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## STUDY

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Traslated by Tim Ennis

# DEMAND SUBSIDIES IN THE HEALTH SYSTEM

## A VIABLE ALTERNATIVE

**Rafael Caviedes**

This paper argues that to resolve the crisis through which the Chilean health sector is passing, the current regime of supply subsidies needs to ended and replaced by a move towards a system of demand subsidies.

Accordingly, in these pages the author proposes a demand subsidy model which would not only be easy to apply and control in our country, but would also make it possible to reduce the size of the “producer State” in this area, and, at the same time provide better medical attention to the population as whole: i.e. those who would stay in the public health system as well as those who would opt for the *Isapres* (Private Health Insurance Institutions). All of this, it is argued, can be done within a framework of subsidiarity, justice and freedom.

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## Introduction

Without committing the offence of generalization, it can be said that the analyses that have been made of the crisis in the health sector invariably conclude that the problem is rooted in structural aspects rather than financial ones, so the solution requires a change in the organization of the Chilean health system.

In this context, controversy has arisen as to the most suitable way of allocating the resources that the State destines to health care; in other words, whether State resources—more specifically, subsidies—should be aimed at supply, i.e. at the providers of medical services, or else towards demand, i.e. to the people or individuals who require the protection of a health system.

In keeping with convention, the term “supply subsidy” will be taken to mean the direct transfer of fiscal funds to the national health services system in order to finance their provision of health care, such as happens at the present time. Similarly, the term “demand subsidy” implies the transfer of a certain per-capita amount to beneficiaries, for them to choose the entity—public or private—most suited to their personal preferences. In the course of this paper these alternatives will be analyzed in their various forms.

The paper presents a model of a per-capita payment, or demand subsidy, whose aim—in a first stage—is to transfer all dependent contributors who are currently beneficiaries of the State health regime to the *Isapres* (health insurance companies). Before doing this, as a point of reference, other per-capita payment systems are described, and certain theoretical foundations are discussed which need to be understood before getting into the proposals. These relate to the concepts of health and medicine, justice and equity, legal foundations and an analysis of the health care “supply subsidy”, as traditionally applied in Chile.

Before embarking on an analysis of these issues, it is worth clarifying certain general aspects of a *demand subsidy*.

In the first place, a demand subsidy is not synonymous with privatization, but only represents a different, certainly more efficient way of allocating resources<sup>1</sup>. More or less participation by the State and private entities in health management is determined by other considerations totally

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<sup>1</sup> In general experience shows that demand subsidies help to raise efficiency at the microeconomic level. See “*Los Systems de Seguro de Salud*”, TASC N° 15, Ilades/Gorgetown, February 1991.

unrelated to the way in which the budget is allocated. Thus, for example, if the State were to pay a certain per-capita amount to a given government or municipal institution, previously freely chosen by its members, this would constitute a demand subsidy, but it would not necessarily lead to the privatization of services. Another, more orthodox model consists of paying subsidies to people so that they can to affiliate to a health insurance institution, which does represent a kind of privatization of health resources administration, despite the fact that health care, especially “closed care” could be provided —mainly for reasons of availability of private infrastructure— in public hospitals, via contractual agreements with the *Isapres*.

Secondly, it is worth pointing out that in Chile there is a consensus in favor of the social market economy as a tool for achieving sustained growth, despite the fact that some sectors, more for ideological than technical reasons, are wary of increasing the participation of private entities in health system administration. However, it is everyone’s responsibility, especially legislators’, to seek a pragmatic solution to the health sector crisis, taking into consideration the nation’s economic reality, consumer sovereignty, production efficiency and equity<sup>2</sup>, as well as private enterprise and market mechanisms as catalysts for economic activity. Indeed, these principles when applied to social security systems —especially in the health sector— have traditionally been confused with a false conception of solidarity and an even more mistaken understanding of justice and equity —values which some people aim to achieve through collectivist systems, which today have been revealed as failures.

In the third place, one can add that our country is in a period of clear transition between a nation on the road to development and development as such; and the health sector is not exempt from this reality. For that reason, the situation is not easy to deal with, as one needs to act on two fronts: namely under-development, with appropriate State policies in this sector, and that of a modern country of increasing complexity and sophistication<sup>3</sup> with a demand for hospital and medical services of ever better quality, which the State is not in a condition to provide.

In the fourth place, nobody disputes the role of the State in the field of prevention, and health promotion and protection, because from the economic standpoint these actions have externalities for the population as a

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<sup>2</sup> *Organización Panamericana de Salud*, Plan of Action for the Implementation of Regional Strategies, 1982.

<sup>3</sup> Juan Giaconi, Inaugural Address at the 2nd *Congreso de Coyuntura de Salud*, Santiago, Chile, 1987.

whole. Likewise, there is a consensus on the State's inspection and regulatory role, as well as supervision and evaluation.

However, not many years ago, few would have dared imagine an alternative to the former national health service (SNS) for meeting the population's health care needs. Today the productive role of the "producer State" is being taken up by private entities which have shown that individual enterprise tends to excellence in service, due to free-market competition and the economic incentives that this generates.

A demand subsidy system in health care is a response to these considerations. In this context, one cannot ignore the important experience of the private health insurance sub-system with its 3.5 million beneficiaries. Indeed, the *Isapres* in Chile may serve as one instrument—certainly improvable and not the only one—for applying the demand subsidy.

In the rest of Latin America, the reality of institutions providing pre-paid medicine has run ahead of health-sector legislation, leaving doctors, health-service providers and beneficiaries protected by common law alone. In Chile, this situation was foreseen in advance<sup>4</sup>, because otherwise, as in other countries, numerous pre-payment companies or health insurance companies would have sprung up in a disorganized fashion, with no regulation or supervision by the Health Ministry. For this very reason, various countries have supported the idea of a per-capita payment, or demand subsidy, as a health insurance subsystem. Colombia, for example, is studying the application of mass affiliation pre-payment systems (public or private), subsidized by the State, as a way of achieving sufficient coverage, in view of its huge number of informal workers and poor students. In Peru, Ecuador and Argentina the Chilean *Isapre* system is being viewed with great interest.

### Health and medicine

It has been said that no institution can promise or assure people's health, as this is a personal situation in which beliefs, expectations, macroeconomic conditions, environmental hygiene, administration systems, medical technology, culture and luck, all play a part; in other words it is a process comprising multiple factors which cannot be supplied as a product<sup>5</sup>.

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<sup>4</sup> In 1981, the *Isapres* were created via D.F.L. N° 3. This legislation was replaced in 1990 by Law N° 18.933, which also created the Superintendency of *Isapres*.

<sup>5</sup> See Fernando Lolas, "*Salud y medicina*", *El Mercurio*, November 1992.

From this point of view, systems of administration or financing of medicine, whether private or state, are only vehicles, for it is medical science that provides the resources for individuals—and ultimately society—to build their own health.

For this reason, it cannot be argued that public or private health systems, or any other model the reader might imagine, are in themselves sufficient to meet individuals' health needs. However, one can argue that some systems—from the socioeconomic point of view and in terms of individual freedoms—are more efficient than others in acting as appropriate instruments for people to build their health. Even so, the final weighing up of the different factors which comprise it cannot be done by bureaucrats, or economists or even public-health experts, but only by ordinary people. It is they, in the end, who are going to construct their health, and this is fully consistent with the postulate of Vilfredo Pareto, according to which individuals are the best judges of their own welfare.

There are numerous examples to show that people have health priorities that depend on their own personal preferences, which explains why certain health related actions may be postponed for other alternatives. Indeed, even in cases of extreme seriousness, people are only willing to spend up to a certain amount to finance the corresponding medical treatment.

According to economic theory, people constantly compare and evaluate the marginal benefits and costs implicit in any action that may affect their health (smoking, or not undergoing a preventive cervical smear examination, for example), against other consumption (or saving) alternatives with which they are presented. In other words, consumers allocate their scarce resources so as to maximize the benefit they obtain from them, and health hardly ever occupies first place<sup>6</sup>. On the other hand, health specialists see it as a basic issue for the individual and give it a higher priority than any other need.

### **Justice and equity**

Usually we hear talk of justice and equity among people concerned with public health, as a requirement that social security systems should fulfill; so it would seem necessary to describe the correct meaning and scope of these terms, which in most cases are mistakenly used as synonymous with equality.

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<sup>6</sup> Paul J. Feldstein, *Health Care Economics* (John Wiley & Sons).

Thus, certain human behavior is referred to as fair or unfair, and a man is said to be just who frequently behaves accordingly; but a law can also be classified as just or unjust, as well as a rule or an economic system. Now, insofar as justice refers to a human creation, a rule, or a social structure, it constitutes a “social value”.

In this respect, i.e. as regards social value, justice has always been linked to the basic principle of “to everyone their just deserts”. But this principle, which seems so simple to state, assumes fulfillment of at least three requirements for it to conform to the idea of justice: namely, proportionality, equality and relationship to others.

