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TRADE IN HEALTH SERVICES

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Foreword

This revised version of the paper by Rupa Chanda is part of a series of research papers prepared for the Working Group on Health and International Economy of the Commission on Macroeconomics and Health (CMH). The Commission was set up in January, 2000, by the Director General, World Health Organisation, under the Chairmanship of Prof. Jeffrey Sachs. As a member of the CMH and Co-chairperson of this Working Group, I have had the privilege of commissioning research papers on issues of importance for health and the international economy.

The paper provides an overview of the nature of international trade in health services and the lessons that can be learnt from the national, regional, and multilateral experience in this context. The study discusses the various ways in which health services can be traded, the main global players in this trade, and the positive as well as negative implications of this trade for equity, efficiency, quality, and access to health services. It also outlines some of the main barriers constraining trade in health services. While some of these barriers are imposed for reasons for public policy and consumer interest, others are clearly protectionist.

The analysis indicates that there has been little progress to date in opening up this sector to trade and foreign direct investment. It emphasises the importance of harmonization of standards, recognition, and insurance portability if health services trade is to be liberalized multilaterally. The study draws broad conclusions about the main issues and concerns which characterize trade in health services and recommends policy measures to ensure that gains from such trade are realized while mitigating its potential adverse consequences.

The rich analysis in this paper should improve the quality of the domestic policy debate as well as help in the process of the ongoing negotiations under GATS at the WTO.

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Trade in Health Services*

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Introduction

Globalization over the past two decades has affected a wide range of sectors, directly or indirectly. Spurred in part by technological advances and by national political and economic compulsions, the process of globalization has led to the emergence of new forms of business opportunities, processes, and organizations. It has made necessary the establishment of international rules and regulatory frameworks in areas which were previously the exclusive domain of domestic policies. The health sector is one such area which has been significantly affected by globalization despite its public good and non-commercial nature.

The health care sector is among the most rapidly growing sectors in the world economy. It is estimated to be about \$3 trillion per year in the OECD countries alone and is expected to rise to \$4 trillion by 2005.¹ Globalization of health services is reflected in the emergence of new kinds of health care organizations over the past decade and in the increased cross-border delivery of health services through movement of personnel and

¹ UNCTAD/WHO (1998), Chapter 3, p. 55 and UNCTAD (April 1997). The OECD countries account for 90 per cent of world health care expenditures. There is significant variation in per capita health expenditures with some LDCs spending \$5 per year to developed countries such as the US spending \$3,500 per year. The sector's share in GDP also varies significantly across countries, from as low as 2 per cent or 3 per cent to over 10 per cent in some developed countries.

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consumers and through cross-border electronic and other means. It is also reflected in the growing number of companies engaged in joint ventures and collaborative arrangements in the health services sector and in the increased cross-border exchange and dissemination of information, education, and training in this sector. There has been a significant growth in opportunities and in the forms of trade and foreign direct investment (FDI) in health services in recent years, involving developed and developing countries.

Globalization of health services is driven by many factors. These include the decline in public sector expenditures and the rise in private sector participation in health care in many countries, the liberalization of related sectors such as insurance and telecommunications, increased mobility of consumers and health service providers due to declining travel costs and greater ease of travel, and technological advances enabling the cross-border delivery of many health services. In addition, differences in costs, availability, and quality of health care across countries, the emergence of investment opportunities in the health care sector with the liberalization of investment regulations, and the general increase in demand for health services arising from rising income levels and aging populations, have also contributed to the globalization of health services. Although trade in health services is modest at present, given the rapidly growing global health care industry and the likely removal of some of the regulatory barriers to such trade at the regional, multilateral, and the national levels, trade in health services is likely to take on greater importance in the future.

Given these trends, there is a need to understand the implications of globalization in health services for realizing social and developmental objectives and the potential tradeoffs between these and commercial considerations. Such an understanding would enable governments to balance competing concerns. Some of the main questions that need to be asked in this context concern the impact of liberalized trade in health services on the cost, quality, and availability of such services in developing countries. What are the kinds of policies and strategies adopted by countries to promote exports of health services and what lessons can be learnt from these experiences? What kinds of supporting policies and measures are required to ensure that trade in health services is not at the expense of national priorities and the interests of the poor? How can a public-private balance be maintained in the delivery of health services in the wake of increased commercialization of health services? What is the role of the international community and of multilateral organizations including the WHO and the WTO in this regard? These are all issues that deserve serious consideration if governments are to take due advantage of the emerging global opportunities in health services while also successfully mitigating the adverse effects of such globalization.

This paper attempts to answer some of the above questions based on evidence from different regions and countries around the world. Section 1 of the paper provides an overview of the nature of trade in health services in the world economy.² It also outlines

² It is important to note that this study covers a wide range of health services, including services not directly in health but in related areas. It covers services relating to the establishment and management of hospitals, clinics, and in general health care infrastructure, professional services provided by doctors, nurses, and paramedics, and related services such as distance education and consulting in the health sector. It was felt appropriate to take such a broad view of health services given the important linkages between health care delivery and other areas of the economy and the need for a holistic approach in addressing issues and concerns emerging from trade in health services.

some of the general implications of trade in health services for national health systems for aspects such as equity, efficiency, and access to health services. Section 2 discusses the barriers constraining trade in health services, the public policy grounds on which they are imposed, and their potential impact on national health systems. The following three sections of this paper assess the worldwide experience with trade in health services at the national, regional, and multilateral levels, respectively. Sections 3 and 4 discuss the strategies undertaken in a unilateral and regional context to promote and constrain trade in health services. Common features of these experiences are highlighted in both these cases. Section 5 assesses the extent of liberalization that has occurred in health services under the General Agreement on Trade in Services (GATS) and discusses the prospects for opening this sector in the current round of services negotiations in the WTO. Section 6 focuses on emerging forms of trade in health services, in particular, the use of information technology in the delivery of health services, and some of the associated issues and concerns. Section 7 draws upon the issues and concerns highlighted in the preceding sections to suggest strategies and measures at various levels to facilitate trade in health services, increase the scope for gains from such trade, and to address some of the attendant concerns.

I Overview of global trade in health services

1.1 Modes of trade in health services

Health services can be traded in various ways. Borrowing from the characterization of various modes of supply under the GATS framework, trade in health services occurs via four modes of supply.³

1.1.1 Cross-border delivery (mode 1)

The first mode is ***cross-border delivery*** (mode 1) of health services. The latter includes shipment of lab samples, diagnosis, and clinical consultation done via traditional mail channels. It also includes electronic delivery of health services or telehealth services. The latter makes use of interactive audiovisual, and data communications to provide services such as diagnosis, second opinions, lab testing, surveillance, consultations, transmission of and access to specialized data, records, and information, and continuing education and upgrading of skills.

