Reforms to *health system financing* in Chile

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The reforms made in the early 1980s profoundly changed the structure and functioning of the health sector in Chile in both the private and the public subsectors. In spite of the considerable advances made since 1990, however, the public-private configuration resulting from those reforms has not allowed the shortcomings in terms of resource allocation and the access of the population to health services to be overcome. A proposal for reform of the sector should be aimed at developing mechanisms to raise the efficiency and efficacy of the resources allocated to it, as well as incorporating and improving solidarity-based mechanisms which will help to tackle and solve the problems of health service access afflicting a substantial part of the population. This dual challenge is by no means easy, since it is necessary to cope with growing demand in a context of shortage of resources. The article describes the Chilean financing model and proposes that the present public-private configuration of the health sector must be redefined in order to make possible greater solidarity in financing, reduce the problem of adverse selection of risks, and permit better linkages between the private and public subsectors, both in the field of financing and in the provision of health services.

I

Organization of the health sector

The reforms initiated in the early 1980s changed the structure and functioning of the health sector in Chile. In particular, the creation in 1981 of Health Insurance Institutions (Isapres) allowed the private sector to begin to play a more active role in health sector finance.

The main reforms made at that time were: i) the establishment of the National Health Fund (FONASA), a financial institution for collecting, administering and distributing State resources for the health sector; ii) the creation of Health Insurance Institutions (Isapres); iii) the decentralization of the National System of Health Services (SNSS) into 27 area health services covering the national territory, each one providing health attention through systems made up of hospitals of different levels of complexity, urban and rural outpatient clinics and rural medical aid posts, and iv) the decentralization of primary health attention.

As a result of these reforms, the Chilean health system now has a dual structure under which the public and private subsectors both carry out functions in the financing (insurance schemes) and production of health services.[1]

II

Features of the Chilean model

The main sources of finance are: i) the compulsory health insurance contributions of all dependent workers and pensioners, equivalent to 7% of taxable income; ii) financial resources from the national budget, mainly channelled through FONASA. In addition, although there are no systematic statistical data on the direct supplementary payments that users make when they use the private services, such payments to private and public suppliers have become a by no means insignificant source of funds.

One of the most outstanding features of the Chilean system is that the health insurance contributions can be paid into either of the two health systems, which operate side by side but on very different principles. Thus, contributors can choose between the public health service insurance system (FONASA) or the private health insurance schemes (the Isapres). If the compulsory contributions are paid into FONASA, the contributor and his dependants will be enrolled in the public health system. If he chooses to pay into an Isapre, the contributor forms part of the private health system.

FONASA has a dual role. On the one hand, it acts as an agency which collects, administers and allocates public resources, while on the other it acts as a public health insurance scheme representing contributors and their dependants. In its role as an insurance scheme, it operates like a traditional social security system, as the benefits supplied are not linked to the contributions paid. In principle, every beneficiary has access to the same package of benefits, whatever his level of contributions. In this sense, FONASA incorporates financial mechanisms for the redistribution of income from the richer to the poorer sectors. Together with this income redistribution, it also applies the solidarity typical of a health insurance system that serves both the healthy and the sick.

Persons classified as indigent, who cannot pay contributions, are beneficiaries of the public system

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[1] Regulation of the health system is the responsibility of the Ministry of Health, in accordance with the Health Code, which covers all matters relating to the promotion, protection and recovery of the health of the population. In addition, in 1990 the Government set up the Superintendency of Health Insurance Institutions: a quasi-autonomous public body responsible for supervising and monitoring the Isapres.

and thus part of the financial responsibility of FONASA, just like regular contributors and their dependants. Indigent beneficiaries receive free attention in the primary health care clinics run by the municipalities or, in more complicated cases, in hospitals that form part of the public system (the "institutional" modality). Contributors and their dependants can receive attention in the public health system or be treated by private suppliers through the "free choice" modality offered by FONASA, in which case they must make a co-payment from their own pocket for the services provided.[2]

The network of suppliers under the institutional modality consists of the health services belonging to the SNSS, which come under the Ministry of Health, and the local primary health clinics, which come under the municipalities. At present, around 75% of the hospital beds in the country belong to the SNSS. Under the free choice modality, beneficiaries can use the services of any private suppliers officially registered with FONASA.

As regards the private system, the Isapres act as insurance companies offering health insurance under a contract which defines the degree of coverage and types of benefits for the individual subscriber or the subscriber and his family unit (spouse, children or other dependants). These contracts operate like an individual insurance policy: the benefits offered vary according to the premium paid and the medical risk category of the insured person(s).[3] Thus, two persons paying the same contributions but belonging to different age cohorts (which mean different medical risks) receive different levels of coverage and benefits. The contracts with the beneficiaries last for one year, after which the Isapres have the right to change their coverage and cost.[4] Generally speaking, for a given level of medical risk the amounts refundable and the maximum levels of coverage increase in proportion to the premium paid.

It is calculated that there are currently over 8,000 different health insurance plans available on the market (Celedón and Oyarzo, 1998). This is because, as the contributions are predetermined by the Isapres, the latter adjust the plans they offer as a function of the contributions and medical risks of their clients.[5] As we shall see below, this multiplicity of health plans obviously has important effects on the capacity of users to choose the right plans and thus reduces the efficiency of resource allocation.

