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10. THE CASE OFTHE MEXICO-UNITED STATES BORDER AREA

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In general, the increasing movement of people has had an important effect on trade in health services. Added to this, the concept of the mobile user - immobile supplier can no longer be confined to wealthy persons in developing countries seeking specialized treatment in developed countries. Worldwide restructuring in the health sector due to the high costs of medical services, particularly in developed countries, has resulted in the creation of an international health-care market. International trade in health services in developing countries has appeared on the scene not only as a way to increase their revenues but also as a way to strengthen and upgrade their national health services. The high content of labour, capital and skills within medical services provides an opportunity for developing countries, as observed in the 1989 OECD report[1], provided that they can maintain the necessary quality levels. Fortunately for the health industry, due to its universal knowledge base, and despite differences in certification and licensing procedures, the quality of medical services is becoming very similar in almost all countries, with cost being the major difference.

TRADE IN HEALTH SERVICES BETWEEN MEXICO AND THE UNITED STATES

The use of Mexican medical services by United States Nationals cannot be considered a new issue. For a long time, Americans have been retiring to some of Mexico's most attractive towns such as Guadalajara and San Miguel de Allende. Once there, they make intensive use of private medical services either by means of private health policies, directly attending private clinics and

[1] OECD, *Trade in Services and Developing Countries*. Paris, 1989.

hospitals, or in some cases, enrolling into the Mexican public health service (the *Instituto Mexicano del Seguro Social* (IMSS) or Mexican Institute of Social Security) by paying a special fee. An aspect of this trend which has become more interesting and obvious at present, is the use of medical services by Americans at Mexican border towns. Despite the widespread idea that medical services in Mexico are of low quality, in general Americans are travelling south of the border seeking affordable health services and low-cost medicine, finding besides that the quality levels are also acceptable.

Three main groups of users of Mexican private medical services at the border have been identified to date:

- the Spanish-speaking Latino-origin Americans (*Chicanos, Pochos* and *Emigrados*) living relatively close to the border, whose cultural and family ties keep them returning to Mexican towns;
- elderly Americans, who seek a good climate, cheap medicine and affordable long-term health care; and
- a group that can be considered as "marginally ill", this is to say, Americans suffering from leukaemia, cancer, AIDS, diabetes, etc., seeking alternative health treatment or medicine that is not readily available in the United States, or has been restricted or banned.

The place of origin, and distance travelled by the two last groups varies. Some people come from as far as Canada[2]. In all these cases, they prefer border towns in order to keep close to the United States, for various reasons. Interestingly, this issue (geographic proximity) has also become an important condition for trade in health services.

In general, it can be said that this development has two main causes: the high cost of medical services in the United States, and the differences in control over prescriptions and medicines between the two countries. It is common knowledge that in terms of expenditure, the United States is the largest single health-care market in the world. In 1993, expenditure totalled US$ 903.3 billion (14 percent of gross domestic product - GDP- or US$ 3,380.00 per capita). And expenditures for 1995 were expected to total US$ 1.1 trillion (15.6 percent of GDP or US 4,050.00)[3]. In the context of the United States, an increasing number of general physicians and specialists, the availability of new medical technologies, and expanding health insurance linked to a fee-for-service payment, are together generating a rapidly growing demand for expensive tests, procedures and treatments[4]. The cost question ensures that not everyone will have the means to pay for medical services, including people in the United

[2] Data from *Hospital Ernesto Contreras* located in the city of Tijuana, December 1994.

[3] *National Health Statistics*, 1994.

[4] World Bank, *World Development Report 1993.* New York, Oxford University Press, 1993. p. 4.

States. Although there is a public American health-care system, not all medical services are covered and, in the end, people have to pay some fees for the services. Instead of spending their savings on expensive medical services, many Americans prefer to find other ways to obtain the same services at affordable prices. For some of them, travelling to Mexico has become a viable solution. In order to do this, Americans must weigh up several factors such as the cost of travel and of continuing communication; the problems and inconvenience of not being able to meet the supplier on short notice when something goes wrong; and the possible savings associated with the lower price or the type of quality of the medical service needed[5].