Within mode 1, telehealth, which is the “integration of telecom systems into the practice of protecting and promoting health” and telemedicine, which is the incorporation of these systems into curative medicine are growing in importance. Today, global demand for telehealth services is estimated at \$1.25 trillion, which includes direct clinical services of \$804.2 billion, professional back up services of \$22.5 billion, consumer health information related services of \$21.6 billion, continuing professional education services

³ The General Agreement on Trade in Services conceptualizes services trade via four modes of supply. These include cross-border trade, consumption abroad, commercial presence, and movement of natural persons (as opposed to juridical entities). All four modes of supply are relevant in the case of health services and are discussed in turn in this section.

of \$3.9 billion, and management of health care delivery services of \$235.5 billion.⁴ Countries are engaged in a variety of telehealth services such as telepathology, teleradiology, and telepsychiatry and many cross-border telemedicine initiatives have emerged.⁵ For instance, telediagnostic, surveillance, and consultation services are provided by US hospitals to hospitals in many Gulf countries and to some countries in Central America. Telepathological services are provided by Indian doctors to hospitals in Nepal and Bangladesh and telediagnosis services are provided by hospitals in China's coastal provinces to patients in Taiwan and Macao and some South East Asian countries. There is also considerable scope for related services such as medical transcription which are being increasingly outsourced to developing countries such as India to reduce costs. With further advances in telecommunications technologies and declining costs of electronic delivery, the scope for mode 1 based trade in health services is likely to grow, not only among developed countries but also increasingly from developed to developing countries and from the more advanced developing countries to poorer neighbouring developing countries.

1.1.2 Consumption abroad (mode 2)

The second mode of health services trade is ***consumption abroad*** (mode 2). This refers to the movement of consumers to the country providing the service for diagnosis and treatment. Such trade is driven by differences in cost, quality, and availability of

⁴ CIBS (1999-2000).

⁵ Related to mode 1 based trade in health services are emerging trends such as cross-border processing of insurance claims, bills, and offshore medical reporting.

treatment across countries as well as factors such as natural endowments, existence of alternative medicines and treatment procedures, long waiting lists for treatment in the source country, and cultural, linguistic, and geographic proximity between sending and receiving countries. Consumption abroad in health services also consists of movement of health professionals and students for receiving medical and paramedical education and training abroad. Some developing countries such as Thailand and India provide technical assistance in the area of medical education services by reserving seats for students from other developing countries.

Trade flows in mode 2 occur among developed, among developing, and across developed and developing countries. It is common for instance for affluent patients in developing countries to seek specialized high quality treatment overseas in developed country hospitals or in neighbouring developing countries with superior health care standards. It is also common for persons in developed countries to seek quality treatment at a fraction of the cost in developing countries, or to seek alternative medicines and treatments and take advantage of natural endowments in developing countries. For instance, patients from developed countries such as the US and the UK can get bypass surgeries or transplants done at one-fourth or one-fifth of the cost in high quality corporate and super specialty hospitals in developing countries such as India, indicating the tremendous scope for gains from trade due to cost differences.⁶ With escalating health care costs and aging populations in developed countries and increased portability of

⁶ See, Chapter 13 in UNCTAD/WHO (1998).

health insurance following opening up of the insurance sector in many countries, consumption abroad in health services is likely to grow in future.⁷

1.1.3 *Commercial presence (mode 3)*

The third mode of trade in health services is ***commercial presence*** (mode 3) which involves the establishment of hospitals, clinics, diagnostic and treatment centres, and nursing homes. Countries have become increasingly open to foreign direct investment in order to upgrade and modernize their health care infrastructure and training facilities. For instance, developing countries such as India, Indonesia, Nepal, Maldives, Sri Lanka, and Thailand have opened their markets to foreign collaboration in the health services sector. Health care companies in developed and some developing countries are also increasingly engaging in joint ventures, alliances, and management tie-ups. Such ventures typically involve acquisition of facilities, management contracts, and licensing arrangements with some degree of local participation to ensure access to certified and adequately trained local persons and to ensure local contacts and commitment. The growing trend towards commercial presence in health services is evident from the many regional health care networks and chains that have been formed in recent years. For instance, the Singapore based Parkway Group has acquired hospitals in Asia and Britain and has created an international chain of hospitals, Gleneagles International, through joint ventures with partners in Malaysia, Indonesia, Sri Lanka, India, and the UK. It has also

⁷ One of the main limitations to consumption abroad in health services has been the lack of portability of insurance. With privatization in the insurance sector, this constraint is likely to be relaxed increasing the scope for mode 2 based health services trade. This constraint is discussed in detail in section 2.

set up a dental surgery chain through joint ventures in South East Asia. The Raffles Medical Group in Singapore has formed strategic alliances globally by developing triangular business associations with health care organizations from developed countries, in partnership with host country investors. The aim of such companies is to develop an integrated network of health care companies offering a range of high quality and cost effective health services.

There are also growing opportunities for diversifying commercial presence in health services. For instance, with the liberalization of foreign investment regulations in hospital operations and management and with the spread of managed care, there are opportunities for commercial presence in management of health facilities and allied services. Some countries are entering into contract-based management and administration of foreign owned or joint venture hospitals. There are also emerging opportunities for firms with experience in accreditation, legislation, and medical standards. Another emerging area for commercial presence is in medical and paramedical education with many well-known medical schools of international repute, establishing joint ventures with local medical schools. Finally, with the integration of information technology in health care delivery, commercial presence opportunities are likely to emerge for firms with experience in IT and health care, including establishment, maintenance, training, and design of such systems.

The overall trend is towards opening up various segments of the health services sector to foreign equity or other forms of participation. With mounting pressures on

public resources and a squeeze on public sector expenditures on health care in many countries, commercial presence in health services is likely to become more important as a means of generating resources for investment and upgrading of health care infrastructure. Trade flows in this mode are mainly from developed to developing countries. However, a few corporate hospitals in developing countries such as India are looking towards regional markets for establishing hospital chains and in the areas of hospital operations and management.