The plans offered by the Isapres must incorporate all the types of health attention offered by FONASA. What differentiates one health contract from another is the degree of financial coverage of the attention received (i.e., the size of the co-payment to be made by the user) and the inclusion of types of attention over and above those offered by FONASA. The levels of financial coverage are determined in line with scales of charges fixed by the Isapres, which do not always reflect the market value of the types of attention in question. If the gap between the prices fixed by the insurers and those charged by the suppliers widens, this increases the financial burden on the user, because of the larger co-payment he must make.

The network of suppliers of the system of Isapres consists mainly of private suppliers: either independent or contractually linked with the Isapres. Generally speaking, there is no integrated system combining the financing and supply of attention (along the lines of the Health Maintenance Organizations (HMOs) in the United States, for example); instead, the Isapres tend to reimburse the payments made by users for health attention, subject to the established ceilings of the coverage provided.

[2] Higher-income contributors who receive treatment in establishments belonging to the National Health Service must make a co-payment. Beneficiaries in group A (indigents), as well as those in group B (persons whose income does not exceed the minimum wage), are treated free in public establishments. Those who are in group C (with an income that exceeds the minimum wage by not more than 40%) must make a co-payment of 10%, while those in group D (all higher incomes) must make a co-payment of 20%.

[3] In reality, there are two types of Isapres: open and closed. Open Isapres operate like insurance companies, with the insurance provided depending on the premium paid and the individual risk category of the assured. Closed Isapres usually have contracts with well-defined groups of persons, generally trade unions or workers in the same firm, so that the medical risk implicit in the scheme offered is of a collective nature and is a function of the risk category of the group of members.

[4] In the event of disagreement, the Superintendency of Isapres is empowered to act as a binding arbitrator between the Isapres and their clients. The powers of the Superintendency in this respect are naturally limited to those laid down in the corresponding legislation.

[5] This phenomenon is due to the fact that the compulsory contribution of 7% of taxable income determines the prices of the policies in a manner which is exogenous to the insurance market, and the insurers must configure the insurance coverage offered as a function of a given price but different medical risks. The great variety of plans is therefore due partly to the mixed public-private nature of the current situation.

III

Coverage and financing of the health system

In 1997 the public health subsector represented approximately 2.7% of GDP while the Isapre subsector represented 1.7%[6] (table 1). As regards population coverage, in the same year approximately 64% of the population was covered by FONASA and 26% were members of Isapres.[7]

In the financing of the public health subsector, the relative importance of the fiscal contribution has been growing in recent years, so that in 1997 it represented 50% of FONASA's income. As a proportion of GDP, this contribution has practically doubled since the first administration of the Democratic Coalition (the "Concertación"), rising from 0.7% in 1989 to 1.3% in 1997 (table 1).

The compulsory health insurance contributions are the second source of finance of the public subsector. Although their relative weight went down slightly in the 1990s, in 1997 they represented 32% of total income, which, together with the fiscal contribution, accounted for nearly 82% of total finance, the remaining 18% being made up of the co-payments by FONASA beneficiaries and other revenue.

In the Isapre system the main source of finance is the contributions (premiums) paid by members, which accounted for an average of 93% between 1990 and 1997. Most of the remainder –an average of approximately 4% of total income between 1990 and 1997– is made up of the sale of voluntary plans supplementary to the plans purchased with the compulsory contributions. The fiscal contribution reflects the subsidies received by Isapre members, especially the "extra 2%" subsidy.[8]

In spite of the efforts made by the public subsector –public health expenditure practically doubled in real terms between 1990 and 1997– the difference with the private subsector in terms of expenditure per beneficiary continues to be substantial. Thus, in 1989 the expenditure per beneficiary in the Isapre system was three times that of FONASA, though this difference had been halved to 1.5 times in 1997.

The levels of contributions also display big differences between the public and private subsectors. In 1989 the average contribution in the Isapres was seven times the average for FONASA, and in 1997 it was still four times greater.

If we look at the distribution of the population between the public and private subsectors by income levels (table 2), we see that in the first four quintiles of the income distribution scale most persons are members of the public system. Only in the fifth quintile (the richest 20% of the population) is there majority membership of Isapres. This tendency has been maintained throughout the 1990s.

With regard to distribution by age groups (table 3), we see that as the age groups rise the people in them tend to be mainly concentrated in FONASA. Even among the richest 20% of the population, after the age of 50 most people likewise tend to be in FONASA.

[6] As this figure does not include co-payments made in the private sector it underestimates global expenditure on health. Different estimates place total spending on health at between 5 and 6% of GDP.

[7] The calculations of coverage are based on the number of contributors under Law No. 18.469, which in 1997 meant some 9,382,000 persons in the public system and some 3,882,000 in the Isapres, representing altogether 90% of the population. The remaining 10% comprises persons belonging to insurance systems with smaller coverage, such as the armed forces and the police, and persons who do not have any health insurance.

[8] Among the subsidies granted to persons enrolled in the Isapres is the extra 2% subsidy established in 1986. This subsidy cannot exceed 2% of a member's taxable income and is granted as a supplement to low-income members whose 7% contribution is not enough to acquire a private health insurance plan. It should be noted that this subsidy is being seriously questioned and its elimination is currently under discussion.