On arrival at some of the largest Mexican border towns, they find that due to proximity to the United States, travelling distances are not a burden, there are no long waiting periods, the quality of services is acceptable, and costs are lower.

The fact that Americans are using medical services in Mexico opens up the argument that Mexico might have a comparative advantage over the United States in the provision of specific medical services. This capacity to sell services to foreigners includes factors such as quality of the services, lower costs, language or cultural ties and geographic proximity.

[5] G. Feketekuty, *International Trade in Services: An Overview and Blueprint for Negotiations.* Cambridge, Mass., Ballinger Publishing Company, 1988. p. 16.

DEFINING THE MEXICO-UNITED STATES BORDER AREA

The Mexico-United States border area is mostly a dry desert zone, interspersed with forest areas and irrigated farmlands. Fourteen pairs of cities exist along 2,500 kilometres (some 1,550 miles), from the Pacific Ocean to the Gulf of Mexico. This is to say that for each city on the American side of the border, there is another one on the Mexican side (which is why they are called "sister cities"). In the past decade the population along the border has doubled to approximately 9.5 millions, and at the same time the border has become the one with the highest number of annual crossings - more than 200 million in 1990[6]. American law requires Mexicans to have either a valid visa or a border crossing card issued by the United States Government to enter legally into the country. Although according to Mexican law, Americans entering Mexico are required to have a permit, border city immigration officers do not ask them for such permits. Therefore access to Mexican border towns is an easy process.

Despite the border's length, the majority of the population tends to concentrate in only six pairs of these cities, starting from the Pacific Ocean: Tijuana-San Diego; Mexicali-Calexico; Ciudad Juarez-El Paso; Nuevo Laredo-Laredo; Reynosa-Mcallen; and Matamoros-Brownsville in the Gulf of Mexico. The relation between these pairs of cities has been continuous and intense.

Although many people argue that this relationship relates more to dependency issues (Mexican border towns depending on American border towns), this cannot always be demonstrated as such, especially with respect to medical services. People on both sides of the border cross legally from one place to the other, seeking features, services and/or goods they are not able to find in their home town. Commuting from one town to the other over the border to work, shop or for leisure purposes is nowadays common and natural. Despite the fact that illegal Mexican migration has become a serious concern for the United States lately, the majority of the border population are legal commuters. In the same way that Americans travel to Mexico for medical services, a small number of Mexican nationals who have the means to pay also make legal trips to the United States for the similar purposes, seeking those services that are not available or have fewer complication risks than at home. According to a study conducted on the border city of Tijuana in 1994, in an average month there were 300,000 border crossings for this purpose (seeking medical services). Of these crossings, 50,000 were visits to San Diego (United States), while 250,000 were visits to Tijuana (Mexico)[7]. Given this situation, it would be difficult and risky to conclude that the relationship between border towns is a dependent one. In the majority of cases one can find a complementary relationship, relating more to division of labour.

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[6] K. Kjoos, The Need for a Coordinate Response to Growth Impacts in the United States - Mexican Border Region. Draft working paper prepared for United States Information Agency Speaking Tour, Mexico, March 1992. p. 2.

[7] *San Diego Dialogue Report*, 1994. p. 30.

THE PROVISION OF HEALTH IN BOTH COUNTRIES

Health and medical care services are organized differently in the two countries. While in the United States the eligibility criteria prevent many people from obtaining the services they need (services may be available but people do not have access to them, either because they are not eligible or because they cannot pay for them), in Mexico people have access to services. Unfortunately, services are not always available, that is to say, physically present.

