

Medical care equity

for older persons in Chile:

the role of the insurance

sector

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Governments play a central role in the organization and financing of health services, and their actions in promoting equitable health care contribute to their legitimacy. Chile's system of health insurance and health care has raised concerns about equity in the financing of this care. This research extends the analysis of equity to the question of access to care, with special emphasis on the heaviest users of medical care: i.e., those aged 65 and over. Data from the 1998 Chilean national CASEN survey show that there were substantial inequities both between and within public and private insurance in this respect. The persistence of inequities within public health insurance indicates that even when financial equity and efficiency are improved, additional attention must be given to barriers to obtaining medical care if inequities in access are to be reduced.

I

Introduction

State involvement in health care plays important material as well as symbolic roles in a society (Esping-Andersen, 1994). Governments promote and regulate medical services to keep people well and treat the sick—an activity that absorbs a significant portion of GDP in most nations and also carries out an important symbolic function in offering a visible benefit to the population in general. In this sense, government involvement in the medical care system plays a legitimation function in the society. To achieve this legitimation function, the State must provide a system that is not only effective but that also appears equitable. Since the elderly are the highest users of health services, and are also often one of the most “legitimate” groups in a society for the receipt of public benefits, the equity of public policy in health care for the aged provides a valuable insight into the legitimacy of the system as a whole. Health care for the elderly is gaining increased governmental attention in Latin America, since a number of countries (Cuba, Uruguay, Argentina and Chile) are in an advanced stage of the demographic transition in which over 10% of the population is aged 60 and over, and both birth and death rates are low (Villa and Rivadeneira, 2000). This situation is accompanied by an epidemiological transition where the primary burden of illness has shifted from acute to chronic diseases that are concentrated among the older population (PAHO, 1998). With 29% of urban households and 37% of rural households in Chile containing older persons (ECLAC, 2001), a substantial portion of the population is directly affected by the health care received by older persons.

Chile was one of the first countries in Latin America to undertake “structural adjustment policies” in the 1970s and 1980s. Following neoliberal principles, the then military government adopted new policies designed to reduce the State’s role in the economy and society. While the privatization and individual capitation of both the public pension and health insurance systems were adopted as solutions to fragmentation and underfunding, the State continues to play a significant role in subsidizing and regulating both systems (Morley, Machado and Pettinato, 1999; Arenas de Mesa, 2000). In the health arena, most middle-class (and hence wealthier) formal sector workers moved from the State-supported Sermena insurance scheme to private

insurance companies (Isapres - Instituciones de Salud Previsional). Other wage workers remained with a new State-supported and subsidized insurance system (Fonasa - Fondo Nacional de Salud), and the military retained its own insurance system. Organizationally, medical care provision was separate from insurance in both the public and private sectors, resulting in a pluralistic system in these two respects (Borzutsky, 1999). The public sector has worked during the 1990s to further separate its roles as a regulator, provider and purchaser of medical care, with moderate but uneven success (Sojo, 1999).

Health insurance in Chile is “purchased” with a mandatory flat 7% assessment of each worker’s salary (with no employer contribution). This “premium” can be applied to insurance in the public system (Fonasa), in one of the many companies in the private system (Isapres), or in the military system¹ in the case of armed forces personnel. Both public and private insurance focuses on acute care services (hospitals, doctors’ fees, and lab and x-ray costs), with a variety of copayments and fee schedules (effectively, payment caps and benefit ceilings). Insurance companies (including the State) have agreements with some private providers who accept fixed fee schedules as full payment. The charges of other private providers can exceed the maximum payments of insurers, often substantially. State-owned hospitals and clinics always accept public insurance payment schedules, and also accept patients with private insurance.

Public insurance in Chile is a four-tier system based on the level of income of beneficiaries. Those with no income (the indigent) are in Fonasa A, which requires no copayments and is limited to the use of public clinics and hospitals. Those with incomes near the minimum wage can receive Fonasa B for their 7% contribution, which also has no copayments for the use of public sector health facilities, but along with FONASA C and D has access to a “free choice” option that pays for care

¹ Military personnel contribute 6% of their salary while the State pays the remaining 1%; until 1998 armed forces retirees were limited to the military insurance system, but now they can opt to contribute to Fonasa or an Isapre instead.

from the private sector (with a 50% or higher copayment using a pre-established fee schedule). Persons with higher incomes are placed in Fonasa C or Fonasa D, which require 10% and 20% copayments respectively when using the public system, based on fee schedules that are typically lower than those used by private practitioners (World Bank, 1995). Fonasa A and B are subsidized by the State, since they cost more than their premiums bring in, while those enrolled in Fonasa C and D redistribute some resources, since their aggregate costs of care are less than their premiums (Bitrán and others, 1996). The Armed Forces insurance system also has a “free choice” option with limits similar to those of the Fonasa free choice system.