TABLE 1

Chile: Financing and coverage of health systems, 1984, 1986 and 1988-1997

	1984		1986		1988		1989		1990		1991	
	Isapres	FONASA	Isapres	FONASA	Isapres	FONASA	Isapres	FONASA	Isapres	FONASA	Isapres	FONASA
Sources of financing (% of GDP)	0.4	2.9	0.7	2.4	0.9	2.1	1.2	2.1	1.4	2.1	1.5	2.2
Fiscal contribution	...	1.2	...	0.9	...	0.8	...	0.7	-	0.8	-	0.9
Contributions	0.4	0.9	0.6	0.9	0.9	0.8	1.1	0.9	1.3	0.9	1.4	0.9
Co-payments	...	0.4	...	0.3	...	0.2	...	0.2	...	0.2	...	0.2
Other revenue	...	0.3	-	0.3	-	0.3	0.1	0.3	0.1	0.2	0.1	0.3
Sources of financing (% of total)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Fiscal contribution	...	42.6	...	38.0	...	37.1	...	33.6	3.2	37.8	3.1	41.8
Contributions	100.0	33.0	94.4	36.3	98.7	37.2	94.9	43.1	91.2	42.9	91.6	39.0
Co-payments	...	12.4	...	12.5	...	10.3	...	8.9	...	8.1	...	7.2
Other revenue	...	12.0	5.6	13.2	1.3	15.5	5.1	14.5	5.6	11.2	5.2	12.0
Sources of financing (1990=100)	18	87	35	83	58	94	84	99	100	100	115	112
Fiscal contribution	...	99	...	84	...	92	...	88	100	100	113	124
Contributions	18	67	36	70	63	81	87	99	100	100	116	102
Co-payments	...	134	...	129	...	120	...	108	...	100	...	99
Other revenue	-	93	34	97	12	128	73	125	100	100	108	120
Average expenditure per beneficiary (1997 pesos per beneficiary)	134 142	37 868	102 104	36 714	118 058	40 882	128 617	43 193	129 115	44 217	123 139	50 633
Average contribution (1997 pesos per contributor)	356 156	25 762	276 874	28 129	286 759	34 273	319 003	43 111	309 711	45 144	288 455	48 480
Beneficiaries (% of total population)	3.1	83.4	7.5	79.0	11.4	77.6	13.5	76.0	16.0	73.9	19.2	71.2

	1992		1993		1994		1995		1996		1997	
	Isapres	FONASA	Isapres	FONASA	Isapres	FONASA	Isapres	FONASA	Isapres	FONASA	Isapres	FONASA
Sources of financing (% of GDP)	1.6	2.4	1.8	2.6	1.8	2.7	1.8	2.5	1.8	2.7	1.7	2.7
Fiscal contribution	0.1	1.1	0.1	1.2	0.1	1.2	0.1	1.2	0.1	1.3	-	1.3
Contributions	1.5	0.9	1.6	1.2	1.7	1.2	1.7	1.2	1.7	1.3	1.6	0.9
Co-payments	...	0.2	...	0.2	...	0.2	...	0.2	...	0.2	...	0.2
Other revenue	0.1	0.3	0.1	0.3	0.1	0.4	-	0.3	-	0.4	-	0.3
Sources of financing (% of total)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Fiscal contribution	3.3	43.8	4.7	45.7	4.6	46.8	4.5	48.0	3.8	48.7	2.6	49.4
Contributions	91.9	35.7	90.6	34.2	91.9	32.4	93.6	31.8	93.9	31.6	95.3	31.6
Co-payments	...	6.9	...	6.9	...	6.5	...	6.6	...	6.6	...	6.7
Other revenue	4.8	13.6	4.7	13.3	3.5	14.3	1.9	13.6	2.3	13.1	2.1	12.3
Sources of financing (1990=100)	133	131	154	147	167	162	184	173	196	187	197	202
Fiscal contribution	138	153	228	179	243	202	258	221	233	243	160	265
Contributions	134	109	153	118	169	123	189	129	203	138	206	149
Co-payments	...	111	...	125	...	132	...	142	...	153	...	168
Other revenue	113	158	119	169	95	202	62	209	76	216	71	220
Average expenditure per beneficiary (1997 pesos per beneficiary)	122 338	61 561	123 607	71 075	124 824	78 974	133 617	80 690	142 669	86 956	142 858	92 842
Average contribution (1997 pesos per contributor)	284 212	54 697	282 194	62 502	287 187	67 534	309 998	71 850	322 934	78 121	316 606	85 284
Beneficiaries (% of total population)	22.1	67.5	24.8	64.8	26.2	63.3	26.5	65.1	26.4	64.5	26.5	64.1

Source: Superintendency of Isapres, *Boletín Estadístico*, various issues, and FONASA, *Boletín Estadístico*, various issues.

TABLE 2

Chile: Distribution of population, by type of health insurance and income
(Percentage coverage)

	Quintile 1			Quintile 2			Quintile 3		
	Public system	Isapres	Rest[a]	Public system	Isapres	Rest	Public system	Isapres	Rest
1990	85.0	2.8	12.2	78.6	6.5	14.9	69.6	11.3	19.1
1992	83.3	4.9	11.9	74.5	11.8	13.8	64.4	17.5	18.1
1994	85.7	5.9	8.4	75.3	13.8	10.9	64.6	22.3	13.1
1996	84.2	5.4	10.4	71.2	14.6	14.2	59.5	23.3	17.3

	Quintile 4			Quintile 5		
	Public system	Isapres	Rest	Public system	Isapres	Rest
1990	57.6	21.6	20.8	36.8	41.2	22.0
1992	50.8	28.6	20.6	29.1	47.4	23.5
1994	48.8	34.4	16.8	31.0	51.4	17.6
1996	44.3	35.2	20.5	26.5	55.2	18.3

Source: CASEN Surveys for 1990, 1992, 1994 and 1996.
[a] Rest = Armed Forces, Private Individuals, Other Systems and Don't Know.