As well as this, there is the problem of clarifying the relation between justice and equity. For Aristotle, what is equitable is not essentially anything other than what is fair, in fact it is the same thing. Equity, put simply, is justice in a concrete case.

Now, all ideals of justice imply, firstly, a certain proportionality between facts and consequences, between what is given and what is received, between what is demanded and what is provided. Moreover, proportionality at the same time means equality in regulation: Not only should there be proportion within each case, but also between the different cases that are regulated. Finally, justice implies relationship to others, i.e. justice is a virtue which presupposes one individual standing in relation to another.

It is appropriate to ask whether these principles are applicable to a system that allows access to different benefits according to the contributions individuals make. Do the legislator and government fulfill these guiding principles in this way?

The answer is, clearly yes. Firstly, it fulfills the most important principle of the idea of justice, namely proportionality, in which there is a parity between what is given and what is received, between the contribution made and the benefits obtained. This is different from what happens when a supply subsidy system is applied in which this proportionality is absent, for no matter what contribution an individual makes he will still obtain the same benefits.

The idea of *equality* is also present. This is reflected in the system by the existence of proportionality between cases involving similar situations, in other words, people who make similar contributions obtain similar benefits.

Finally, the idea of relationship between people is not absent either, if one considers that this is a system in which a multiplicity of interrelated individuals participate. Moreover, the application of the system produces a direct affect on the poorest people, to the extent that the decongestion of the state apparatus will redound in better health care for poorer sectors.

Closely related to this is the issue of the principle of State subsidiarity. The encyclical *Centesimus Annus*, puts special emphasis on respect for and fulfillment of this principle, stating:

By intervening directly and taking responsibility away from society, the Welfare State causes a loss of human energies and an exaggerated increase in the public-sector apparatus, dominated by a bureaucratic logic rather than by concern to serve users, and it implies a huge expansion of spending.

It is precisely in this aspect where the proposed model assumes a special transcendence, for, in applying it, the State will exercise the supply functions which are inherent to it, and which it cannot elude, while allowing the development of private enterprise, thus fulfilling the principles of justice and equity.

### **Constitutional law**

Since the beginning of our nation's independent life, concern for the health of the inhabitants of the country has always been a feature of the governments that have succeeded one another, and this has been reflected in the different fundamental charters that have governed us from 1818 until the one currently in force, approved in 1980. Article 10, N° 14, Paragraph 4 of the 1925 Political Constitution of the State, refers to the State's duty to ensure public health and the hygiene-welfare of the country, providing in addition, for the need to assign sufficient money for maintaining the National Health Service.

This provision is part of the generic constitutional law relating to the protection of labor, industry and social security activities.

With the passing of Decree Law N° 1.552, in 1976, approving Constitutional Act N° 3, on constitutional rights and duties, the difference between the right to health, and the right to work and to social security, as contemplated in N°s 19, 20 and 21 respectively from Article 1, became clear. Article 1 N° 19 assured all people the right to health, increasing State responsibility in everything relating to hygiene welfare, to the point where the State has to guarantee free and equal access for inhabitants to all actions relating to integral health, i.e. promotion, protection, recovery and rehabilitation, as well as coordinating and controlling the execution of health care activities, and also making it preferentially the State's duty to carry

them out, notwithstanding the fact that private health care initiatives can be undertaken within the limits established by the law.

The 1980 Constitution—in Article 19, N° 9—largely reiterates the principles already commented on from the Constitutional Act, however certain new concepts are incorporated which are vitally important for the issue we are analyzing.

Thus, the right to health protection is guaranteed, and free and equal access to health care actions, coordinated and controlled by the State, is protected; but unlike the rule contemplated in the Constitutional Act, what the State assures is that health care actions are in fact carried out, not necessarily through its own public bodies, but also through private institutions subject to terms and conditions provided for by the law, which can set obligatory contributions.

Along with this public or private health provision, the final paragraph of N° 9 states that people can choose the system, either private or state, in which they wish to make effective their right to health protection.

In the context of these Constitutional provisions, DFL N° 3 (Ministry of Health) was issued, on April 27th 1981, setting out the rules for providing health care and benefits in health insurance institutions, and also regulating their constitution and operation.

The private health system, made up of health insurance institutions (known as *Isapres*), has helped to make it possible to completely fulfill the constitutional guarantee outlined above, in terms of each individual being able to choose their health system. In fact, a possibility or option that did not exist before the creation of *Isapres*, has been opened up, for previously, every worker was obliged to pay their legal health care contribution into a state institution.

Notwithstanding the above, there are a large number of people who are prevented from adequately exercising their constitutional guarantee, as their possibilities of choice are limited, and their demand for health care is in practice restricted to the state health system; their right to health protection can only be realized through a state service. A demand subsidy, i.e. direct transfers of State resources to people seeking health care, rather than to the institutions providing medical services, would make it possible for a large part of the population to be able to adequately exercise the guarantee established in the 1980 Constitution. Consequently, the resource transfer mechanism to be analyzed in this paper is legitimized and protected constitutionally, insofar as it aims precisely to make a constitutional guarantee effective.



### What is a subsidy?

According to classical definitions, subsidies aim to transfer resources so that people can gain access to certain goods or services, that society considers necessary, but which through their own means they can not obtain.

A subsidy can be applied to supply or to demand. Thus, a subsidy may increase the incomes of the recipient so that he or she can finance the acquisition of some good or receive certain goods at below market price.

A demand subsidy consists of a consumer receiving a sum for a specific use (in this case to pay for a health system) and he or she freely decides which institution to go to, to acquire the product or service required (health plan) at its real price, so it is the subsidized person who holds the bargaining power in demanding the highest quality in the service received from the supplier.

A supply subsidy, on the other hand, is directed at the producer of the good, rather than the demander, so that the good being supplied can be sold at below the real market price, without distinction in terms of who is demanding the product or service. Such is the case of public health, in which financing is provided to health producers (health services and hospitals), and not to consumers (beneficiaries), who consequently lack all bargaining power *vis-à-vis* the supplier of the service (the State).

In theoretical terms, subsidies have to fulfill certain basic characteristics in order to be efficient from the social point of view<sup>7</sup>. Subsidies should be:

a) *transitory*, i.e. they should be provided only as long the condition giving rise to the subsidy exists;

b) *targeted*, i.e., they should be channeled directly to the people who are qualified and identified as subsidy beneficiaries, so as to avoid others improperly receiving the benefit<sup>8</sup>;

c) *efficient*, in that the welfare perceived by the recipient should be greater than the welfare lost by the contributor. Consequently, they should be progressive, and the mechanisms for administering the subsidy should be economic;

<sup>7</sup> Ernesto Miranda, "*Subsidio a la oferta o subsidio a la demanda*", *Revista de Administración en Salud*. N°14, 1991.

<sup>8</sup> A classic example of a badly targeted subsidy is the state health system. According to one study, "In this sense, the supply subsidy does not permit adequate control, because most health establishments (public hospitals) attend a population that is heterogeneous as regards incomes". See "Health Insurance Systems", TASC N° 15 Ilades/Georgetown, February 1991.

d) *economically feasible*, i.e. they should be in proportion to the limited resources available to the nation. The financing of a subsidy cannot affect a country's development, for example by financing it with taxes that restrict economic growth.

e) *direct*, in that they should be financed out of the general taxes of the nation, rather than through the transfer of homogeneous benefits from the wealthiest to the most poor, within the system. In cross-subsidies, redistribution is partial and only operates among those who are participants in the system, rather than the whole of society. Also, acute disincentives are generated, which lead the wealthiest to abandon the system or to evade the payment of contributions<sup>9</sup>. It is worth pointing out here, that it is precisely this circumstance or characteristic that renders inapplicable the proposal to subsidize state health with resources from the *Isapre* system, as has insistently been suggested by people who do not understand the economic implications of the matter.

## FISCAL TRANSFERS TO STATE SERVICES

### Supply subsidy in the health system

The natural tendency of those working in health care has been to subsidize supply. This is due to the fact that when planning, health experts, on the basis of the information asymmetry that exists between doctors and the population, subordinate the concept of demand to one of need. By "health need" one understands what bureaucrats and technical experts think the population needs, or, in individual terms, what the doctor thinks the patient needs. On the other hand, "demand" is what the population effectively wants and is prepared to pay for. As the "needs" that the State sets out to satisfy do not coincide with (usually variable) "demand", the provision of state services will always be unsatisfactory or deficient<sup>10</sup>.

Chile has not been exempt from this trend. The Treasury finances preventive and curative medicine in the free-choice and institutional health modes, and certain health care actions, such as inoculation campaigns, the

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<sup>9</sup> In pay-as-you-go social security systems—for example, the free choice mode and institutional health care—the wealthiest try to pay the minimum, as, independently of the size of their contribution, the benefits they obtain are the same for all. It is argued that these transfers ought to generate solidarity and equity, but economists of all shades of opinion agree on the perversity of cross-subsidies.