In the private insurance market, individuals can pay extra premiums, beyond the required 7%, to improve the coverage (particularly in terms of payment caps per service) and choices in their insurance. In the year 2000, 50% of all families with private coverage paid extra to improve their coverage (Superintendencia de ISAPRES,

2001). Private insurance companies are allowed to adjust their premiums and benefits for risk, on the basis of sex, age, and number of dependents. For example, a common plan costs a 65 year old single man six times what it costs a 35 year old single man. Each private insurance company may therefore have hundreds of possible plans to accommodate different incomes, with each plan varying widely with regard to copayments and services covered (Larrañaga, 1997). Because premiums rise substantially with age, in 1998 ISAPRES covered about 24% of persons under age 65, but only 7% of persons aged 65 and over (Ministry of Planning and Cooperation, 1999). While almost all ambulatory care for the privately insured population is provided by the private sector, privately insured persons also make use of public sector hospitals at times. The use of public sector hospitals has represented an indirect public subsidy of the private sector, since the public sector has not had adequate information systems for billing the private insurance companies when appropriate.

II

The role of equity in medical care

The Chilean State made “equity”, along with “growth”, a central pillar of its public policy when democracy was restored in 1990 (Muñoz Porras, 1998). National economic growth did continue for most of the 1990s, and poverty rates declined, but economic inequality also increased as measured by the percentage of total urban income earned by the wealthiest 10% of urban households and the rising Gini index of income inequality (ECLAC, 2001). Equity in the publicly visible sectors of social and health services was a goal of the center-left government, as a way to maintain broad popular support, even though it was obliged by the 1980 Constitution to act within the political and economic structure developed by the military regime. The stated goals of the Ministry of Health in the 1990s were equity, decentralization and patient satisfaction/participation (Ministry of Health, 1999).

Equity in medical care is also a priority issue in other Latin American nations (Alleyne, 2002) and throughout the world (WHO, 2000; Hurst and Jee-Hughes, 2000), and it involves a number of different dimensions, including the distribution of the outcomes, the process, and financing. Unlike a focus on efficiency,

which tries to maximize the results obtained per unit of financial input, equity examines the extent to which each of those dimensions is distributed across the population (Hurst, 2001). In Chile there is particular concern about equity between different socioeconomic groups and between different geographic regions of the country (sometimes expressed as rural-urban differences, but more often as differences between the 13 administrative regions into which the country is divided from north to south).

Outcome indicators which are considered important in Chile include mortality (especially infant mortality) and life expectancy. Infant mortality in Chile continues to vary by region and mother’s education (Muñoz Porras, 1998; Hollstien and others, 1998), even though it has fallen dramatically over the past 40 years and Chile is tied for first place internationally in the level of equity in child survival (WHO, 2000; Hurst and Jee-Hughes, 2000). Total mortality rates, however, continue to show inequalities, since they are associated with the income levels of communities (Arteaga and others, 2002). Life expectancy has risen during the past 40 years, even among those who are already aged 60,

although the remaining life expectancy at that age varies between 21.1 and 23.1 years across the administrative regions (Morales and Villalón, 1999).

The process indicators describe the manner in which the outcomes are being produced, including the quality of care and access to services. Gender and income inequalities are high as regards the use of medical and dental care, suggesting that there are gender and income barriers to access (PAHO, 2000; Arteaga and others, 2002). The degree of satisfaction with the health care system is also closely associated with income (Rodríguez and Tokman, 2000). The World Health Organization (WHO) terms this element of equity “responsiveness”, and its survey of key informants places Chile 45th in overall achievement but 103rd in equity of responsiveness (WHO, 2000; Hurst and Jee-Hughes, 2000). The structure of the dual public-private health care and insurance systems is an important cause of income-related inequality in the services received (Sojo, 1996).

Financing is often measured by the contributions by or spending on each beneficiary. Equitable contributions are those which involve a non-regressive proportion of a person’s discretionary income, while equitable spending involves a correlation between medical needs and the resources used. In Chile, spending on medical care is inequitable because the public sector spends about 93,000 pesos per capita per year compared to the 143,000 pesos per capita spent by the private sector although the population served by the latter is healthier and younger (Titelman, 1999). This is only a minimal estimate of the spending inequity, since these data do not include the substantial

copayments in the private sector, meaning that the actual spending gap is substantially higher. There is also widespread concern over the risk selection of private insurance, which forces older and higher-risk persons to rely to a disproportionate extent on the publicly subsidized FONASA system (Bitrán and Almarza, 2000; Sojo, 1999; Sapelli and Torche, 1998). In contrast to Chile’s world leadership in the equity of infant survival, it comes 168th (out of 191) in the WHO’s measure of fairness of financial contribution (WHO, 2000; Hurst and Jee-Hughes, 2000).