In Mexico health and medical care are provided together in the public system, whereas in the United States the public health system relates to public health activities, and medical care services are provided separately, especially for the poor. The Mexican system is a public-based medical-care system with the Secretariat of Health (*Secretaria de Salud*) providing general health and medical care for those without rights to the social insurance system, or those who cannot afford or do not have access to private physicians. The primary provider of social insurance services is the IMSS and the ISSSTE (Institute of Social Security Services for Civil Workers). Services also exist for the armed forces, and for petroleum and railroad workers. Despite the existence of these state health-care services, a large number of people cannot obtain access to any private or public health service. This is the case of rural areas, where access and infrastructure become difficult and expensive. The National Programme of Health estimated in 1983 that 14 million Mexicans had no access to medical services. And in 1986, after several efforts, 12 percent of the population (roughly 9.6 million) had no access to any form of medical service[8]. Because the government is restructuring the health sector and continually cutting funds to the public sector, the provision of health services by the private sector has been playing an important role, filling the gaps left by the public sector. Even so, some of the most well-known physicians and some of the best-equipped hospitals and medical centres in the country are still within the public sector. Private hospitals and clinics are often owned and administered by groups of physicians and in only very few cases are equipped with sophisticated technology. Because only a small amount of equipment is manufactured in Mexico (such as intravenous solutions, plastic parts and some ultrasound equipment, but no major medical equipment)[9], many physicians buy their own equipment from the United States at market rates. The main obstacle is that most equipment tends to be extremely expensive when bought new, even after elimination of import tariffs after the North America Free Trade Agreement (NAFTA) came into operation between Canada, Mexico and the United States

[8] C. Sole, The Mexican Health Care System, in D. Warner, K. Reed (Eds.), *Health Care Across the Border: The Experience of U.S. Citizens in Mexico.* United States-Mexican Policy Report No.4, LBJ School of Public Affairs. Austin, University of Texas, 1993. p. 79.

[9] Opportunities for United States participation in the expansion of the Mexican health care system. Project Identification Mission, prepared for the United States Trade and Development Agency, 1994. p. 10.

in 1994. Therefore many hospitals and clinics prefer to buy secondhand or refurbished equipment from local suppliers or directly from American suppliers[10].

Nevertheless, Mexico's imports of medical equipment in 1993 rose to US$ 500 million, double the amount of its 1989 imports of medical equipment[11], thus demonstrating that, in general, the health sector is beginning to improve its facilities. And the situation will tend to change as, under NAFTA, tariffs for goods classified in the "A" category, including medical equipment, were eliminated as of 1 January, 1994. This will open the market for United States vendors of medical equipment in Mexico.

Private medicine is considered in Mexico as one of the most profitable economic activities, with salaries varying according to the scope of the practice and location. They can vary from between US$ 20,000 and US$ 30,000, and up to US$ 200,000 or more per annum. The average tends to be around US$ 50,000. Specialists probably earn an average of US$ 100,000 to US$ 150,000 per annum[12]. Most of the best hospitals and clinics are concentrated in some of the biggest cities in the country (Mexico City, Guadalajara and Monterrey). Recently several investors have started developing and upgrading health care centres along the border (specially in the largest border towns) in order to capture American demand for medical services. And regardless of the high costs of buying and importing equipment from the United States, recent information shows that a group of Mexican companies from Sonora placed up to US$ 100,000 in orders at Temple Medical of Arizona[13]. The Mexican public health sector has also made efforts directed at capturing international demand. Recent information indicates that the IMSS offered Mexican migrants living in the United States the opportunity to enrol members of their family living in Mexico by paying a special fee. This will allow them to have full health coverage, including pharmaceuticals, at a fairly low cost. This health care scheme is to be available through all Mexican diplomatic representations in the United States.

In the United States, the health and medical care system is based primarily on private practice, and fee-for-service with public health services. These are provided by the public health system of city, county or regional public health department clinics. And where present, federal-funded community health centres provide care for those unable to afford private care. Hospitals are generally "for-profit" with few large public hospitals available in the border area. People pay

[10] A new C. A. T. scanner sells for US$ 45,000, while a refurbished one can be obtained for US$ 15,000. D. Beachy, Free Trade: Medical Industry Looking South of the Border. In *The Houston Chronicle*, May 29 1994. p. 36.

[11] Project Identification Mission, 1994, p. 36.