<sup>10</sup> Philip Musgrove, "*Reflexiones sobre la demanda en salud*", *Cuadernos de Economía*, N° 66, Catholic University of Chile, 1985.

National Program for Complementary Nourishment (PNAC), as well as the tasks of regulation and supervision, among other things, through a system of fiscal resource transfer subsidizing supply.

The National Health Fund (FONASA), the system's financial entity, provides most of the resources to the health services, i.e. it subsidizes the provision of health services through public establishments. This is basically carried out through two procedures: a) in the case of sectoral wages by handing over money in accordance with the pre-assigned payroll-dependent budget established by law; and b) consumer goods and services, by charging for health care provided (a system known as FAP or FAPEM)<sup>11</sup>. Likewise, certain rewards and incentives are applied to the FAP and FAPEM<sup>12</sup> to promote specific health care actions. Also, FONASA makes transfers for investment, either for maintenance or for new installations or equipment.

#### Use of the State subsidy

Of FONASA's total income for 1992, amounting to US\$ 734.2 million (Ch\$ 275,327 million), 47.9% (US\$ 351.61 million) of this was made up by subsidies coming from direct fiscal contributions (taxes) and only 43.1% (US\$ 316.4 million) corresponded to health insurance contributions paid by beneficiaries of the system (see Figure 1). The rest, US\$ 66.19 million, came from co-payments and other revenues. 81.8% (US\$ 600.6 million) of these funds were transferred to finance the institutional mode of the National Health Service System, and 13.77% (US\$ 101.06 million) were used to finance the free-choice mode.

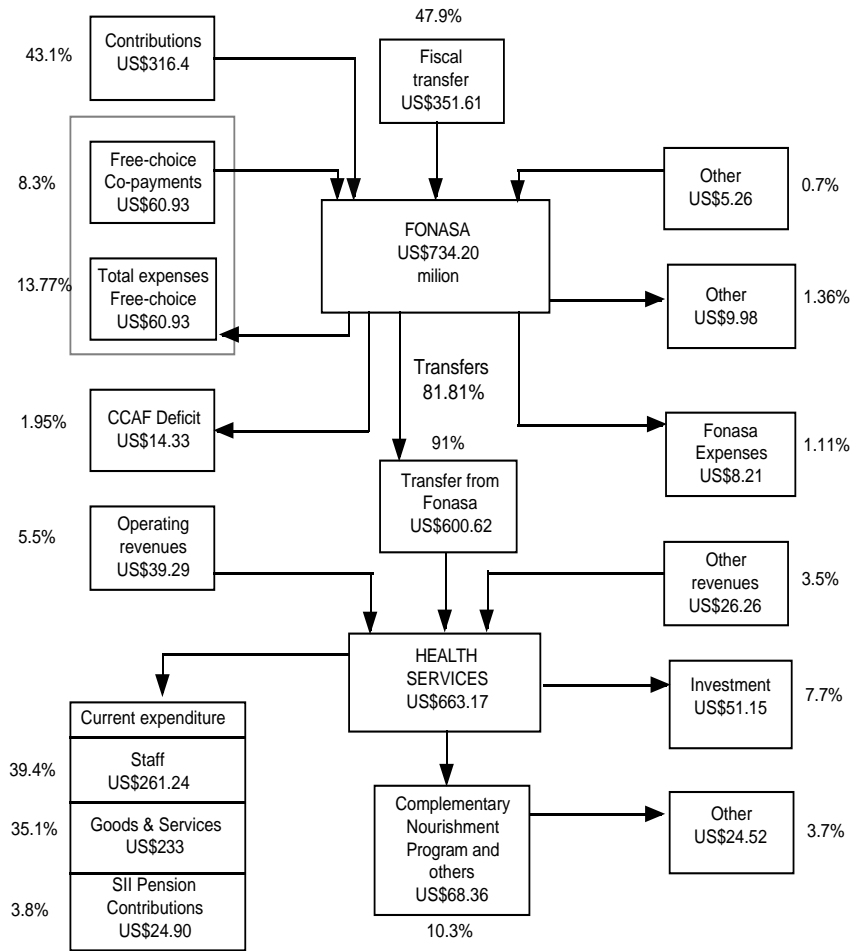
It should be pointed out that FONASA receives and distributes financial resources without distinguishing whether the beneficiaries use the free-choice mode or the institutional health care mode, or both forms together, a right that people have enjoyed since the end of the 1970s.

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<sup>11</sup> The FAP corresponds to the charges that institutions which are dependencies of the national health services system make (institutional mode). The FAPEM corresponds to invoicing by municipal entities (also institutional mode), both of which are based on the FONASA single health care tariff.

<sup>12</sup> This system began experimentally in 1978 to expand basic services and correct distortions caused by the allocation of resources by programs. See Tarsicio Castañeda, "*El sistema de salud chileno: Organización, funcionamiento y financiamiento*", *Boletín O.P.S.*, Vol. 103, Nº 6, 1987.

FIGURE 1: AMENDED BUDGET 1992  
(US\$ MILLION)



Notes: 1. Approximate values in US\$ for the 1992 budgetary year  
2. The US\$ is valued at Ch\$ 375  
3. Excludes budget of the Health Secretariat.

### Shortcomings of the system

#### Cross subsidies

Figure 2<sup>13</sup> shows public sector beneficiaries ordered according to contribution paid, as the upward sloping line (N1 C). The area of this triangle (N1 CN3) corresponds to total revenues from health insurance contributions. Total spending on public health in theory rises with the level of income, so real expenditure would be represented by the curve AD.

On the X axis, contributors are ordered according to their contributions in pesos. Beneficiaries located at point N1 are those paying the legal minimum. To the left of point N2 are “net recipients”, in other words those who *receive* subsidies from the State and from the more wealthy. Those to the right of that point, between N2 and N3, we will refer to as “net contributors”, i.e. people who pay an amount greater than the benefits they receive from the State, and who therefore contribute towards financing the state system. Consequently, the state subsidy is represented by the figure A D'B'N1O, with triangle D'B'B' corresponding to cross-subsidies provided by the “net contributors”.

According to this, cross-subsidies would be produced in the state health system, because the wealthier affiliates would contribute with their surpluses (the shaded triangle above line AD) to financing the health of poorer ones. This would mean that the State spends less in terms of Treasury contributions, in other words “it saves” an amount equivalent to those cross-subsidies. These people, out of their own incomes, would not be able to choose a health plan in an *Isapre*, so they are obliged to remain in the State health system unless and until their personal incomes rise, or there is a subsidy, or the prices of health plans in private institutions come down substantially. It should be pointed out that it is not possible to determine who generates these subsidies or which mode of health care they use.

As can be seen, there are inequities in the state system, because the benefits provided —due to a misconceived sense of solidarity— are the same for everyone, and independent of the amount of the contribution. This produces perverse incentives which encourage numerous irregularities, such as evasion of health insurance contributions. Thus, there are many independent workers or family firms enjoying good income levels, who only contribute the legal minimum amount (approximately US\$ 7) for the right to use FONASA, the free-choice mode or institutional health care

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<sup>13</sup> Ernesto Miranda, *op. cit.*

—an alternative which is vastly more economical than affiliating to an *Isapre*.

This situation is aggravated in the institutional health care mode, because those who pay most receive a lower reimbursement for their health care expenses. It is precisely because of this circumstance that, for example, in the case of many workers in private houses, their employers pay their contributions at the minimum taxable level so as not to lose their right to free health care.

Moreover, state health services have a captive population which cannot choose to take their subsidies to another entity, either public or private. In this respect, it has been said that it is necessary, within a regulatory framework, to allow people to opt for the different alternatives in satisfying their health needs, in an establishment belonging to either the public or the private system, as this, on the one hand, generates an improvement in people’s levels of satisfaction and, on the other, stimulates efficiency in the establishments of both systems through the effect of competition<sup>14</sup>. It would seem that the answer to this points to the need for a profound change in systems for allocating State resources, as will be seen below.

FIGURE N° 2

Recipients
Contributors
Number of Affiliates

PER-CAPITA FISCAL TRANSFERS FOR PEOPLE TO CHOOSE THEIR  
HEALTH SERVICE (STATE OR PRIVATE)

**Demand subsidy**

In the search for more efficient ways to transfer the funds the State destines to health care, various procedures have been formulated for budgetary allocation involving the transfer of funds through a per-capita payment, so that each contributor chooses the public or private institutions he or she prefers. This proposal is called a health *demand subsidy*.

<sup>14</sup> Héctor Sánchez, “La crisis de los servicios de urgencia. Un desafío y una oportunidad”, *Revista de Administración en Salud*, N° 19, University of Chile, 1992.

