

The case of the Chilean health system, 1983-2000¹

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with the collaboration of

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INTRODUCTION

During the 1980s, foreign trade in health services made a marginal contribution to Chile's economy and to providers in its national health system. The export of health services has been a constant since the 1950s, as the result of education provided to professionals from various Latin American countries attracted by the prestige of Chilean centers for higher education and service providers and their patient referrals to top level specialists and centers where they studied their specialties. The importation of services for individuals

and services required to develop the national health system involved the services characteristic of a relatively closed economy and a health system dominated by the public sector in terms of delivery, financing, and social security wherein the training of health specialists abroad depended on foreign assistance and limited public financing.

This paper will analyze the development of foreign trade in services in more recent times, marked by the introduction of liberalization (1976-1986) and subsequently strong economic growth associated with modernization and sectoral institutional

¹ This work is the product of a collaboration between the United Nations Economic Commission for Latin America and the Caribbean (ECLAC) and the Pan American Health Organization (PAHO) with support from public and private providers in the Chilean health system participating in foreign trade in health services. The research was led by a team from ECLAC made up of Vivianne Ventura-Días, Director of the Division of Foreign Trade and Financing for Development; Francisco Prieto, a consultant with that Division and Chile's Ministry of Foreign Relations; Daniel Titelman, Economic Affairs Officer of the Financing Unit of that Division; and Francisco León, Social Affairs Officer of the Social Development Division, who coordinated the team. Cesar Viera and Mónica Bolis of the Development Division made up the PAHO counterpart responsible for analyzing, together with the ECLAC team, the various phases of the work. Macarena Correa, Teresa Hernández, and Marcela Weintraub were hired as consultants by PAHO and later by ECLAC. They and Francisco León were responsible for the interviews and the search for and systematization of data. An earlier version of this paper was submitted to specialists during the month of June and at a discussion workshop with specialists and interested parties in Chile on August 3 of 1999. The current text was written by Francisco León.

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changes that included the national health system (1987 to the present). The central hypothesis is that those who have made greater progress in the modernization of health care now consider exports in health services a functional component of health and a source of considerable future income rather than as a change in quantitative terms, a change that is probably still marginal. The goal is to define the links between the major elements in institutional change and modernization of the national health system—development of technology and models of care, the emergence of new types of providers and commercial practices and rules of the game in the economy and in the national health system—and the import and export dynamics of given services produced or required by the system and by the population. This will provide an agenda of policies and public initiatives to promote and regulate the potential for growth in this trade to benefit development of the health system and the national economy.

During the period under analysis, and within the context of new policies on financing and sectoral organization and opening of the national economy to the world economy, the health system has strengthened its relationships with other national health systems and systems producing the services needed for its development. In this initial stage, the national health system's imports of services have increased and become much more diverse than have exports in services provided to individuals and health organizations in neighboring countries or to foreign tourists or

foreigners residing temporarily in Chile. At the same time, there has been an import substitution, replacing the health services formerly provided abroad to Chilean residents, and an increase in public and private providers' capabilities for and interest in exporting such services to neighboring countries. These changes have become increasingly dynamic in the period under study and everything points to an accelerated export trade in future years.

The first section of this paper will characterize the elements of modernization and institutional change and explore the linkages that explain their impact on foreign trade in services. The second section will analyze the effective impact of such linkages between modernization and health reform and foreign trade in services. Finally, the third section will develop some ideas on policies and initiatives to foster the development of foreign trade, particularly exports of health services to neighboring countries.

MODERNIZATION, INSTITUTIONAL CHANGES, AND FOREIGN TRADE IN HEALTH SERVICES³

Between 1983 and 2000, far-reaching and numerous changes in the national health system transformed the dominant public sector model that had prevailed since the 1950s into an increasingly heterogeneous model in terms of composition and of the changing relationships in the distribution of resources and power

³ I am grateful for the observations provided by César Oyarzo who reviewed the earlier version submitted to the discussion workshop on August 3, 1999. See also: Baeza C, Oyarzo C, et al. *El sector salud en Chile: un diagnóstico compartido*. Santiago, Chile, 1998, and Colegio Médico de Chile. *Políticas de salud para Chile: nuestra visión*. Santiago, Chile, 1998.

among the different segments or levels: central public, decentralized public, municipal public, semi-public (occupational insurance mutual organizations and companies), private (insurance plans, service delivery centers, private practice) and nonprofit organizations. Given that this transformation of the health model is ongoing, the emerging model is neither complete nor consolidated and there are very diverse proposals regarding central aspects of its future development.

The most important sectoral changes, in terms of their impact on foreign trade in services, are changes in the rules of the game for establishing service providers and determining their role in the national system and the development and deregulation of the job market. The transformative effects of these changes have in turn been enhanced by some of the structural reforms implemented since 1974, particularly those relating to the opening of the economy and deregulation of the labor market and of prices for services.

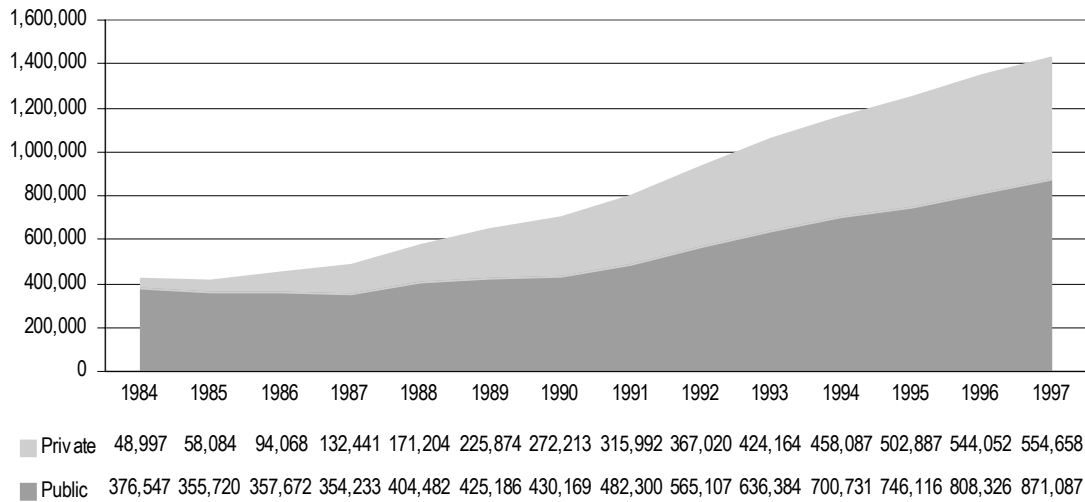
Institutional changes in providers

Privatization

According to institutional changes begun in 1983 in the health system, compulsory contributions for health care based on payroll were retained. The employee is now entirely responsible for those contributions, and they are voluntary for the self-employed. The most important change has been the participant's freedom to choose the institutional modality (public or private) of the provider contracted to handle his/her contributions and to provide services

and the creation, along with the public National Health Fund (FONASA), of private agents (ISAPRES) to offer and administer health plans based on those contributions. Initially, the plan developed during the military regime sought to favor the development of private agents until they totally replaced FONASA. However, this changed under the democratic regimes (1990) with increases in budgetary funds allocated to the public health sector, which resulted in improvements in the quantity and quality of services provided by public providers and, subsequently, with the proposed transformation of FONASA into something more like an insurance company. In terms of analyzing its modernization and its influence on foreign trade in services, the essential point is that by retaining dual contributions based on taxes and payroll, the Chilean health system has moved toward separating the financial management and service-delivery functions. Also there has been an expansion of the role played by the private sector, first in financial management and later in service delivery, by increasing the percentage of services that FONASA may purchase from private providers.