1.1.4 Movement of health personnel (mode 4)

Finally, health services can be traded through the ***movement of health personnel***, (mode 4) including doctors, specialists, nurses, paramedics, midwives, technicians, consultants, trainers, health management personnel, and other skilled and trained professionals. In fact, this mode along with consumption abroad constitute the bulk of trade in health services today. The factors driving cross-border movement of health service providers include wage differentials between countries, search for better working conditions and standards of living, search for greater exposure, training and improved qualifications, and demand-supply imbalances between receiving and sending countries in the health sector. In the nursing profession, mobility is particularly important, given nursing personnel constitute 70 per cent of health care staff and 80 per cent of direct patient care. In most countries there is a demand and supply imbalance in the nursing sector.⁸ For instance, there are shortages in the UK, Denmark, Israel, Italy, Norway, and the Middle East and also a shortage of specialty nurses in many countries. Cross-border

⁸ See, Chapter 8 in UNCTAD/WHO (1998).

movement of nurses is driven by such shortages in addition to factors such as the poor distribution and utilization of nurses, wage differentials, poor working conditions, retraining requirements, poor management and compensation practices, and lack of jobs in the home country.⁹

Trade in health services via movement of persons mainly consists of exports of health providers from developing to developed countries and between developing countries in certain parts of the world. An estimated 56 per cent of all migrating physicians flow from developing countries to developed countries while the latter receive only 11 per cent of all migrating physicians. The emigration percentage is even higher for nurses. The extent of movement of health personnel is evident from a few examples. For instance, in Ethiopia, 55.6 per cent of pathology graduates left the country between 1984-94 (book) while in Ghana, only 22 of 65 medical graduates remained in the country.¹⁰ There is also a south-south flow of persons in the health sector, such as by Cuban doctors to Ghana on limited term contracts, from African countries such as Ghana to Jamaica, and from India to the Gulf States and the Middle Eastern countries on short-term contracts or as economic migrants. Among the most prominent exporters in this mode are

⁹ Chapter 8 in UNCTAD/WHO (1998) discusses interesting patterns in recruitment around the world for the nursing profession. North America recruits from Argentina, Australia, Canada, Chile, Colombia, Cyprus, Denmark, Hong Kong, India, Ireland, Jamaica, Japan, Mexico, Netherlands, New Zealand, Norway, Philippines, Sweden, Taiwan, Trinidad and Tobago, and the UK. The Middle East recruits from Australia, Belgium, Canada, Denmark, Germany, India, Ireland, Kenya, Malaysia, Netherlands, New Zealand, Norway, Philippines, Sweden, Trinidad and Tobago, and the UK. Europe recruits from Argentina, Australia, Belgium, Denmark, India, Ireland, Netherlands, New Zealand, Philippines, and Sweden. The West Pacific countries recruit from Hong Kong, Ireland, Netherlands, New Zealand, Philippines, Taiwan, Tonga, and the UK. Both the private and the government sectors are involved in recruitment. The recruitment patterns indicate that countries may be both exporters and importers of health service providers.

¹⁰ See, Chapter 2 in UNCTAD/WHO (1998).

countries such as India, the Philippines, and South Africa whose nurses, doctors, and technicians emigrate to countries in the Middle East, the US, UK, and Australia. The Middle East is an important host market for a wide range of health professionals, with significant demand for doctors, nurses, X-ray technicians, lab technicians, dental hygienists, physiotherapists, and medical rehabilitation workers. Some countries have significant outflows as well as inflows of medical staff. For instance, Jamaica imports nurses from Myanmar, Nigeria, and Ghana and exports nurses to the US and Canada. The UK experiences outflow of specialists and doctors to the US and Canada while receiving nurses and doctors from India, South Africa, and Ireland.

The approach towards mode 4 based trade in health services by exporting and receiving nations varies depending on the individual needs of countries and the demand-supply characteristics of the sector. Some source countries encourage outflow while others create impediments in the form of authorization requirements, clearances, and contractual arrangements with the home country government or disincentives in the form of migration taxes. On the receiving side, some developed countries such as the US have special visa schemes to facilitate the entry of certain classes of health personnel, such as nurses, to meet domestic shortages in those areas while impeding the entry of other health professionals through quantity limits on visas and certification requirements. To the extent that movement of professionals impinges on national labour market and immigration policies as well as recognition and certification requirements, the scope for mode 4 based trade in health services depends on the relaxation of these regulations. Growing cross-border delivery of and training in health services may reduce the need for

such flows by alleviating the shortage of health professionals in the recipient countries and by enabling health professionals in developing countries to get access to the latest technology and information.

1.2 Data issues

One of the main constraints to understanding the nature of trade in health services and to analysing trends in this area is lack of reliable, comprehensive, and internationally comparable data. Most of the data available is anecdotal in nature. While services have always been difficult to quantify in terms of volumes and values due to their nonstorable and intangible nature, this problem is all the more severe in the case of social sectors such as health where data is simply not available at a disaggregated level.

Balance of payments (BoP) data on services trade typically cover transport, travel, and insurance services, with a remaining heterogeneous category of “other services”. There is no separate category for health services. Trade in health services is captured in bits and pieces under several items in the BoP. It is mainly captured within travel services in the form of earnings from treatment of foreign patients and expenditure by nationals for treatment abroad, that is, mode 2. However, for almost all countries, the expenses for health purposes are not separately available under travel and so a proper estimate of mode 2 based trade in this sector cannot be obtained. Trade in health services is also captured under “other services” to the extent that there is cross-border delivery of health care through traditional and electronic delivery of such services, that is, mode 1. It is also partly captured under remittances and transfers relating to movement of health personnel

across countries or mode 4. But even in these latter cases, there is no separate categorization for health services and so the value of trade cannot be estimated specifically for this sector. The BoP data also does not capture commercial presence in health services. This has to be estimated based on sales and transactions of affiliates of domestic and foreign health companies. The latter is, however, available for only a limited set of developed countries.

In short, there are no good estimates of the volume or value of trade in health services and existing data are likely to seriously underestimate its true magnitude.¹¹ While information on modes 1, 2, and 3 are available in the BoP, they are far from comprehensive and are subsumed within larger categories. Some of the best information that is available is from in-depth country level case studies. Thus, one of the imperatives is to collect internationally comparable and comprehensive data on trade in health services to facilitate an understanding of the international trade and investment trends in this sector, an issue taken up later in this study.