TABLE 3

Chile: Distribution of population, by type of health insurance, age and income

Age	Quintile 1				Quintile 2				Quintile 3			
	Public system	Isapres	Armed Forces	Rest [a]	Public system	Isapres	Armed Forces	Rest	Public system	Isapres	Armed Forces	Rest
00-20	85.4	5.5	0.4	8.7	69.9	16.6	3.8	9.7	54.4	28.0	4.8	12.8
21-50	81.8	6.1	0.4	11.8	67.6	16.4	3.1	13.0	54.4	26.6	3.5	15.6
51-64	87.3	2.9	0.4	9.4	81.8	6.0	1.5	10.7	72.4	12.1	2.6	12.9
65 or more	89.5	0.8	0.5	9.2	91.1	1.1	0.9	6.9	89.4	1.6	2.2	6.8
Total	*84.2*	*5.4*	*0.4*	9.9	*71.2*	*14.6*	*3.1*	*11.0*	*59.5*	*23.3*	*3.7*	*13.5*

Age	Quintile 4				Quintile 5			
	Public system	Isapres	Armed Forces	Rest	Public system	Isapres	Armed Forces	Rest
00-20	36.6	42.7	5.5	15.2	19.1	66.1	2.6	12.1
21-50	37.9	40.4	4.5	17.2	21.8	60.1	2.5	15.6
51-64	59.6	20.3	7.2	13.0	37.1	39.8	6.3	16.9
65 or more	79.4	5.9	6.1	8.7	55.5	21.8	9.8	13.0
Total	*44.3*	*35.2*	*5.3*	*15.2*	*26.5*	*55.2*	*3.8*	*14.6*

Source: CASEN Survey, 1996.
[a] Rest = Private Individuals, Other Systems and Don't Know.

As older people represent higher medical risks, the logic of private insurance schemes will naturally cause the insurance companies to discriminate against this class of insurance risks, either by charging higher premiums or by reducing the levels of coverage. This phenomenon is known in the economic literature as "cream skimming" or skimming off the cream. Such risk discrimination not only affects the elderly but also anyone who has a higher risk of falling sick (such as relatively older persons or those suffering from chronic ailments) and poorer persons. These kinds of people represent "bad risks" for private insurance schemes. In this sense, as the Isapres are acting as casualty insurance agents in a highly deregulated market, they tend to behave in a manner that encourages such discrimination.

The existence of a solidarity-based insurance system such as FONASA, which acts as a "lender of last resort", together with the capacity of the Isapres to skim off the cream, means that under the Chilean model access to health services is determined by income levels and levels of medical risk. In this context, FONASA tends to concentrate those with the lowest incomes and the highest medical risks, while the Isapres attract people of high income and low health risk. This segmentation of the population produced by the way the current public-private structure operates in Chile adversely affects the equity of the system, since the levels of per capita expenditure and average numbers of cases of medical attention per beneficiary differ significantly between the two subsectors (Larrañaga, 1997).

IV

The public subsector

As noted earlier, public expenditure on health has increased significantly in the 1990s. Thus, between 1990 and 1997, in real terms, this expenditure increased by 100% and the fiscal contribution grew by 164%, rising from 0.8% to 1.3% of GDP (table 1).

In spite of these high growth rates of expenditure, however, there are still serious deficits as regards the public sector's capacity to provide health services for the population, and moreover most of the health services belonging to the SNSS have problems of finance and manning.

The main item in public health expenditure is wages and salaries, which came to 40% of the total in 1997 (table 4). Unfortunately, under the current rules the wages and salaries of public employees are not directly linked to productivity and performance criteria, but rather to seniority, which means that pay increases do not necessarily correspond to improvements in the health services. Investment expenditure, for its part, increased from 3.6% of total expenditure in 1989 to 9% in 1994 and 7% in 1997. Although this expenditure is indispensable, and also unavoidable in view of the state of the SNSS health services at the end of the 1980s, it is also true in this case too that not all the expenditure on infrastructure is automatically reflected in improvements in the services provided.[9]

One of the main aims in the reforms made in Chile has been to improve the efficiency and global management of the available resources. In view of the chronic scarcity of financial resources affecting the health sector, better resource allocation is crucial for coping with the growing demands.

In the public subsector, efforts have been made to increase resource allocation efficiency through decentralization policies and changes in the payment and budgeting mechanisms of hospitals and primary attention centres.

The processes of decentralization of the SNSS and primary health attention begun in the 1980s were supplemented in 1994 by the law on personnel regulations for the municipalized health services. As well as trying to improve the labour situation of these workers, this law sought to establish management commitments between the area health services and the municipalities regarding the coverage of health activities.

[9] It should be noted, however, that improvements in the infrastructure and level of equipment make it possible to increase the quality of the treatment provided, which does affect the average number of days of hospitalization and the possibilities of treating certain ailments.