To implement the concept of the demand subsidy, various alternative proposals have been put up, among which we will discuss the following: (a) per-capita payment to autonomous entities according to the population freely affiliated to them; and (b) a subsidy to low-income people for them to choose an *Isapre*. The models presented in this paper have the same aim, but differ in certain important respects, such as the scope of the subsidy and the organization of the system or entity that will administer it.

Finally, before embarking on an analysis of these models, it is worth emphasizing that because of the information asymmetry that exists between the supplier of medical care and the patient, and due to the very nature of medical attention with its components of emotivity and uncertainty, it is the service provider (i.e. the doctor giving the treatment) who decides the patient's consumption, which in economic terms means that supply conditions demand<sup>15</sup>. Thus, a subsidy applied directly "to consume" medical care —especially as regards outpatient attention, consultations, etc.— produces perverse incentives (moral hazard), which help to increase suppliers' profits and, consequently, raise health costs. For this reason one must not confuse the "benefits" granted by *Isapres* (or FONASA, in the free-choice mode) with the subsidy. Indeed, "benefits" are only that fraction of the price that is paid by the institution, but this is financed out of the contributions or monthly premiums paid by the affiliate; the rest of the cost of medical attention is also financed by the beneficiary via the so-called "co-payment" or "moderating payment". This payment is crucial to the financial health of the system, as it helps regulate demand and avoid overuse, or abuse of medical attention<sup>16</sup>.

Below three models are presented which have been proposed at various times as suitable ways of materializing the foregoing ideas:

A. Per-capita payment:

A.1) First Aid Units<sup>17</sup>.

A.2) High Capacity Out Patient Care<sup>18</sup>.

B. Simple subsidy to people to opt for an *Isapre*<sup>19</sup>.

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<sup>15</sup> Philip Musgrove, "Reflections on health demand", *Cuadernos de Economía*, N° 66, Catholic University of Chile, 1985.

<sup>16</sup> The demand for health care has shown great price elasticity; indeed, the higher the co-payment the less the demand.

<sup>17</sup> A proposal drawn up in 1987 by an interdisciplinary team from the Ministry of Health.

<sup>18</sup> See Alfredo Rioseco B. and Carlos P. Ubilla, *Revista de Administración en Salud*, N° 11, 1990.

<sup>19</sup> Proposal presented at the *Centro de Estudios Públicos* Health Commission by Rafael Caviedes in 1990.

Clearly these models are not the only ones, but they serve as a basis to initiate discussion on the system, as well as showing the operational and technical feasibility of implementing a per-capita payment or demand subsidy model.

### **A.1) Per-capita payment to first aid units**

This model aims to restructure the sector's entire resource allocation, keeping in mind appropriate incentives to encourage excellence in the administration of available funds, as well as consumer sovereignty. The project is conceived on the basis of certain "Administrative Units", which are assigned a per-capita amount according to the population captured by each one. Every so often people will have the opportunity to freely change Unit, thereby avoiding the perverse effect of system with a "captive population". Moreover, people would be able to choose an *Isapre* with their per-capita contribution. Units would also be comprised of one or more first-aid establishments, of greater or lesser complexity.

#### **Financing**

The financing of these Units comes out of health insurance premiums paid by individual members and from a complementary per-capita subsidy granted by the State. Thus, the income of each Unit would be variable as this would depend on the population affiliated to each one. This should promote excellence both in administration and in service quality in order to capture a larger population. In addition, the Units would have the faculty to charge beneficiaries a percentage of the cost of their health care, according to the family group's income bracket as determined by law, as well as charging for medical attention provided to those not belonging to that Unit or to private individuals.

#### **Operation of the system**

Putting the system into practice is visualized in stages and sub-stages to avoid current institutions suffering distortions in their financing.

The model involves two stages:

- Uniform per-capita subsidy.
- Differentiated per-capita premium.



*Uniform per-capita subsidy*

In this first stage, a uniform per-capita subsidy is assigned to each person affiliated to a given Unit. Each Unit would have to keep a record of people affiliated. There will also be a simple procedure to allow individuals to affiliate according to their preferences. Indeed, initially, as the number of beneficiaries corresponding to each Unit would not be known with certainty, appropriate statistical procedures will be used to estimate the current beneficiary population in the national health service system, according to geographical area. In this way, the historically based contribution could be reduced and that based on estimated population increased.

FONASA would transfer funds according to the number of people affiliated, as reported by each unit, and would control to record net variations in the population of each Unit, and so share out per-capita allowances appropriately according to available budgetary resources. The purpose of this is to allow each Unit to gradually construct its own up-to-date list of actually affiliated population, in order to claim the per-capita subsidy corresponding to it. These Units would provide health care for their beneficiaries in both closed plans and the free-choice system.

In the case of more complex health care, each Unit would be able to rely on certain hospitals for attending to their affiliates. For this they would pay a fee, depending on the number of people affiliated to the particular closed plan, plus certain variable payments calculated in terms of rates for specific cases.

The system assumes the greatest administrative flexibility and incentives possible, both for the Units and for the hospital.

*Differentiated per-capita premium*

This stage involves the payment of a differentiated subsidy, according to the contributions made by affiliates to the Unit and the number of family dependents. Thus, when the affiliate's income rises the subsidy would fall, but by a smaller proportion than the contribution so as not to discourage raising this. Thus the largest state subsidy would be targeted on lower-income people. This mechanism would allow Units to offer differentiated plans: i.e. higher premiums (contribution plus subsidy) would gain greater comfort, thereby encouraging affiliates to pay more (and not evade), and hospitals to provide a better service to capture these patients. Units would provide free attention to the poor and destitute. The quality of this attention would depend on the resources the State allocated to it, as it

would be completely financed by the per-capita grant allocated by the government to deal with such cases.

This stage involves Units capturing their own revenue and informing FONASA of what they received as well as the number of affiliates and their dependents. FONASA would act as the controlling body and would calculate, by difference, the subsidy that corresponds to each entity. The per-capita premium, as indicated above, would be differentiated according to the contribution made by each family group, and its number of dependents. Once these Units are organized, operating correctly and collecting their contributions, they should be turned into joint-stock corporations whose shareholders would be their own employees and affiliated members. Subsequently, these entities could be constituted as *Isapres*, under Law 18.933.

### A.2) Out-patient Centers<sup>20</sup>

The proposed model, named “Ambulatory Centers of High Diagnostic and Therapeutic Capacity” (CAARDT), also involves a financing mechanism based on a per-capita demand subsidy.

The national system would comprise three sub-systems: a) the Resolutive Ambulatory Attention Subsystem (SAAR), consisting of a network of out-patient attention whose basic philosophy would give priority to the health care of people affiliated to such centers of attention; b) the Hospital Attention Subsystem (SAH), which would include payment for “regulated groups of health care actions”<sup>21</sup>, and c) the Private Health Insurance Regime administered by the *Isapres*.

The authors argue that the proposal’s most important objectives would involve improving the quality and timeliness of health recovery actions, via out-patient attention with treatment capacity. They also consider the private sector as a crucial element in helping to de-congest public institutions, as the aim is to encourage the development of a wide-ranging network of care infrastructure through non-governmental organizations, both ambulatory and in hospital.

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<sup>20</sup> See Rioseco and Ubilla, *op. cit.*

<sup>21</sup> Similar to the Related Group Diagnosis (DRG) in North America. Cases have been typified requiring hospitalization according to a set of variables (fees, days in bed, inputs, exams, etc.). In this way the tariff that the hospital receives would be that corresponding to the DRG tariff for a given diagnosis. If the hospital saves on the treatment, it makes a profit, otherwise it assumes the loss.

## Financing

The financing of the per-capita amount will come from payments corresponding to the legal health premium (7% of income subject to an upper limit of US\$ 105 per month) plus a contribution equivalent to 2% of GDP, minus expenditure on curative free-choice medicine, all of this divided by the number of beneficiaries in the institutional (non-free-choice) mode. In this way, it was calculated that for 1989 the per-capita contribution would have been US\$ 5.68 per month.

## Operation of the system

### *Ambulatory Treatment Subsystem*

This will be made up of a network of microsystems named “Ambulatory Centers of High Diagnostic and Therapeutic Capacity” (CAARDT), which in turn will be made up of a network of ambulatory attention establishments organized around those centers. The CAARDT would be run by legally constituted not-for-profit public or private corporations. Their faculties would include administering resources, capturing the per-capita subsidy, promoting the services they offer, enrolling beneficiaries, paying work disability benefits, and negotiating contracts with public or private hospitals to provide closed attention for their affiliates.

### *Hospital Attention Subsystem*

This comprises state hospitals but also includes the possibility of participation by non-governmental organizations, either with their own establishments or else administering public establishments. These organizations would be financed exclusively by the sale of services to the CAARDT, for hospital care provided to their own member beneficiaries through the free-choice mode, as well as attending to *Isapre* affiliates and private individuals as such.