1.3 Implications of trade in health services

It is difficult to say whether trade in health services is good or bad since there are many competing considerations. The net impact depends on the specifics of the country

¹¹ This further begs the question as to why trade data in health services is particularly poor or even nonexistent while there is available disaggregated data for other service sectors such as financial services and telecommunications. Is this due to the small amount of current global trade in this sector and thus the lack of interest of policy makers in collecting information in this regard or is it merely a reflection of the difficulties in capturing health services trade? It is probably a combination of the two reasons. Health services have never been perceived as a commercially oriented sector and thus collection of trade data in this sector has never received much attention.

and its national health care system, the regulatory environment, the strategies adopted to facilitate or constrain trade, and the externalities associated with such trade for the rest of the economy. Each mode has its benefits and attendant adverse consequences and thus needs to be assessed in turn. It is important to note two points at the outset. The first point is that many of the negative outcomes discussed in this section have existed for some time and are present even today. The question to ask, however, is whether the increasing globalization of health services is likely to aggravate such outcomes and pose additional challenges. The second point is that the welfare implications of health services trade vary depending on whose welfare one is considering. In the following section, the welfare implications are considered for society or the country at large and not that of the individual service provider or consumer.

Cross-border delivery of health services through information and communication technologies has direct and indirect implications for health conditions in poor countries. For instance, telemedicine can enable health care providers to cater to remote and underserved areas and segments of the population, thus enabling greater access to health services and promoting equity in the provision of health services and working directly to improve health care provision and disease prevention. Telemedicine can also help alleviate human resource constraints by enabling remote delivery of some health services, enable more cost-effective surveillance of diseases, and provide affordable and better quality diagnosis and treatment in poorer countries. Developing countries can use telemedicine to widen access to medical care, upgrade the often uneven quality of health treatments within the country, and save on foreign exchange as there would be reduced

need for domestic patients to go overseas for treatment. Telemedicine can also enable developing countries to update medical education via teleconferencing and other interactive electronic means. The latter in turn could help reduce the need for developing country health care professionals to migrate abroad for exposure and training purposes. The diffusion of technology via telemedicine can be a useful tool for distance learning for poor and remote regions, communities, and countries. Telemedicine may also help increase the efficiency of the health care sector by making use of interactive methods and by making possible more rapid and up-to-date services at lower cost. There may also be indirect benefits due to increased transparency and efficiency of governance with the use of information and communication technologies, which in turn could improve the availability and delivery of publicly provided health services.¹²

The aforementioned gains can be realized provided there is the requisite infrastructure, which in turn requires substantial investment. One could question whether the resources required for investment in telemedicine are not better invested elsewhere such as in basic health care facilities, for disease prevention and cure where there is a direct impact on the poor. Could telemedicine channel revenues away from rural and primary health care towards specialized centres which cater to the affluent few in developing countries? If telemedicine results in concentrated technologies which serve only a small part of the population, or if it is at the expense of public investments in basic preventive and curative health care services and the public health care system, then it can reduce equity in health care. Given the substantial costs involved in providing wider

¹² See, Chandrashekhar and Ghosh (2001) for a discussion of the implications of information and communications technologies for health conditions in low income countries.

access to such technology and the problems of resource allocation in developing countries where basic infrastructure for health and education is lacking, investments in telehealth services can come at the expense of equity and meeting basic social needs. Also, to the extent that telemedicine attracts skilled workers from other services as well as within the profession, it may further reduce equity. The cost effectiveness and affordability of telemedicine is also an important consideration since many developing countries lack the required telecommunications infrastructure, with telephone and electricity lines being nonexistent and unreliable in many parts of the country. Hence, the gains noted earlier have to be weighed against such equity and cost considerations, particularly in light of the highly capital-intensive nature of this mode of supply.

Trade in health services via consumption abroad also has mixed implications. On the positive side, it may enable exporting countries to undertake improvements in the national health system by generating foreign exchange earnings and additional resources for investment in this sector. It can also help in the upgrading their health care infrastructure, medical knowledge and skills, technological capacities, and health care standards in the country. For countries which import health services through consumption abroad, the latter can be an important means of overcoming shortages of physical and human resources, particularly, for specialized health services. The availability of good quality, affordable treatment at geographic proximity is often an important criterion in such cases. For instance, Bangladeshis seek specialized treatment in India due to the latter's competitive prices and geographic proximity. For similar reasons, patients come from Maldives, Bhutan, and Nepal to India, and patients from the border regions of

countries such as Myanmar, Laos, and Cambodia, Brunei, come to Thailand for treatment.

However, consumption abroad based trade in health services may also result in a dual market structure or aggravate such tendencies within the health care system. It can result in the creation of a higher quality, expensive segment catering to wealthy nationals and foreigners and a much lower quality, resource-constrained segment catering to the poor. Availability of services, including beds, doctors, and other trained personnel may rise in the higher standard centres at the expense of the public sector. Unless efforts are made to ensure that the services are equally available to nationals, mode 2 may result in crowding out of the local population.

Thus, as with mode 1, it is difficult to assess the net impact of mode 2 based health services trade on the domestic health sector. Efficiency gains in the form of increased revenues and quality may come at the cost of social equity. The net impact depends on whether public funds are used to subsidize health care providers who cater to foreign patients. It depends on whether the quality of services to the general population improves or whether separate facilities are established which cater only to foreign and affluent domestic patients. If public funds are indeed used to benefit foreign patients only, then the efficiency gains from consumption abroad may be more than offset by the negative impact on equity and access for the public.

The implications of commercial presence are similarly mixed in nature. Like consumption abroad, commercial presence in health services can generate additional resources for investment in and upgrading of health care infrastructure and technologies, generate employment and reduce underemployment of health personnel. It can enable the provision of expensive and specialized medical services, and increase competitive capacity, quality, accessibility, and productivity of health care services. The availability of private capital could reduce the total burden on government resources and help reallocate government expenditure towards the public health care sector. Affiliations and partnerships with reputed health service institutions in developed countries can also help in the development of service facilities in developing countries. It also creates opportunities for trainees from developing countries to seek training in international centres of excellence. Commercial presence can also make possible quality improvements through the introduction of superior management techniques and information systems. There may also be positive externalities for national training institutions. Foreign commercial presence in the medical education sector in the form of joint ventures between foreign and local medical schools can help recipient countries differentiate and upgrade curricula while generating revenue for the exporting institution and enhancing the latter's reputation.

However, again, the aforementioned benefits are not guaranteed. The gains realized from reduced pressure on government resources may be offset by the huge initial public investments that may be required to attract foreign direct investment in the sector. If superspecialty corporate hospitals are established using public funds and subsidies,

then there would be a diversion of resources from the public health system. Mode 3 based health services trade may also result in a two-tier health care system consisting of a corporatised segment and a public sector segment. Such two tiering may also create a problem of internal brain drain, with better quality doctors, nurses, and specialists flowing from the public health care segment to the corporate segment which is better paid and has superior infrastructure. Moreover, foreign direct investment may be concentrated on high-end technology and not the kinds of services which address the broader social needs of the population. Such a dual system arising from commercial presence may thus result in crowding out of poorer patients and a “cream skimming” phenomenon whereby those who need less but can pay more are served at the expense of the poor and more deserving.