The financing of medical care in Chile during the 1990s shows the lowest levels of equity among the three key dimensions of health systems performance – outcomes, process, and financing. Policy initiatives (such as the Universal Explicitly Guaranteed Access Plan (Plan AUGE) during the early 2000’s have focused on improving access to expensive services for all and on the reduction of long waiting lists in the public sector, by using a more equitable financing system.

The following analysis seeks to improve our understanding of the factors that influence the equity of the health care system that the reforms build upon, by examining the situation of those most dependent on medical care: i.e., persons aged 65 and over. It goes beyond the existing literature on equity in Chilean health insurance, which usually makes a dichotomy between the public and private sectors and provides bivariate analyses (see for example Larrañaga, 1999; Lenz and others (eds.), 1999; Muñoz Porrás, 1998), since it shows the variations within the health care sector as a whole and provides a multivariate analysis of access to health services.

III

Methods

This study uses the 1998 CASEN (National Socioeconomic Profile Survey) that was conducted by the Chilean Ministry of Planning and Cooperation (MIDEPLAN) during November and December of that year. It is a nationally representative survey of 48,103 households and 188,348 individuals, including 14,910 persons aged 65 and over. The Economic Commission for Latin American and the Caribbean (ECLAC), a United Nations regional research centre, adjusted the reported income to account for missing data and underreporting

of income (ECLAC, 1999). All analyses were conducted using normalized weights to adjust for the disproportionate sample sizes in rural regions.

Indicators of health care access in the survey include whether the respondent was ill or injured in the past three months, if so, whether they received medical attention, and if they received attention, did they experience any delay in obtaining care (a lot, a little, none). A series of questions was asked on the medical care received, including how many times

respondents had a well-visit (“Control Preventivo de Salud”), saw an ambulatory care doctor, and saw a specialist in the past three months. All of these variables were dichotomized into yes/no responses. Respondents who used medical services and/or prescription medications when ill were asked how they paid for them. Responses were divided into two classes: those who had no out of pocket costs, versus those who did. Finally, women were asked if they had ever had a pap smear. The question on health insurance coverage included a category for those who knew they were in the State-supported insurance system but were not sure which sub-category they belonged to. To include these persons in the regression analysis, we imputed them to a specific insurance type, using a hot-deck imputation procedure with stratified groups of rural vs. urban, married vs. other, 70+ vs. 65-69, any high school education vs. other, and per capita family income quartiles. These cases accounted for 3% of those with State-supported insurance. The other insurance types included the armed forces insurance system, Isapres, private arrangements (including non-members of Isapres, members of workers’ mutual insurance schemes, and uninsured), and “others”.

The demographic characteristics used to stratify the user population included age, gender, income, education, and rural location. With respect to age, a distinction was made between those aged 65-74 and those aged 75 and over. Income was adjusted by ECLAC for missing values and underreporting (ECLAC, 1999)

IV

Findings

Among persons aged 65 and over, the State-supported insurance scheme (Fonasa) is by far the most common (table 1). A quarter of the elderly population receive insurance through Fonasa A (the system for indigents), meaning that they do not receive even a minimum pension or earnings. This insurance is also the most restricted in its coverage. Over one-third are in Fonasa B, indicating that their pensions or earnings are at or near the minimum. Fonasa A and B together cover 62% of all persons aged 65 and over in Chile. The two State-supported plans that enroll elders with more resources, Fonasa C and Fonasa D, together cover 15% of the elderly. Another 3% knew they had public health insurance coverage but were not sure at which level.

and was presented as household income per capita. In the regressions, household income per capita was dichotomized between the lowest quintile of those in the insurance plans analysed and the remaining four quintiles (the per capita household income of the bottom quintile was 45,000 pesos per month; in comparison, the minimum State old age pension was 23,000 pesos per month in 1998). Education was reported in years of schooling, and in the regressions it was dichotomized between less than high school (0-8 years) and any level of high school education (compulsory education does not extend to the high school level in Chile). Rural areas were considered to be those outside of formal communities.

After assessing the frequency distributions of the socioeconomic variables and access to health care, logistic regression equations were estimated for each of the access variables, using the socioeconomic variables (education, income, gender, age and residence in urban or rural areas) as controls. The analysis was limited to those covered by the general State-supported insurance system (FONASA), the armed forces insurance scheme, and private insurance (Isapres). These insurance types were entered as categorical variables, taking private insurance as the reference group. Since a single logistic regression equation only documents the statistical significance of differences between the various insurance types and the reference group, multiple equations were estimated in which the reference group was changed so that each insurance type could be evaluated against all of the others.