Beneficiaries can choose between the free-choice or the non-free-choice mode, a right they would be able to exercise every six months. The model also involves special subsidies to micro systems providing certain predefined services, such as high cost ones.

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### Thoughts on the per-capita payment models

The models outlined above contain important points for consideration, in that they point to changing current resource allocation policy, by shifting state subsidies from supply to demand. The payment of a per-capita subsidy to people so that they can freely choose the Center or Unit that provides them greatest benefits, will necessarily mean a better use of resources. Likewise, competition between entities will contribute to excellence in the service provided. Moreover, a system of payments to hospitals for the purchase of services will generate greater efficiency in the administration of those establishments.

The per-capita payment would avoid service provision being inadequate, as to satisfy the needs of the membership each Unit would tend to optimize the use of its resources and minimize unsatisfied demand. In national terms, the inefficiencies presently caused by the problems of central planning would be reduced, because, as mentioned above, unused resources arising from an excess supply of one service mean unsatisfied needs in others.

However, it is worth noting that the so-called “Ambulatory Centers of High Diagnostic and Therapeutic Capacity” (CAARDT) is conceived on the basis of non-profit making entities, for which reason there are not enough incentives for these institutions to develop significantly—a situation which the other model satisfactorily resolves. Evidence of this is provided by the not-for-profit Work Place Accident Mutual Funds: nearly 30 years since the passing of Law 16.744, there are still only three institutions of this type, despite the notable increase in the labor force that has occurred over this period.

The CAARDT proposal also does not contemplate the possibility of people being able to use their per-capita payment to opt for the private health subsystem, unlike the model explained in section A.1) above. A problem also remains regarding affiliation to these centers, as to share out the complete budget the CAARDT as a whole needs to have all of the population subscribed, a situation which might require some time and a significant “marketing” effort, especially as regards people of few resources, the destitute, extreme rural populations and independent workers.

Also, although it is true that in the cities different entities can compete to capture affiliates, in many cases competition would be made difficult by the fact that people normally go to the health center nearest their

home. This problem becomes more evident in sparsely populated rural areas.

Furthermore, the question of high specialization hospitals remains to be resolved (Chest, Neurosurgery, etc.), as these require special funding. Similarly, inoculation plans and other actions that have positive externalities should be able to implemented efficiently through these decentralized units.

Finally, one of the most frequent criticisms of a per-capita payment system is the difficulty the State will have in putting the model into operation. The proposals outlined are alternatives which do have some complexity, but which do not present insuperable difficulties as regards putting them into practice.

### **B) Simple subsidy for people opting to join an *Isapre***

The essence of this model is that part of the funds traditionally used to finance the provision of medical care in public establishments, is used to subsidize dependent workers of medium and low incomes, so that they can exercise their right of choice enshrined in the Constitution and choose the private institution that best suits them<sup>22</sup>.

The funds provided by the Treasury as subsidies would be assigned to dependent workers, according to the size of their respective family groups. The aim in the first stage would be to transfer all *dependent contributors*, who are currently beneficiaries of the state health regime, to health insurance institutions. It would also seem advisable to extend the application of a subsidy to *independent* workers; however, the methodology to be used would be different, and it is not described or evaluated in this paper. It should be stressed that the contribution these workers make is voluntary, so it would be very difficult to determine effective incomes for calculating the amount of the subsidy. To accredit income, for example, the income-tax declaration made to the Internal Revenue Service might be used.

It putting this model into practice it would be essential to consider health insurance institutions, because these constitute an established system complementary to the state one, which is duly regulated and involves sufficient guarantees for users.

Before analyzing the workings of the proposed model, it is useful to consider the most relevant characteristics of the system of health insurance institutions.

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<sup>22</sup> See R. Caviedes, "Asignación de recursos en salud", *El Mercurio*, August 1989.

### Characteristics of the *Isapre* system<sup>23</sup>

a) *Isapres* are regulated by law insofar as the contributions they receive are of an obligatory nature, and they replace the State in health service provision and in the payment of subsidies for common illness<sup>24</sup>;

b) The system allows people to exercise freedom of choice: i.e. there is the possibility of disaffiliating from the state health regime and opting for an *Isapre*.

c) The law includes legal minimum benefits for preventive medicine, mother and child check-ups and the payment of subsidies for illness;

d) Each *Isapre* can freely negotiate a contract with the affiliate, regarding the provision, form and conditions of health care as well as benefits provided for health recovery;

e) *Isapres* are controlled and supervised by a Superintendency, and the provision of the benefits agreed with their affiliates is backed by real guarantees equal to nearly one month's contributions to the system (US\$ 36 million in October 1992);

f) The minimum percentage of earnings earmarked for financing health care is the same, regardless of the option chosen, state or private (7% of income);

g) The system allows individuals to organize and assume management of a health insurance system. This is an example of legitimate social participation within a free society.

The *Isapre* system has other elements which, due to their relevance, are worth commenting on in greater detail, these are: a) free competition, and b) acceptance by workers. We will analyze the significance of each of these aspects in detail.

#### a) Free competition

The regulatory framework governing health insurance institutions includes simply entry barriers and an absence of bureaucracy in setting up an entity of this type. This has made possible the existence of numerous institutions providing a multiplicity of health plans. There are in fact 34 *Isapres*, of which 15 belong to worker groups or large industries and eight to medical firms. Moreover, two of these entities trade shares on the stock

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<sup>23</sup> R. Caviedes, "*Desarrollo del sistema privado de salud Isapre*", *Revista de Administración en Salud*, N° 19, University of Chile, 1992.

<sup>24</sup> As has already been mentioned, the Chilean *Isapres* are the only pre-payment system inserted as a health insurance sub-system complementary to the state system. This makes it differ greatly from other systems of pre-payment or health insurance existing in other countries.

market, one is a cooperative, seven are non-profit making, two are associated with transnational entities, 14 are from the provinces and, finally, several are on the way to internationalizing their business.

#### b) Change of mentality

The decisive influence this system has had on workers' mentalities is worth special consideration, as they have really become aware of the rights arising from their health contribution. Thus, workers know with complete certainty that their contributions give them access to certain benefits strictly related to the amount of their contributions. This has enabled workers today, both as regards health contributions and insurance<sup>25</sup>, to perceive the significance of their insurance contributions, and be aware of the direct relation that exist between their rights and duties, between effort and benefit, between individual labor and reward.

#### The working of the model

As mentioned above, the model involves providing a variable per-capita amount to individuals which they can add to their own contributions and choose a health plan in a private institution.

This amount would be calculated keeping in mind the variable expense that the Treasury incurs per person: i.e. equivalent to what the State on average would no longer spend on curative and preventive health care, and work disability-related benefits, for each individual (see Annex N° 1). It is estimated that the net subsidy that the Treasury would provide would be a maximum of about six dollars per month per person, as shown in Annex N° 1.

In addition, depending on the size of the family group, there would be a certain upper limit or maximum value that each family could accumulate: i.e. if the sum of the contribution plus the per-capita subsidy exceeded this upper limit, the subsidy would be applied only up to that limit (columns "Subsidy" and "Total" of Table N° 1). In this case, as Figure N° 3 shows, if an individual's contribution increases—for example if his income goes up, or due to overtime, bonuses, etc.—, the subsidy would be reduced by the same amount. Although the formula may seem complex, in

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<sup>25</sup> The Chilean social insurance system (Pension Fund Administrators, AFP) involves individual capitalization, so the benefits workers obtain are also in strict relation to their contributions, just like the Isapre system. This has meant that the evasion of contributions and under-contributing only occurs in the state sector.

practice it is not, because the *Isapre* would simply calculate the subsidy as the difference between the upper limit and the total contribution made by the family group (“Subsidy” column in Table N°1-B).

In calculating the upper limit, an amount close to the minimum price of plans currently offered in the market would be used.

>>> FIGURE N° 3

SUBSIDIES PERCEIVED BY FAMILY GROUP AND INCOME	
Family income, US\$ per month	

Thus for an affiliate with no dependents, the maximum contribution with the right to subsidy has been arbitrarily set in this model at US\$ 24. If the affiliate has one dependent (spouse) the upper limit would rise to US\$ 40, and by a further US\$ 8 for each of the first four children and US\$ 6 for each dependent thereafter (Table N° 1-A).

TABLE N° 1-A

N° of Beneficiaries	Upper limits (US\$)	N° of Beneficiaries	Upper limits (US\$)
1	24.00	4	6.00
2	40.00	5	64.00
3	48.00	6	70.00
		Each dependent	
		US\$ 4.00 extra	

These upper limits would be automatically adjusted according to the wage index or some other suitable indicator. The amounts indicated as ceilings could be calculated according to a different formula than that proposed; for example, by establishing a maximum price for the plan with the right to subsidy, according to the health standards that the State wants the *Isapres* to provide to subsidized people, or else by defining a variable upper limit that changes gradually so as to avoid disincentives to increasing the contribution.



