UNITED
NATIONS

TD

United Nations
Conference
on Trade and
Development

Distr.
GENERAL

TD/B/COM.1/EM.1/2
7 April 1997

Original : ENGLISH

TRADE AND DEVELOPMENT BOARD
Commission on Trade in Goods and Services, and Commodities
Meeting of Experts on Strengthening the Capacity
and Expanding Exports of Developing Countries
in the Services Sector: Health Services
Geneva, 16-18 June 1997
Item 3 of the provisional agenda

INTERNATIONAL TRADE IN HEALTH SERVICES:
DIFFICULTIES AND OPPORTUNITIES FOR DEVELOPING COUNTRIES

Background note by the UNCTAD Secretariat

GE.97-50672

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EXECUTIVE SUMMARY

1. The health sector in almost all countries, including the most highly developed, is in the process of restructuring. In countries where health services were seen as a right for all, to be supplied or guaranteed by the Government, declining budgets and mounting costs have forced a reduction in government insurance coverage and opened up more scope for the private sector. This has increased the potential for international trade in health services, and a number of developed countries have taken advantage of new trade opportunities in this sector.

2. Developing countries face an even more acute restructuring problem, sometimes as a result of conditions attached to IMF/World Bank programmes, exacerbated by the fact that large segments of the population may have little or no capacity to pay for medical treatment and may have limited access to medical care. For some developing countries, trade in health services is regarded as a means of increasing revenues and strengthening and upgrading their national health service. In engaging in such trade, they are drawing upon competitive advantages which include lower-cost skilled personnel, cultural factors and natural endowments, and unique forms of medicine.

3. The movement of natural persons is of particular importance as a "mode of supply" of health services. The movement of medical personnel seeking higher incomes or higher-quality living and working conditions can give rise to export earnings in the form of remittances, but can also result in a "brain drain" in countries where the same opportunities are not available. In many countries, the outflow of nationals is compensated by the inflow of foreigners, but the poorest countries, including least developed countries, find themselves most penalized as they are unable to obtain replacements. The countries which seem to gain the most from exports through this mode are those which organize such movement in teams, which both creates export earnings and ensures that the personnel return to their home countries bringing with them increased skills. Paradoxically, immigration regulations may be drawn up to facilitate the entry of medical personnel, who then face difficulties in practising due to the lack of recognition of professional qualifications. The establishment of consistent curricula and mutually acceptable professional standards among countries may be a necessary step to facilitate the movement of health professionals in the future.

4. The movement of persons as consumers is growing and taking different forms, no longer being confined to wealthy persons in developing countries seeking specialized treatment in developed countries. Developing countries are evolving strategies to attract foreign patients. While the main barrier may be the inherent insecurity of persons in poor health, the non-portability of insurance policies (government and private) internationally limits the size of the tradeable market.

5. The export of medical education services, once the reserve of a few developed countries, is now becoming an important trade item for certain developing countries. Often students become medical residents, delivering services in the country in which they are studying, thus converting themselves from importers to exporters.

6. The establishment of foreign firms in the health sector has traditionally been prohibited or impeded by a variety of restrictions, including economic needs tests. However, the enlargement of the private health sector has been accompanied by a partial opening of the market to foreign firms in many countries, often with a view to reducing costs, relieving the burden on the public sector, and introducing new technologies.

7. The penetration of foreign markets is being facilitated by the emergence of new forms of business organization such as health management organizations (HMOs), which have exercised downward pressure on health costs.

8. Telemedicine is making trade in health services possible through the "cross-border" mode. Telemedicine can be used to provide medical services to poor countries and remote regions within countries. Some commercial firms are basing their export strategies on telemedicine.

9. The increasing globalization of the health service sector can be seen in the expansion of trade through all four modes of supply. Deeper liberalization has been taking place within regional and subregional agreements. Regulations and restrictions imposed by Governments and private professional associations are being eroded by market forces. However, many restrictions still exist on international trade in this sector, as shown by the relatively limited GATS commitments in this area.

10. Many countries, both developed and developing, are adopting export strategies for health services, and some are liberalizing access to their own markets. However, the limits to competition presented by social, cultural and development considerations, as observed in many service sectors, are more acute in the health service sector, where the lives of individuals and the well-being of the population in general are at stake. A "new generation" of regulations needs to be devised to permit increased trade in this sector as a means of reducing costs while at the same time ensuring that such trade strengthens the quality and coverage of health care.

11. A number of additional factors which affect the capacity of developing countries and their trade performance in the health service sector would seem of similar relevance in other service sectors, such as the importance of movement of persons as a means not only to supply services but also to upgrade skills and technological capacity. In addition, new trade opportunities are provided by emerging technologies which facilitate cross-border trade and by new forms of business organization adept at penetrating foreign markets. However, difficulties will also arise in drawing up regulations and scheduling commitments which foresee such developments. In addition, these factors illustrate the need to exploit the potentially mutually supportive role of the public and private sectors and the importance of the current work under GATS on the mutual recognition of professional qualifications.

12. Trade in the health service sector also demonstrates the extremely vulnerable position of poorer, especially least developed countries, which on the one hand suffer from a "brain drain" and on the other do not have access to advanced technologies. Direct action by the international community is required to prevent a further erosion of these countries' capacity in health and other services sectors.

CHAPTER 1
THE NEW SCENARIO IN THE HEALTH SERVICES SECTOR

13. Governments are faced with a complex set of factors that continue to make it increasingly difficult to provide health services to their populations. In the developed world in particular, high-cost medical interventions combined with an ageing population have made the marginal health returns of many interventions extremely expensive.[1] The rate of globalization of trade, travel and migration, technology and communications has dramatically accelerated over the last two decades, resulting in gains for some and marginalization for others. Ecological problems have emerged, with increased threats to health.

14. The World Health Organization (WHO) reports that although improvements in health status, health coverage and access to health care are apparent throughout the world, these improvements have not benefited all. In fact the number of the poor in developing countries has increased, thereby increasing the potential for health status disparities between the developing and the developed world. Projections indicate that there is a great danger that the gains realized will not be sustainable in the future.

15. It is increasingly being recognized that economic policies have a

significant impact on health status. New policies are tending to reduce government spending on social sector programmes, and if not counterbalanced, these policies could lead to detrimental effects on health status. Considerable concern has been expressed in recent years about the impact of economic development, and in particular the structural adjustment process, on both the environment and social progress in general, especially in terms of education and health.[2] The increased acceptance of the multiplicity of factors that contribute to health status has resulted in attempts to develop intersectoral approaches. The health sector is seeking to interact with other sectors such as agriculture, education, finance, trade, the environment and others.

16. As finances become more limited globally, the need to seek cost-efficient and cost-effective strategies for the strengthening of health systems and health-care interventions is becoming more urgent. Competition between sectors can be expected to become more intense. Understanding the relevant benefits of an intersectoral approach and engaging other sectors in developing coordinated programmes are necessary steps in the development of effective actions.