Altogether, in 1998, the general State-supported insurance covered 80.4% of the elderly population. The Armed Forces scheme covered less than 6% and private insurance (Isapres) less than 7%. About 6% were covered by a variety of other “private” arrangements, including special programmes that cover work-related disability and those not currently enrolled in any plan.

Both the mean and median family incomes per person vary by type of plan (table 1). The different levels of Fonasa, which are linked to income, reflect these differences. The median per capita household income of those in the highest income plan (Fonasa D) is double that of the persons enrolled in the lowest income plan that requires the payment of contributions (Fonasa B).

TABLE 1

**Chile: Characteristics of persons aged 65 and over,
according to insurance type, 1998^a**

	Entire country ^b	Fonasa A (indigents)	Fonasa B	Fonasa C	Fonasa D	Fonasa ^c (exact plan not known)	Armed Forces	Isapres (private)	Private arrangements
sample n =	14 910 ^d	4817	5787	738	935	414	520	562	927
Plan penetration (%)	100	25.0	37.2	6.0	9.1	3.1	5.7	6.7	5.9
Mean income ^e	160,223	68,368	107,886	155,048	246,436	213,157	252,555	520,149	222,459
Median income ^{ef}	74,784	51,844	74,916	96,185	142,118	104,612	154,155	252,340	98,194
Mean age	73.2∇.1	73.7∇.1	73.5∇.1	72.8∇.3	71.8∇.2	74.5∇.4	73.6∇.3	71.0∇.3	72.4∇.2
Persons aged 75 and over (%)	35.5	39	37.2	35.4	27.7	45.9	39.9	21.8	30.3
Females (%)	57.3	57.4	59.9	53.4	51.1	56.9	62.2	48	57.2
Less than full primary schooling (%)	47.8	74.3	55.1	33.8	18.6	35.2	14.4	8.5	32.9
Some high school education (%)	29.2	9.0	19.7	37.2	56.6	38.8	51.9	74.5	43.9
Mean years of education	7.1∇.01	3.4∇.04	5.0∇.05	7.1∇.15	9.3∇.1	7.0∇.22	8.5∇.16	11.6∇.20	7.5∇.15
Rural residents (%)	17.7%	36	17	5.4	4.8	5.9	1.8	2.7	17.1

Source: Prepared by the author on the basis of research results.

^a FONASA: National Health Fund. Isapres: Private health insurance companies. Armed Forces: Health system of the Chilean Armed Forces.

^b Includes "other" and "don't know" insurance types, which are not shown separately and constitute 1.3% of respondents.

^c Corresponds to persons who are FONASA members but do not know at which level.

^d Represents 1,085,000 residents of Chile aged 65 and over.

^e Mean income is total family income per person per month in Chilean pesos, adjusted for underreporting by ECLAC.

^f For total country, 75th percentile = 124,821 pesos, 90th percentile = 238,856 pesos.

The income of those covered by the Armed Forces plan is similar to that of the members of Fonasa D, while those enrolled in Isapres have a median income about 1.75 times that of those in Fonasa D. The median per capita household income of persons with private insurance is just above the 90th percentile for all the elderly in Chile. Those with private insurance are also the youngest, are least likely to be female, and have the highest education. In other words, private insurance is most commonly held by older persons whose demographic characteristics are associated with the lowest medical needs and highest resources. Those with private insurance or Armed Forces coverage are the least likely to live in rural areas. This is consistent with the findings of other research involving all ages, which report that the public system as a whole has a population with higher needs than the private system (Ministry of Planning and Coordination, 2001).

There were likewise large differences in the indicators on access to care by older persons according to their insurance status (table 2). Persons with private insurance were among the least likely to report being

sick or having an accident in the previous three months, while Fonasa A and B (which are the lowest income groups) were the most likely to report illnesses. Among those reporting an illness, those with private insurance were the most likely to report obtaining medical attention, while those with Fonasa A and private arrangements were the least likely, with about one-quarter of those reporting illnesses or accidents not having received medical attention. Among those receiving medical attention, those with insurance through Isapres and those with Armed Forces coverage were the most likely to report that they received care promptly and without delay, while Fonasa A registered the fewest persons reporting prompt care. Almost all the privately insured obtained ambulatory physician care from private practitioners, along with almost half of those in Fonasa D. The least likely to see a private practitioner were those in Fonasa A, who almost exclusively used public providers, and those with military coverage, most of whom used military health care providers. Only 5% of the elderly population reported using emergency care services, but the pattern

TABLE 2

Chile: Indicators of health care access of persons aged 65 and over, according to insurance type, 1998^a
(Percentages)