[12] E. Mendoza, R. Rangel, Mexican System, a Mix of Public and Private Providers. *Physician Executive Magazine*, Vol. 20, No. 6. p. 25.

[13] L. A. Mitchel, Health Care Revolution in Mexico Opens the Door. *Arizona Business Gazette*, 21 April 1994. p. 42.

for care through public insurance programmes such as Medicare and Medicaid which serve the indigent and the elderly respectively (eligibility and coverage being their main limitations), or through private health insurance obtained by individuals and as "health benefits" from employers, or from their own pockets. Even with health insurance plans, people usually have to pay some amount themselves for care.

Medicaid is a joint federal-state programme for health care assistance for the low income population[14], and its eligibility is based on age and income level. In order to qualify for Medicaid benefits, an individual over 65 generally must have no more than US$ 1,900 in assets, not including his or her house. On the other hand, Medicare is an insurance programme for health care for the aged (over 65). People are enrolled automatically when they reach the age of 65. Medicare is divided in two parts: part A covers services at participating hospitals and limited skilled nursing; Part B is a voluntary programme that pays for 80 percent of customary services at reasonable charges[15]. Although coverage is wide, Medicare does not cover dental work or outpatient pharmaceuticals. The majority of these services are highly used by the increasingly ageing American population. The elderly consume almost 40 percent of all health care[16]. Life expectancy rate in the United States is among the highest in the world. It is expected that by the year 2050, an estimated 68 million persons (roughly 22 percent of the population) will be over 65 years old, while those over 85 will increase eight times to account for 5 percent of the total population[17]. Together with the increase of the ageing population, there has been an increase in the number of elderly people who have substantial incomes.

Despite the huge United States health expenditures, there are still significant numbers of medically underserved people, and some rural populations with very little or no access to health services. Many Americans also lack health insurance[18]. On the United States side of the border there is high

[14] Included within this category are: the aged, blind, and/or disabled families with dependent children, pregnant women and children, and people whose income and/or resources are in excess of the standard for categorically needy coverage. S. Watson, Medicare and Medicaid. In D. Warner, K. Reed, op. cit. p.170.

[15] For part B, the enrolee pays a premium of about US$ 46.00 a month, and Medicare covers 80 percent of the determined fee. Part B covers physician services, medical services and supplies, home health-care services, outpatient hospitals services, outpatient hospital therapy, laboratory and diagnostic tests, x rays, radiation therapy, home dialysis supplies and equipment, physical and speech therapy, and ambulance service. S. Watson, op. cit. p. 173.

[16] V. Fuchs, *The Service Economy*. New York, National Bureau of Economic Research, 1993. p. 14.

[17] D. Warner, Mexican provision of health and human services to America citizens: barriers and opportunities. *Public Affairs Comment Magazine*, Vol. XXXVI, No.1, p. 4.

[18] According to a 1994 report, nine million Americans were without health insurance from January through September 1990, and sixty million had no coverage for at least one month during that time. *Modern Health Care*, 1994, p. 2.

population contrast. Although some of the richest states like California and Texas are located within this region, one of the largest concentrations of medically indigent people also lives in this area[19]. The Latin-origin population is increasing, as well as their life expectancy rates, in many of the American border cities. A recent study reported that the total population of the border states was nearly 52 million residents, out of which 25 percent were of Latin origin (60 percent of all the Latino population in the country)[20]. Although migration has become a nationwide concern for Americans, and their migration controls continue to tighten, several United States insurance companies have been benefiting from it. Because salaries in Mexico are lower, some insurance companies have developed health plans specially targeted at the Latin-origin population, offering up to 100 percent coverage if medical services are consumed in Mexico. And, recently, new organizations called preferred provider organizations and health management organizations among others, are making direct contact with Mexican health providers, arranging fixed prices per service in order to include them in their health policies. Cost and language have become a key element of the success of some of these new health organizations.

[19] *Border Health Report*, 1993, p. 7.

[20] D. Hayes-Bautista, *Workforce Issues and Options in the Border States*, Paper presented at the Border Health Working Group Session held in San Diego, California, 1996.