Countries such as Thailand and Bangladesh have experienced such problems in the context of commercial presence and privatization of health services. In Thailand, there has been increased outflow of service providers from the public to the private health sector, partly in response to the emergence of joint venture private hospitals formed by local and foreign companies. This internal brain drain has aggravated the shortage of health personnel and problems with the quality of distribution of these resources in the country. Such flows have also worsened the distribution of health personnel between rural and urban areas and between Bangkok and other provinces.¹³ Similarly, in the case of Bangladesh, following the opening up of the health sector to foreign direct investment in November 1999, concerns have been voiced about internal brain drain of health service

¹³ Janjaroen and Supakankunti (2000).

providers. While the potential benefits in terms of technology, infrastructure, employment of health personnel, and foreign exchange savings are recognized, there has been public debate about the implications of such opening up for equity, access for the poor, and the adverse effects on health coverage of the general people and the poor. To prevent foreign commercial presence from hurting national health objectives, it has been suggested that a regulatory framework be introduced to ensure that the benefits of upgrading are extended to all patients along with special provisions for the poor, such as assigning a certain percentage of the beds in the new hospitals to the poor for free or subsidized treatment.¹⁴ Thus, commercial presence as well as consumption abroad in health services may have undesirable consequences in the absence of well-enforced contractual arrangements between the government and private health care establishments to ensure access for the needy local population and in the absence of systems for transfer of resources and cross-subsidization from the private to the public health care system.

The implications of trade via movement of health service providers are similarly mixed in nature. From the sending country's perspective, increased mobility of health care providers can help promote the exchange of clinical knowledge among professionals, help upgrade their skills, and raise the standards of health care in the home country, provided these service providers return to the home country. There are also gains to the sending country from remittances and transfers. From the point of view of health professionals, mode 4 is definitely welfare enhancing as it provides them with

¹⁴ Rahman (2000).

opportunities to earn higher wages, widen their knowledge and skills, and work with superior health care facilities and with better equipment and infrastructure.

For the receiving country, mode 4 in health services often provides an important means to meet shortage of health care providers, to improve access to health care services, improve the quality of such services, and to contain cost pressures. A case in point is Mozambique, which is among the poorest countries in the world. Mozambique is dependent on foreign health personnel. Doctors from the national cadre provide primary care while senior foreign specialists, mostly from South Africa and Portugal, are used to staff large hospitals and fill public health positions. The same is true for another very poor country, Mauritania, where there are very few qualified local doctors and specialists. The country depends on foreign doctors from France and neighbouring countries such as Tunisia and Morocco. In addition to importing foreign personnel, some countries also enter into collaborative arrangements with more advanced countries in the region and with developed nations to receive assistance with training and infrastructure development. Movement of health care providers across countries can also facilitate mutual recognition of health service providers and adoption of common certification procedures and harmonization of standards across countries.

However, there are also adverse implications for equity, quality, and availability of health services for the source countries if the outflows of health service providers are of a permanent nature, that is, if there is brain drain of health professionals. The problem of brain drain and measures to stem brain drain have been discussed extensively in the

trade literature. It is relevant not only in health but also in a variety of other skilled service professions. However, given the public service dimension of health services, it is particularly problematic in the case of this sector.

Brain drain in the health care sector is of major concern to many developing countries as illustrated by the wide range of countries suffering from this problem. In South Africa for instance, an estimated 10,000 health professionals emigrated from the country during the 1989-97 period.¹⁵ According to information from medical schools, between one-third to one-half of the graduating class in each year emigrates abroad, temporarily or permanently, with the majority going to the US and the UK.¹⁶ More than 10,000 medical and biotechnology experts from Egypt are estimated to have emigrated from the country.¹⁷ Some 60 per cent of Ghanaian doctors trained locally during the 1980s have left the country and in Sudan an estimated 17 per cent of doctors and dentists left the country during the 1985-90 period. Over 21,000 Nigerian doctors are practising in the US while the Nigerian health care system suffers from a shortage of health care practitioners.¹⁸ During the 1990s, out of 1,200 doctors trained in Zimbabwe over this period, only 360 were practising in the country in 2001. A large number of nurses emigrated to the UK, Australia, and New Zealand. The main reasons cited were low wages, poor working conditions, and political instability.¹⁹ In Jamaica, some 50 per cent of registered posts for nurses and 30 per cent of posts for midwives went unfilled in 1995

¹⁵ Kaplan, Meyer, and Brown (2000).

¹⁶ Cohen (1997).

¹⁷ Khalil (April 1999).

¹⁸ Oyowe (May 1997).

¹⁹ Nyathi (2001).

while there was outflow of public health nurses, therapists, midwives, technicians, and certain categories of medical specialists.²⁰ In Pakistan, it is estimated that on average, about half of the country's medical graduates in any year leave the country and go to the West. Only a small fraction of these graduates return to Pakistan, though the numbers are not known. Even as early as the 1960s, one-fourth of the country's 17,000 or so medical graduates, emigrated abroad and most never returned.²¹ Even developed countries such as Canada have experienced brain drain of specialists in the health professions to the US following cuts in health care expenditures and closure of hospitals and clinics, although unlike developing countries, developed countries have also had the compensating benefit of inflows of health professionals.²²

Brain drain imposes significant costs on the source country. Emigration of health personnel can create shortages in the home country thus reducing the access to and range of health services. There is loss of human capital investment and of public resources especially when medical training and education are publicly funded and subsidized, as they are in many developing countries. One study estimates that South Africa experienced a loss of 67.8 billion Rands worth of human capital investment in the health care sector in 1997 given a training cost of 600,000 Rands per doctor incurred by the state. Such loss of financial and human capital is only partly offset by the remittances arising from such outflows. Moreover, there are income distributional and reallocation

²⁰ UNCTAD/WHO (1998), Chapter 8.

²¹ O. Gish (Nov. 1999).

²² DeVoretz (September 1999), Canadian Medical Association Journal (October 1999), CMA submissions to Parliament (June 1998).

consequences since remittances and transfers are private and do not flow directly to the public sector unlike the direct benefits that flow from the retention of domestic health professionals. Movement of students from developing to developed countries results in loss of trainees and valuable human resources in the health sector of developing countries to the extent that it is permanent in nature.