TABLE 4

Chile: Public expenditure on health, 1980-1997
(As a percentage of total expenditure)

Year	Remunera-tion	Consumer goods and services	Investment	Current transfers[a]	Social security benefits[b]	Other expenditure	Total expenditure
1980	35.0	19.9	3.6	6.0	25.9	9.6	100.0
1981	35.8	18.2	2.6	6.7	28.9	7.8	100.0
1982	34.3	20.3	2.3	8.0	29.7	5.4	100.0
1983	34.2	22.3	0.8	6.2	28.0	8.5	100.0
1984	35.0	22.6	1.7	8.2	25.9	6.6	100.0
1985	35.4	23.0	2.3	7.2	26.3	5.9	100.0
1986	35.8	22.6	1.6	6.7	25.9	7.4	100.0
1987	36.1	25.3	2.1	9.3	20.1	7.1	100.0
1988	34.6	27.5	3.0	6.6	21.3	7.1	100.0
1989	33.3	26.0	3.5	12.3	19.0	5.8	100.0
1990	32.1	26.7	2.6	12.1	17.5	9.0	100.0
1991	33.4	28.0	2.9	12.2	16.4	7.1	100.0
1992	33.5	26.2	9.4	11.4	15.5	4.0	100.0
1993	37.0	24.5	8.0	10.6	15.0	4.8	100.0
1994	37.7	24.1	8.8	9.2	14.5	5.7	100.0
1995	39.2	25.2	8.0	9.3	14.7	3.5	100.0
1996	39.3	25.6	7.4	9.5	15.1	3.1	100.0
1997	39.9	24.9	6.5	8.9	15.6	4.3	100.0

Source: Department of Marketing, FONASA.
[a] Current transfers = National Supplementary Nutrition Programme + Unified Family Allowance Fund.
[b] Social security benefits = Subsidies + curative medical care + compensation payments.

Traditionally, the transfers of resources from FONASA to the public health establishments (which cover around 90% of the financial needs of those establishments) have been based, on the one hand, on past budgets, mainly to cover the payment of wages and salaries, and on the other, on a system of billing for services rendered introduced in 1978 and designed to cover expenditure on goods and services. Investment resources are allocated from the central level according to discretionary and rather unclear criteria (Lenz, 1995).

This manner of distributing resources tends to foster serious inefficiency in their allocation and management. As the budgetary inertia rewards higher expenditure and punishes saving (because this would lead to future budget cuts), there are increased incentives for increasing expenditure, regardless of considerations of quality and appropriateness. The system of payment and budgeting affects the quality and cost of the services provided.

International experience reflects a growing consensus on the disadvantages of retrospective payments.[10] Most countries have tried to progress towards resource allocation formulas linked with criteria of efficiency and efficacy. Among these systems are per capita payment, payment per health episode, and diagnosis-related payment (Lenz and Muñoz, 1995).

In the case of Chile, the changes in the mechanisms for the transfer of financial resources have followed this trend. In the establishments belonging to the SNSS, the system of billing for services rendered has been changed through the introduction of systems of prospective payment or payment by results. Experiments are currently being made in the use of diagnosis-related payment (DRP) and prospective payment for services (PPS).

The DRP system is being applied in secondary and tertiary-level establishments in about 17 of the 27 area health services belonging to the SNSS. This system involves the payment of a predetermined amount depending on the diagnosis and currently

[10] Such payments include payments for services rendered, payments based on past budgets, and payments per day of attention.

covers 26 of the most frequent types of attention. For those types of attention which do not have a predetermined DRP value, the PPS system of payment for the attention actually given is used. This system covers the less frequent types of attention and those cases where the original diagnosis made on admission subsequently involves other types of attention.

In spite of the efforts to introduce mechanisms such as DRP and PPS, the systems of resource allocation in the public health subsector continue to operate in a bureaucratic and very inflexible manner. This is mainly because between 70 and 80% of the resources are still allocated on the basis of past budgets and are used primarily to finance wages and salaries in labour contexts where there is little flexibility.

For the financing of primary health attention, it has been proposed that the system of billing for services rendered in municipal establishments should be replaced by a per capita system of payment.

The system of billing for services rendered in municipal establishments in force since 1981 operates in a similar manner to the system of billing for services rendered. The payments are made on the basis of a list of the types of attention given in municipal establishments. Because of the volumes of claims for payment made by the municipalities, a ceiling was established for the maximum amount of such claims in each region. The regional ceiling is in the hands of the Intendente (governor) of each region, who is empowered to define ceilings for each of the communes (sub-regional divisions) under his jurisdiction (Lenz, 1995).

It is currently being proposed that the system of billing for services rendered in municipal establishments should be replaced with a system of prospective per capita payments. The amount of resources transferred per beneficiary would depend on whether the municipality was urban or rural and on its level of poverty. This scheme, which is currently in operation in 310 communes, makes it possible to link the transfer of financial resources more clearly with the volume of treatments or consultations given and the economic and social conditions of the municipality, thus having a positive effect on equity.

V

The private subsector

Since the system of Isapres was set up in 1981 its population coverage has grown rapidly. As from 1994 it stabilized at around 26% of the population, and in 1997 it accounted for 64% of total health insurance contributions, equivalent to 1.3% of GDP (table 1).[11]

Although the Isapres have tried to expand their universe of beneficiaries towards middle-income sectors, their members still tend to be concentrated in the higher levels of the income distribution scale (table 2). Even so, the average real taxable income of the members of open Isapres went down by 31% between 1984 and 1997: from 442,605 pesos to 305,061 pesos at December 1997 prices (table 5).