EXISTING STUDIES ON THE PROVISION OF HEALTH SERVICES IN THE BORDER AREA

Many studies on medical services along the United States-Mexico border have been conducted by different organizations. Interestingly, literature on this topic began to increase in the 1990s mainly because of two developments: the increase in the Latin-origin population in American border towns, and the opening of the Mexican market for investment as a direct result of NAFTA. These two events produced different reactions in the literature, from studies concerned with the control and/or eradication of transmissible diseases menacing the United States through the Mexican border, to marketing studies seeking investment opportunities for the United States in the Mexican health market. All these studies show different approaches to the existing situation with respect to health in the border area.

Up to now, thirty-seven studies have been identified, four of them conducted between 1986 and 1989, and the rest between 1990 and 1996. Thirty-four of the studies have been conducted by American institutions and organizations, two by Mexican institutions, and only one by researchers from both countries. This shows how little attention has been paid on the Mexican side of the border to this new development. The information provided by the studies can be organized into six main groups. There is a group of studies concerned with health status, and the control and/or eradication of transmissible diseases, concluding with the need to devise and create a binational health programme to deal with such issues. Another group of studies covers migration control issues and, to some extent, have xenophobic implications, although they are unable to demonstrate that Mexican indigents are becoming a burden to the American public health sector. A third group of studies concentrates on criticizing the shortcomings of the American health system. A fourth group dwells on the tendency of Americans to use Mexican health services along the border, arriving at the conclusion that people do so because all the necessary elements are present. A fifth group takes into consideration the possibilities of using the Mexican health system as a way to reduce United States expenditure on health. And very recently (coinciding with NAFTA coming into operation), a sixth group deals with marketing studies on American opportunities to invest in the private health sector in Mexico as a way to capture some of the money spent on health by Americans while in Mexico.

It is interesting to see that, although almost all studies acknowledge that Americans travel to Mexico for medical services, only nine actually see it as a new trend. It is true that the studies dealing with American investment opportunities and the reduction of American health expenditures are also aware of this trend, but, ultimately, they focus on different tasks. Seen from a different perspective, these efforts can be understood as an exercise to foster international trade in medical services between Mexico and the United Sates.

TRADING OPPORTUNITIES AND BARRIERS

Despite the fact that existing studies on trade along the Mexico-United States border were not intended to seek elements of comparative advantage, they provide information that can be interpreted in that light. Elements such as the presence of skilled physicians, dentists and nurses, the low cost of medical services and pharmaceuticals, better personal treatment, good quality services, the lack of long waiting periods, easy access and infrastructure, proximity to the United States, and easy border crossings to Mexico all translate into comparative advantages.

The increasing number of United States nationals retiring to live in Mexican border cities, or travelling from the United States to Mexican border towns for various reasons, and the increasing number who seek Mexican medical and dental services and pharmaceuticals are related to demand conditions.

The proximity and presence of United States suppliers of medical equipment (either new or refurbished), and the supply of (low cost) Mexican pharmaceuticals, are related to associated support industries.

The rising cost of medical services in the United States; the poor medical coverage of Medicare programmes, the unaffordability of health insurance programmes for a large part of the population, differences in salaries and in control over prescriptions and medicines between the two countries, and the devaluation of the Mexican peso, are all related to chance.

In general it can be said that, besides the advantage of geographical location, the border region also has a development potential for international trade in medical services. In almost all the existing studies, the medical services mostly used by Americans were those making direct use of physicians' and nurses' time (general consultation, therapy and minor surgery). This fact can be explained by two factors: physicians' salaries in Mexico are lower, and the quality of general medical services is acceptable according to United States standards. Considering that medical services consumed by Americans fall into the realm of "labour-intensive and skill-intensive" activities, it can be said that Mexico has a comparative advantage over the United States in the provision of these medical services. Thus, opportunities for trade exist in those areas.