	Entire country ^b	Fonasa A (indigents)	Fonasa B	Fonasa C	Fonasa D	Fonasa (exact plan not known) ^c	Armed Forces	Isapres (private)	Private arrangements
Illness/accident in past 3 months	36.7	39.7	40.3	34.7	35.6	27.5	33	28.7	27
If so, received medical attention ^d	82.8	77.4	83.3	85.5	93	79.8	87.9	92.3	75.4
Satisfied with promptness of medical attention	86.8	82.7	86.6	84.2	90.3	93.9	89.8	95.0	88.6
Ambulatory care by private provider ^d	24.8	7.2	27.7	36.8	48.6	52.3	17.9	91.7	61.3
Emergency care by public sector provider ^e	82.2	88.9	86.3	85.3	89.7	69.2	89.2	32.5	50.0
Had a well-visit ^d	21.4	25.3	25	19.1	15.2	19.7	17.9	13.1	9.4
Ever had a Pap smear (women)	55.8	41.7	55.1	64.0	66.4	54.7	72.1	80.8	58.4
Had a specialist visit ^d	10.6	7.9	10.7	13.0	15.9	5.6	13.7	14.7	7.2
Had no out of pocket expenses for illness care ^f	58.4	89.5	65.9	39.1	25.6	34.8	5.5	6.1	15.6
Had no out of pocket expenses for prescriptions ^f	40.8	67.7	42.4	21.2	18.3	41.5	7.6	4.3	10.4

Source: Prepared by the author on the basis of research results.

^a FONASA: National Health Fund. Isapres: Private health insurance companies. Armed Forces: Health system of the Chilean Armed Forces.

^b Includes "other" and "don't know" insurance types, which are not shown separately and constitute 1.3% of respondents.

^c Corresponds to persons who are FONASA members but do not know at which level.

^d During last three months.

^e Includes National Health Service System (SNS), Emergency Primary Attention Service (SAPU) and the Armed Forces system.

^f In connection with ambulatory attention received.

of medical attention was different for that given in other ambulatory services. Almost 90% of emergency care users with any type of Fonasa or Armed Forces coverage used public (or Armed Forces) providers, and about one-third of those with Isapre coverage also used public providers.

The only area where Fonasa A members have better access to care is in the proportion who report a well-visit ("control preventivo") in the period in question, although the absolute level of such visits (25%) is low for a population in this age group. The trend is the opposite for women reporting having had a pap smear, where the 80% figure for those with private insurance is almost double the rate for those with Fonasa A. Consultations with specialists are most commonly reported among those with Fonasa D, private insurance,

and Armed Forces coverage, while they are least likely among those with Fonasa A or private arrangements. Within Fonasa, there is a steady increase, from those with the lowest incomes (Fonasa A) to the highest (Fonasa D), in most indicators of access to care.

Among those who visited a doctor on account of an illness or accident, about 90% of those with Fonasa A reported no out of pocket costs, in comparison with about 5% of those with Armed Forces or private insurance (table 2). Since Fonasa A and Fonasa B charge no copayments for visits to public clinics, those reporting that they had to pay were primarily those who sought private care (7% of Fonasa A and 28% of Fonasa B medical visits for illness/injury were to private providers). When medicines were prescribed, two-thirds of those with Fonasa A received the medication at no

cost, compared to about 5% of those with private insurance (Isapres) and 8% with military insurance (table 2).

While it might appear that income should have no influence on access to health care by those with free Fonasa A (indigent) coverage, there is nonetheless a significant improvement in access figures for Fonasa A beneficiaries with per capita household incomes above the national median, compared to those below it. For example, older persons in Fonasa A with per capita household incomes above the median were more likely than those below the median to obtain medical care when sick (81.7% versus 75.9%, $p < .05$) and were less likely to report delays when they sought medical care (9.7% versus 20.0%, $p = .000$). As might be expected, older persons with Isapre private insurance, who face potentially high copayments, also exhibited an income effect, even though they had notably higher incomes than those in Fonasa A. Elderly persons in Isapres with per capita household incomes in the top 10% nationally were more likely than other elderly Isapre members (who were mostly in the eighth and ninth income deciles) to obtain medical care when sick (95.5% versus 85.5%, $p < .05$) and were less likely to report delays in receiving medical care (2.1% versus 8.6%, $p = .000$). A similar income effect exists for older persons with Armed Forces insurance. This variation by income *within* each type of insurance suggests that at least part of the access differences *between* insurance types may be the result of the different income profiles of each insurance type.

