promote public-private complementarity, to make better use of the country's health infrastructure, and to integrate the primary care level with the other levels. The utilization of procedures such as ambulatory surgery, one-day hospitalization, and short-stay treatment are used by the facilities under the SS. The mechanisms for patient referral and back-referral among the levels of care in the SS and regions have not been modified, except for tests of new formulas for coordination between levels.

In the provision of primary care services, the change focuses on recognizing the health needs of the population, with an integrated, family-based approach, so that the current PHC physician's offices are undergoing a transition toward Family Health Centers. At the secondary care level, new types of facilities such as the CRS and the CDT are operating.

To serve vulnerable groups, mention should be made of the improved capacity for local management in poorer municipios; campaigns to reduce morbidity and mortality from ARI and reduce deaths at home from ARI in infants under the age of three months.

<u>Management Model:</u> The most important change in the management model for the public assistance network is the application of management commitments that seek greater interaction between the technical care team and the administrative-financial area. These commitments represent contracts between different entities of the system and link the allocation of funds to the achievement of goals. They have been developing since the first quarter of 1994, their goals are precise, easily monitored, and largely unaffected

by factors outside management. The indicators used facilitate overall analysis of the SS.

There is legal and institutional capacity to purchase and sell services from and to third parties. This is found in certain support services (laundry, cleaning, surveillance, etc.), facilities responsible for specific specialties (cancer patient foundations), in territorial areas with populations under their care (PHC hospitals and physician's offices) and in the sale of services to insurers and private providers, when supply is limited in small cities, or when the supply is specific in specialties that are lacking.

The possibility of organizing self-managed public health facilities is under legislative discussion. Publicly owned facilities have not been handed over to private management.

<u>Human Resources</u>:¹⁰ There is no overall organization for human resources education regarding HSR, but efforts have been made in the regulation of paramedical health technicians, within the context of the agreement on technical cooperation between the Ministry of Education and MINSAL (1993). Curriculum changes in college education have been agreed upon with the Schools of Medicine and are being developed at different universities.

The participation of workers and their representatives in health focuses primarily on the demand for better wages and on the protection of working conditions. A labor model is being promoted that considers workers part of the solution, establishing entities for negotiation with unions and utilization of participatory mechanisms.

Changes have been introduced in the planning and management of human resources based on the diagnosis of current supply in order to define the criteria for expansion. In recruitment and selection, the operation of the Allocation Cycle has been retained; it utilizes criteria for allocating professionals based on equity, allocating positions to the most deprived SS. For the remaining SS staff, there is a decentralized Recruitment and Selection system, with criteria defined locally. In 1997, an Experience- and Performance-based Allocation (or incentive) System was established for SS personnel, as well as an Individual or Institutional Performance System for subsidiary agencies that do not provide care.

The Family Health Centers Program introduces the multidisciplinary professional practice with professionals in training or trained in Family Medicine. In addition, the Internship Program for PHC Professionals abroad has been established (so they will have direct experience with family health models), as have various exchange programs for professionals through sister-city hospital programs. The methods introduced for staff training are:

a) Conventional Training, to improve technical and managerial competence. With the contribution of the World Bank, a fund was created that invested US\$1.5 million per year for six consecutive years; this

facilitated identification of training needs, the preparation of projects, and the allocation by the SS themselves of an additional US\$1.5 million.

b) Methodology for Continuing Education in Health (1998), which developed continuing education projects in eight Health Services, for critical units found in the initial diagnosis. The creation of mechanisms for the certification of health workers is beginning to be explored in MINSAL (with British and PAHO Technical Cooperation), through the determination of labor profiles and accreditation systems.

Quality and Health Technology Assessment:¹¹The current accreditation program has not been reformulated. HSR includes initiatives in the technical quality areas through training of all personnel and application of appropriate technologies through mechanisms such as Quality Management Centers. Regarding perceived quality, various types of surveys, Patient Care Services (SAP) and the Bilingual Information Centers for the Arauca population in the Araucanian Region have been developed. Initiatives to develop mechanisms for health technology assessment are recent, and in 1998 the Chilean Agency for Health Technology Assessment was recognized.

Evaluation of Results

Equity: There is insufficient evidence to attribute changes in the health status of the Chilean population to HSR. Trends toward continuous improvement are a reflection of decisions made throughout the century.

In Coverage: Basic health care covers 100% of the population, since there are no barriers to access in Public Health Services, and curative care in the public facilities is guaranteed for both emergency care and highly complex pathologies. This is even true for people with private insurance when services required exceed the plan's ability to pay. In case of public insurance beneficiaries, there are copayments of 10% to 20% of the fee, based on income.

In Access: The SNSS has a vast network of facilities of differing complexity. In general, there are no sectors beyond the range of the health care network, with the exception of a few isolated rural populations in the southern archipelagos.