Sectoral privatization has led to increases in the amount and distribution of health financing and spending among the different segments (Figure 1). The private and semi-autonomous public segments have been most favored, particularly the private segment; they represent 40% of total spending since 1990, with spending per beneficiary in 1997 prices increasing from Ch\$ 129,114 to 142,858 in the period 1990–1997 (Figure 2). These aggregate figures fail to show that the percentage of the total corresponding to private spending is

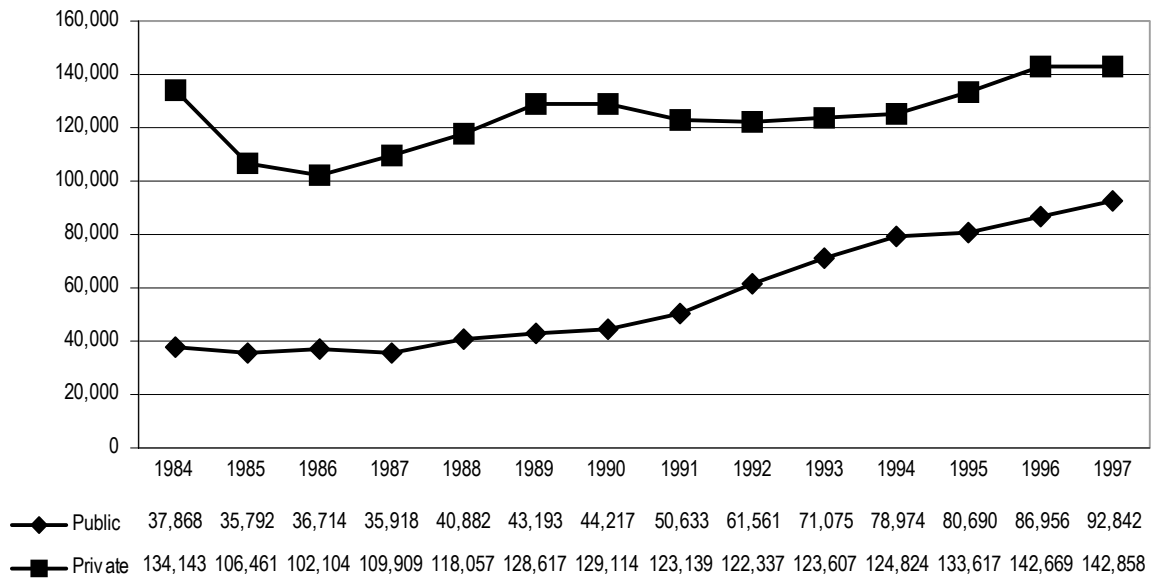
Figure 1. Health expenditure in Chile, 1984-1997 (in millions of 1997 pesos)

Sources: *Boletín Estadístico*, Superintendencia de ISAPRES; Depto. de Comercialización y Finanzas, FONASA; División de Financiamiento, CEPAL.

higher for some types of services, particularly medical visits, hospitalization, drugs and laboratories, while the public sector continues to be almost entirely responsible for preventive health services such as vaccinations and subsidies for target populations (e.g. childbearing-age women), regardless of whether the subject is privately insured or not. Maternity subsidies received by private insurance beneficiaries alone represented an amount equal to profits on such insurance plans in 1995. This also created transfers of public resources to private beneficiaries, when privately insured persons used the public services without making the corresponding payments. Based on the 1996 survey of national socioeconomic characteristics (CASEN), those transfers were estimated to represent slightly more than 10% of such public services. Public transfers to private beneficiaries began to be corrected for services at the secondary and tertiary care levels in the mid-1990s and only

since 1999 at the primary care level.

Development of private insurance and public quasi-insurance during the same period has had a similar affect on the distribution of spending. In effect, the ISAPRES operate under a system in which the user freely chooses the system within the health plans' reimbursement levels and there has been an increase in the percentage of freely-elected spending in FONASA (25% of total spending in 1998). This has led not only to an increase in the percentage of freely elected spending, but also to competition among service providers under this modality (secondary and tertiary level facilities and professionals in private practice). The latter have benefited most from the redistribution of total health spending, to the detriment of municipal primary health care facilities and, to a lesser extent, of public services at the secondary and tertiary levels. As a result, we also see a very favorable differentiation in the compensation and income of those working in the

Figure 2. Health expenditure by beneficiary, Chile, 1984-1997 (in millions of 1997 pesos)

Sources: *Boletín Estadístico*, Superintendencia de ISAPRES; Depto. de Comercialización y Finanzas, FONASA; División de Financiamiento, CEPAL.

avored segments, and an increase in the number, experience, and professional qualifications of professionals and technicians working part- or full-time in those departments.

In the context described above, modernization of health services has been a function of the relative availability of resources in the public and private units of the health system, and in it has made far greater strides in private facilities and among professionals and technicians in private practice. However, the timing of this differential increase in health spending and its distribution varies greatly. Before the institutional changes in the national health system began in 1983, the crises of 1976 and 1983 and changes in the economic model resulted in a reduction of health spending as a percentage of the GDP and in the amount spent per beneficiary and, consequently, in the investment in health. This explains the

increasingly backward trend in the Chilean health system as a whole in this sub-period in comparison with the systems in countries with more developed technology and models of care.

In the next subperiod, dating from the institutional changes of 1983 to the beginning of the democratic regime in 1990, private insurance and facilities and occupational insurance mutual organizations steadily increased their participation in total occupational health spending until the former reached 40% of that spending, with outlay per beneficiary at about 2.5 times that of the public sector (See Figure 2). This allowed those segments of the health system to increase their investments and to begin strenuous modernization efforts while the three levels of the public sector remained stagnant, increasing their relative backwardness within the system and as compared to developed countries.

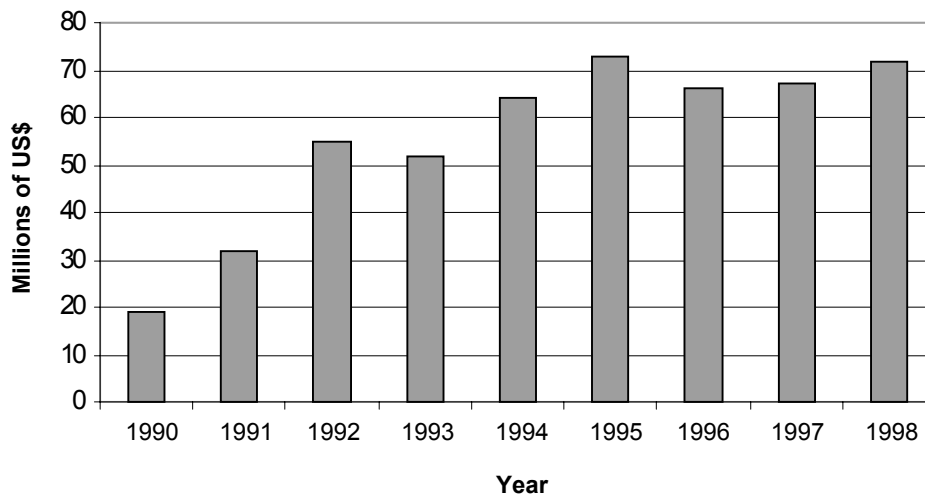
In the final subperiod from 1990 to 1999, the public sector—particularly in the secondary and tertiary levels,—increased its total and per-beneficiary spending and investment, primarily through increased allocations within the National Budget. The autonomous public and private sectors increased at a similar rate, propelled by increases in real wages and accordingly in contributions, thus maintaining their percentage of total health spending. The autonomous public and private sectors have thus achieved rapid and continuous modernization since 1983, allowing them to serve as a reference for the process of public sector modernization after 1990.

Modernization accelerated not only because there were greater resources available in the 1983-1999 period, but also because advantage was taken of the cumulative technical progress made in health in the developed countries where modernization in recent decades and spiraling costs per beneficiary resulted in strong pressure to reduce costs in order to deal with problems in the financing of their systems.⁴ In turn, globalization of health information and the population's increasing access to that information meant that the population's demand for health care reinforced the direction of the health system's decision makers for whom the point of reference was the advances made in developed countries. In the early years, competition among the ISAPRES and among centers and professional providers to attract higher-income contributors and beneficiaries intensified those modernizing pressures.

The effect of this modernization on health equipment imports was not long in coming and it continued due to the financial resources, expanded infrastructure, and modernized health equipment (Figure 3). Since this modernization occurred within a market-based economic model open to international trade, the combination of reduced tariffs on imports and the predominance of market forces in the allocation of resources fostered the tendency to begin modernization by investing in and importing infrastructure and equipment more than by improving health care practices. In addition, given the competition for resources among private providers, these were inclined to expand their clientele with more visible investments, such as infrastructure and equipment, rather than by improving the quality of care and progressively changing or expanding technology and infrastructure. This technical modernization later made it necessary to work on the quality of care and fostered and dictated the demand for qualified human resources adapted to modernization and imported services, particularly in professional and technical training, service management, and health-facility design.

Institutional changes and modernization of the health system coincided with changes in financing methods and the proliferation of centers for professional and technical training in health. Financially, the universities and technical training centers, which used to depend almost entirely on tax revenues after the education sector liberalization, came increasingly to depend on contributions

⁴ John Child and Ray Loveridge, in collaboration with Microelectronics in the Service Sector International Research Team. *Information technology in European services*. Cambridge, MA: Basil Blackwell, 1990.

Figure 3. Medical equipment imports, Chile, 1990-1998

from students. Initially, these contributions did not add up to the traditional financial levels due to fiscal constraints under the 1982-1990 economic adjustment program, fewer admissions, and limitations on most of the population's ability to spend on education during those years of recession when increases in real wages were limited. At the same time, the multiplication of technical and professional training centers did not immediately result in a greater supply of health education since the new centers lacked the financial resources and academic maturity necessary to offer very expensive and academically-demanding specializations such as those in health. This left unchanged or reduced the ability of those educational centers to educate human resources and even more so their ability to incorporate new specializations and to update the traditional specializations on a timely basis.