As already noted earlier, the Isapres act as individual risk insurance companies. Unlike FONASA, the rules on contributions or the purchase of insurance from these institutions do not include solidarity-based mechanisms in matters of finance.[12]

The foregoing reflects the fact that equity is not one of the objectives of the Isapre system. The arguments put forward in favor of the establishment of Isapres were based upon the pursuit of efficiency. It was maintained that the introduction of market mechanisms for both the provision of services and financing which would facilitate and stimulate the capacity of users to make a choice would increase efficiency in resource allocation in the private subsector, with the challenges in terms of equity and solidarity being left in the hands of the public subsector.

[11] In 1998, for the first time since they were set up, the growth rate of the Isapres' portfolio was negative: in June of that year the number of beneficiaries of the system went down by 0.6% compared with the same period of the preceding year.

[12] They do, however, display the type of solidarity typical of risk aggregation mechanisms: i.e., between the healthy and the sick.

TABLE 5

Chile: Evolution of average real taxable income of Isapre members, 1984-1997
(In December 1997 pesos)

Year	Type of Isapre		
	Open	Closed	*Total, whole system*
1984	442 605	495 240	*452 418*
1985	336 392	431 760	*350 142*
1986	341 911	502 865	*364 365*
1987	305 990	456 471	*321 788*
1988	319 764	455 990	*332 755*
1989	311 725	475 954	*326 208*
1990	300 593	476 640	*314 807*
1991	287 043	486 070	*300 545*
1992	281 768	501 854	*294 298*
1993	275 126	507 368	*286 254*
1994	272 804	505 150	*282 442*
1995	294 247	514 123	*302 608*
1996	308 504	534 654	*317 060*
1997	305 061	519 334	*312 782*

Source: Superintendency of Isapres, *Boletín Estadístico,* various issues.

International experience, like that of Chile, shows that the imperfections in the health market mean that efficiency gains are not ensured simply through the free play of supply and demand.[13]

One of the main elements in the problem of efficiency (and of course of equity) is the incentive for risk selection in insurance markets. If the profits of the insurers are closely related with discrimination of risks ("skimming off the cream"), it is unlikely that they will have much incentive to seek major gains in efficiency. On the contrary, they will be encouraged to avoid accepting high-risk clients rather than promoting improvements in their resource management.

In the case of Chile, the current public-private structure, together with a highly deregulated market, has permitted and encouraged cream skimming and the existence of substantial cross-subsidies, as we shall see below.

Another problem associated with individual insurance markets is the high cost of administration and sales. The high cost of the latter is due to the need to compete for clients in a market of highly homogeneous products which differ little from each other. In Chile, although the share of administration and sales costs has been going down it is still high. In recent years, administration and sales costs have stabilized at around 20% of total costs (table 6).

In order to bring in greater regulation and supervision of the Isapre system, in 1990 the Superintendency of Health Insurance Institutions was set up. This institution is responsible for enforcing the rules on contracts between the Isapres and users laid down in Law No. 18,933. This law also lays down arbitration procedures for dealing with and settling disputes between the Isapres and contributors and/or beneficiaries.

In 1995 these rules were amended through Law No. 19,381, mainly with the objective of improving the regulatory capacity of the Superintendency and providing greater protection for users. Among other things, the amendments made: regulate and standardize the information that the Isapres and the Superintendency must provide to users; regulate the price system for the elderly; regulate exclusions applied in the contracts and lay down rules on pre-existing ailments; regulate the way surpluses of contributions must be managed, through individual savings accounts for the workers involved; and establish a reference list of types of treatment, based on the FONASA list (Celedón and Oyarzo, 1998). In 1997 a "primer" was established to facilitate comparisons between different health plans.

[13] Among the market flaws are the uneven access of suppliers and users to information and the problems of moral hazard, adverse selection and "cream skimming". Public insurance systems, on the other hand, have problems of free riders.

TABLE 6

Structure of expenditure of Isapres, 1984-1997
(In millions of pesos of each year)

Isapre system as a whole	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Operating costs	4 710	8 092	16 023	27 686	42 181	66 329	98 902	142 206	192 272	247 737	297 947	353 219	414 332	449 168
Reimburse-ments	3 077	5 177	10 914	19 362	30 551	46 759	69 790	102 812	142 784	187 708	224 614	267 326	311 399	...
Direct medical attention	210	691	1 138	2 059	1 426	1 897	2 423	4 167	5 773	6 624	6 793	6 746	7 359	...
Preventive medical examinations	34	71	260	92	118	127	415	359	491	591	753	1 017	1 082	...
Total benefits provided	*3 321*	*5 939*	*12 312*	*21 513*	*32 095*	*48 784*	*72 628*	*107 338*	*149 048*	*194 924*	*232 160*	*275 089*	*319 840*	...
Incapacity benefits	1 099	1 467	3 190	5 473	8 764	15 138	22 076	31 777	39 144	47 927	58 563	68 715	82 975	92 868
Other costs	290	686	521	700	1 322	2 408	4 199	3 091	4 081	4 886	7 223	9 415	11 517	13 354
Administra-tion and sales costs	2 394	2 916	5 277	8 262	11 115	15 959	26 089	34 495	44 622	60 888	73 479	88 127	98 276	105 490
Publicity	158	139	280	270	357	579	939	1 276	1 659	1 958	2 376	2 601	3 184	3 068
Remunera-tion	944	937	1 965	3 047	4 669	6 020	9 843	13 010	16 779	23 609	29 117	33 739	36 805	38 894
Commissions on sales	470	576	984	1 695	1 844	3 354	5 105	6 522	7 748	10 808	13 835	17 791	22 175	27 334
Other ex-penditure	822	1 264	2 047	3 250	4 245	6 006	10 202	13 687	18 436	24 513	28 169	33 996	36 111	36 194
Total ex-penditure	*7 104*	*11 008*	*21 300*	*35 948*	*53 296*	*82 288*	*124 991*	*176 701*	*236 895*	*308 625*	*371 444*	*441 346*	*512 660*	*554 658*
Operating costs as a percentage of total expenditure	66.3	73.5	75.2	77.0	79.1	80.6	79.1	80.5	81.2	80.3	80.2	80.0	80.8	81.0
Administra-tion and sales costs as a per-centage of total expenditure		26.5	24.8	23.0	20.9	19.4	20.9	19.5	18.8	19.7	19.8	20.0	19.2	19.0