17. The environment within which health systems and health policy are being developed has changed dramatically. In previous decades, Governments looked forward to long periods of national reconstruction, economic growth and a wider sharing of prosperity. "Redistribution with growth" was the theme for development. Economic orthodoxy and development thinking has changed. The redefinition and reduction of the role of the state is now being seen on all continents. Market mechanisms, rather than public intervention, are increasingly being used to drive national economies. The health sector is also experiencing these changes, and there is growth in private-sector participation in the financing, production and delivery of health and health care services. In some countries public institutions are being sold off to the private sector and new private institutions are replacing or augmenting them. Insurance schemes and community financing are being encouraged, as are private providers. However, a new challenge will be for Governments to continue to steer and regulate the health sector, including private providers, for the benefit of public health.

18. The changing balance between the public and private sector raises concern about equity and access to services, especially for the most needy populations. Most Governments are engaged in health sector reform initiatives, involving fundamental examinations of the financing, organization and management of their systems. The search for new partnerships and sources of revenue are integral parts of these reforms.

19. The issues discussed above affect different countries in different ways, and the capacity to address them depends in part on the socio-economic and political environment of the country.

20. The key issues facing a number of poor developing countries include shortages of resources: financial, material and human. This is aggravated by adverse economic conditions and the loss of trained personnel to other countries. There is also a shortage of technology in many countries, and in others a concentration of high technology that serves only a small part of the population. Countries are searching for opportunities that will provide foreign capital and strengthen their ability to meet the needs of their populations. Among the opportunities being examined are opportunities for trade within the health sector. Countries are seeking areas in which they have a comparative advantage and using this as a basis for the development of services for export.

21. The competitive position of a health service will depend on many factors: cost structure, the availability and skill level of human resources, service differentiation, availability of technology and health facilities. These comparative advantages are reinforced by other factors such as geographical proximity, cultural and linguistic affinities, natural endowments, and the ability to market advantages effectively.

22. The benefits that may accrue from the development of trade opportunities

must be weighed against the potential negative effects. For example, the development of a private facility with state-of-the-art technology to provide services for the wealthy or for foreigners will increase the technology available in the health system. However, it is unlikely to contribute to the improvement of access to health services for the general population, unless arrangements are made that require a proportion of the beds or services to be made available to the public sector. From a competitive point of view, the availability of technology is an important element in making a specific country or health establishment appealing. From a public health point of view, the right balance has to be found between the need to invest in technology to guarantee a modern and effective level of health care, and the avoidance of over-spending. It is clear that, as countries explore opportunities for trade in health services, there must not only be the corresponding regulations that enable this to take place, but more importantly legislation and regulations that support values of national health policy such as equity and sustainability.

CHAPTER 2
MODES OF TRADE IN HEALTH SERVICES

(a) Movement of natural persons

23. In terms of the General Agreement on Trade in Services (GATS), health services include: medical and dental services; services provided by midwives, nurses, physiotherapists and para-medical personnel; hospital services; and other human health services.

24. The temporary movement of personnel to provide services abroad is relatively more significant as a mode of trade in health services due to the essentially labour-intensive nature of these services, the fact that shortages of personnel exist in many countries and the fact that health services, unlike many other professional services (e.g.legal or accounting services), are largely based on universal scientific knowledge.

25. Health professionals move to seek improved living and working conditions and more lucrative remuneration, often shifting from the public to the private sector. They may also wish to acquire higher professional qualifications or to expose themselves to new techniques not available in the home country. Employers seek to purchase skills that are in short supply domestically.[3] The movement of health professionals can offset shortages in the receiving countries, and remittances can improve the standard of living in their countries of origin. Thus, while the permanent emigration of health personnel can result in a brain drain from developing countries, temporary movement can contribute to a general upgrading of skills when the returning persons resume their activities.

26. Developing countries are estimated to supply 56 per cent of all migrating physicians and receive less than 11 per cent.[4] The direction of flows has changed over time. Whereas, in the 1960s, doctors working abroad were mostly from developed countries, since then they have come predominantly from developing countries and particularly from Asia.[5] Many countries experience both an outflow and an inflow of health personnel. For example, the United Kingdom exports junior nurses to the United States and in turn imports nurses (e.g. from Ireland and India) to meet the domestic shortage; Jamaica exports nurses to the United States and imports them from Nigeria and Myanmar. Thus it is the lowest-income countries which are most affected by the "brain drain", as they are unable to attract replacements. For example, South Africa has witnessed an exodus of medical personnel to the United Kingdom, Canada and the United States, and also a migration from the public to the private sector within the country. The resulting shortage in the public sector was first met by personnel from neighbouring countries; however, as this was resulting in an unacceptable brain drain from its poorer neighbours, the South African Government entered into contracts with Cuba to obtain medical personnel to work in more remote areas. In order to halt the brain drain, an arrangement has been made for doctors from Mozambique to work part of their time in South Africa (while resident in Mozambique) so as to supplement their income. Often health professionals from developing countries

provide a great deal of the unskilled labour in the health sector in the developed world, despite the qualifications they may have.

27. Some recent studies draw attention to the saturation of developed country markets, especially the United States and the European Union, for certain categories of health professionals.[6] However, new openings may still be available in specific sectors, such as nursing care for the elderly and for handicapped people or for patients suffering from drug or alcohol addictions, and medical services in remote areas. Cultural affinities and geographical proximity facilitate the movement of health personnel abroad.

Actual or potential trade barriers

28. Restrictions on movement of health personnel may arise in connection with economic needs test requirements, discriminatory licensing, accreditation, recognition of foreign professional qualifications, nationality and residency requirements, state and provincial requirements, immigration regulations, access to examinations for completion of qualifications, foreign exchange controls affecting the repatriation of earnings, and discriminatory regulation of fees and expenses.

29. *An economic needs test (ENT)* conditions temporary entry upon a determination that no resident/national of the host country is available and qualified to carry out the same assignment. In the GATS commitments, an ENT, defined as a barrier to market access under Article XVI, frequently appears as a qualification to commitments relating to the movement of natural persons, including intra-corporate transferees and independent contracted professionals. An ENT acts as a quota restriction and may be qualitative or quantitative. It takes into account current population characteristics and health care service capabilities.

30. *Licensing provisions* can impede entry of foreigners through non-recognition of their professional qualifications or by imposing discriminatory, more stringent and more costly standards on them. Licensing and recognition of qualifications are particularly complicated in cases where no national licensing body exists and granting of the licence to practice medicine is the responsibility of the individual state or provincial authorities, each of which has a medical licensing board. Requirement of registration with, or membership of, professional organizations could also constitute an obstacle to the person wishing to provide a service on a temporary basis.

31. In the United States, for instance, the requirements for obtaining a licence to practice medicine for those with qualifications obtained outside the country vary from state to state, some of which allow graduates of foreign medical schools to practice subject to a written examination. Candidates must also pass the qualifying examination of the Educational Commission for Foreign Medical Graduates and then undertake a period of graduate medical education at a hospital in the United States. Many states grant a licence to practice medicine by endorsement to graduates of accredited Canadian medical schools.[7]

32. In Canada, the requirements for obtaining a licence to practice medicine for physicians with foreign qualifications vary from province to province. Foreigners must also obtain the agreement of the relevant provincial ministry that their professional services are needed. Registered nurses must have been granted a provincial licence to practice in Canada before they can be granted entry as professionals. An employment authorization issued at the time of entry can have a maximum duration of one year. Extensions may be granted in one year increments, at the discretion of an immigration officer. Under the North American Free Trade Agreement (NAFTA), provision is made for temporary movement of health professionals.