Moreover, the salaries of public sector health workers, who still constituted the majority in the system, continued to fall behind those of other

public employees and fees for independent professionals did not experience a general increase until real wages began to improve with the economy as a whole early in the 1990s. As a result, interest in entering health careers declined as compared to others such as business administration, that are more closely linked to emerging economic opportunities. Under these conditions, in order to respond to the technical progress afforded by investments in infrastructure and equipment, obtain the profitability required from these investments and use them as intended, the health system had to utilize national professionals more intensively, attract foreign professionals and technicians, and supplement both solutions.

The weight of investments and the need to improve the management of service-provider centers and insurers, both public and private, led to a natural demand for modernization in health, particularly with the increases in available resources and in political and financial controls during the current decade. Thus, in the political

arena, democratization made for quicker and more exhaustive evaluation and criticism of the use of budgetary funds allocated for health, especially because a significant portion of such funds came from a tax reform established by consensus of both the government and the opposition. In the financial arena, the view began to prevail that health-care provider companies should and could achieve and steadily increase profitability as experienced in other sectors. Both phenomena led to a similar result: the adoption of evaluation techniques and improved management of public companies and services, with which economists and administrators would come to direct the programming and management of key activities in the national health system.

The development of insurance

With institutional changes in the health system in 1983, market forces should have theoretically determined fees for services and the cost of salaried labor, which had been previously set by the State. However, during the early years, a dual system existed in which the market governed in the emerging private sector while the centralized, government setting of rates continued in the public sector, with the public sector's influence predominating in the system as a whole. Regarding fees based on rates set by FONASA through negotiation with health professionals and labor costs based on public-sector salary schedules, the lack of resources allocated to the public sector due to the economic adjustment program, consistent with the goal of accelerating privatization of services and the transfer of FONASA members to the ISAPRES, meant that increases in

prices for professional and hospital care continued to be limited to the private sector and were paid primarily by the upper-income contributors and beneficiaries.

However, when general increases occurred in household income in the 1990s, deregulation of health care prices was limited by participation of the ISAPRES and the continued role of FONASA. The instruments for this are the plans established for members and agreements with service providers within the legal framework governing the operation of the ISAPRES and FONASA. Health plans determine reimbursable care and copayments under each program and give economic priority to and foster the expansion of demand for the programs among the insured population and expansion of the supply of services by providers. In turn, standard prices or discounts for care are determined by agreement between the insurance plans and individuals and institutional providers. These provide an advantage to those who receive them, whether through ISAPRES or FONASA. Thus, insurance plans and agreements play a decisive role in determining prices for services through negotiations. Although these negotiations are conducted in the market, they continue to be limited to a set of institutional providers and in some cases, as in negotiations with FONASA, they are also limited to representatives of individual providers. Therefore, the evolution of effective demand for health services and the universe of health care that benefits from modernization of the national health system are determined primarily by the plans and agreements of the ISAPRES and FONASA, which cover about 90% of the country's population.⁵

⁵ The rest are served by public providers as indigent.

In this context, the decision to invest in the equipment, management, or human resources of a health care provider for the Chilean population is contingent upon the likelihood that the provider will be included in the health plans of the ISAPRES and FONASA. This has a decisive influence on the return on investment. Thus, private insurance and FONASA have had an important role in the pacing and direction of modernization and on the importing of equipment and professional education for the national health system. This relationship is expressed in various ways, with providers influencing insurers and insurers influencing providers. Thus, some provider centers that specialize in meeting the demand of high-income groups or those with health insurance plans that cover very costly treatments are able to incorporate care that captures a type of demand formerly met only overseas, and to provide the service in Chile at lower or equal overall cost. Once national, even if relatively limited, capacity to provide the service is established, pressures to make it available spread to other provider centers and ultimately it becomes acceptable to make the service available to the beneficiaries of the ISAPRES and later those of FONASA. Conversely, special types of service such as diagnostic imaging, which is very costly, may be accepted by the insurance plan but the frequency with which they are prescribed may lead insurers to establish additional limitations on reimbursement to beneficiaries and to limit prescription and delivery.

The influence of insurance on health services imports and exports is generally more direct and, in the case of Chile, it has been fostered by tariff reductions and the elimination of

restrictions by product characteristics of an exporting model. The inclusion in one or several health plans of the right to receive care abroad depends on case-by-case decisions made by each private insurer and FONASA's authorities. This means that it is reasonable to hypothesize that the ISAPRES and, to a lesser extent, FONASA, have a potential role as facilitators of imports in health services. In addition, as prices for health services in Chile have risen significantly during the 1983-1999 period, insurance plans have been able to provide access to care abroad as a cost-control measure, with users having the option to receive care in Chile or abroad.

The facilitating role of Chilean insurance plans can be extended to trade in health services, especially when neighboring countries have similar insurance programs with which to establish exchange agreements. This has been true during the 1983-1999 period under analysis. Moreover, because Chilean private insurance plans have played a pioneering role in Latin America, they have served as a model for some of the basic elements in other countries' health insurance programs. In addition, national insurance programs can include in their plans coverage for care in foreign health institutions for services not provided or insufficiently provided within the country, thus facilitating the importing of such services. Given that during this period providers in the Chilean national health system imported from some other countries the professional training, technical assistance, or equipment needed by the health system, the ability of insurance programs to include care in those countries under their health plans has increased. For example, it is natural

for the professionals and technicians trained in centers outside Chile to bring with them not only knowledge but also contacts for referring their patients. It follows that they would seek assistance in their practice from the center where they studied and from other professionals they met while abroad. Furthermore, the computer revolution will be responsible for multiplying the opportunities for remote consultation, for example, by sending files via the Internet.

Deregulation of the labor market

Because the health system is labor-intensive, institutional changes aimed at developing a market economy must take that aspect into account when setting priorities, and this was done in Chile. As indicated earlier, there was initially a dual system for setting fees and labor costs in the health services, with market forces prevailing in the private sector and administrative price-setting in the public sector. This made public sector prices very influential within the system. Since prices set in the public sector were very low, the private sector could compete favorably with the public sector in terms of health insurance membership, free choice of service provider, and workplace.

Later, during the 1990s, with decentralization of secondary and tertiary services, the municipalization of primary health care, and changes to make FONASA more like a state insurer, differences began to arise among the services and among municipalities in the compensation paid to health workers as well as in fees for services provided by FONASA,

under growing pressure from market mechanisms. Although centralized setting of the public sector salary schedule and of FONASA rates continued, the multiplicity of autonomous agents resulting from the decentralization of services, municipalization, and greater freedom of action with respect to central FONASA authorities opened the way to competition and market influences. The services and municipalities would not be able to attract staff and FONASA would not be able to attract professionals for inclusion in free-choice lists if compensation did not become increasingly competitive both internally and with respect to compensation in the private sector.

Employee associations in the services and municipalities were collectively successful in adopting a program to adjust compensation in the public sector health services over the medium term. These levels became the base level, and each service or municipality improved upon them so as to be able to compete in retaining staff and filling vacancies. Due to the inadequate training of human resources brought about by the rapid expansion in the health system's financial resources and activities during this decade, professionals were in short supply. This limitation created greater competition and a need for sustained compensation increases for those professionals in short supply, a reduction in the level of qualifications required for different positions, and the hiring of personnel abroad.

In this context,—unlike what happened with monetary exchanges where domestic currency continued to be tied to the dollar,⁶—health sector compensation, labor costs, and

⁶ This policy, adopted by the military regime, was maintained until 1982.

treatment costs in Chile increased relative to those in most neighboring countries. This tended to make it more attractive for providers to import equipment, for foreign patients to receive care in their own countries or in countries where care was less expensive, and for foreign professionals to come to work in Chile. The trend grew more rapidly in the importing of equipment and compensation paid to professionals than in the loss of competitiveness in the services. Thus, technological modernization accelerated, increasing the need for specialized professionals and competition for them in those centers most advanced in the modernization process, and forcing centers less able to modernize to import professionals from abroad.

The lack of specialized human resources has intensified the tendency to have them rapidly trained abroad, particularly at higher qualification levels with short-term (one or a few weeks) or medium-term (three months to less than a year) training requirements, postponing or eliminating the expansion and adaptation of Chilean training capacity in many specialties. Greater opportunities for professional and technical mobility as a result of specialized professional training in a labor market where such resources are scarce has led professional training—preferably abroad—to become a strategic component in the competitiveness of companies and institutions in the labor market.

THE IMPACT OF CHANGES IN THE NATIONAL HEALTH SYSTEM ON FOREIGN TRADE IN SERVICES

During the 1983-1999 period, the export of services, unlike modernization of the national system, was not an early objective of participants in the process but arose when modernization had already become significant, widespread, and sustainable. Thus, in this section we chose to begin with the import of services generated by the process of modernization and then to address the export of health services.