With respect to the modes of trade, the movement of consumers, in the shape of movement of patients, is the most common one, although recently other modes - the movement of suppliers, commercial presence in the form of affiliates or joint ventures, and telemedicine - are beginning to appear at some of the larger border cities such as Tijuana and Mexicali. The movement of personnel (mainly physicians and nurses) is not freely allowed. The free movement of physicians and paramedics (mainly from the United States to Mexico) is allowed only upon request and in extreme situations (flooding, earthquakes, etc.). It must be clarified that NAFTA does not include, among the professionals mentioned in the agreement, the free movement of physicians. According to NAFTA, professionals willing to work abroad should comply with

all the necessary regulations stipulated by the country in which the professional wants to work[21].

There are certain mechanisms that could be considered as obstacles or barriers to trade. For example, certification and licensing procedures are different in both countries; this may be one of the first obstacles to deal with. In Mexico, licensing is on a national basis, granted by the Secretariat of Health. This allows physicians to practise in any state within the country. In the United States, physicians must comply with state regulations, and these vary from state to state. Therefore, one of the first objectives should be to arrive at an agreement with respect to the type and quality of the services offered to American nationals in the Mexican border area. Within NAFTA this task is deemed to be carried out by local medical associations at the state level on both sides of the border, although they have not done so yet. Professional associations become very important in this event, for they are the ones which have to determine all the aspects related to issues of quality and control.

Certainly an important factor to cover will be the reimbursement of treatment costs by insurance companies as well as the question of malpractice insurance for Mexican establishments and/or for individual medical providers.

A number of common restrictions and controls will also need to be worked out. For example, restrictions should be imposed on the type of research activities to be conducted in alternative care clinics, often partly owned by United States nationals. Regulations concerning prescriptions and pharmaceuticals need to be harmonized. Environmental aspects of disposal of hospital residues must also be taken into consideration.

Other issues to consider are the possible social impact that the development of trade in health services can have on Mexican border towns. Laws, codes and penalties should be designed and implemented in order to prevent Mexican health facilities from refusing health services to Mexicans in order to ensure a place for Americans. A disproportionate increase in the cost of private medical services may also occur as a result of trade, preventing access to them by the local population.

Mexican border towns in general are not fully prepared to deal with international trade in health services. Some of the largest border cities such as Tijuana, Mexicali and Juarez have considerable infrastructure limitations, and existing conditions need to be improved first. Coincidentally, local planning departments tend to be more concerned with developing land for assembly plants (or *maquiladoras*) than with other types of trade.

CONCLUSIONS

The provision of health is different in Mexico and in the United States. In both cases, there are shortcomings that, to some extent, are being covered by

[21] NAFTA, 1992, Ch. XII.

the private sector. Interestingly, and due to proximity, some of the gaps within the American health systems are being covered by the Mexican private health sector, in this way opening opportunities for trade.

Until now neither government has played a major role in the development of international trade in this sector. Therefore the only issues that can be related to governmental interventions are the ones concerned with telemedicine (an issue that the Mexican Government has seen as a way of delivering medical services to remote areas), and with border-crossing facilities, a policy that the Mexican Government has seen as important because of the influx of tourists.

Despite the fact that UNCTAD has been analysing trade in services since 1985, it was not until quite recently - UNCTAD 1997- that the topic was seen as advantageous for both developed and developing countries. It may be said that, hitherto, neither Mexico nor the United States has realized the full potential of developing international trade in health services between the two countries. The Mexican Government has not been aware of it. The United States Government is beginning to realize its importance, mainly as a way to reduce its health expenditure. The only sector to realize its potential has been the United States private health insurance.

If international trade in health services is to be developed, more in-depth studies need to be conducted in order to identify more precisely the type and extent of the demand for Mexican medical services. There is a need to monitor the behaviour of this demand, its trends and shifts, in order to devise specific trade schemes. But, most of all, there is a need to conduct binational meetings dealing with this topic. Up to now, meetings have dealt with health in general and not international trade. Furthermore, there is a great need for sufficient evidence in order to convince local governments of the importance of this sector and the potential benefits of promoting international trade.