33. Within the European Union, discriminatory treatment of nationals of other member States based on nationality with regard to establishment and provision of services is prohibited. Several directives cover health service providers

(Directive 77/452/EEC on nurses responsible for general care, Directive 78/1026/EEC on veterinary surgeons, Directive 80/154/EEC on midwives, Directive 85/433/EEC on pharmacists). Council Directive 93/16/EEC of 5 April 1993 relates to facilitation of the free movement of doctors and mutual recognition of their diplomas, certificates and other evidence of formal qualifications. It establishes provisions to facilitate the effective exercise of the right of establishment and freedom to provide services in respect to the activities of doctors and provides for mechanisms of convergence and coordination. Proposals have been made to provide for examining the problems of Community nationals with third country medical qualifications.[8] Council Directive 89/48/EEC of 21 December 1988 provides for a general system for ensuring the equivalence of university diplomas in order to bring about effective freedom of establishment within the Community. Article 3 is the main provision of the Directive and establishes the general rule that a person who is entitled to exercise a profession in the member State of origin is entitled to recognition of his/her diploma for the purpose of taking up the same profession in the host State. It therefore creates a right to recognition which individuals may rely upon directly before national authorities, both administrative and judicial. The system is based on the principle of mutual confidence and comparability of training levels; however, where major structural differences between training courses existed, the host member State would be entitled to require compensation, namely an adaptation period and an aptitude test.[9]

34. Although professional associations are crucial in maintaining standards and quality of service, they have often attempted to dampen price competition and restrict new entrants. For example, the American Medical Association used to provide for contract practice rules that made it unethical for a physician to treat patients under a salaried contract with a hospital or health maintenance organisation that was controlled by non-physicians. Association rules also considered it unethical for a physician to accept compensation that was inadequate in light of the usual fees in the community. Professionals have used control over medical plans or insurance firms to discriminate against potential competitors in the domestic market and abroad. However, restrictions imposed by professional associations are being eroded by market forces. It should be noted that some joint actions are legitimate and aim at maintaining standards and quality.

35. *Lack of or incomplete information* may hinder health professionals from looking for working opportunities abroad. In response to this problem, a number of specialized firms actively seek medical personnel for foreign destinations.

36. Regulations have often prevented health care professionals from advertising prices, discounts and services. Removing this restraint could be of importance in promoting competition; on the other hand, these regulations have been implemented with the aim of maintaining quality, and preventing deception and consumer injury.

GATS commitments

37. Most GATS commitments on temporary entry and stay of natural persons are not sector-specific and therefore it is hard to evaluate how they will affect health care personnel.[10] The commitments on the movement of natural persons normally include entry requirements for three main categories of personnel - business visitors, personnel engaged in setting up an establishment presence, and intra-company transferees - and a fourth category, namely personnel in specialty occupations. The fourth category could provide some limited access for health professionals, e.g. in the area of management consulting, research and development, and health educational services. Only a few countries thus far have made commitments in the area of personnel in specialty occupations.

38. Some of the trade barriers mentioned above are evident from the market access and national treatment limitations contained in GATS commitments. Moreover, temporary entry and stay of independent health care personnel are generally not covered by GATS commitments. A few commitments do provide for

movement of natural persons in medical and dental services; for example, the European Community (EC), under the subsector relating to professional services, has scheduled commitments relating to: (i) medical, dental and midwives services (CPC 9312, 93191); (ii) veterinary services (CPC 932); (iii) nurses, physiotherapists and paramedical personnel (CPC 93191); and (iv) pharmacists. The commitments relating to (i) are covered by the modes of supply relating to commercial presence and movement of persons. Under foreign commercial presence, some member countries limit access to natural persons or professional associations among natural persons. Under the mode of supply of natural persons, residence or nationality requirements, ENT or limited authorizations apply.[11]

39. The specific commitments on this mode of supply demonstrate that few countries have bound their existing immigration laws and regulations; there is therefore some margin for improving the concessions without actually modifying the relevant legislation. In fact a number of countries have introduced provisions in their immigration legislation to facilitate the temporary entry of certain medical personnel. In the United States, for instance, H1A visas are granted to foreign nurses who are not immigrants and who occupy permanent positions temporarily; this visa does not require certification from the United States Labour Department. A 1994 Act authorizes each state's department of public health to grant waivers for up to 20 physicians per year to work in areas having a shortage of health care professionals.[12]

40. In Australia, of the 24 major classes of temporary resident visas and entry permits, at least nine are relevant to the temporary entry of specialty personnel, including educational personnel, visiting academics, medical practitioners, and public lecturers. In Japan, in addition to persons setting up a commercial presence and intra-company transferees, employment permits for temporary working visas can be issued to 13 categories of persons, including professors for research and teaching at the college level, providers of medical services, and researchers. The United Kingdom has a regulatory regime for non-EC nationals that allows the issuance of work permits to licensed professionals, administrative and executive staff, highly qualified technicians with specialized experience, key workers with expert knowledge, and hospital auxiliary occupations. These categories are subject to a labour market needs test and, in the case of hospital auxiliary occupations, to quotas.[13]

(b) Movement of consumers

41. Trade in health services under this mode includes primarily health services provided to foreign patients; however, educational services provided to foreign students can also be considered trade in health services.

42. In the case of *movement of patients*, the most important barrier is the emotional insecurity of persons who are ill, do not wish to be far from their families, and are particularly sensitive to cultural and linguistic differences. For those persons willing to travel to receive health care, an additional deterrent is the fact that in most cases public health systems and private insurance policies do not cover health treatment abroad (with the exception of some "de luxe" private insurance schemes which include treatment abroad, but charge very high premiums, and of some insurance policies which cover health care received abroad in case of emergency during business trips or vacations). This limits the current market for trade in the form of movement of patients to certain categories of consumers. Patients might, therefore, look for health care abroad if the treatment needed is not covered or not available, or is only partially covered, under their health insurance. Since they have to pay for it, they may consider going where the quality/price ratio is more favourable than at home. Insurance coverage may be less of a factor when there are long waiting lists to have access to medical services, or when the patient feels that the quality of the health services provided by foreign institutions is significantly better than that provided by national institutions and is able and willing to pay, regardless of insurance coverage.