Importing services for the national health systems

Professional and technical training abroad

In interviews held during field research for this paper, specialists in the service-provider centers and the directors of health-training centers repeatedly expressed concern over how difficult it was to obtain professionals and technicians specialized in the new diagnostic and treatment techniques to meet the growing demand created by increased technical equipment. In particular, there were ethical concerns regarding the relationship between deregulation in the certification of specialists,⁷ with shortages of specialized personnel, and pressures to amortize investments in centers and

⁷ Although there is a national commission for certification of medical specialties, this certification is still not required in order to work as a specialist. Such deregulation is obviously greater when we go from the professional level to the technical level, given that in this case it is the chief of service or of the attending team who defines the acceptable level of qualification for those running the teams or administering treatments.

units. These were leading to the unacceptable situation of increased malpractice.

In a national health system such as that of Chile, which over the last five decades had been able to provide national academic centers for its own specialists and a sizable number of those from other Latin American and Caribbean countries, the scarcity of professionals seemed strange. Interviews with Dr. Valdivieso, Director of the Department of Internal Medicine of the School of Medicine, Catholic University of Chile, and Chairman of the National Certification Commission, allowed us to clarify the problem of the shortage of specialists and to guide the search for relevant information. Actually, the country continues to train health specialists both nationally and regionally, and it is possible that the training of specialists is increasing significantly in the medical schools and technical training centers created in the last two decades. Where it exists, the problem of inadequate supply does not involve long-term specializations (that take several years of training) but rather the subspecialties that only require a few weeks or months in which professionals and technicians receive training in new techniques or methods of care.

The demand for subspecialties in health-services provider centers has steadily increased with modernization of the Chilean system over the last two decades. The relative scarcity of skilled staff has greatly increased the earnings of those who obtain such qualifications, and reinforced the demand for training.

This demand must be satisfied abroad, but such transfers are further facilitated by reductions in the cost of international travel. Initially, it was customary to go abroad for very short periods, in some cases limited to attendance at congresses, informal exchanges with specialists at training centers or health care provider facilities, and visits to commercial firms selling medical technology. However, the trend toward seeking training of three months or longer grew in the 1990s, including formal courses and practice periods in specialized centers.

The high assessment of subspecialists and the need and ability to use them to replace specialists in a professional job market where certification is deregulated have begun to lessen the interest in traditional specialist training. According to the directors of university education centers, they have begun to have places that go unfilled in some specialty programs offered every year. Only as an exception, as in a specialty such as ophthalmology, is demand greater than the available supply at the professional level. In the case of university-trained nurses, the specialization received in training centers is not valued, or is not valued to the same degree as training obtained in-service, and the provider centers require in-service training. This also indicates that there are unresolved problems arising in the field of professional training of specialists, problems associated with the ongoing modernization of the health system.⁸

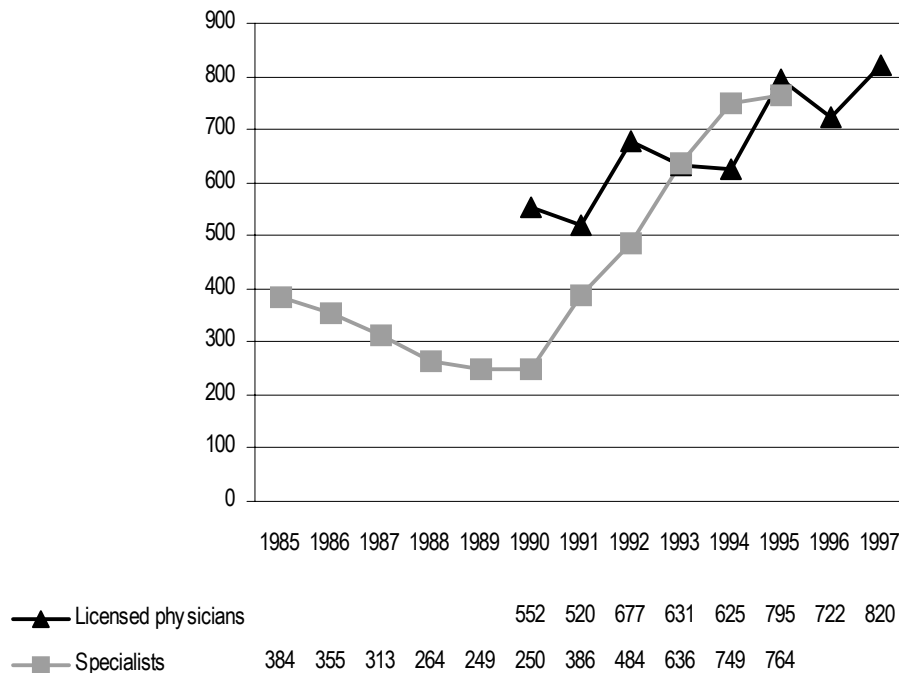
Traditionally, the training of specialists in Chile or abroad has been

⁸ See: Carlos Toro Álvarez. *Educación continuada de postítulo para médicos en Chile en la Facultad de Medicina, Universidad de Chile; Recursos humanos en salud, formación y acreditación*. Santiago: August 1999; pp. 88-96 (Academic documents series No.1); and Human Resources Division of the Ministry of Health. *Estudio diagnóstico de la situación de personal y cargos de trabajo de los servicios de salud*. Santiago; 1999.

financed by the Ministry of Health (MINSAL) directly or in combination with contributions from the decentralized services and municipalized primary health care. This is one of the incentives that the public sector has for attracting and retaining its professionals. Figure 4 shows the evolution of specialized training from 1985 to 1997; it declined proportionately more than the budget for MINSAL services during the 1983-1989 subperiod and then began to increase at higher rates starting in 1990. In addition, the Chilean government benefited from extraordinary contributions in international (bilateral and multilateral) financial and technical cooperation to facilitate the

transition to democracy and to give priority to social sectors, including health, particularly activities in the public sector. A portion of that international cooperation, especially bilateral cooperation in the case of health, provided MINSAL with technical assistance and an extraordinary program of fellowships abroad. The latter initially favored long-term specialists but increasingly emphasized internships and training in subspecialties lasting for about three months. This reflected, in part, the extraordinary program for construction of infrastructure and hospital equipment promoted by MINSAL under President Alwyn's government (1990-1994). Over the course of the decade,

Figure 4. Physicians graduated abroad as well as specialists licensed to practice in Chile, 1985-1997



Source: Universidad de Chile, Facultad de Medicina, Recursos humanos en salud, formación y acreditación, agosto de 1999. (Serie de Documentos Académicos No. 1)

AȘOFAMECH, Escuela de Medicina, U. de Chile, Ministerio de Educación, Ministerio de Relaciones Exteriores.

this bilateral cooperation has been continued by countries such as Spain and England, but not by other countries, leading to a reduction in the funds available for specialized training. However, as of last year this was offset by a project using national funds allocated for primary public health care professionals, which amounted to some US\$ 1.1 million in 1998 and US \$ 1.3 million in 1999.⁹

There are several thousand foreign professionals, primarily physicians and nurses, currently working in Chile. During the period from 1990 to 1997, there were 1,297 physicians legally authorized to work in Chile, a sixth of them through revalidation of their degrees and the remainder under international agreements, with the number of annual authorizations increasing by 500% during that period. Most of those professionals work in primary care centers in municipalities that have low-income populations or are relatively isolated geographically, in the health centers of public and private companies also located in isolated areas such as mining areas, and in other cases in first-rate private centers for specialized care such as rehabilitation, not traditionally developed in Chile. Considering the public sector alone (secondary and tertiary health care services and municipalized primary services), the number of those working in primary health care (540) is currently twice the number of those working in the services (240).

In turn, the introduction of national economic groups and international corporations and the influence of risk managers in the ownership and organization of health-

care provider centers are new trends which have established more direct links between improved quality and productivity in health care and the investment in human resources, thus increasing the marginal role that the institutional private sector had in financing training at home and abroad for medical specialties and sub-specialties and for other professionals and technicians on health teams. An example of the evolution of private sector institutional participation is provided by one of the clinics that has made great strides in the modernization process. In that institution, the number of physicians whose specialization abroad was financed increased from 2 in 1994, before institutional responsibility was assumed, to 21 in 1999, representing approximately US\$ 400,000 for the latter year or approximately one-third of the amount paid by MINSAL for its special project to train professional and technicians abroad.

Other services from abroad required by the system

In recent years, the services imported by the national health system and associations—joint ventures between national and foreign companies—have diversified. This is due primarily to the demand for centers of greater excellence in the forefront of modernization. Among these can be included schools teaching architectural design for building secondary and tertiary health care centers. For example, the two important expansions of large first-rate clinics currently in progress or being designed have hired the national firm affiliated with an important USA

⁹ Anríquez C. *El sector salud: un caso de cooperación internacional*. Santiago, Chile: MINSAL; 1990; and MINSAL, Office for Cooperation in International Affairs. *Cooperación técnica en Salud*. Santiago: July 1998.

consortium. Also, hospital waste management services and patient's meals in hospitals are being provided by national firms affiliated with European and North American consortia. Finally, foreign consultants are currently providing health management services to private clinics and to hospitals in the autonomous public sector.