Thus it is clear from the preceding discussion that trade in health services is driven by a wide range of factors. The competitive position of a country in health services depends on its cost structure, the availability and skill level of its human resources, the extent of service differentiation, and the availability of technology and health facilities. Comparative advantage in this sector is reinforced by factors such as geographic proximity, cultural and linguistic affinities, natural endowments, and the ability to market these advantages. A country's ability to export health services thus rests on both inherent and acquired advantages. With an estimated 40 per cent of all expenditures on health care coming from private sources and in the wake of declining budgets, rising costs, and reduced government insurance coverage, opportunities for trade in health services are bound to expand in the future.²³ But, as the preceding discussion indicates, trade in health services has positive and negative dimensions. Appropriate regulations, safeguards, and supporting policies have to be introduced if the goals of equity and efficiency are to be met.

²³ World Bank estimate.

It is important to point out, however, that many of the adverse consequences of globalization in health services noted above, are really a result of internal factors and not globalization per se. Given these internal conditions, globalization may create further distortions and disparities, thereby possibly aggravating such problems. However, globalization may also provide opportunities for correcting some of these distortions and underlying conditions. For instance, the root cause of brain drain in health care from developing countries is low wages, poor working conditions and infrastructure, and social and political factors. While trade may open up opportunities for increased flows of health care professionals between countries and thus brain drain, it may also help in retaining and attracting health professionals back to the source country by raising standards, improving infrastructure, and creating more domestic employment opportunities in the sector. Similarly, the problem of crowding out of nationals from the health care system due to consumption abroad of health services, is often due to inadequate human and physical resources, reflecting the inadequate investments by most countries in the health care sector. In the absence of appropriate regulations to ensure access for the needy, trade may aggravate the crowding out problem. However, if safeguards are in place to ensure access for the needy, then trade can augment the resources available for investment and alleviate the pressure on the health care sector by expanding facilities for all. Thus, it would be wrong to hold trade culpable for such outcomes. The impact of trade in health services for equity, access, costs, quality of health services is in large part dependent on the policies and safeguards governments put in place.

II Barriers to trade in health services

There are numerous constraints to trade in health services. Some are justified on public policy grounds while others are motivated by purely protectionist objectives and political economy reasons. Many of these barriers simultaneously cut across the different modes of supply.

There are three broad categories of barriers to trade in health services. These include: (a) restrictions on entry and terms of practice by foreign health service providers; (b) restrictions on foreign direct investment in the health sector and in related sectors; and (d) domestic infrastructural, regulatory, and capacity constraints. In each case one needs to ask whether these barriers are justified, on what grounds, whether they can be overcome, and whether alternative measures can be considered which would both facilitate trade in health services and compensate for or safeguard against the negative consequences of such trade.

2.1 Restrictions on entry and practice by foreign health service providers

Cross-border mobility of health personnel is restricted by border measures as well as domestic regulations which are used to regulate entry as well as the terms and conditions of stay and operation by foreign health service providers in the host country. Such constraints limit the scope for trade via mode 4 and also indirectly via mode 3 to the extent that movement of health personnel is required for staffing and management of foreign commercial establishments in this sector.

Border measures consist mainly of immigration regulations which include quantitative limits on entry and various eligibility conditions for entry. Employment authorization is granted by immigration officers upon approval by the relevant national ministry and the duration of employment may be limited to one year with extensions granted at the discretion of immigration authorities. In some professional categories where there is oversupply in the host country, government officials may altogether prevent entry. As noted above, there are also constraints imposed by some source countries on outflows of their health professionals through emigration clearance requirements and migration taxes.

Domestic regulatory measures include economic and local market needs tests and manpower planning tests which are used to determine the need for foreign health service providers and the quantity to be allowed into the host country. Such tests permit temporary entry after determining that no resident or national of the host country is available with similar qualifications to carry out the task. However, since these tests are often very discretionary in terms of the criteria used to determine necessity and in terms of their administration, they constitute nontransparent and often discriminatory barriers to trade in health services.

Domestic regulations concerning accreditation and licensing requirements for foreign health service providers constitute another major constraint to health services trade. In the absence of mutual recognition agreements between the home and host countries, foreign health professionals are often subject to highly stringent and

discretionary standards. In the US, for instance, foreign qualified doctors and nurses must requalify to practice in the country. This requires passing the qualifying exam of the education commission for foreign medical graduates following a period of residency at a US hospital. Often access to examinations may itself pose a problem for foreign health professionals. Another major constraint in this context is the absence of a single licensing body in some countries. In such cases, foreign health professionals are required to meet recognition requirements of individual provincial and state authorities, each with their separate medical licensing boards and with very different standards. For instance, in Canada, licensing requirements vary across provinces. Relevant provincial ministries must agree on the need for the professional service provider. Registered nurses require provincial licences to practice before they can enter Canada. In some countries, there are also requirements of membership or registration with professional organizations, where the latter in turn may depend on meeting nationality or permanent residency requirements, de facto ruling out the scope for practice.²⁴

Professional associations in the host country, while important for ensuring adherence to minimum standards in the profession, may often be protectionist in their intentions, seeking to protect their income by deterring entry and limiting competition from foreign health professionals. They may reduce price competition by preventing foreign health service providers from advertising their prices, discounts, and the services offered. For instance, the American Medical Association has in the past prevented foreign health service providers from advertising and engaging in price competition and has used

²⁴ Such certification and recognition requirements also constrain trade based on consumption abroad of health services.

its control over medical and insurance firms to discriminate against potential competitors in the domestic market and abroad.

2.2 *Restrictions on FDI in health and other sectors*

Foreign investment regulations in the health care sector affect the scope for trade via mode 3. Until recently, most developing countries did not permit foreign private participation in their health sector given its public good nature and its perception as a sector that is exclusively in the government domain. It is only during the 1990s that developing countries have liberalized their foreign investment laws in health services. Common barriers to foreign direct investment in health services include limits on foreign equity participation, discriminatory tax and other treatment, restrictive competition policies, economic needs tests, authorization requirements and clearances from the national ministry of health, and quantitative limits on the number, location, staffing, and management of foreign establishments. Mode 3 is further constrained by restrictions on movement of health care practitioners and managers required for commercial presence.

Trade in health services is also constrained by restrictive investment regulations in related areas such as insurance, education, and telecommunications which not only affect mode 3 but some of the other modes of supply as well. Foreign investment regulations prohibiting foreign private players in the insurance sector limit the portability of insurance coverage across countries. The latter coupled with lack of recognition of qualifications for those rendering treatment and services to the foreign patients, restricts patient mobility across countries and thus the scope for consumption abroad in health

services. Similarly, limits on foreign participation in educational and training institutions in the health sector also constrain trade in health services by limiting the scope for cross-border movement of health trainers, educators, and students. Another important related area is telecommunications where barriers to foreign presence affect upgrading of infrastructure, access to new technologies, and cost of services, thereby constraining the scope for trade in health services through telemedicine and ancillary services such as medical transcription and internet based medical education and exchange.