43. Patients seeking health care in foreign countries could include: (i) those

who travel abroad looking for specialized or surgical treatment that employs advanced technology which may not be available at home or for prestigious health institutions; (ii) those who travel to seek convalescence care; (iii) those who travel to specific places to benefit from natural endowments - such as hot springs and spas - and are willing to link medical treatment with other activities, such as recreational tourism; (iv) those who travel for medical and dental out-patient treatment, looking for treatment similar in quality to that they can receive at home but less expensive or for specific services not available in the country of origin; emigrants living abroad and border patients are important groups of clientsin this context; (v) elderly persons who move to countries where costs are lower and the climate is better than in the home country and returning nationals who have lived many years abroad and who are able to retire in their country of origin. Retirees are regarded by many as the biggest potential market for developing countries, and the health care that developing countries are able to provide will affect their ability to attract the elderly. However, a major barrier to retiring abroad is the lack of portability of health insurance.[14]

44. Elements such as well developed transportation, a common or similar language and culture, friendly doctor-patient relationships, readily available information on health facilities abroad, and established links with health institutions in the home country contribute in all cases to making the option of looking for health care in a foreign country more attractive. On the other hand, visa requirements, foreign exchange restrictions or the need to obtain authorization for medical expenditures may discourage many patients from seeking services in foreign countries.

45. Countries which have traditionally attracted foreign patients are the developed countries which can offer health providers of international reputation, specialized treatment, and state-of-the-art technology. However, developed countries compete among themselves on the basis of the fees they charge.[15] A number of developing countries are actively seeking to attract foreign consumers, relying on their ability to offer good health care at prices significantly lower than in the developed countries. Others are trying to penetrate the international health service market on the basis of the uniqueness of the treatment they can offer or relying on their natural, geographical and cultural characteristics; however, these elements are usually combined with price advantages.[16]

46. The European Union has dealt with the problem of the non-portability of public health care insurance through a system under which sickness benefits in kind are provided according to the legislation of the country where an EU citizen resides or stays as if he/she was insured in that country. These benefits may be more or less advantageous than those provided by the country where the citizen is actually insured. After delivering the service, a bill is submitted to the health insurance of the home country for payment.[17] In some other countries (e.g. Egypt, Jordan, Costa Rica), patients can be authorized to obtain treatment abroad at the expense of the national health system (NHS) when the NHS is not in a position to provide the required treatment. However, procedures for authorization can be long and cumbersome. Some countries, including EU member States, have signed bilateral agreements which allow total or partial portability of public health insurance.

47. Until some years ago, the movement of patients was expected to expand, under the assumption that patients would increasingly request highly specialized care and the number of health institutions able to provide it would be limited. However, the trends in other modes of supply, especially commercial presence and cross-border trade, as discussed below, may be reducing the motivation for patients to travel abroad, or may shorten the length of their stay in foreign countries.

48. On the other hand, the global trend of increasing medical costs and decreasing public health care budgets, with the consequent reduction of health care coverage, may encourage a larger number of patients to look for health treatment in countries where the price/quality ratio is more advantageous than

at home. The effort to keep health costs under control may prompt health maintenance organizations in developed countries to include in their network developing country health institutions which can provide medical treatment at competitive prices. The reduction of public health coverage is leading to the expansion of private insurance, which may include provision for treatment abroad.[18]

49. The overcapacity in terms of hospital beds in certain countries, notably the United States, has prompted major marketing efforts to reach potential foreign patients. Similarly, in countries where state-controlled medicine was previously the rule, efforts by medical institutions to attract high-paying foreign clients are beginning to have their impact.

50. In the GATS commitments related to trade in health services, consumption abroad is usually allowed without limitation, but some countries (i.e. Bulgaria, Poland and the United Sates) have indicated restrictions on the coverage of public insurance schemes outside the country.

51. As *students* prefer to study in their own country to avoid future problems in certifying diplomas and obtaining licenses to practice their profession, this kind of movement of consumers takes place mainly when health education is not available in the home country; when the cost of medical or para-medical training varies greatly among countries; when students are unable to meet the qualifications of domestic medical schools; or if they aim at achieving a higher level of education which could facilitate their access to the labour market of the country where they have studied or could allow them to increase their earning potential in their home country. In some cases foreign students become "residents" (postgraduate medical trainees who are delivering services), thus converting themselves from importers to exporters of services, while remaining in the same institution.

52. Usually, developed countries' strength with regard to attracting foreign students is based primarily on the international reputation of their institutions and/or on the uniqueness of the training they can offer, but to an increasing extent cost is becoming a competitive factor. Some developing countries are also using the good reputation of their schools and/or of the special training they can offer, combined with the cost factor, as a means to attract foreign students. The ties established between foreign students and the hospitals where they undergo their studies or training may become an important element later in patient referrals to such institutions from the students' home countries.

53. It seems that the most important criteria for choosing a foreign institution are its reputation, the cost, and the availability of funding. Other factors, such as language, cultural affinities and geographical proximity, also play a significant role. In certain cases it is the uniqueness of the training which attracts foreign students, and such as the case, for example, of traditional Chinese medicine. The choice to go abroad for education and/or training is also influenced by the extent to which foreign diplomas are recognized by the home country.[19]

54. Issues relating to the recognition of diplomas are usually very sensitive. One reason is the objective differences in the curricula offered by different countries/institutions, while another is the resistance of health professional associations to opening the domestic markets to students who have studied abroad, especially when there is no shortage of medical personnel trained in local schools. However, professional associations play a positive role in ensuring that health professionals comply with certain quality standards. Institutions in countries which have attracted foreign students mainly because of low tuition fees and lack of screening in foreign students' enrolment risk being penalized if, at the same time, they are not able to give assurances as to the quality of the education/training provided and the standards enforced in the granting of degrees.

55. Some countries have a long tradition in providing education and training to foreign students (e.g. the United Kingdom[20] or the United States), while others have only recently entered this market (e.g. Australia).[21] Other countries, like China, which have traditionally provided education and training to foreign students in the framework of technical cooperation programmes, are now moving to do it on a commercial basis. However, countries such as Brazil are still receiving foreign students mainly in the framework of technical assistance or other kinds of agreements.

56. The flow of developing country students moving to other countries to study appears to be decreasing, since several developing countries have established medical and para-medical schools to meet national demand.[22] Moreover, the use of information technology, and in particular telemedicine, is affecting the movement of students, since they can use interactive educational services and upgrade their education without going abroad. However, while some years ago students in the health professions would concentrate on medicine, dentistry or nursing, nowadays they may consider enrolling in new disciplines, such as health services management or nursing administration. Since most developing countries are still unable to provide adequate education and training in these new areas, it may be possible to have a number of students considering going abroad for this kind of study/training.

(c) Foreign commercial presence

57. This mode includes the establishment of a commercial presence in a foreign market to provide health-related services to clients in that market. It can be split into the following categories: (i) foreign commercial presence in the hospital operation/management sector; (ii) in the health insurance sector; (iii) in the educational sector; and (iv) on an ad hoc basis.

58. In most countries, foreign investment in the health sector has been subject to considerable restrictions, if not prohibited. However, many countries have started opening their markets to foreign presence in various forms and favouring competition as a means of achieving better health services, reducing price escalation, and taking pressure off the public sector. In addition, new business techniques have facilitated foreign participation with a minimum of actual investment.

59. Foreign commercial presence in the hospital operation/management sector. Hospital management companies usually try to establish themselves in countries which have liberal investment laws, are open to joint venture initiatives, and have either high per capita income or a sufficiently large share of the population able to afford private health treatment.