Health services provided to individuals overseas

The hypothesis that private insurance played a role in facilitating imports through the inclusion of health care services abroad in insurance plans was demonstrated by an increase in the number of ISAPRES and insurance plans offering such benefits over the most recent five-year period. The pioneering institution, the "VIDA TRES" ISAPRE, has just included such a benefit in the Mayo Clinic (USA) for all its plans. However, because this generalized benefit was not accompanied by a further increase in premiums, use of the service to date has been marginal. This does not mean that importation of this service has declined in Chile. On the contrary, the Mayo Clinic began to operate through a representative's office at least two years ago. In addition, rehabilitation and some other service categories have increased in Cuba and a company responsible for selling such services has been set up.

Furthermore, health-care provider centers generally indicated that they use services such as consultations with foreign centers but that these are free of charge because the centers consulted are those where their specialists received their specialized training. Also, what generally happens is that specialists refer their patients

to centers abroad for diagnoses or for some of the few treatments and interventions not available in the country, sending them with an attending physician, while the services that take the longest time and cost the most are provided in Chile. This indicates an effort to minimize total cost abroad and these practices are promoted by the ISAPRES and FONASA, the customary health plans.

Frequently, the experts consulted have indicated that health services abroad are included as part of the marketing policy of some private insurance plans, primarily for the higher-income population. The services offered and actually used have to date been associated with care in USA centers and not in neighboring countries. This means that the cost of the trip acts as a filter on care, limiting it to care that costs in excess of several thousand dollars or care that is essential but cannot be obtained in Chile.

The dynamic that begins to operate with this type of importing of services can develop quite significantly when the referral centers for care abroad are located in neighboring countries to which patients are able to travel by land or air at much less cost than to the USA. This is true of Argentina, which of the countries bordering on Chile has the most first-rate centers and specialists in all of South America. For example, the fact that the ISAPRES White Cross and Aetna Salud of the international AETNA consortium in Chile have members whose numbers represent a fifth of the total—equal to 800,000 beneficiaries—and that the consortium has an equally significant presence in Argentine insurance, would indicate that the importing of health services from Argentina could increase very rapidly.

Exporting health services

Import substitution

By giving priority in this analysis to import substitution, we want to emphasize its importance in terms of exporting Chilean health services. While not one of the objectives of modernization, import substitution has resulted from the modernization of health care that included among its priorities the types of care that require development of technologies and models of care for diseases such as cancer, one of the most important health-care fields abroad.

Import substitution occurred during a period when the sustained 12-year growth of the national economy, together with a concentration of income in the upper 5% of the population, brought incomes in such households up to the current figure of about US\$ 80,000. In other words, the income group most inclined and most able to consume health services abroad increased both in terms of numbers and income level. At the same time, development of the ISAPRES and catastrophic insurance, which recruited most of their members from households in the upper three levels of the income structure, fostered growth of the demand for more complex and up-to-date health care, some of which was not available in Chile in earlier years. Both factors promoted growth in the demand for such care, creating a market that is large enough to make the relatively broad provision of such services in the country profitable, as in the case of diagnostic imaging, for example. In some cases, the type of treatment developed (e.g. cosmetic surgery, also linked to income growth and concentration) is not considered by

many health specialists to be an activity of the sector per se. However, in terms of economic and labor effects, such treatment also represents a contribution to the national economy from health service provider centers.

Another indicator of the dynamic of import substitution is the speed with which the Chilean health system has been able to provide care that until recently led to a flow of patients abroad, as had been the case with rehabilitation, particularly in terms of care provided in Cuba. In response to this, the country's two largest insurance mutuels and a North American consortium developed the project for a first-rate rehabilitation center in Las Rejas, in the metropolitan area of Santiago. In addition to eliminating travel expenses to Cuba, the Chilean center will have the advantage of having its own clients who are injured and require rehabilitation among the two million members of those insurance mutuels.

The greatest limitation on import substitution in the health services, as for other relatively high-cost items, is the narrowness of the national market and its slow rate of expansion. In order to confront this limitation, first-rate private centers are currently developing two types of strategy: attraction based on institutional prestige; and the formation of networks or systems of centers for care and referral. The first strategy requires that the center be recognized, particularly for its quality of care and the spectacular nature of its successes in cases that have achieved national attention, the reputation of its professional and technical team and its customary clientele, and the attractiveness of its facilities. The formation of networks depends less on marketing and publicity than the first

strategy, but requires significant and sustained organizational efforts whose complexity is discouraging to many of those in charge of first-rate provider centers. This strategy is more feasibly developed by university clinical hospitals whose connection with basic and specialized education allows them to start with a broad base of professional and technical networks that serve as the foundation for organizing the system of centers. This may also be true of centers that are linked through their association with an insurer or that belong to an occupational health facility.

The importance of import substitution in Chile's health services can be appreciated by comparing the behavior of other service sectors such as tourism, where the increase in and concentration of income plus reduced costs for personal travel abroad, especially by air, have also fostered a strong increase in tourism beyond Chile's borders.

Services to residents of neighboring countries

Chile shares with Argentina, Brazil, and Uruguay a position that favors exports in health services, in that they offer care that due to its complexity and modernity does not exist in some neighboring countries.¹⁰ They also play an important role in the education of Bolivian, Ecuadorian, Paraguayan, and Peruvian health professionals, who tend to refer their patients abroad to the centers and specialists they met during their studies. In addition, the development of relatively similar health insurance systems completes the favorable scenario for trade in health

services within MERCOSUR and with countries bordering on that customs union.

In the case of Chile, its first-rate centers have captured upper-income and upper middle-income patients from Bolivia and Peru and, to a lesser extent, from Ecuador. Of these, Bolivia has been the source of the greatest flow of patients and the target of efforts to capture them on the part of the ISAPRES and the national health-care provider centers. During the current decade, sustained growth in the Bolivian economy and consequently in the number of average and high-income households, as well as improvements in road connections and the transport of people between the two countries, have increased the potential for trade in services and Chilean interest in attracting Bolivian patients.

The first-rate clinics indicated above have established agreements with Bolivian health-care provider centers and have increased their promotional activities, further concentrating on the capture of patients from that country. According to interviews conducted with staff members in the offices of those and other first-rate clinics and hospitals, these facilities act as alternatives or complements to provider centers in the USA. In some cases, they provide all the specialized care and in others they combine diagnosis in the USA with treatment in Chile. Despite the existence of similar health insurance programs in Bolivia and Chile, some of which have shareholder ties, most patients pay the expenses for care received privately, since only recently have two of the insurers in Bolivia expressly included reimbursement for

¹⁰ Committee on Service Export Companies. *La exportación de servicios en Chile: un diagnóstico preliminar*. Santiago: 1996.

care in Chile under their plans.

In the tertiary care center that has been most successful in attracting Bolivian patients, the number of hospitalizations went from 236 in 1996 to 314 in 1998, while more than 600 persons received outpatient care. Spending by these patients on hospitalization is estimated at about US\$ 2.5 million and outpatient care, at over US\$ 1.2 million.

The ISAPRES have shown interest in expanding their patient base to middle class households whose numerical importance and income levels have risen sharply along with economic growth. At least three of the ISAPRES have conducted preliminary feasibility studies on starting activities in the Bolivian market. These include the two ISAPRES specializing in the northern health market that last year began activities to capture members and sell services in their associated provider centers. The explanation, according to the ISAPRES specializing in the central Chile market, lies in the advantage that its northern competitors have due to their location.

Services to foreigners temporarily residing in Chile

It is well known that during the 1980s and 1990s Chile successfully attracted significant flow of direct foreign investment. Together with some geographic advantages that facilitate operations with MERCOSUR and in areas such as mining that Chile has in common with neighboring countries, this flow of foreign investment has led to an increase in the number of resident foreign companies, professionals, and technicians. These professionals and technicians are members of health insurance plans in their home countries and wish to retain

seniority and rights in them. They seek to do so by transferring administration of their insurance plan or by utilizing health provider centers that, in addition to providing the highest quality of care, have experience in operating with foreign insurance plans.

Prior experience of some first-rate providers in the metropolitan area of Santiago in capturing the health care of diplomatic and international agency personnel through agreements allowed them to do the same thing with this new segment of temporary foreign residents. The number of households in this segment has grown from a few thousand to several (3-4) tens of thousands over the course of the 1990s. The provider centers' interest has been due not only to this growth but also, according to staff members interviewed in administrative offices, to the prestige that providing health care to this clientele represents and, with respect to patients living in neighboring countries, because the care provided to them represents a much broader and more frequent range of health problems. Thus, capturing this temporary resident segment allows for more rapid growth and modernization of centers that are able to combine it with care of medium- and high-income Chilean patients and foreigners residing in neighboring countries.