2.3 Domestic constraints-regulatory, infrastructural, and capacity related

Trade in health services is also constrained by domestic regulatory, infrastructural, and other inadequacies. Chief among these is the absence of a well-developed regulatory and legal framework to address issues pertaining to certain forms of health services trade, in particular, telemedicine. Cross-border electronic delivery of health services is at present limited by the absence of regulatory frameworks to deal with malpractice liability, confidentiality and privacy of information, recognition, lack of insurance coverage, and cross-border payment arrangements.

Infrastructural, financial, and human resource constraints also limit the scope for trade in health services across all modes of supply. Inadequate telecommunications facilities are a major constraint to cross-border electronic delivery of health services. Deficiencies in health care infrastructure and low standards, including inadequate and low quality physical and human resources, limit the potential for exports of health services via all four modes of supply. Shortage of well-trained and skilled doctors,

nurses, and technicians, shortage of financial resources, beds, clinics, and dispensaries, limits the potential for consumption abroad in health services. Similarly, insufficient human and financial resources limit the potential for exports via commercial presence and cross-border movement of health service providers. Shortage of financial capital constrains investments in and upgrading of infrastructure, skills, and training required for exporting health services. Large gaps in the availability of basic infrastructure availability in areas such as telecommunications, the lack of investment in schooling and in developing skills and literacy, and low penetration of computers within developing country populations are all constraints to the expansion of information technology based trade in health services.

In addition to the aforementioned barriers to health services trade, there are other restrictions. These include foreign exchange controls which affect overseas treatment, regulations on repatriation of earnings as well as on fees and expenses of foreign health service providers which affect commercial presence and movement of health professionals across countries, visa and travel formalities which affect consumption abroad and mobility of service providers. There may also be discrimination against foreign health professionals in the form of harsher working conditions, particularly in the nursing and paramedical segments. Domestic competition policies relating to price discrimination, advertising practices, and firm size are also constraints to health services trade.

It is important to recognize that some of the barriers discussed above are used to protect consumers, to maintain professional standards, and to ensure equity in the public health care system. However, some of these barriers are primarily aimed at limiting competition and protecting incomes of local service providers at the cost of foreign health professionals. This distinction between a purely protectionist policy and a public interest policy often depends on how the regulations are administered, whether they are transparent in their criteria and use or whether they are used in a discretionary and discriminatory manner. Thus, the justification for such regulations as well as their implications are likely to vary across countries, depending on the needs and specificities of the health sector in individual countries and how they are implemented.

III Individual country experiences with trade in health services

Given the paucity of data on trade in health services, it is difficult to estimate the extent of market access and protection in this sector and to quantify the impact of such barriers and their removal for costs, quality, and availability of health services. Most of the work in this area has involved case studies of individual countries to assess the costs and benefits arising from trade in health services. The following discussion highlights the experience of various developing and developed countries with regard to trade in health services. It distinguishes between countries which are players in the global health services market due to active promotion of such trade as opposed to countries which are global players due to inherent factors or existing demand-supply and cost conditions. In some cases, trade is a result of both conscious strategies and inherent factors.

3.1 Developing countries and trade in health services

Several developing countries such as Cuba and Jordan have adopted conscious strategies to promote exports and imports of health services. Countries targeting exports of health services have relied on inherent advantages as well as introduced policies to develop a competitive advantage and niche in this sector. The objectives have primarily been to earn foreign exchange and remittances and increase the financial capacity of the public health care system, to generate employment, and to upgrade the national health care infrastructure and standards. Developing countries which have promoted imports of health services have mainly focused on addressing domestic shortage of health personnel and facilities and on improving the quality of domestic health infrastructure. Other developing countries such as India have not had specific policies to promote such trade but are nevertheless important players in this market. The following discussion looks at the experience of selected developing countries.

(a) Cuba

Since the end 1980s, Cuba has adopted an export strategy in health services. Its exports in this sector amounted to \$30 million in 1998, rising from less than \$20 million in 1994.²⁵ The Cuban strategy for promoting health service exports has focused on four areas.

²⁵ Wasserman and Cornejo (1999).

The first is consumption abroad. Cuba attracts foreign patients from countries in Europe, Russia, and from Latin America and the Caribbean to specialized clinics in the country which provide high quality care at competitive prices. The Cuban strategy has also aimed at service differentiation, such as focusing on treatment of certain kinds of skin diseases which are incurable in other countries, and on the development of new procedures and drugs such as for pigmentary retinopathy or vitiligo. In 1995/96, more than 25,000 foreign patients came to Cuba for treatment generating an estimated \$25 million in sales of health services to foreigners.²⁶ Free or subsidized care is provided to patients from some countries. There are also bilateral agreements between the Cuban government and social security institutions of other Latin and Central American countries to facilitate consumption abroad, with rates agreed upon by both parties. To facilitate exports under this mode, the government has provided for easy payment facilities including payment with credit cards or any convertible currency.

In the context of consumption abroad, Cuba has further differentiated itself from many other countries by combining health care with tourism. The government has created a trading company called Servimed to sell combined tourism and health care packages in target markets with the help of tour operators and travel agencies. Servimed provides health services to tourists. This company is specifically responsible for health services trade under the ministry of public health. The company made a profit of \$4 million in 1988, serving over 2,000 foreign patients. Two smaller agencies have also been

²⁶ UNCTAD (April 1997).

established in health tourism to provide rehabilitative and convalescent health services through resorts and spas.

The second area of focus has been movement of health personnel given its availability of low-cost, highly qualified health service providers. Cuba has adopted a strategy of sending health personnel abroad on short-term remunerated contracts which are supervised by the Cuban Economic Office. In some cases, exports of health personnel are based on solidarity agreements with countries. In 1991, 624 Cuban health professionals and technicians went to 24 countries to provide health services overseas. These included physicians, dentists, nurses, and middle-level health technicians. The target markets are typically developing countries where there is a shortage of health service providers. These include various African countries such as Ghana, Jamaica, South Africa, Mozambique, Zambia, Guinea-Bissau, Angola, poor Central American countries such Nicaragua, and Middle Eastern countries such as Libya. However, since most Cuban health professionals serve abroad as internationalists, at rates subsidized by the Cuban government. Hence, the foreign exchange earnings from such outflows are meagre given their development assistance nature. Recently, there have been efforts to increase the remuneration associated with such flows. The Cuban Ministry of Public Health is also interested in diversifying to activities such as advisory and consultancy services and providing medical equipment maintenance and medical information services as part of its strategy of exporting professionals in health and allied areas.