60. It appears that most providers of health services have established themselves in foreign countries through joint ventures with local partners or triad ventures with local and third-country investors. Acquisition of facilities is one technique of commercial presence but is restricted in many countries, and management contracts and licensing are becoming a preferred means of commercial establishment for hospital services. The involvement of local partnership is usually sought so as to have access to certified and adequately trained local medical personnel. Moreover, a local partner helps in ensuring local contacts and commitments.

61. A significant characteristic of commercial presence in hospital operation/management is the involvement of companies whose traditional business is outside health care services, such as management or pharmaceutical companies. This trend indicates that hospital operation/management is regarded as a growing sector and ideal for diversification. Another increasing trend is to contract non-health-related companies to carry out ancillary health services.

62. Foreign commercial presence in the health insurance sector. Until recently, private health plans have seen little development abroad, in part because the market was limited, but also because in some countries there were

regulations limiting or prohibiting private foreign investment in health insurance.

63. In Brazil, for instance, the health insurance market was opened to foreign capital and companies in May 1996 as part of the commitment of the Government to raise the quality of health services offered, to lower prices and to establish a fair level of competition in the market.[23] However, the anticipated price decreases have not yet materialized, the main reason being that foreign insurance companies are not allowed to invest in hospitals, and the market is therefore still characterized by very limited competition.

64. Another technique for penetrating foreign markets is through "managed care" services, which combine management and insurance. Managed care is a system that in varying degrees integrates the financing and delivery of medical care through contracts with selected physicians and hospitals and links with insurance companies (most "health maintenance organizations" are provided by large insurance companies) to provide comprehensive health care services to enrolled members for a predetermined monthly premium.[24] It thus creates both captive suppliers and a captive market, but serves to reduce overall medical costs by requiring the participating physicians to provide the lowest-cost treatment. In some countries, persons who would normally be unable to pay for private insurance can afford the managed care plans, thus taking pressure off the public health sector. On the other hand, such schemes may lead to the defection of public doctors to the private sector. Managed care firms are resented by independent medical practitioners, who fear a reduction in their autonomy, in their incomes and in the quality of medical treatment, but they find it difficult to compete with the managed care enterprises.

65. Foreign commercial presence in the educational sector. Some well-known medical schools are establishing themselves in foreign countries, including developing countries, usually through joint ventures with local schools. This kind of foreign commercial presence is often accompanied by movement of providers (e.g. professors) and of consumers (e.g. students moving from the headquarters to the subsidiaries and vice versa). The interest for the recipient country lies in the possibility of differentiating and upgrading the curricula available to its students/medical personnel, while the interest for the exporting institution lies in having access to new sources of revenue, spreading its reputation abroad, and avoiding overcrowding at its headquarters.

66. Foreign commercial presence on an ad hoc basis. Companies sometimes establish themselves abroad with the purpose of, for instance, upgrading health facilities within the framework of multilateral funding programmes. This kind of commercial presence is time-limited, since foreign companies usually leave the host country once the specific activities they were called on to carry out have been completed.

GATS commitments

67. According to their GATS commitments, all member States of the European Union maintain some form of economic-need limitations on the establishment of new hospital facilities.[25] Moreover, almost every EU member favours local over foreign interests in the establishment of a commercial presence. Less favourable treatment may be extended to foreign persons or entities with respect to acquiring real estate or investing in health care concerns.[26]

68. In the United States, the establishment of hospitals or other health care facilities may be subject to needs-based quantitative limits. Canada has not scheduled commitments on any health care services. Japan limits ownership of hospitals and clinics to nationals/licensed physicians or groups of persons of whom at least one member is a Japanese-licensed doctor. Moreover, investor-owned hospitals that are operated for profit are prohibited. Regulations are less strict in the nursing home sector, where foreign companies are benefiting from the dramatic increase in the over-65-year-old population in Japan and a shortage of nursing homes and other long-term care facilities in that country.[27]

69. In Brazil, according to the 1988 Constitution, foreign companies cannot own hospitals or clinics. In Mexico, foreign investment is allowed up to a level of 49 per cent of the registered capital of enterprises. In India, foreign companies can establish themselves only through incorporation, with a foreign equity ceiling of 51 per cent. Malaysia maintains economic needs tests. Foreign companies have to set up joint-venture corporations with Malaysian individuals or Malaysian-controlled corporations or both. Aggregate foreign shareholding in joint-venture corporations must not exceed 30 per cent. However, some countries go beyond their commitments and actually allow more openness in their markets.

70. GATS commitments on "life, accident and health insurance services" are most detailed under the commercial presence mode. Cross-border trade is left largely unbound in respect of both market access and national treatment. Somewhat more liberal commitments are made for consumption abroad in respect of market access, but not for national treatment, with the majority of measures left unbound. Among the many requirements for providing life, accident and health insurance services through commercial presence, the following are cited by most countries under market access commitments: limitations on foreign equity participation; requirements to provide services with a specific legal entity; commercial presence; authorization and licensing requirements; limitations on the type of operations performed. A few countries have included such discretionary measures as economic needs tests as well. In national treatment, commitments are less stringent and conditions are mainly related to limited foreign shareholding and nationality requirements.

71. The trend in both developed and developing countries is to open markets to domestic and foreign competition with the aim of reducing costs and improving quality so as to make the private health structure accessible to a number of people who cannot afford it at present. The switch of a part of the population from public to private health structures, with the consequent increase in the human and financial resources available to the public sector, would be especially positive in those countries which suffer from a shortage of medical personnel and health facilities. A new challenge for the private and the public sectors is thus how to coexist in the same market and benefit from each other's presence. Some countries have already worked out arrangements to make sure that domestic and foreign private investments in the health sector are beneficial to the whole population.[28]

72. The opening of markets to foreign insurance companies may also yield some positive results. It seems that domestic companies which have to compete with foreign companies are already improving - in terms of premiums, range of benefits, and conditions for enrolment - the insurance package they offer to their clients. If an increasing number of patients can join private health plans and a larger number of types of treatment are included in those plans, the consequence will likely be less pressure on the public infrastructure. However, a "new generation" of regulations may be required to ensure that foreign commercial presence is supportive of the national health system in the importing country.

(d) Cross-border trade

73. Until recently, cross-border trade in medical services, apart from licensing and royalties, did not seem to be feasible, particularly on a commercial basis. However, the recent rapid development in telecommunication technologies and health informatics has been changing the picture dramatically. Telemedicine, i.e. the provision of medical care using interactive audio, visual and data communication, includes medical care delivery, consultations, diagnosis and treatment, as well as education and the transfer of medical data. To a certain extent telemedicine is a substitute for face-to-face contact between the health care provider and the client, as well as for consultations between health care providers themselves. Other new developments in cross-border trade include the processing of insurance claims/bills in developing countries, as well as offshore medical reporting.