Perhaps due to the limited numerical importance of the segment of population involved, the ISAPRES have not shown interest in administering foreign insurance plans for professionals and technical personnel nor have they been pressured by the first-rate provider centers and foreign insurance plans to do so. In the case of the provider centers, the occasional delays and risks associated with payment are considered marginal in

terms of the volume of care and the income generated.

On the other hand, several of the ISAPRES would be interested in exploring the expanding foreign market of foreigners in Chile, as there are already close to two million visitors each year, and this is being promoted through an aggressive national program that could increase these figures by 50% in just over five years. The fact that the country of origin for foreign tourism in Chile and the destination of Chilean tourists abroad is one of the MERCOSUR countries—including Chile and Bolivia—would allow for negotiations in the context of the customs union so as to regulate exchanges among health insurances, expanding the agreement currently existing in the area of health cooperatives. In this regard, the initiatives of some provincial Argentine governments to establish exchanges among their health insurance programs so as to cover tourists residing in both countries would make it possible to develop useful pilot experiments aimed at moving toward integration of health insurance and that would contribute elements for broader integration at the level of MERCOSUR, Bolivia, and Chile.

TOWARD AN AGENDA OF INITIATIVES AND POLICIES

Our analysis has shown how modernization and institutional changes in Chile's health system have favored the internationalization of health, understood as a tightening of the connections between the Chilean health system and the systems of third countries. The development of trade in health services

and in goods and services needed by health systems is an important and growing part of that internationalization. In that context, it is logical that policies to promote and regulate such trade cannot be limited to the national arena but must also include the country's integration and trade agreements.

Internationalization and trade in health-related services have played as important a part in modernizing the national health system and in improving the population's health as modernization has allowed. They have also influenced the evolution of the costs of health care and changes in the relative use of the factors of production in health (capital, technology, and labor). The initiatives and policies for dealing with some of the central problems in the development of the national health system, such as the shortage of professionals and technicians and the trend toward increased per capita costs for health insurances—including FONASA—will have to consider foreign trade in the health services. From that perspective, it would be more desirable to give priority in this section to foreign trade policies on services that are linked to those central problems in the national health system and to seek to select instruments that are consistent with the strategy of international inclusion of the Chilean economy, particularly in terms of Latin American regional and hemispheric integration.¹¹

Exports in health services have been limited to some provider centers and areas, with care provided to foreigners residing in the country being more important than care provided to residents of neighboring countries.

¹¹ Zarrilli S, Kinnon C, eds. *International trade in health services: a development perspective*. Geneva: UNCTAD; 1998.

These exports, based on the comparative advantages of location and strengthened by recent modernization and the ties of some academic centers and health care providers with professionals in neighboring countries, give Chile an intermediary or final role with respect to developed countries.¹² Exports in health services are complementary to the important process of replacing imports in the national health system, which will have to continue its current dynamic to respond to the demands for quality and updating of care among high and average income groups, whose numerical importance and average income will grow steadily according to anticipated trends in national economic growth. In this context, the promotion of health exports may provide opportunities for expansion in markets such as that created by tourism, either due to the size of potential flows and promotions under way, or due to the natural association of tourism and health care as in the case of thermal baths.

It has already been noted that alternatives for the future direction of health reform are far from moving toward consensus. This situation underlines the advisability of discussing policy measures within the context of the national health system's current structural heterogeneity and recognizing that, to be effective, the proposed measures must foster consensus-building among the principal participants in the system and be suitable to the specific features of the different segments (public, private and collective) that comprise it. Given our aim to encourage reflection among a group of specialists, —an aim

which inspires this paper more than do finished instruments, —in the remainder of this section some elements will be suggested for an agenda of initiatives and policies to promote and regulate foreign trade in health-related services.

The alternatives

The strategies for foreign trade in health services open to Chile in the medium and long term have in common the search for an expanded market in order to make modernization of the national system more feasible and rapid and to keep modernization from accentuating the currently dominant dualism and inequity. Within that context, it is worthwhile to examine the alternative of gradualism based on current formulas for expanding trade versus rapid market expansion based on changing the reference market and the export basket.

The gradualist alternative would consist of maximizing the possibilities of the most promising formulas, primarily.

- in the area of exporting services, by repeating experiences such as expanding into the Bolivian market based on transportation facilities and by strengthening such experiences through further use of the facilitating role of health insurance programs in the case of some border regions of Argentina; and
- in the regulation of imports, by taking greater advantage of long- and short-term training of specialists abroad, and using it to supply a national system of ongoing training for health professionals and technicians.

¹² United Nations Conference on Trade and Development. Health care exports under consumption abroad mode. Geneva: 16-18 June 1997.

The alternative to rapid market expansion would consist of converting MERCOSUR into the reference market, by prioritizing:

- exchanges and integration among public and private health insurance programs of subregional countries so as to capture the demand created by tourist flow among the countries and foster the development of provider-centers systems in some specializations and border areas;
- development of specializations related to caring for the population group over 60 years of age; and
- development of a system of short-term specialized professional and technical training services on a subregional scale based on specific needs of the subregion and on capturing demand in the rest of Latin America.

For the provider centers that are more advanced in the process of modernization, the gradualist alternative has the advantage of being able to follow the example of countries like Bolivia that are beginning to be successful, and repeating the example in regions bordering on northern and central Argentina. On the other hand, there is a risk of accentuating the dualism in the levels of quality and coverage in health care in those centers versus those in most of the system; it is not financially feasible in a reasonable amount of time to extend a modernization method that is based on the ability to pay among high- and average-income groups to all of the provider centers nor to the population served by the national health system.

The alternative of rapid market expansion has the advantage of being able to develop a common method of

financially viable modernization for the public and private sectors—given the reduced costs involved in operating at an economically more efficient technological and organizational scale,—and providing more equitable benefits to the national population. One of the main difficulties lies in the insecurity that still surrounds MERCOSUR as a plan for integration, as it puts agreements reached in this context at risk of protectionist setbacks. Another difficulty is the resistance of many participants in the system to multisectoral initiatives such as those involving products that can be developed for the population over 60 years of age.

These alternatives for promoting and regulating trade in services should be evaluated with a view to the anticipated demographic and epidemiological evolution of the population, improvements in the duality among subsets of the population for the sake of greater equity, and the health sector's contribution along with other sectors to promoting economic growth and economic openness within the context of subregional (MERCOSUR) and hemispheric integration.

Aging of the population and the growing importance of related health problems are the major challenges to be faced by the health system in the next two decades. These factors may jeopardize the ability to finance the health system during that period due to the high costs represented by the doubling of the percentage of people over 60. In epidemiological terms, aging will create a greater incidence of chronic and degenerative diseases, with the resulting need for professionals and technicians specializing in those areas. In financial and ethical

terms, aging suggests the need to resolve the current exodus of those over 60 from the private system to the public system when their premiums rise to levels over five times higher than those paid at age 30, with increased copayments required by the ISAPRES, making financing even more precarious, by FONASA or as indigents, for those belonging to low-income groups among the population. The current problem of inequity in health services among income groups in today's population, which is reflected in an epidemiological profile of differential health demand and institutional solutions—generally private for those with higher income and public for those with limited income—would be even more difficult to overcome given the scenario of an aging population.¹³ The relationship between accelerated modernization and institutional changes and equity in health, as the analysis on aging showed, can be summarized in terms of expanding the preexisting equity gap. The concentration of income that has accompanied the increased overall income and household income levels, together with the concentration of higher-income contributors and beneficiaries in health insurance/financing institutions, could only serve to strengthen, in turn, the concentration of modern advances in a limited number of centers, to a greater extent at the higher levels than at the primary care level and among members of the ISAPRES and the insurance plans against greater or catastrophic risks than in FONASA. As could be seen in the analysis of emerging problems

related to deregulation in the labor market and institutional changes in professional education, one of the results of this concentration has been professional migration toward the levels, types of care, and institutions that are better incorporated in the process of modernization at the expense of many public sector health care centers, especially those providing municipal primary health care that are plagued by deficits and extremely high staff turnover.

A contradiction in terms, but an equally possible advantage of concentration is the appearance of installed capacities underutilized at regional level in the country together with greater household buying power due to increased incomes and better operation of FONASA, the ISAPRES, and the autonomous public sector institutions, thanks to institutional changes. As we will discuss below, this is a very suitable basis for putting together the development of foreign trade in border areas.

The strategy of open regionalism adopted by the countries of Latin America, which seeks to maximize relationships among countries within a single subregion and make the subregion compatible with hemispheric and global areas finds in MERCOSUR one of the candidates with greatest potential.¹⁴ In the case of foreign trade in health services, this potential is important and can be utilized in the short term. When institutional changes in the economy and in health systems have a similar orientation, they facilitate relation-

¹³ Titelman D. *Reformas al financiamiento del sistema de salud en Chile*. Santiago: CEPAL; 2000 and Bitran R, Almarza FX. *Las instituciones de salud provisional en Chile*. Santiago: ECLAC; July 1997. (Development Financing Series No.56).