Table N° 1-B shows a series of contributors classified by income between US\$ 100 and US\$ 1,000, and by family group, between one and six beneficiaries. Here it should be noted that the contributor himself is included as a beneficiary, so when the Table refers to three beneficiaries it means the contributor plus two dependents. Thus, for example, to calculate the subsidy corresponding to an affiliate with three dependents who in a given month is paid an income of US\$ 650, we see in the column corresponding to four beneficiaries, that this family group would be subject to an upper limit of US\$ 56. As the contributor pays US\$ 45.50, the subsidy for that month would be US\$ 10.50 (56-45.5), i.e., US\$ 2.63 per capita. Likewise, if the contributor's income rises to US\$ 675, the following month he will receive US\$ 8.75 in subsidy, or US\$ 2.19 per person.

Figure N° 4 shows total incomes for different family groups (between one and six people). It can be seen that as family incomes rise the subsidy is applied only up to the upper limit. Thus, for example, an affiliate with one dependent who receives between US\$ 400 and US\$ 550 reaches the ceiling with the corresponding subsidy, and his total amount available for choosing an health plan in this income bracket remains constant. In this regard, it has been suggested that the ceiling should be variable, i.e. that it should increase slightly so as not to discourage the contribution, which seems very reasonable.

## Supervision

Supervision of the system is the job of the Superintendency of *Isapres*. For this purpose each *Isapre* has to provide a detailed account to the State of the amounts it charges each month, via a list identifying subsidized people, and the amount of subsidy corresponding to each one, calculated in terms of the difference in terms of the contributions paid that month, as discussed above. In addition, the *Isapre* has to indicate the total subsidy it will draw from the fiscal current account, just as, at the present time, funds corresponding to maternity subsidies are drawn on the Family Benefit Fund (*Fondo Unico de Prestaciones Familiares*) operates. Having said that, subsidy regulations should establish sanctions for affiliates who submit false or spoiled income declarations in order to obtain this benefit without the right to do so.

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TABLE N°1-B: APPLICATION OF SUBSIDY ACCORDING TO INCOME AND NUMBER OF BENEFICIARIES IN US\$

Income	Legal contrib.	1		2		3		4		5		6	
		Benef.	Ceiling	Benef.	Ceiling	Benef.	Ceiling	Benef.	Ceiling	Benef.	Ceiling	Benef.	Ceiling
US\$	(a)	(b)	(a+b)	Subsid.	Total	Subsid.	Total	Subsid.	Total	Subsid.	Total	Subsid.	Total
100	7.00	6.00	13.00	12.00	19.00	18.00	25.00	24.00	31.00	30.00	37.00	36.00	43.00
125	8.75	6.00	14.75	12.00	20.75	18.00	26.75	24.00	32.75	30.00	38.75	36.00	44.75
150	10.50	6.00	16.50	12.00	22.50	18.00	28.50	24.00	34.50	30.00	40.50	36.00	46.50
175	12.25	6.00	18.25	12.00	24.25	18.00	30.25	24.00	36.25	30.00	42.25	36.00	48.25
200	14.00	6.00	20.00	12.00	26.00	18.00	32.00	24.00	38.00	30.00	44.00	36.00	50.00
225	15.75	6.00	21.75	12.00	27.75	18.00	33.75	24.00	39.75	30.00	45.75	36.00	51.75
250	17.50	6.00	23.50	12.00	29.50	18.00	35.50	24.00	41.50	30.00	47.50	36.00	53.50
275	19.25	4.75	24.00	12.00	31.25	18.00	37.25	24.00	43.25	30.00	49.25	36.00	55.25
300	21.00	3.00	24.00	12.00	33.00	18.00	39.00	24.00	45.00	30.00	51.00	36.00	57.00
325	22.75	1.25	24.00	12.00	34.75	18.00	40.75	24.00	46.75	30.00	52.75	36.00	58.75
350	24.50	0.00	24.50	12.00	36.50	18.00	42.50	24.00	48.50	30.00	54.50	36.00	60.50
375	26.25		26.25	12.00	38.25	18.00	44.25	24.00	50.25	30.00	56.25	36.00	62.25
400	28.00		28.00	12.00	40.00	18.00	46.00	24.00	52.00	30.00	58.00	36.00	64.00
425	29.75		29.75	10.25	40.00	18.00	47.75	24.00	53.75	30.00	59.75	36.00	65.75
450	31.50		31.50	8.50	40.00	16.50	48.00	24.00	55.50	30.00	61.50	36.00	67.50
475	33.25		33.25	6.75	40.00	14.75	48.00	22.75	56.00	30.00	63.25	36.00	69.25
500	35.00		35.00	5.00	40.00	13.00	48.00	21.00	56.00	29.00	64.00	35.00	70.00
525	36.75		36.75	3.25	40.00	11.25	48.00	19.25	56.00	27.75	64.00	33.25	70.00

(continúa)

(continuación tabla 1-B)

550	38.50	38.50	1.50	40.00	9.50	48.00	17.50	56.00	25.50	64.00	31.50	70.00
575	40.25	40.25	0.00	40.25	7.75	48.00	15.75	56.00	23.75	64.00	29.75	70.00
600	42.00	42.00		42.00	6.00	48.00	14.00	56.00	22.00	64.00	28.00	70.00
625	43.75	43.75		43.75	4.25	48.00	12.25	56.00	20.25	64.00	26.25	70.00
650	45.50	45.50		45.50	2.50	48.00	10.50	56.00	18.50	64.00	24.50	70.00
675	47.25	47.25		47.25	0.75	48.00	8.75	56.00	16.75	64.00	22.75	70.00
700	49.00	49.00		49.00	0.00	49.00	7.00	56.00	15.00	64.00	21.00	70.00
725	50.75	50.75		50.75		50.75	5.25	56.00	13.25	64.00	19.25	70.00
750	52.50	52.50		52.50		52.50	3.50	56.00	11.50	64.00	17.50	70.00
775	54.25	54.25		54.25		54.25	1.75	56.00	9.75	64.00	15.75	70.00
800	56.00	56.00		56.00		56.00	0.00	56.00	8.00	64.00	14.00	70.00
825	57.75	57.75		57.75		57.75		57.75	6.25	64.00	12.25	70.00
850	59.50	59.50		59.50		59.50		59.50	4.50	64.00	10.50	70.00
875	61.25	61.25		61.25		61.25		61.25	2.75	64.00	10.50	70.00
900	63.00	63.00		63.00		63.00		63.00	1.00	64.00	7.00	70.00
925	64.75	64.75		64.75		64.75		64.75	0.00	64.75	5.25	70.00
950	66.50	66.50		66.50		66.50		66.50		66.50	3.50	70.00
975	68.25	68.25		68.25		68.25		68.25		68.25	1.75	70.00
1,000	70.00	70.00		70.00		70.00		70.00		70.00	0.00	70.00

*Note:* The ceiling represents the maximum amount a contributor can accumulate (legal contribution + per-capita subsidy), according to the number of components in his family group (beneficiaries). If the sum of the contribution plus the subsidy exceeds the ceiling, the subsidy is applied to the difference until reaching the upper limit, so the subsidy decreases gradually as contributions rise, as can be seen in the table above.

The figures presented here only constitute a model for discussing the per-capita subsidy and the ceilings for each family group. The per-capita subsidy considered in this model is US\$ 6 per month.

The subsidy calculation is linear, non-discrete. The table used, as an example, incomes at intervals of US\$ 25, despite the fact that the idea is for the subsidies to be calculated in terms of the difference, as mentioned. The column labeled 1 shows the subsidy calculation for a person with no dependents. The column labeled 2 represents an affiliate plus one dependent, and so on up to six dependents. Columns marked "Subsid." show the resulting subsidy for that family group. Columns marked "Total" indicate the amount available to the affiliate (contribution plus subsidy) to opt for an health plan.

FIGURE N° 4

CONTRIBUTION PLUS SUBSIDY
Family income per month US\$ 1 Beneficiary, 2 Beneficiaries (etc.)

### Financing

In Annex N° 1 an estimate has been made of the cost of applying this subsidy. Given the scope and aims of this paper, in no way is it intended to provide an economic evaluation of this; however, preliminary figures (Annex N° 1) show that US\$ 28.2 million would be required to finance the subsidy to 2.8 million people, in a program applied gradually over four years. The subsidy has been projected over this period, as it has been estimated that the annual growth capacity of the *Isapre* system could increase as a result of the implementation of the subsidy. It is worth mentioning that in the last two years these institutions have taken in more than 400,000 new beneficiaries per year.

### CONCLUSIONS

Firstly, the model is easy to implement, as it does not require profound reforms, but is based on existing and well known institutions, which would make possible its implementation in the short run.