The differences between types of insurance in table 3 are adjusted for some of the differences in socioeconomic situation (SES) and show that plans continue to display significant differences in the access to care that they provide. The table shows that, compared to older persons with Isapre (private) health insurance, those with Armed Forces insurance have a statistically similar likelihood of having been sick or having had an accident in the past three months, while those with Fonasa C or D have a 27% greater chance (odds ratio (OR) = 1.27) of being ill, after SES adjustment. Fonasa A and B both have similar odds, with a 46% and 47% greater likelihood of reporting an illness compared to those with Isapre insurance. Although table 3 only presents odds ratios compared to those with Isapres insurance, it also shows the statistical comparisons between each type of insurance. For example, those with Armed Forces insurance are statistically similar (=) in their risk of illness to those with Isapre and Fonasa C/D, but are less likely to report

an illness (<) than those in Fonasa A or B. When the odds ratio is less than 1.0 it means that the group is less likely to report the outcome in question. For example, among those who reported an illness/accident in the past three months, those with Fonasa A had 0.44 times the odds (i.e., less than half the odds, or 56% less) of reporting that they had sought medical care, compared with those in Isapres. This is statistically less than Fonasa B, Fonasa C/D, and the Isapres, but not less than for members of the Armed Forces system.² Similarly, those seeking care are least likely to report that they obtained prompt medical attention if they are in Fonasa A, with increasing promptness for Fonasa B, and then for Fonasa C/D, the Armed Forces, and Isapres together. When an additional variable was added for using private versus public outpatient services (not shown), the differences between insurance schemes as regards prompt care attenuated to the point of not being statistically significant, whereas the variable for private health care arrangements was significant (OR=2.1, $p = .000$). This suggests that the location where care was received was more important than the type of insurance covering that care.

After applying the statistical controls, those with Armed Forces coverage have overall access indicators that are closest to those with Isapres and Fonasa C/D, while Fonasa A and B are often more similar to each other than to Fonasa C/D and usually have the worst access indicators. In this matrix, those with Fonasa C/D are always different from Fonasa A, while the wealthier Fonasa C/D members have indicators similar to those of Isapre members in two areas (i.e., consulting a doctor on account of illness/injury and consulting a specialist for the same reason). While differences persist in access to care between those with different types of insurance even after applying controls for SES differences, it is impossible to fully control for SES because Fonasa A is, by definition, a social welfare insurance that contains people who cannot afford any other type of insurance.

While table 3 only presents the adjusted odds ratios by insurance type, it is also useful for describing the pattern of other significant independent variables, in order to highlight factors other than type of medical insurance which influence equity of health care access

² Fonasa A is different from Fonasa C/D but not the Armed Forces primarily because the smaller sample size of those with Armed Forces insurance requires larger differences to be statistically significant.

TABLE 3

Chile: Odds Ratios (OR) for access to health services through publicly supported schemes,^a compared to access by elderly persons with Isapre health insurance, controlling for differences in gender, age, education, income, and rural residence^b

	Fonasa A (sample n=1 999) ^c	Fonasa B (sample n=2 407)	Fonasa C/D (sample n=630)	Armed Forces (sample n=177)
Sickness/accident in past 3 months	OR=1.46	OR=1.47	OR=1.27	OR=1.12
Statistical differences in above, across plans	= Fonasa B > Fonasa C/D > FFAA > Isapres	= Fonasa A > Fonasa C/D > FFAA > Isapres	< Fonasa A < Fonasa B = FFAA > Isapres	< Fonasa A < Fonasa B = Fonasa C/D = Isapres
Among those who were sick and saw a medical provider	0.44	0.54	0.78	0.65
Statistical differences in above, across plans	< Fonasa B < Fonasa C/D = FFAA < Isapres	> Fonasa A < Fonasa C/D = FFAA < Isapres	> Fonasa A > Fonasa B = FFAA = Isapres	= Fonasa A = Fonasa B = Fonasa C/D = Isapres
Persons who were sick, saw a doctor, and were satisfied with the promptness of the medical attention	0.26	0.38	0.42	0.48
	< Fonasa B < Fonasa C/D < FFAA < Isapres	> Fonasa A = Fonasa C/D = FFAA < Isapres	> Fonasa A = Fonasa C/D = FFAA < Isapres	> Fonasa A = Fonasa B = Fonasa C/D < Isapres
Persons who reported having visited a specialist	0.76	0.86	1.05	0.94
	= Fonasa B < Fonasa C/D = FFAA < Isapres	= Fonasa A < Fonasa C/D = Fonasa B = Isapres	> Fonasa A > Fonasa B = FFAA = Isapres	= Fonasa A = Fonasa B = Fonasa C/D = Isapres
Persons who reported having undergone a preventive care examination	1.72	1.7	1.24	1.23
	= Fonasa B > Fonasa C/D > FFAA > Isapres	= Fonasa A > Fonasa C/D > FFAA > Isapres	< Fonasa A < Fonasa B = FFAA > Isapres	< Fonasa A < Fonasa B = FFAA = Isapres
Persons who had ever had a Pap smear (women)	0.3	0.41	0.5	0.72
	< Fonasa B < Fonasa C/D < FFAA < Isapres	> Fonasa A = Fonasa C/D < FFAA < Isapres	> Fonasa A = Fonasa B < FFAA < Isapres	> Fonasa A > Fonasa B > Fonasa C/D < Isapres

Source: Prepared by the author on the basis of the research results.