74. One of the driving forces behind the recent provision and application of telemedicine services is their effect on cost inflation. According to studies in the United States, the cost of telemedical services could be expected to be half that of traditional services. Health care providers would be able to see a greater number of patients per day, particularly in cases related to home visiting, and this would particularly benefit understaffed health care institutions.[29]

75. Currently, international trade in telemedical services seems to take place amongst developed countries or involve imports from developed into developing countries.[30] Among the immediate benefits that accrue to developing countries from the development of trade in telemedicine services are improved access to medical care and the upgrading of health treatment in terms of more even quality. Teleconferencing has been established among institutions in Canada, Kenya and Uganda to provide continuing medical education and allow health care workers in Africa to benefit from the latest medical knowledge and advances. The development of telemedicine could eventually have an impact on other modes of supply of medical services since, by receiving cross-border consultations, patients will be less likely to travel abroad, and medical professionals and students will be able to buy medical education services from foreign countries and thus be less likely to move abroad. Telemedicine may also facilitate the development of consistent curricula and mutually acceptable professional standards cross countries.

76. The main factor that will further to development of telemedicine over the next few years will be the continued need to improve access to health care services and reduce their cost, including the financial and time cost involved in the travel of patients, physicians and nurses. With economic growth, the aging of the population, improved levels of education, the emergence of new diseases and the re-emergence and persistence of old diseases, demand for medical services can be expected to grow substantially. The countries that will be able to benefit from telemedical services most will be those that will have enabling technology and trained medical professionals to provide and receive it. On the other hand, lack of access to telemedical networks would not only deny potential benefits to local consumers, but would also marginalize health professionals in those countries which are unable to become part of the network.

Actual or potential trade barriers

77. The existence of enabling technology constitutes a critical element in the provision of some of these services, and the substantial investment needed would make trade in telemedicine services prohibitively expensive in some cases. However, with the general trend of declining costs of equipment and communication links, some problems should be less acute in the near future. Several standards exist for transmitting data and images and for making electronic medical records, and compatibility problems could therefore arise. Internationally agreed standards would enhance trade and comparability of care.

78. Many problems of a technical and ethical nature remain to be overcome before telemedicine could be practised on a broad basis. Concerns remain regarding the privacy of the patient in the provision of information on medical conditions, and steps should be undertaken to ensure confidentiality.

79. The recognition of the qualifications of the service provider and the associated question of licences to provide services across borders are also issues. The question of the ethical and legal liability associated with the provision of medical teleservices involves the issue of the dispersion of medical liability. Solutions similar to those resorted to in traditional medical services could be proposed, i.e. by determining that liability rests with the practitioner who receives a service (e.g. laboratory tests). More broadly, a regulatory framework has to be developed and legislation adopted before full-scale application of telemedicine could proceed.

80. Notwithstanding the favourable effect on patients' spending, telemedicine for the most part is not yet covered by existing insurance schemes. However, fears concerning consumers' unwillingness to accept telemedical consultations and that their preference for direct face-to-face contact would limit provision of telemedicine were not borne out by early studies, which showed, contrary to expectations, that technology acceptance was not a major issue.

CHAPTER 3
EXPORT STRATEGIES IN THE HEALTH SERVICES SECTOR

81. The development of exportable health services is seen as a means of: (a) generating the resources required to reduce the financial pressure of the fiscal deficit created by the need to grant universal health care coverage; (b) improving infrastructure (hospital facilities and other complementary structures) by utilizing the resources resulting from serving foreign demand; and (c) upgrading technological capacities with a direct impact on the national health system which can be assimilated into and/or adapted to the existing human resources infrastructure. A crucial element of any successful export strategy is to seek to benefit from the optimal use of forward and backward linkages between domestic production and the external markets for health care services.

82. Export strategies may be implemented by different actors: (i) Governments; (ii) the public and private sector; (iii) private-sector associations; and (iv) individual companies.

83. Strategies implemented by Governments. The rationale of this strategy is to obtain foreign currency from exports of health services to strengthen the financial capacity of public health institutions and make the health sector a contributor to the global development of the country. Three key examples relate to Cuba, the United Kingdom and Jordan.

84. *In Cuba*, one of the Government's objectives is to convert the country into "a world medical power". In this perspective, a multifaced export strategy in the health sector has been implemented since the end of the 1980s. One of the main elements of the strategy is to send medical personnel abroad, especially to countries experiencing a serious shortage of health workers. Another is to attract foreign patients to specialised clinics which provide high-quality health care at competitive prices. Most of the specialized clinics also function as training centres for national and foreign students. Another facet of Cuban export strategy is to link health care with tourism. SERVIMED, a trading company created by the Government, prepares health/tourism packages to be sold in target markets in cooperation with tour operators and travel agencies. Cuba also relies on service differentiation to make its health services competitive in the world market. Cuban doctors are able to treat with success some skin diseases which are regarded as incurable in the rest of the world. This treatment is associated with the development of new procedures and new drugs. The success of the Cuban strategy is demonstrated by the increasing number of patients who go there every year for treatment. During the 1995-1996 period, more that 25,000 patients and 1,500 students went to Cuba for treatment and training respectively. As a result, the income earned through the sale of health services to foreigners amounted to more than 25 million of United States dollars.

85. In 1988, the *United Kingdom* created the National Health System Overseas Enterprise (NHSOE) as the marketing arm of public health companies and institutions to facilitate the export of health services provided by the public sector. The rationale of the strategy is twofold. First, by exporting medical services, NHSOE is trying to strengthen the financial capacity of public health institutions to maintain and increase the coverage and standards of public health in the United Kingdom. Second, NHSOE provides development and care opportunities to British health professionals through participation in overseas projects. The impact of this strategy has been positive, since public health institutions have

been able to sell services overseas and obtain fresh financial resources. In addition, through training and educational programmes, the NHS has partially overcome the shortage of medical personnel within the public sector by facilitating the stay of foreign professionals.

86. *Jordan* has taken great strides since the beginning of the 1990s towards becoming the medical centre of the Arab world. In this context, it has launched massive investment programmes to upgrade and modernize public hospitals and medical schools. It has, at the same time, created incentives for national and foreign private investment in the health sector. As a result of this strategy, 11 new private hospitals have started operations, most of them benefiting from state-of-the-art technology, including computerized links with prestigious health centres in Europe and North America.

87. Joint strategies implemented by the public and the private sector. In 1994 *Australia* established the National Health Industry Development Forum (HIDF) and launched a programme of assistance to private firms in an effort to bring various parts of the health industry together and help develop a common focus. The Forum is jointly convened by the Ministries of Industry and Health, with the support of Austrade. Australia's export strategy is focusing on two modes of supply, namely cross-border trade and movement of consumers.[31]

88. The public and private sectors in *China* have jointly developed a strategy to attract foreign consumers, to export health providers and to set up foreign commercial presence, mainly based on the uniqueness of traditional Chinese medicine (TCM). Many foreign patients who go to China for treatment are "overseas" Chinese, but an increasing number of non-Chinese patients are showing interest in TCM. The movement of suppliers of services takes the form of health teams working abroad on contract - both in the framework of aid programmes and on a strictly commercial basis. Usually, Chinese institutions enter into agreements with foreign Governments or directly with medical institutions. While they make a small profit, their main objectives are to upgrade the standards of medical services in China by exposing medical personnel to broader experiences and new techniques and to disseminate the use of TCM abroad in order to benefit, in the long run, from a larger demand for TCM from patients in Western countries. China has also entered into joint ventures with partners in the medical profession, as well as with local authorities, and has opened several dozen TCM medical facilities in more than 20 countries. Most of them are the result of initiatives taken by specific medical schools, hospitals, or doctors, while some are operating under the auspices of the competent ministries. As from 1980, China has begun to take positive measures to open its medical and health market to foreign investment and allow joint ventures with foreign counterparts. By the end of 1996, 60 joint ventures with foreign partners had been established in the hospital sector.[32]

89. Strategies implemented by private-sector associations. Private-sector associations are implementing export-oriented strategies to capitalize on market opportunities. An illustrative example of a global strategy developed by a private-sector association is that implemented by London Medicine[33], which has two main objectives: promoting and developing business opportunities for London Medicine's affiliates in order to increase the flows of clinical, educational and research work in London's hospitals and medical schools, and to attract research contracts and investment from British and international companies.