Secondly, it can be introduced gradually, depending on the funds the State wishes to destine to it, thereby controlling the transfer of beneficiaries to *Isapres* and extending this gradually to at least 60% of the population. This will depend on the level of income and employment in the country (see Annex N° 2). This percentage could be raised as improvement in the economic situation occurs.

Thirdly, the State could destine all its resources and concern towards beneficiaries who remain in the state health regime, for them to enjoy an adequate service—one that is worthy and efficient—so long as they are unable to accede to the private system. Moreover, all health care actions that cannot be delegated because of the externalities they imply, would be better carried out by the State.

In addition, any reform that it might be thought desirable to carry out in the government sector would be considerably more simple, from the

operational point of view, if the Health Services attended a smaller population.

Prior to certain legal reforms, public hospitals would obtain income from the sale of health care provided to subsidy beneficiaries. This would stimulate an improvement in the quality of service and management, motivated by the chance to capture these incomes.

Finally, the significant increase in the number of beneficiaries of the system would cause a reduction in the prices of health plans. This is based on a reduction in administration costs arising from the economies of scale generated, as well as greater risk diversification for these institutions.

### **Criticisms of the model**

It is argued that the transfer of the relatively wealthier population to the *Isapre* system will mean the State will have to finance that part of the cross-subsidies these affiliates provide as contributors, compared to poorer beneficiaries. But, as has been explained, cross-subsidies are inefficient and unfair, so this a problem which the State will have to resolve sooner or later anyway.

It is also argued that it would be socially inefficient to subsidize the relatively wealthier beneficiaries of the state sector to transfer to an *Isapre*, because the benefit would be greater if this subsidy was applied to poorer people. An answer to this is that wealthier affiliates spend more on health, so by transferring to the private sector they would free physical, human and financial resources, which would make it possible to improve health care for the less advantaged. However, while it is true that part of the population would opt out of the government system, it is also true that there are unsatisfied needs among the most poor, who would thus consume part of the hospital resources freed up. In other words, a more expeditious state system, with less rejection, albeit with fewer affiliates, would not mean an immediate cut in public health spending.

Another criticism makes the point that low-income people do not have the knowledge needed to affiliate to an *Isapre*, and they might choose clinics or doctors that were inappropriate to their income and the financial coverage their health plan provides them. This hypothesis is highly debatable, because today all beneficiaries of the state system have the right to the free-choice mode, and thus may check themselves into the best clinics in the country, even though they receive a minimal reimbursement from FONASA. What is true is that nothing gives the State faculties to take decisio-

ns on behalf of the consumer and restrict freedom of choice among individuals. What is needed is to establish systems of information which are adequate and timely, so that the market operates correctly and affiliates can choose what is best for them when they require medical attention.

It is also argued that the demand subsidy would substantially raise health costs, proof of this being the North American system. However, the Chilean model differs from the American one, among other reasons, because the latter does not involve a moderating user co-payment which unfailingly regulates the price of medical care. In health systems, equity and freedom of choice should prevail above all else. Otherwise, it could be argued that if institutionalized medical attention were more economic than the private system, the State should restrict the free exercise of the profession, which would clearly be absurd.

Finally, although it is impossible to anticipate all the effects that would be produced as a result of implementing a reform of this type, it is clear that putting it into practice would have positive results from the social point of view, and there can be no doubt it would be more efficient than the current policy applied by the Government, consisting of increasing direct transfers to state hospitals, even if these are given greater administrative flexibility.

## **ANNEX N° 1**

### **ESTIMATION OF THE DEMAND SUBSIDY FOR ISAPRE AFFILIATES**

#### **Preliminary calculation of the subsidy**

As pointed out above, the scope and purpose of this paper is not to carry out socio-economic evaluation, but to provide basic guidelines for a more in-depth study.

In a first stage, consisting of a four-year plan, the aim is to grow to one million contributors: i.e. 2.8 million individual beneficiaries. This is equivalent to the “dependent” contributor population, currently beneficiaries of FONASA, as can be seen in Table N° 1. Obviously, this is not enough for the method to be extended to a larger population, but it would serve as a basis for studying its application to other segments.

The transfer of 2.8 million beneficiaries would require marginal contributions for the health sector and so the conclusion is that it would be perfectly feasible.

Procedure

This is basically divided in two points. In point 1 the maximum theoretical amount that could be distributed in subsidies to beneficiaries is calculated. Point 2 estimates the financial effects for the State in transferring 2.8 million beneficiaries to the *Isapres*.

1. Determination of the maximum theoretical subsidy

To calculate the maximum theoretical per-capita subsidy we divide current SNSS expenditure (see Figure N° 1) by the estimated number of beneficiaries using the institutional mode (estimated at 7,000,000 beneficiaries):

CURRENT SNSS EXPENDITURE  
(FOR 1992 IN US\$ MILLION, ACCORDING TO PROVISIONAL FONASA BUDGETS,  
SEE FIGURE N° 1)

Personnel	261.24
Consumer goods and services	233.00
Payment of work disability benefit	24.90
Total current expenditure	US\$ 519.14

Calculation of average current expenditure by the state health services (US\$ per beneficiary per month:

$US\$ 519,140,000 / 7,000,000 / 12 = US\$ 6.18$  per month per beneficiary.

This figure corresponds to a maximum theoretical amount that could be paid as a subsidy, if what is spent on providing health care to beneficiaries of the state services is distributed. It is also worth pointing out that the health services budget is being raised considerably every year, so when the reader analyzes this figure it will already be obsolete.

2. Calculation of State savings and expenditures

Below we estimate the financial effects that would be caused by the transfer of subsidized beneficiaries to the *Isapre* system: i.e. the savings and expenditures that would be produced. The following categories are analyzed:

1. Lower incomes from contributions;
2. Operational savings of the SNS;
3. Higher spending to finance the subsidy;
4. Higher income through the sale of SNSS services;
5. Savings in CCAF Work Disability Benefits; and
6. Savings in the FONASA free-choice mode.

## 2.1 Lower Treasury income due to contributions no longer received

According to the statistics of Table N° 1 (March 1992 figures), Pension Fund Administrators (AFPs) had 4,281,476 active affiliates, of whom 4,150,526 (N° 3 of Table N° 1) joined as dependent employees. However, only 2,110,518 (N° 4) of these actually made contributions as dependent employees. If from this total we subtract dependent workers affiliated to *Isapres* (1,087,015 contributors), there would be approximately 3,063,511 (N° 7) dependent workers who are FONASA beneficiaries. Of these, 2,040,008 (N° 5) workers did not make AFP contributions as dependent employees during the month of March.

### *a) Supposed arrears*

The above figures show that only 50.85% of AFP affiliates paid contributions that month. However, *all* of them had the right to some health system. 26.19% of AFP affiliates are contributors to an *Isapre* where health contribution evasion or arrears are minimal. For this purpose we have assumed a 5% evasion rate, i.e. 54,351 AFP-*Isapre* contributors. Thus, the remainder of “non-paying AFP contributors” amount to 1,985,657 (N° 9), of whom we assume 40% only pay the minimum amount into FONASA, either independently or on their own account. Thus, we can estimate contribution evasion or non-payment by dependent workers who make use of the state health regime as amounting to 38.89% of total AFP-FONASA contributors. This does not take into account workers who still pay into the State pension system known as *Instituto de Normalización Previsional* (INP), as this is not considered relevant for this exercise.

### *b) Calculation of contributing beneficiaries in the state health regime affiliated to an AFP*

Finally, if from the 2,110,518 AFP contributors (N° 4) we subtract dependents affiliated to *Isapres* (1,087,015), there would be 1,023,503 (N°



11) workers paying into AFPs who are also beneficiaries of the state health regime. This figure coincides with that shown at the bottom of Table N° 2 (1,028,527), obtained by subtracting *Isapre* contributors from AFP contributors per income bracket. This universe of people could be eligible to receive a subsidy.

*c) Beneficiaries per contributor*

According to statistics from the *Isapre* system there are 2.39 beneficiaries per contributor (1.39 dependents per contributor). Nevertheless, for the socioeconomic group involved we will assume 2.8 beneficiaries per contributor.

FIGURE N° 1  
ANALYSIS FOR AFP DEPENDENT WORKERS (June 1992)

Category of worker		Number	Percentage
Total AFP Affiliates	(1)	4,281,476	100.00
Total <i>Isapre</i> Affiliates	(2)	1,160,039	27.09
Dependent AFP Affiliates	(3)	4,150,526	100.00
Dependent AFP Contributors	(4)	2,110,518	50.85
Total AFP Non-contributors	(5)	2,040,008	49.15
Dependent <i>Isapre</i> Affiliates	(6)	1,087,015	
FONASA Dependents	(7)	3,063,511	
Dependent FONASA contributors	(11)	1,023,503	
AFP-Isapre non- contributors	(8)	54,351	
Dependent AFP-FONASA non-contributors	(9)	1,985,657	
FONASA non-contributors	(10)	1,191,394	38.89

(1), (3), (4) = Source: Bulletin of the AFP Superintendency, June 1992.