^a Fonasa: National Health Fund; Isapres: private health insurance companies; FFAA: health system of the Chilean Armed Forces. Fonasa has four levels (A, B, C and D); persons who reported that they belonged to Fonasa but did not know at what level (n = 414) were assigned to one of the levels using a hot deck imputation procedure.

^b Logistic regression equation with Isapres as the reference group (n = 146), controlling for gender, age (65-69, 70-74, 75+), education (0-8 vs. 9+ years), low income (<45,000 pesos/month per capita household income vs. higher incomes), and rural residence.

^c The values of n are for those reporting an illness

for older persons. In the logistic regressions underlying the tables, older persons in rural areas were more likely to report an illness but were less likely to report a medical care visit when sick. Rural residents were also less likely to report specialist visits or pap smears, but more likely to report timely care, net of other variables. Older women were more likely to report an illness and

were also more likely to report specialist and preventive visits. The oldest of the elderly category were more likely to report an illness than the younger elderly, and they were also more likely to report prompt medical attention and specialist visits, but less likely to have ever had a pap smear (in the case of women). Elderly people with any high school education were more likely

to seek medical care when sick, to see a specialist, or to have had a pap smear (in the case of women), but less likely to report preventive visits. Regardless of

insurance type, income is associated with greater likelihood of seeing a specialist, or having had a pap smear in the case of women.

V

Conclusions

Improving equity in health care has become an important goal of the democratic Chilean State, as well as of many other countries around the world. Such equity involves an equitable distribution of the financing of health services, the processes of care (including access and quality), and the outcomes of care (WHO, 2000). Most of the public discussions on equity in the Chilean health care arena have focused on the differences between public and private health insurance. This article shows that there is a wide variation of access to care both between and within the different types of health insurance for the group that has the highest need for and use of medical care – the elderly. Because most elderly have limited resources, they are particularly vulnerable to inequities in medical services.

The cost of private health insurance for older persons is beyond the means of all but the wealthiest, because private health insurance premiums are risk adjusted by age. The study shows that the 7% of persons aged 65 and over with private health insurance are wealthier, have more education, and are younger than those with other types of insurance. Not surprisingly, they are also less likely to report an illness, and more likely to have better access to care than other groups of persons over 65. Other studies have noted that in the general population many of those with private insurance make use of public hospitals, so that the public sector ends up subsidizing private insurance (Ministry of Planning and Cooperation, 1999; Titelman, 1999) and improving the level of access for the members of Isapres. The present study shows that a similar pattern exists in the case of emergency medical attention, where one-third of the privately insured elderly who need emergency care rely on public services. This suggests that older persons with private insurance have access to both public and private sector providers as needed. Even within this high-income group, however, those with the highest incomes (i.e., the top decile nationally) had better access than other elderly persons with

private insurance (Isapres). This can be explained by the frequently high copayments required by private insurance schemes and the fact that, among private providers, the most expensive hospitals and clinics may provide the promptest and most specialized care.

The concentration of older persons in the public system makes the situation as regards equity within that system particularly important for that population group. The main State-supported health insurance system, Fonasa, has different types of insurance that are based on different levels of premiums, which in turn are based on earnings. This means that the four Fonasa groups have different socioeconomic characteristics. The two most common insurance types among the older population are Fonasa A, which is for indigent persons, and Fonasa B, which is for those with the lowest pensions and income. Neither Fonasa A or B require copayments in the public system, and their beneficiaries report similar levels of illness/injury, use of medical care when sick, specialist use, and preventive care use, even after controlling for differences in age, gender, rural residence, education, and low per capita household income. In general, the members of Fonasa C and D (combined for the multivariate analysis) are wealthier than those of Fonasa A or B, but not as wealthy as those with private insurance (Isapres). Even after controlling for SES characteristics, Fonasa C/D beneficiaries have better access than those of Fonasa A and B, notwithstanding the copayments required. Delays in obtaining an appointment, which have been a chronic problem in the public sector for years, were experienced most by Fonasa A, whereas Fonasa B, C and D (and Armed Forces) registered better indicators in this respect. The improved performance of Fonasa B versus Fonasa A with regard to delays in appointments for older persons may be due, in part, to the more frequent use of private providers by Fonasa B members, despite their low incomes. This use of private providers may serve as a safety valve when the public system becomes overcrowded. Other contributory factors behind the

differences in access between Fonasa A and B could be insufficient medical resources in the poorest communities, where Fonasa A beneficiaries are most likely to live, or administrative problems in those communities that lead to delays in the provision of health care.