Source: Superintendency of Isapres, *Boletín Estadístico,* various issues.

In general terms, all these measures have been aimed at securing greater transparency of the insurance plans offered by the Isapres, but they have not been able to overcome the problem of risk discrimination or "skimming off the cream".

5. Fiscal aspects

Fiscal considerations were an important factor in the decision to make reforms in the health sector. The incorporation of the private sector is aimed not only at improving the efficiency of health service management but also at making it possible to transfer part of the expenditure costs traditionally borne by the public health subsector to the private subsector. It is hoped that the private subsector will be capable of financing and providing health services for part of the population which has depended in the past on social security and the public subsector.

For this to occur, the reforms must be capable of shifting not only the financing but also the demand for health services to private suppliers. Otherwise, the State would have to cover the same health costs, but with a lower level of income. The possibility of securing significant shifts in demand from the public to the private subsector is limited by the interaction of two factors: i) the low income levels of a large part of the population, in contrast with the upward trends in the cost and the complexity of health attention, and ii) the practice of risk discrimination.

A configuration of the mixed public-private health system which does not shift demand to the private subsector forces the public subsector to make heavy expenditure to cover the population of lower income and higher risk, while, because of the reforms, a substantial part of the resources obtained from the compulsory health insurance contributions tend to go to the private subsector.

The reform process begun in Chile in the early 1980s provides some useful lessons on this effect of the public-private combination. It is observed that after the reforms the amounts of financial resources received by the public and private sectors are similar, but the private subsector covers only about 26% of the population, whereas the public subsector is responsible for 60% of it, made up furthermore of people with lower incomes and higher medical risks, so that while the demand for health services has not gone down, there has been a decline in the financial resources from the corresponding compulsory health contributions.

The unequal distribution of the risk portfolio between the private and public subsectors as a result of an unsuitable public-private mix is not the only source of pressure on the public budget. Faulty design of the institutional and regulatory framework can give rise to problems of cross-subsidies, which arise when beneficiaries of the private subsector make use of public clinics and hospitals but that subsector does not pay the public subsector for all the cases treated. In Chile, this cross-subsidy has been estimated at around 15 billion pesos per year: close to 4% of public health expenditure and to 2.7% of the total expenditure of the Isapres.

VI

Challenges of the reforms

The reform experiences which may be observed in the region and elsewhere reflect particular features of the actual situations involved. There are, however, some common elements which define their general thrust: i) separation of the functions of financing and providing health services; ii) an increase in users' capacity to select suppliers and, in some cases, insurers; iii) promotion of competition among suppliers and among insurers, and iv) stronger regulatory and supervisory mechanisms.

Although the reforms applied in Chile do incorporate several of these elements, the mixed health system which arose from the reforms displays serious problems of efficiency and equity. The public-private combination tends to give rise to serious cases of inequity as regards access to services and their quality, as well as problems of efficiency and resource management at both the public and private levels.

One of the main challenges facing the Chilean system is that of transforming the current public-private combination, which calls for the restructuring of the systems of financing and provision of health services.

On the financing side, the main tasks still remaining to be done are to introduce solidarity mechanisms into the rules on contributions to the private health insurance system and to design instruments to discourage risk discrimination. This discrimination is encouraged by the fact that private health risk insurance exists side by side with a solidarity-based public health insurance system and that there are few regulatory instruments in the Chilean health market.

The need to maintain solidarity of financing in schemes which compete with each other has been a concern of many health system reform processes. In the Latin American context the experience of Colombia is worthy of note, while in Europe that of the Netherlands is likewise noteworthy. Both these systems form part of organizational schemes that pursue what is termed "managed competition". Some proposals have been put forward along these lines for Chile (Aedo, 1997; Larrañaga, 1997).

The challenge that must be met is how to reconcile the existence of risk insurance with mechanisms designed to secure solidarity in financing: i.e., how to ensure that the health insurance contributions paid by subscribers are not determined by their level of medical risk, in circumstances where the income received by the insurance companies is adjusted according to their risk portfolios, in order thus to reduce the incentive for the insurers to concentrate on the low-risk population.