(2) and (6) = Source: *Isapre* Superintendency, June 1992.

(5) = (3) - (4)

(7) = (3) - (6)

(9) = (5) - (8)

(8) = A 5% arrears rates is assumed.

(10) = We assume that 40% of AFP non-contributors (9) only contribute to FONASA as independents.

(11) = (4) - (6) Target market of the subsidy.

TABLE N° 2

Income brackets (Chilean \$)	AFP Contributors (1)	<i>Isapre</i> Contributors (1)	FONASA Contributors
< 30.000	167,791	9,702	158,089
31-100	1,180,699	247,840	933,849
101-150	286,404	224,493	61,911
151-200	145,867	108,783	37,084
210-300	140,867	121,360	19,507
301-max	193,921	209,062	0
Other		165,772	
Total	2,115,542	1,052,188	1,028,527

Figures approximated to June 1992 by the author.

Note (1): The number of “contributors” by income bracket shown in the above table may have certain variations as the information available in the Bulletins of the AFP and *Isapre* Superintendencias (for June 1992), do not coincide in some income brackets, so the figures have had to be approximated. The resulting average income is US\$ 22 (Ch\$ 76,943), considering the brackets below \$ 301,000, which would be where people receiving the subsidy would be concentrated. FONASA contributors are obtained by difference.

The Treasury would cease to receive approximately US\$ 113 million per year. This is due to the fact that, with the subsidy, contributing workers would opt out of the State health regime —approximately one million contributors with an average income of US\$ 220 per month, according to Table N° 2. Of these, 61.11% effectively pay the contribution equal to 7% of income (a 38.89% rate of evasion or arrears never recovered by the State, as indicated in a):

$$1 \text{ million contributors} \times \text{US\$ } 220 \times 7\% \times 12 \times 61.11\% = \text{US\$ } 112.93 \text{ million per year.}$$

This corresponds to 36% of all contributions received (US\$ 316.4 million per year according to Figure N° 1). The difference would be provided by pensioner contributors and independent workers not considered in this study.

2.2 Estimation of operational savings arising from the disaffiliation of one million contributors, plus their dependents, from the State health regime (2,800,000 people).

Current monthly state expenditure, calculated in point 1 is equal to US\$ 6.18 per month per capita: therefore, this represents:

$$2.8 \text{ million beneficiaries} \times \text{US\$ } 6.18 \text{ per month} \times 12 \text{ months} = \text{US\$ } 207.65 \text{ million per year.}$$

Notwithstanding this, we will assume that effectively only 70% of this amount is saved per year, because part of these resources correspond to public institutions' fixed costs. As is well known, no expenditure is fixed in the long run, so most of these resources should be saved. Considering the less optimistic alternative we would have:

SNSS Savings:  $207.65 \times 70\% = \text{US\$ } 145.36$  million per year.

### 2.3 Calculation of extra Treasury resources needed to finance the demand subsidy

If the maximum amount of the subsidy is US\$ 6.18, the average per-capita subsidy would be US\$ 3 per person per month (the subsidy is less if people's income goes up, i.e. it varies between 0.1 and 6.18). Consequently, annual spending of the subsidy would be:

$2.8 \text{ million beneficiaries} \times \text{US\$ } 3 \times 12 \text{ months} = \text{US\$ } 100.8$  million per year.

### 2.4 Calculation of higher SNSS income arising from the sale of services to *Isapres*

Some of the subsidized beneficiaries would demand health care in hospitals run by the national health services simply because there is not enough private infrastructure everybody. For this reason we assume that part of the income received from these affiliates would be spent buying services from public hospitals.

a) Total new income the *Isapres* will receive from contributions and subsidies relating to new affiliates (US\$ million)

Contributions ( $220 \times 7\% \times 12$ )	184.80	(Point 1.4)
+ Health Subsidy /year	100.80	(Point 3)
Total:	US\$ 285.60 million per year.	

b) Health expenditure represents 59% of total incomes<sup>26</sup>. Of this, expenditure on Closed Attention amounts to 37.9% of health spending.

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<sup>26</sup> Source: *Boletín Estadístico de la Superintendencia de Isapres*, 1991 (Open Isapres).

Consequently we will assume that the following would flow back to public hospitals from the sale of services:

$$59\% \times 37.9\% \times 285.60 = \text{US\$ } 63.86 \text{ million per year.}$$

The production cost of these services is estimated at 80% of hospital income.

$$\text{US\$ } 63.86 \times 0.80 = \text{US\$ } 51.08 \text{ million per year.}$$

(As can be seen, we have made no assumption about public hospital income arising from charging for consultations, treatment, out-patients examinations, etc., which would help to improve the project if they were to occur).

## 2.5 Savings on Work Disability Subsidies (SIL)

The Treasury will cease to finance the deficits on labor disability subsidies, paid by the so-called *Cajas de Compensación* (Figure N° 1). We will assume the Treasury would save the proportion corresponding to dependent affiliates, who would leave the State regime. Let us assume 90%:

$$\text{CCAF Spending on SIL} = \text{US\$ } 14.33 \text{ million per year.}$$

$$14.33 \times 90\% = \text{US\$ } 13.43 \text{ million per year.}$$

## 2.6 Savings on curative medicine in the FONASA free-choice mode:

FONASA would save the fraction of reimbursements paid to disaffiliating beneficiaries.

According to Figure N° 1:

Contributions from Beneficiaries	US\$ 60.93 million
Total Free Choice expenditure	US\$ 101.06 million
Net Free Choice expenditure	US\$ 40.13 million

From this figure we estimate that the Treasury would save the same proportion of dependent affiliates who leave the State health regime:

$$\text{US\$ } 40.13 \text{ million} \times 33\% = \text{US\$ } 13.24 \text{ million per year}$$

Summary:		US\$ Million
1	Less income from contributions	(112.93)
2	SNSS operational savings	145.36
3	Higher spending to finance subsidy	(100.08)
4	Higher income from sale of SNSS services	63.86
	Production costs of SNSS services (80% of sales)	(51.08)
5	Savings on CCAF work disability subsidies	13.43
6	Savings on FONASA free-choice mode	13.24
Fiscal contribution (deficit) US\$million		(28.20)

### 3. Tentative program for subsidy provision

The period over which subsidies would be applied would depend on the *Isapres'* commercial and operating capacity and people's interest in taking advantage of the benefit.

#### Beneficiaries:

1st year	700,000
2° year	1,400,000
3° year	2,100,000
4° year	2,800,000

#### Conclusion from the figures

According to these preliminary figures, the implementation of a demand subsidy for 2.8 million people to affiliate to an *Isapre*, would represent a higher monthly fiscal contribution to the health sector, up to the fourth year (system in operation) equal to US\$ 28.2 million (Approximately 3.1% of the 1992 FONASA budget) —a figure which is irrelevant in the context of the sizable budget increases of more than 50% that the State sector has experienced in recent years. To the State, the subsidy would represent a monthly US\$ 0.8 per beneficiary.

## ANNEX N° 2

## STATISTICAL FIGURES ON THE ISAPRE SYSTEM

Historical growth of beneficiaries  
(affiliates plus family dependents)

Year	Beneficiaries	Annual growth	% growth on previous year
1981	61,659	61,659	
1982	164,307	109,668	166.48
1983	229,844	65,537	39.89
1984	365,260	135,416	58.92
1985	545,587	180,327	49.37
1986	921,294	375,707	68.86
1987	1,905,004	983,710	30.79
1988	1,450,175	145,171	20.35
1989	1,756,169	305,994	21.10
1990	2,108,308	352,139	20.05
1991	2,566,144	457,836	91.72
1992	3,000,063	433,919	16.91
1993	3,450,000	450,000	15.00
		Estimate	

**Prospects for the *Isapre* system**

In December 1992 the *Isapre* system had 3,000,063 beneficiaries (1,264,148 affiliates). Growth in 1991 and 1992 was 457,836 and 433,919 beneficiaries respectively, compared with the preceding year, and for 1993 a further 450,000 new beneficiaries are expected.

According to the historical growth of the *Isapre* system, an average of 445,878 people have joined in each of the last two years. If this growth is maintained for four years, the system would accumulate 4.8 million beneficiaries. If to this we add subsidized people (2.8 million) in this first stage, by the end of four years there would be 7.6 million beneficiaries in the private health system. Obviously, the stability of the system's rules of the game and economic growth will be fundamental factors in fulfilling these predictions.

Thus, as relatively wealthier people lose the right to the subsidy, the rest of the population will accede to this benefit, provided the country's development and economy so permit. Meanwhile, and until this happens, they would be attended in the national health service system or in the free-choice mode.