After the financially privileged private insurance sector, the Armed Forces plan (which has its own medical care delivery system) appears to provide the next best access overall for older persons, followed by the Fonasa plans (B, C, and D) which give the option of making use of private suppliers, and the situation of elderly persons with higher incomes. The elderly persons with the highest need and fewest resources are found in Fonasa A, which exhibits the worst profile in terms of access to care. In view of the fact that they are not required to make copayments in the public system, however, their access problems would be much worse if they had to use private health insurance. The poorest elderly persons – those in Fonasa A – also apparently face a number of barriers to obtaining needed medical care that are not measured here. Among these non-insurance related barriers are transportation costs to clinics; organizational barriers such as the frequently mentioned queues and waiting times at public clinics, and/or the insufficient supply of medical resources in the poorest communities (Wagstaff, 2001).³ Quality of care problems may also discourage some persons from seeking care. Public providers of medical care were rated as “excellent” by 67% of respondents of all ages, compared with 84% who gave private health care providers that rating. It is important to distinguish between the insurance provider and the medical care provider, however, since the public sector Fonasa insurance scheme was rated excellent by 72% of respondents while the private sector Isapre insurance system was given that rating by only 50% (*El Mercurio*, 2000). The public health care provision system is trying to deal with some service problems, including the long waiting lists and insufficient infrastructure (Gutiérrez, 2000), while the Isapre insurance system is trying to improve its insurance image by adding coverage for selected high-cost (“catastrophic”) illnesses whose cost previously exceeded coverage limits by large amounts.

³ For example, one government official reported that it was difficult for older persons with pneumonia to obtain a public hospital bed during the winter when total hospital demand was at a peak. After a program was started that paid public hospitals extra for each admission of older persons suffering from pneumonia, however, there was a marked improvement in access.

The only area where low-income elderly persons in Fonasa A and B have better outcomes than others is in their access to preventive care: a service which is covered by all insurance types but is free in public clinics. The overall rates are low, however –13% for those with private insurance and 25% for those with Fonasa A – which suggests that most elderly persons consider seeking medical care only for curative purposes and not for prevention. The high reliance of Fonasa A recipients on public clinics may result in their being called more often for preventive visits when they make use of the clinic on account of illness.

It is important to note that only a limited number of indicators on access to care were available for this analysis. Most of the indicators concern the receipt of different types of medical services, and there were no data that allowed for an adjustment to take account of different levels of medical need. Since low-income persons typically have higher medical needs than wealthier persons, it is likely that adjustments for medical need would increase the levels of inequalities in service use. Identifying effective ways of reducing these inequalities (by means other than income redistribution) would require additional data about the factors that influence the receipt of medical care, including the relative availability of services, how easy it is to reach and pay for those services, and how different groups evaluate the quality and responsiveness of their care.

Because of Chile’s favourable long-term macroeconomic growth, it is often looked on as a model for structural adjustment policies. However, the legitimacy of democratic governments must be built on social as well as economic results. In Chile, health care has been an important sector for demonstrating the government’s goal of growth with equity. The present analysis focused on the population aged 65 and over because these persons make most use of health services and are thus most seriously affected by any inequities in the medical care system. The cross-sectional data used cannot show if the equity of access to medical care for the elderly improved during the 1990s, but they do document inequities that still remained in 1998, both between public and private insurance, as well as within each type of insurance. Much of the attention in discussions of health care reform has been on the benefits and financing mechanisms of public and private insurance. This study shows that while equity in benefits and financing may be a necessary component of overall health system equity, it is not in itself sufficient, since access varies

within the different types of insurance. This is particularly significant in the case of the older population, since a quarter of these persons are in Fonasa A, which exhibits the lowest levels of access of all insurance types.

In the current public health care system, those with moderate financial resources are allowed to pay extra to access the private health system, regardless of whether or not they have private insurance. But private health service providers are located primarily in higher income areas, meaning that low income elderly persons would have little access to this resource even if it were available and free to all with public insurance. Thus, the most effective and feasible way to improve access to medical care for older persons (an element of equity at the process

level) would be to continue to improve the operations of public sector providers. This may involve increasing the payments made by Isapres to public providers when Isapre members make use of public emergency medical services and public hospitals, or increasing the allocation of public funds. It will also mean continuing to improve the organization and administration of public sector medical services (Sojo, 1999). It is critical that equity of access for the elderly is considered, along with equity of financing, when policies are debated concerning health care reform in Chile, as well as in any other country that is modifying its system of financing and/or providing health care services.

(Original: English)

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