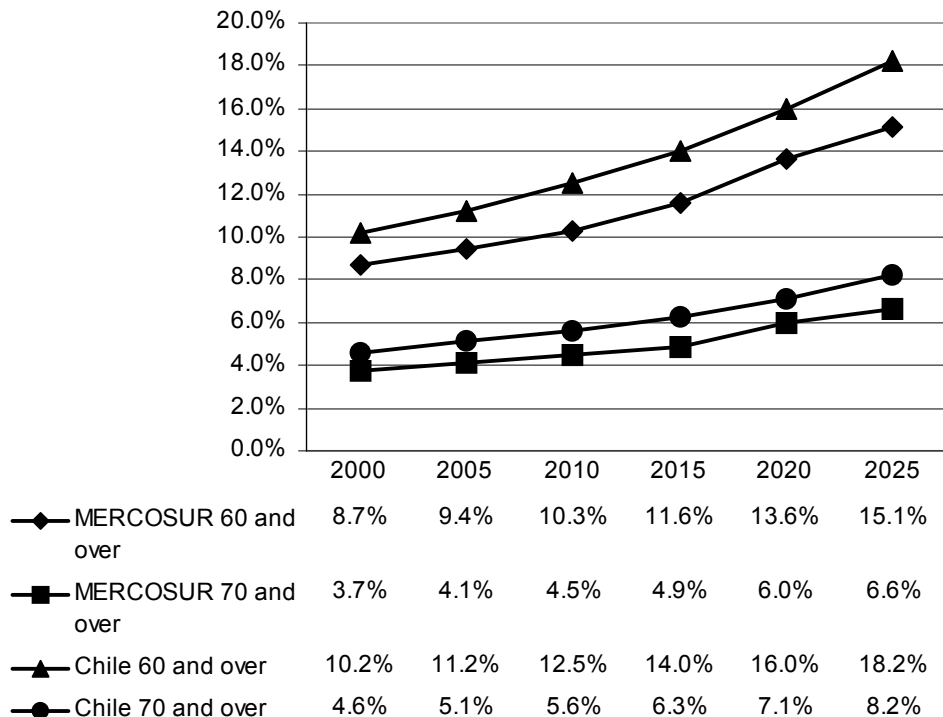
¹⁴ French-Davis R. *Macroeconomía, comercio y finanzas para reformar las reformas en América Latina*. Santiago: McGraw Hill Interamericana; 1999.

ships among regions, including coordination and integration relationships, and make them desirable. Similarities in population, economic, and political dynamics are clear in that for the most part they involve countries undergoing medium or advanced demographic and epidemiological transitions, with open market economies and political systems moving toward democratization. In addition, their diversity creates fertile soil for exchange, cooperation, and integration. Figure 5 shows the evolution of aging among the MERCOSUR countries, including the affiliated countries (Bolivia and Chile), as a subregional group and its evolution in Chile, highlighting the rapidity of growth in the older age

groups, per capita spending in health, and relatively similar epidemiological profiles. This similarity shows differences in the stages of development of the individual health systems. For example, Chile is moving toward specialization in the professions and health teams, a transition that Argentina has already made and Bolivia has not yet begun.

The situation sketched indicates that, in developing foreign trade in health services, Chile could look positively on the alternative of rapid market expansion from the viewpoint of subregional integration in MERCOSUR. Nonetheless, there are elements in the gradualist approach that should not be discarded, such as the development of trade in border

Figure 5. Estimated growth of the aging population in MERCOSUR^a countries and Chile, 2000-2025



Source: CELADE. América Latina: proyecciones de población 1970-2050. *Boletín Demográfico* 1998; 62.

^a MERCOSUR includes also Chile and Bolivia.

areas, and merit inclusion as specific products in the expansion alternative.

Elements of the agenda¹⁵

■ Give priority to care of the elderly

The expanding market for health care of those over age 60 offers the greatest potential for export of Chilean health services in the MERCOSUR subregion in terms of volume and ability to pay. This is because as long as problems of equity in general and equity in health are not resolved, life expectancy for those over age 60 increases with the level of individual and household income.¹⁶ In addition, it becomes increasingly likely over time within the context of recent social security reforms in the MERCOSUR countries that the elderly will have old age pensions and the number of indigents in that population group may decline.

By the year 2000 this market segment in Chile will amount to 1.55 million people, 704,000 of whom will be older than 70. At the same time, in the MERCOSUR countries as a whole, plus Peru as a neighboring country, there will be 23.12 million, 9.92 million of whom will be older than 70. Within twenty-five years, there will be 3.55 million in Chile and 52.58 million in MERCOSUR, of whom 1.6 million and 23.2 million, respectively, will be older than 70. The greatest geographical concentration of this market is and will be in the central regions of Argentina, Uruguay, and Southern Brazil and these areas coincidentally account for

significant numbers of people within the MERCOSUR subregion who travel to Chile as tourists, making it reasonable to travel also for specialized health care.

Specialization in health care for the elderly is both a priority in Chile and an expanding market in border areas as surmised on recent travel to near neighbors of MERCOSUR, which are also the areas with the highest income in that subregion. This allows for favorable evaluation of Chilean initiatives and policies that promote the development of health services products designed for this market and of the potential for rapid expansion due to population growth and effective demand in that market.

Some health services products for export to the population aged 60 and over in MERCOSUR countries would require greater emphasis on or incorporation of some specializations and modalities of care currently underdeveloped or nonexistent in Chile. There would thus be a lag in comparison with other countries of the subregion such as Argentina. For other products such as rehabilitation, there are recent and significant initiatives in progress, although they are limited to occupational health. For still other products such as health care services in association with the development of thermal baths, Chile has practically no experience. This development of specialties associated with the health care market for those over age 60 would need to be clearly defined for Chile in the short term.

At the organizational level, the

¹⁵ International Trade Center UNCTAD-WTO Home Page, Sector Profiles & Profile Health Services, December 1998. World Trade Organization. Council for Trade in Services, Health and Social Services. Background Note by the Secretariat, 18 September 1998. (Restricted.)

¹⁶ See, for example, Rofman R. "Diferenciales de mortalidad adulta en Argentina." *Notas de Población* 59, June 1994.

development of these products is one of the areas where it would be necessary to change the generally isolated perspective that has evolved in the institutions and companies of the national health system. This would require greater integration between health care and activities such as rest homes, physical culture, and tourism, and confronting the fear of complicated intersectoral arrangements that we found while conducting this research, even among those who are recognized as the health system's most capable managers. Exposure to the experience of other countries in technology capture missions could be a basic factor in promoting these ideas.

■ Establish links between tourism and health¹⁷

From the perspective of MERCOSUR, although not limited to it, it is desirable to establish links between tourism and activities to expand the delivery of health services to temporary foreign residents. Unlike the case of health care for foreigners living in Chile for one or more years—where a gradual increase is to be anticipated, although at a lower rate than in earlier years,—this market segment would consist of tourists. It may involve tourists whose stay in Chile represents an increase in the demand for general health care or some tourism product based on the country's utilization of natural advantages, which includes a significant health care component.

Figure 6 shows the dynamic growth in Chile's tourist activities and the concentration of arrivals and departures in the MERCOSUR subregion

and in Peru. A simple estimate based on data prepared by the National Tourism Service, taking into account the evolution of the economies in the tourists' countries of origin,¹⁸ shows continuing concentration of arrivals in the subregion and increased departures, with the possibility that by the end of the next 5-year period Chile will receive 2.5 million tourists, more than 70% of whom will come from the MERCOSUR countries and from Peru, for an average stay of 12 days.¹⁹

The importance of this flow of tourists is not so much that it represents an increase in the demand for health care but rather that, while visiting Chile, these tourists will have the opportunity to examine the country's health care system as a criterion for selecting their destination and ultimately to use its services. The fact that 65% of the tourists who came to Chile in 1988 came from Argentina, Bolivia, and Peru, and predominantly from border areas, shows the strong relationship that exists between tourism and health, as already indicated.