90. Health cooperatives in the MERCOSUR countries have set-up the "Tarjeta MERCOSUR" which allows patients enrolled in the health cooperative of one country to receive health care in another country through the services of the associate cooperative.

91. Private companies' strategies. A number of health companies are developing global strategies to penetrate foreign markets, taking advantage of promotional mechanisms implemented by their Governments. This is, for instance, the case of the Parkway Group and the Raffles Medical Group of Singapore.

92. The Parkway Healthcare Group is the biggest investment group in the field of health care in Singapore and one of the largest health care organisations in Asia. The Group has created Gleneagles International as an international brand. A key element in the strategy of the company has been the acquisition of hospitals in Singapore to build up a base and then step out into the region in joint ventures with partners in the host countries. Gleneagles currently has or is in the process of setting up joint ventures in Malaysia, Indonesia, Sri Lanka, the United Kingdom and India. The company is also setting up a specialized heart hospital in London. Another key element of the strategic directions of the group is to develop a highly integrated network of health companies in the region aiming at offering its patients a wide range of high-quality and cost-effective health care services across Asia. The results of the strategy have materialised in Singapore, where the three hospital of Gleneagles were the first hospitals in Asia to achieve ISO 9002 international quality certification.[34] Similarly, the Raffles Medical Group (RMG) is building up strategic alliances overseas by developing triangular business associations with health care organisations from developed countries in order to venture into third countries in partnership with host country investors.

93. Some private clinics in Canada are trying to exploit the American market, relying on the high quality of their services and on their comparatively much lower prices. A clinic in Toronto is negotiating with United States insurance companies and health maintenance organizations to offer medical services to their customers at a fraction of United States costs. This formula could lead to an unprecedented integration of Canadian and American health care.[35]

Notes

1. In 1995, the OECD countries devoted, on average, 10.4 per cent of their GDP to health care (public and private). In the same year, they spent on average US$ 2,071 per person on health care. In 1970, Medicare, the United States public health-insurance scheme for the elderly and disabled cost the Government US$ 6 billion; now it costs US$ 200 billion. In future it will cost even more: by 2030, Medicare is expected to absorb 7.5 per cent of GDP, up from the current 2.6 per cent. In France total spending on public health has been surging at a real annual rate of more than 5 per cent over the previous 15 years; "A headache", *The Economist*, 8 March 1997; "An unhealthy silence", *The Economist*, 15 March 1997; and "Will Medicare sink the budget?", *The Economist*, 1 February 1997.

2. Warford, J.L., "Environment, Health and Sustainable Development: the Role of Economic Instruments and Policies", Discussion Paper: Director-General's Council on the Earth Summit Action Programme for Health and Environment, WHO, 1994:16

3. Alastair M. Geray and Victoria L. Philips, "Nursing in the European Labour Market: an Economic Perspective", in C.E.M. Normand and P. Vaughan Editors, *Europe Without Frontiers.* John Wiley and Sons Ltd., 1993.

4. *The World Development Report of 1993: Investing in Health*, quoted by: H. Ashok Chandra Prasad, Rajendar Kapoor, *Trade in Invisibles: An Indian Perspective*, Commonwealth Publishers, New Delhi, 1996.

5. A. Mejia, H. Pizurki, E. Royston, *Physician and nurse migration*, WHO, Geneva, 1979.

6. The US Council on Graduate Medical Education has recently determined that by the year 2000 national supply could exceed needs by more than 100,000 physicians; quoted by Shalala Foreign Doctor Letter, 7 February 1997; Internet site: http://www.telalink.net/~gsiskind/docs/shalala.html

7. *World Directory of Medical Schools*, Sixth Edition, WHO, 1988.

8. Commission of the European Communities, *Report to the European Parliament and the Council on the state of the general system for the recognition of higher education diplomas,* Brussels, 15 February 1996, COM(96) 46 final.

9. Some member States have implemented legislation setting up rules on licensing and recognition of qualifications obtained in non-EU countries.

10. For a an overview of temporary movement of natural persons, see: *Information on the temporary migration regime (laws and implementing regulations) in force in selected developed countries*, note by the UNCTAD secretariat, UNCTAD/SDD/SER/7, 25 September 1995.

11. Under foreign commercial presence, it is provided that access is restricted to natural persons only in Germany and Spain. In Italy and Portugal, access is also restricted to natural persons, but professional associations among natural persons are permitted. In Ireland, access can take place only through partnership or natural persons. In the United Kingdom, establishment for doctors under the National Health Service is subject to manpower planning. Under the mode of supply of natural persons, Denmark provides for limited authorization (for a maximum of 18 months) to fulfil a specific function and imposes a national treatment limitation providing for a residence requirement in order to obtain the necessary individual authorization from the National Board of Health. Italy also requires residency in the country. Greece, Portugal, Germany and France impose the condition of nationality. In France, however, access to non-nationals is possible within annually established quotas, while in Germany a waiver may be granted in cases of public health interest. Access for services provided by nurses, physiotherapists and paramedical personnel is provided for mainly through commercial presence and movement of natural persons. Under commercial presence, the EC schedule provides that in Austria, Italy, Portugal and Spain access for nurses is restricted to natural persons. Under the movement of natural persons mode of supply, Denmark provides for limited authorization (maximum 18 months) to fulfil a specific function, Greece and Portugal provide for the condition of nationality, and Italy for residence requirement and an ENT subject to regional vacancies and shortages. The above-mentioned limitations apply to non-EC citizens.

12. *Immigration and Nationality Act of the United States*, Washington D.C. Government Printing Office, 9th Edition, April 1992. Implementing regulations are summarized in *U.S. Consolidated Federal Regulations*, 8-CFR Chapter 1, Washington D.C., Government Printing Office, 1 January 1994 Edition.

13. *Trade in Labour Services and Temporary Movement of Persons as Services Providers*, note by the UNCTAD secretariat, TD/B/CN.4/24, 3 September 1993.

14. It is estimated that, by the year 2015, 15 per cent of the United States' population, 24 per cent of Japan's population and 17 per cent of Europe's population will exceed 65 years of age. By 2015 the United States, Japan and Western Europe will have a combined population older than 65 years of age of more than 100 million; L. Martin, *The Graying of Japan*, Population Reference Bureau, Washington D.C., 1989.