Generally speaking, health systems based on managed competition schemes tend to be organized on the basis of a solidarity fund responsible for distributing subsidies to offset the differing individual risks, so that each member contributes as a function of his income and the insurance companies receive payment as a function of their risk portfolio. The solidarity fund is the body responsible for compensating the insurers for the differences that may exist between their risk portfolios.

In addition to establishing a solidarity fund, it is also necessary to introduce such instruments as mandatory health insurance, to define basic health packages, to regulate the cost of the insurance premiums and to ensure serious supervision and regulation by the authorities in general. The aim of a basic or integrated package is not to reduce the levels of coverage of the insured persons but to ensure a similar level of health service coverage for all, regardless of their contributions. It is also useful for making insurance plans more homogeneous and helping to determine the scales of prices for medical attention.[14]

These instruments must form part of a regulatory scheme which promotes competition. They are not forms of regulation designed to avoid such competition but seek instead to overcome the market flaws typical of a competitive environment.

The application of mechanisms theoretically designed to combat the problem of "cream skimming" does not guarantee that this phenomenon will indeed be brought under control, for the lack of the necessary institutions in imperfect health markets makes this problem difficult to counter.[15]

In the provision of health services, the public-private configuration also gives rise to problems of inefficiency and poor resource management. Firstly, the very limited interaction between public and private suppliers has led to inefficiency in global resource allocation. Secondly, in spite of all the efforts made to improve allocation mechanisms within the public subsector, this subsector still suffers from a bureaucratic structure, with serious rigidities in the way it handles financial transfers to the area services of the SNSS, so that there is little incentive to improve the efficiency and efficacy of expenditure.

International experience shows that, in view of the asymmetry of information and the difficulty users have in processing the information needed to make a proper choice of their suppliers, there is a tendency to adopt systems which restrict the free choice of suppliers. These systems are based on the concept of a "gatekeeper": a family doctor who makes a first diagnosis and then if necessary directs the patients to more specialized services. In order to avoid problems of collusion between these family doctors and the suppliers of specialized services there must be a high degree of competition among such doctors.

VII

Conclusions

The reforms begun in the early 1980s in Chile have significantly changed the structure of the health sector, combining the public and private subsectors for the financing and supply of health services.

Among the main issues that need to be addressed are, on the one hand, the need to create solidarity-based financing mechanisms in the context of the private insurance schemes and, on the other, the need to avoid the risk discrimination which takes place in the Isapre system. Although the latter is an inherent problem in risk insurance, it tends to be encouraged by the design of the current public-private configuration.

The effects on equity deriving from the introduction of the system of insurance schemes in the health market depend more on the nature of the contribu-

[14] This is without prejudice to the right of individuals to acquire broader coverage, in terms of the types of attention covered or the quality of their hospital accommodation, by taking out voluntary insurance plans.

[15] After the reform of the health insurance system in the Netherlands, the difficulty of implementing the system of risk-adjusted payments has led to the insurance companies only taking responsibility for 3% of the difference between their real costs and the costs used to define the risk-adjusted per capita payments. The remaining 97% is reimbursed retrospectively by the solidarity fund, through a system of compensation for losses.

tions and the rules governing them, as well as on the degree of deregulation of the market, than on whether those schemes are public or private.

In this connection, there are examples, both in the international context and in the region itself, of what is called "managed competition". These cases, unlike the Chilean model, seek to introduce private insurance systems with elements of solidarity-based financing, in order to avoid the problem of risk discrimination.

Nevertheless, one of the objectives of the Chilean system in the short term is to strengthen the capacity of the Superintendent of Isapres to develop prudential regulation instruments for the private insurance market. These instruments would make it possible to rationalize the supply of medical insurance, since the current diversity of such supply gives rise to many problems in terms of efficiency. The high levels of expenditure on administration and sales displayed by the Isapre system are also frequently questioned. Although this expenditure has tended to go down somewhat, it is still felt to be relatively high.

Because of the lack of a fluid and transparent relationship between the public and private suppliers, the supply side of the health service market has become segmented, thus giving unsuitable incentives for the development of the supplier institutions.

This segmentation of supply has given rise to cross subsidies due to the services which are rendered by the public sector to Isapre beneficiaries but are not reimbursed to that sector by the Isapres. Because of the high cost that these subsidies involve for the public sector, they must be eliminated in order to achieve a more efficient system of insurance and services. It may be noted that the efforts made by FONASA to improve its data bases have enabled it to tackle this problem to some extent, by increasing the capacity of the public services to collect charges from users who are members of the Isapre system.

In the public health subsector, reforms have been made in order to promote the allocation of resources on the basis of results and performance (the DRP and PPS systems). These efforts are still only very recent, however, and cover only a small percentage of public resources, as nearly 70% of the budget is for the payment of wages and salaries. One of the challenges which remains to be solved is that of giving the SNSS greater labour flexibility and a scale of remuneration based on productivity.

It is also important to strengthen FONASA's capacity to act as a supervisory agency for users of the public system and to improve its performance in its roles as collector and allocator of resources and as a health insurance system.

Finally, in order to make reforms in health systems it is essential to have the necessary political consensus. In the case of Chile, apart from the diagnostic studies made of health sector dynamics it has not been possible to establish a political consensus that would allow vigorous progress in the substantive reforms needed by the system. In view of the complexity of the technical and value-related aspects of the sector, such a consensus is important not only for initiating reform processes but also for ensuring that they have lasting effects.

(Original: Spanish)

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