The opportunity to obtain emergency care on the same day it is sought is guaranteed by: a) Emergency services (SU) attached to hospitals; b) Emergency Primary Care Services (SAPU), attached to a PHC physician's office and designed to serve the population of several offices; c) Emergency Health Care Service (SAMU)), prehospital care that covers more than 60% of the population; and d) Short-stay Hospital Wards (SHA) under the ARI program.

Obtaining nonemergency PHC is regulated by an appointments system, just like the system used by the specialties, which have waiting lists. Approximately 30% of PHC facilities have extended the hours they are open to the public from 6:00 pm to 9:00 pm and in the Araucanian Region (with 30% Arauca population), all

hospitals provide bilingual information services.

For the most frequent surgical pathologies, the proposal has been to establish a three-month period for resolving them in public facilities. If not resolved, FONASA would proceed to pay for the benefit in a private center and deduct the cost from the budget of the public facility that did not perform the surgery.

Effectiveness and Quality: There is no evidence that the modifications attributable to HSR as redirected in 1994 have had an effect on the traditional health indicators. It is too soon to observe these results.

Technical Quality: A registry of quality committees by health care network facility is not available. People registered with a Family Health Center or a traditional PHC Physician's Office receive a personal record that indicates their essential data and the services they have received in terms of health promotion and protection, treatment, and rehabilitation. At the time of hospital discharge, all patients receive a record containing the diagnosis, the results of any complementary tests or examinations, the treatment received, and the treatment prescribed. The epicrisis is indicated in the clinical file, only part of which is sent to the PHC facility.

Perceived Quality: Each beneficiary of FONASA, when treated institutionally, can choose their PHC facility but not the specific professional or referral center. Under the free choice modality, they can select providers, with up front copayment based on a national schedule. Private insurance beneficiaries have increasingly less free choice, given the existence of closed health plans with preferred providers or providers contracted by the insurance plan itself. The high income group retains full free choice because of the cost of the plan selected.

User opinion polls indicate a high degree of dissatisfaction with both public facilities (poor treatment, inadequate environment and technological obsolescence) and private facilities (ignorance of the details of contracts, exaggerated expectations about the situation, and lengthy waits in waiting rooms). Therefore, initiatives in varying degrees of development have been launched in the public sector--for example, the Friendly Hospitals program, Patient Care Services (SAP), daily visits, husbands accompanying women during childbirth, prenatal check-ups, and family planning for couples, with varying degrees of development. *Efficiency*

In the Allocation of Resources: 96.9% of the urban population is connected to a household drinking water system with continuous monitoring of quality; this figure falls to 9.7% among scattered rural populations. Of the population, 97.5% has toilet facilities, 70% is connected to sewerage systems, and 16% of the rural population have cesspools. Although the urban population has regular solid waste collection systems, information on the type of final disposal is not available, and only 10% of waste is treated before being its

final disposal.

The health situation is determined by the political and technical decisions made by the ministries in the social sector and coordinated by the Ministry of Planning and Regional Governments, but not to HSR, except for the emphasis on prevention (accidents), self-care in health (joint activities by Education and Health), the targeting of resources to critical areas (highly complex pathologies, introduction of new vaccines such as the *Haemophyllus influenzae* type b vaccine), and increased resources for PHC (in the context of the Family Medicine Plan), etc. To make the allocation of resources more efficient, tools are being introduced, such as management information systems, diagnosis-based payment, economic and social evaluation of projects, AVISA, cost-effectiveness criteria, management commitments, etc. Application of the first and the last of these has already been justified.

Efficiency in Resource Management: Financial reform, which is part of HSR, includes the standardization of procedures and interventions and the measurement of activity indicators in all hospitals. In addition, as a result of training programs and increasing responsibility under the decentralization process, hospitals have reduced the average length of a hospital stay, increased the number of discharges per bed, increased the use of surgical wings and know the cost per day of hospitalization and per outpatient visit. Budget allocations are based on the activity criterion. Facilities have negotiated their management commitments but cannot expand the expenditures framework by using new income.

Sustainability: In general, the health system has long had legitimacy and acceptance. The available information is sufficient for knowing expenditures and the overall trends both in the aggregate (public and private sectors) and broken down by institutions and territorial units. Medium- and long-term sustainability is guaranteed in terms of both health policy decisions and financing for programs and services. Programs to be noted include: a) EPI, b) health check-ups (prenatal and healthy child) and, c) Supplemental Food. Services to be noted include: a) professional care in childbirth, b) emergency consultations and scheduled consultations for accidents and morbidity, c) the Comprehensive Care Network, d) State subsidiarity.

There are sufficient tools to adjust income and spending at health institutions, as well as the ability to collect from third-party payers. The country has the economic capacity to finance its operating budgets and investments in health and is paying off its loans.

Social Participation and Control: The creation of Development Committees and Employer-Employee Committees is the result of the content of HSR. The starting point is the qualitative and quantitative level of the Development Committees (283 in operation), the Employer-Employee Committees (in all hospitals and SS) and the Quality Management Centers of Valparaiso-San Antonio SS.

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