15. Some world-renowned hospitals in Canada, for instance, have started targeting American patients. They can offer a service as good as the one provided in the United States at a fraction of the cost. This is because of cheaper administrative costs, much lower doctors' salaries, and a low Canadian dollar; "A Special Report with Radical Surgery", *Maclean's*, 2 December 1996.

16. In the case of Mexico, for example, geographical proximity to the United States represents the major comparative advantage, along with lower costs, for developing health services exports. In addition, cultural factors in the border area - such as language and the special characteristics of the doctor-patient relationship - attract patients of Mexican descent and other Spanish-

speaking patients who reside in the United States. In the case of Jamaica, an area of comparative advantage for the country is that it shares a common language with its main potential markets, the United States and several neighbouring Caribbean countries. In the case of India, most foreign patients come from countries having a large population of Indian origin.

17. Other countries belonging to regional associations are trying to develop similar systems. In the case of MERCOSUR, for instance, a proposal which would allow citizens of one country to receive health care in another country under the same conditions applying to nationals of that country is under discussion. The main obstacle to the implementation of this proposal seems to be the lack of similarities among the national health care systems; information collected in an interview with the Head of the Advisory Service on Special Health Questions (Assessoria de Assuntos Especiais de Saude) in the Ministry of Health in Brazil in January 1997.

18. In the United Kingdom, for instance, the number of people covered by health insurance has quadrupled in the past 25 years to more than seven million, corresponding to 12 per cent of the population. The private health market is expected to continue to grow at 5 per cent per year and treat 16.5 per cent of the population by 2000. "An unhealthy silence", *The Economist*, 15 March 1997.

19. In the case of institutions in China providing training in traditional Chinese medicine, for instance, the largest group of cash-paying foreign students are Germans, reflecting the fact that some German universities give credits for courses taken in specific institutions in China. In the case of Asia, joint ventures established between Australian universities on one hand and Indonesian and Malaysian universities on the other allow Indonesian and Malaysian students to attend half of their courses/training in Australia and half in their home country, having their diplomas recognized in Australia and at home; information collected in several interviews with the managers of the Universities of New South Wales and Victoria in Australia in January 1997, and with researchers of the Research Institute for International Economic Cooperation of MOFTEC in China in December 1996.

20. Eleven per cent of the entire student body studying at the higher education level in British publicly funded higher educational institutions are foreigners. In the specific subject areas of "Medicine and Dentistry" and "Subjects Allied to Medicine", foreign students total 13,300, i.e. 5,600 from EU countries and the remainder from non-EU countries, mainly Asia.

21. However, foreign students studying in Australia already represent around 11 per cent of the entire student body; information collected in interviews with the managers of the Universities of New South Wales and Victoria in January 1997.

22. *International Trade in Health Services: Main Issues and Opportunities for the Countries of Latin America and the Caribbean*, UNCTAD and Pan American Health Organization, UNCTAD/SDD/Ser/Misc.3, July 1994.

23. Since the opening of the market, four multinational companies have established themselves in Brazil, mainly creating joint ventures with local companies. It seems that the presence of foreign insurance companies has produced some improvements in the Brazilian market, namely companies are offering insurance packages which provide a better coverage and are just starting to save on administrative costs; information collected in an interview with the manager of a consultancy firm specialized in insurance in Brazil in January 1997.

24. The term "managed care" encompasses health maintenance organizations (HMOs), preferred-provider organizations (PPOs), and point-of-service financing and delivery systems. HMOs are the most tightly structure variant of managed care, requiring patients to use participating physicians for medical care except in emergencies. PPOs are networks of individual physicians, medical groups, and hospitals that accept a discounted rate of payment in exchange for the plans' efforts to deliver large numbers of patients. Point-of-service plans are more restrictive than PPOs, but less so than HMOs, in terms of patients' ability to choose doctors; J.K. Iglehart, "Health Policy Report. Physicians and the Growth of Managed Care", *The New England Journal of Medicine*, Vol. 331, No 17, October 1994, pp. 1167-1171.

25. In France, Italy, Luxembourg, the Netherlands, and Spain, the construction or expansion of hospital facilities is limited by a health services plan that identifies local needs. Sweden maintains economic-need limitations on the number of private medical service practices that may be subsidized through its social security health care reimbursement system.

26. In Austria, for example, foreign commercial presence commitments affecting all health care sectors require authorities to consider local interests before authorizing foreign persons or companies to acquire property and before allowing foreign concerns to invest in corporate entities. In France, foreign acquisitions of the stock of newly privatized companies may be limited if total foreign investment exceeds one third of total investment or 20 percent of total equity. In Finland, foreign commercial presence is allowed only through incorporation with a foreign equity ceiling of 51 per cent.

27. U.S. International Trade Commission Investigation, *General Agreement on Trade in Services: Examination of Major Trading Partners' Schedule of Commitments*, (Investigation 332-358), Washington, 1995.

28. In India, for instance, the Government may provide the land to build private hospitals in exchange for a certain number of beds for patients in the public sector; information collected in interviews with the managers of the Apollo Hospital and the Scort Hearth Centre in New Delhi, India, in January 1997.

29. *Financial Times*, 5 February 1997.

30. Since the early 1990s, telemedicine projects have been implemented worldwide by the WellCare Group as a Harvard Medical School initiative to provide national and international telemedicine services. The WellCare Telemedicine Network has set connections between the United States, Europe, Australia and Singapore and has offered telemedical services in a number of developing countries. Another example is Health Care International (HCI), located in Scotland, which is providing the world's first fully electronic patient care and completely electronic medical record. HCI receives referrals from health care providers in the Middle East, Greece, Turkey, Egypt, and the United Kingdom; M. Sosa-Iudicissa, J.Levett, S. Mandil and P.F. Beales Editors, *Health, Information Society and Developing Countries*, European Commission DG XIII and the World Health Organization, IOS Press, 2995.

31. Australia is aiming to become the centre of excellence in telemedicine by promoting and supporting R&D in the application of multimedia processes to deliver health care, taking advantage of its very developed infrastructure and low cost of telecommunications. The treatment of foreign patients encompasses the sale of private beds in public hospitals as well as in private clinics. To facilitate flows of foreign patients to public and private clinics, Australia has developed a Medical Visa. Public medical schools are training foreigners in many areas of health. To meet foreign demand, Australian medical schools have created specialised international departments, set up joint ventures with foreign universities and opened medical schools in target markets. As a result of the above strategy, the income earned from overseas

training activities contributes up to 20 per cent of universities' budgets; The *Australian Health Care Industry*, Australian Health Industry development Forum and Department of Foreign Affairs and Trade, June 1996.

32. Xing Houyuan, *Health Services in China*, Research Institute for International Economic Cooperation, mimeo, March 1997.

33. London Medicine was created in 1993 with sponsorship and support from London medical and business communities, as well as local and national authorities; *London Medicine Brochure*, July 1996.

34. Singapore Trade Development Board, *Singapore Trade News*, March/April, July/August 1996.

35. "A Special Report with Radical Surgery", *Maclean's.*