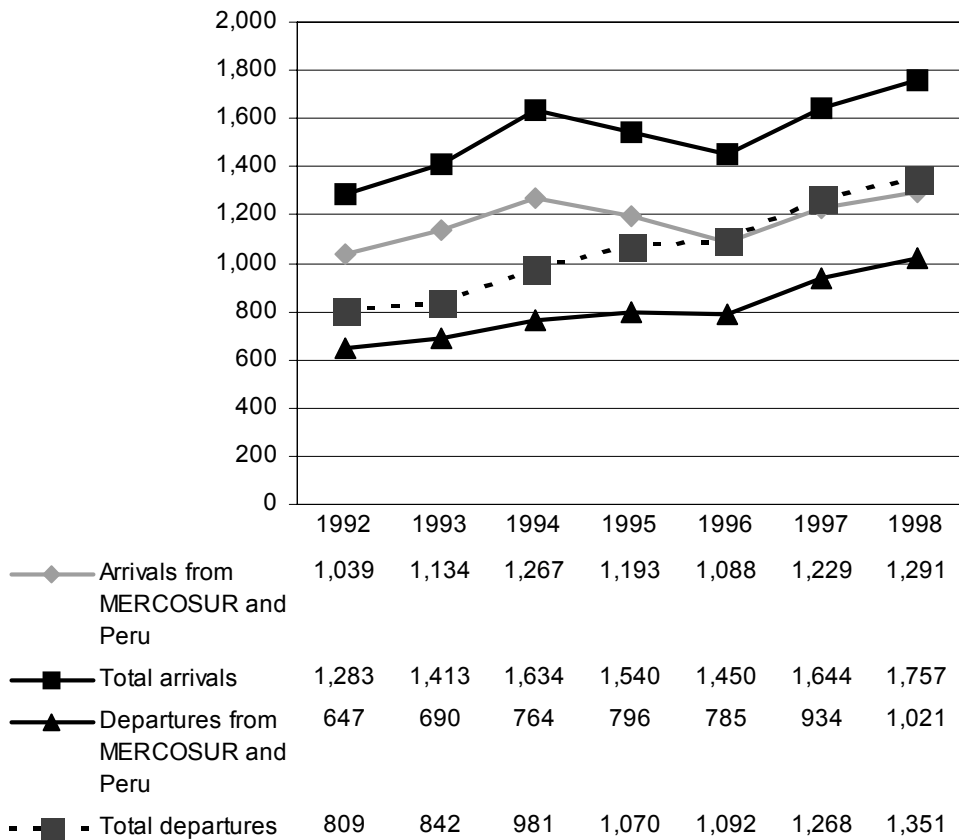
In addition, as part of its domestic and international tourism attractions, Chile has traditionally developed thermal baths and spas. It has more than 100 potential sites, and 30 important sites are in operation. Most of these sites are in the early or middle stages of development, putting Chile in first place in South America for this trade category. This trend in the level of development of thermal baths and spas has begun to turn around as several of the centers are either located in the same place as facilities providing

¹⁷ Ashworth G, Goodall B, eds. *Marketing tourism places*. London: Routledge; 1990.

¹⁸ United Nations Economic Commission for Latin America and the Caribbean (ECLAC). *Estudio económico de América Latina y el Caribe 1998-1999*. Santiago: ECLAC; 1999.

¹⁹ Servicio Nacional de Turismo (SERNATUR). *El turismo chileno en cifras*. Santiago; 1999.

Figure 6. Tourism in Chile, number of arrivals and departures (in thousands), 1992-1998



Source: Elaborado por la Unidad de Estadísticas, Departamento de Planificación, Servicio Nacional de Turismo (SERNATUR).

a higher level of care or are part of them. However, these centers' only connection with health care is the presence of a physician or nurse to attend to occasional health problems. There is potential for adding to this natural attraction and form of recreation a wide range of health care services, particularly those designed for the population group aged 60 and over.

■ Exporting health service in border areas

This is one of the best known health care export products, particularly because there are marked differences

between areas, as in the case of northern and central Chile and southern Peru, central and southern Bolivia, and northern Argentina. The border areas of neighboring countries are also distant from metropolitan areas or national capitals, with the exception of Bolivia, which includes the capital; the total population in the nearest border areas is some 10 million inhabitants. In order to better appreciate what development of this product represents, we will briefly analyze the case of northern Chile.

Over the last two years, this area has seen the greatest increase in the flow of bilateral trade and tourists and patients from Bolivia, which is

associated with the completion of an international highway joining the Bolivian capital with the capital of the Chilean department of Arica and the main branch of the national highway. At the same time, of all of Chile's regions, the northern region together with the capital has received the highest percentage of direct foreign investment over the longest period of time. This investment has been concentrated in mining activities. It is of interest to us that this has led to great investments in productive health centers. In order to attract and retain the working population, these are usually first-rate centers and at present they have a significant idle capacity because of the limited size of the target population.

In addition to allowing health insurance programs to carry out their role as facilitators of trade, as indicated previously, the development of this area also means that measures must be adopted to fully use the idle capacity of existing high-level centers, expanding their radius of care to populations in neighboring countries and coordinating the activities of general health care centers with activities related to occupational health.²⁰ The exploratory interviews conducted with key people involved in economic and health care activities and in local governments in those areas and at the respective national central organizations indicate that people are highly receptive to such proposals.

This border area will experience expansion as a potential health-export market with completion of the international highway connecting northern Argentina, eastern Bolivia, and western Brazil (Matto Grosso).

■ International agreements on health insurances

As a customs union and the nucleus of an economic integration agreement, MERCOSUR has specialized commissions, such as the health commission, that have already approved initiatives such as the exchange of services between health service cooperatives. An initial further step in that direction would be to negotiate an agreement making it possible to include travel insurance in the health plans of public and private insurers. This would be an additional incentive for tourism within the subregion and it would serve to expose tourists to the subregion's health systems. This in turn would pave the way simultaneously or subsequently, as applicable, toward agreements allowing access to specialized fields or general medicine in border areas for members of the health care systems in one or more member countries.

The combination of social security reforms in health and the establishment of MERCOSUR make this a timely moment for such initiatives. The European Union experience shows that once integration processes are consolidated, it is more costly to remove barriers between countries, including those on trade in health services. Moreover, experience in Southeast Asia indicates that insurance companies and health providers in many countries—and this is already happening in MERCOSUR—can play an integrating role that actually promotes subsequent and more general negotiations between countries.

²⁰ Currently Chile has a superior level of development in occupational health for mining activities at high elevations (above 2,000 meters). Such activities are also important in the bordering areas of Bolivia and Peru.

■ Specialized professional and technical training

Acknowledging that the internationalization of professional, academic, and in-service training of specialist teams is a requirement for dynamic evolution, the objective would be to optimize the combination of these training components. In particular, this means obtaining a balance between modernism in training, as measured by the most advanced international level, and maximum development of national capacity for academic and in-service training of specialist teams. Particular attention should be given to the equitable distribution of financing for training among public and private participants, as well as institutional participants and professionals, and technicians in private practice.

The principal instruments for achieving these objectives would include international technical cooperation agreements, policies on fellowships and credits for specialized professional and technical training, including strong participation from insurance programs and FONASA and the centers providing services, as well as promotion of specialized training and modernization of health services management, particularly human resources management, in order to improve human resource allocation and utilization in the short and medium terms.

Our analysis indicates that internationalization of the Chilean health system—although it has received essential support from advances made in the developed countries, particularly the USA and some countries of the European Union such as England and Spain—has found a natural setting in the countries of MERCOSUR and some Latin

American countries based on geographic location and traditional academic and professional ties. MERCOSUR in particular seems to be the preferred international arena for carrying out professional training activities.

In the field of the specialized professional and technical training, Chile and the more advanced countries in technology and health training could combine efforts to develop training in short- and medium-term specialties. Far from an approach that would replace imports from the developed countries, we believe that the correct policy approach would be to utilize current ties but direct them toward a broad program of training in subspecialties that would make it possible to satisfy the current unsatisfied demand in MERCOSUR, Chile, and Bolivia more rapidly and at less cost. It should later be possible to compete for professional and technical short- and medium-term training in the South American market and in the markets of some Central American countries.

In the field of professional training, it would be possible at the same time to facilitate the inclusion of top-notch specialists in activities directed to integration, both hemispheric and with the European Union, as well as to promote other activities such as foreign study programs where Chile already has experience in other disciplines. These activities could promote the national program and specialist training in MERCOSUR.

Progress in the sciences and health care in the developed countries and the similarity of central aspects in the demographic and epidemiological evolution of Chile and MERCOSUR means that adaptive incorporation of these aspects is the natural way to

modernize the national health system. However, the dangers of modernizing health systems solely on the basis of imitation include underdevelopment of national research and making modernization and research on development dependent upon third countries. This means that it is possible to strengthen the ties created when national specialists and researchers are trained in developed countries, particularly in the case of joint research on pathologies that are widespread or specific to Chile and the MERCOSUR countries or on common pathologies, where relationships among researchers from various countries make it possible to obtain or disseminate results more rapidly.

In the current phase of negotiations to create free trade systems within the hemisphere and with the European Union, the search for joint initiatives such as professional training and health research should be given preferential attention. These do not affect significant commercial interests but they are of mutual interest, so they could be seen as symbols of integration and receive support from the most advanced countries in research and from the most advanced countries in professional training and health sciences research such as those of the European Union, Canada, and the USA.