The third area of focus in Cuba's export promotion strategy for health services has been in medical education. Cuba provides training and education to foreign students at specialized clinics in the country. An estimated 1,500 students came for medical training to Cuba in 1995/96.²⁷ Scholarships are provided to foreign medical students under bilateral agreements. Services for graduate level training of specialists are priced at \$12,000 to \$16,000 for medicine and dentistry per year and graduate level courses for paramedics are priced at \$1,500 per month. The foreign exchange earnings from exports of medical education services are thus substantial.

Cuba has also focused on establishing itself as an important regional exporter of health services. It has a programme for health service exports directed at the countries of Latin America and the Caribbean. It exports consulting services in biotechnology, pharmacy, and provides medical information to countries such as the Dominican Republic and Uruguay in the region and has joint ventures in health services with firms in Argentina, Brazil, Mexico, and Colombia. Cuba also provides telemedicine to countries in the region given its modern technology and infrastructure investments in this area.

Integral to the Cuban health services export promotion strategy have been the objectives of providing employment to qualified health service providers, of making use of excess capacity in the sector to make medical and pharmaceutical products, of generating resources for investment in health care infrastructure, and of providing an alternate source of financing for the public health system. To support this strategy, the

²⁷ Wasserman and Cornejo (1999).

government has adopted a conscious policy of investing in necessary services such as clinics, labs, biotechnology, technology for telemedicine, and in other information services, including directing part of the foreign investment in the country towards the health sector. The telecommunications sector has received most of the foreign investment in the country and this has facilitated the establishment of telemedicine links between all hospitals and the provision of advanced services, such as diagnostics, surgery, second opinion, and epidemiology, to the remote areas of the country. There is a project on telemedicine and information with data base services such as Medline which was established in 1992. As a result, today, Cuba is one of the most advanced countries in the use of modern technology within the region. The export strategy has also exploited the linkages between health and other sectors such as education and tourism and used exports of health services to promote value added in related areas.²⁸ The Cuban strategy has also focused on regional diversification, tapping specific target markets within the region and elsewhere such as in Scandinavia, Canada, and parts of Africa.

(b) Jordan

Jordan is another country which has consciously promoted health service exports. The country is accepted as the medical centre of the Arab world. Jordan has invested in upgrading and modernizing its public hospitals and medical schools. It has private hospitals with state-of- the-art specialized technology. Many of these hospitals have links

²⁸ A large part of the foreign investment in Cuba is directed at tourism services and is from Jamaica, Barbados, Canada, Mexico, and various European countries. Part of tourism activity is in turn relevant to health services trade.

with renowned hospitals and medical centres in Europe and North America. Jordan has also created incentives for national and foreign private investment in the health sector. The country exports health services to countries in the region through consumption abroad given its superior health care facilities within the Middle East and through movement of its health professionals given the high quality but relatively low cost of its health service providers. These advantages have no doubt been partly facilitated by the investments made in this sector from foreign and domestic resources and the country's openness to foreign collaboration in health services.

(c) China

In China, there has been a joint strategy by the public and private sectors to promote exports of health services. The focus of this strategy has been on consumption abroad, commercial presence, and on movement of health service providers. The strategy aims at attracting foreign consumers to China for treatment, with particular focus on exploiting the unique features of Chinese traditional medicine and special treatment procedures. Foreign patients who come to China include those who are working or studying in the country, tourists, and overseas Chinese residents. Most tourists and foreigners residing in the country get medical services in the big cities of Beijing, Shanghai, and Guangzhou at much lower costs than in developed countries. Some foreigners and overseas Chinese residents also come for special treatment in Chinese traditional medicine out of belief in these alternate treatment procedures and because it is affordable. Hence, China has consciously tried to make a niche in the alternative

medicines market in order to tap this segment of the market for foreign patients. Chinese institutions have signed agreements with foreign governments and foreign medical institutions to help disseminate traditional Chinese medicine abroad.

The Chinese export strategy has also focused on establishing commercial presence abroad, including the setting up of joint ventures with overseas partners. By the end 1995, there were 100 such joint ventures, though relatively small in size, in more than 20 host countries. In these joint ventures, China provides labour services and technology while the host country provides the premises and equipment. Traditional Chinese medicine facilities have also been opened overseas. These are mostly small clinics with a few doctors practising traditional Chinese medicine such as acupuncture and moxibustion.

China also promotes health service exports via the movement of service suppliers in medical teams. Such exports depend on the state labour export companies and are based on intergovernmental agreements on labour exports. An estimated 15,000 doctors of western and Chinese medicine, pharmacists, and nurses have been sent abroad from China over the last thirty years. Chinese health service providers have gone to over 20 countries in Asia, Africa, the South Pacific, Europe, and North America.

There has been little effort to promote the role of cross-border delivery in China's health services trade. The scope for the latter is limited by infrastructural constraints in the country's telecommunications sector. Although there is some telemedicine which is

used to transmit information, to enable academic exchanges with foreign medical research institutions, and for telediagnosis services between the coastal provinces and Hong Kong, Macao, Taiwan and some South East Asian countries, to date, such trade is of low value.

China has also adopted a liberal strategy towards the imports of health services, particularly with respect to commercial presence. The health sector has been opened to foreign investment since 1980. Foreign wholly owned establishments and joint ventures are permitted in the Chinese health sector. As of end 1996, there were 60 joint ventures in the hospital sector.

Despite the conscious policies to export health services via modes 2, 3, and 4, China's exports in this sector are quite small. The latter is mainly due to the presence of various external and internal barriers. Exports via movement of health professionals are constrained by licensing requirements which prevent Chinese doctors from practising in Europe and North America as their degrees are not recognized. Chinese doctors must requalify by passing host country exams, where they encounter problems in getting access to the exam, with the terms and conditions of the exam, and with language.²⁹ Exports via consumption abroad are constrained by lack of insurance coverage, particularly in the case of traditional Chinese medicine where only certain kinds of treatment may be allowed and only certain kinds of professional qualifications are recognized by insurance companies, given the low level of understanding about alternative medicine. The nature of Chinese medicine also poses certain difficulties in

²⁹ For example, the Commission on Graduates of Foreign Nursing Schools does not have an exam centre in China.

that treatment procedures may be long and expensive and thus lack of insurance coverage precludes consideration of such treatment altogether. Cultural and linguistic differences also make it difficult to undertake treatments where interrogation and continuous interaction are required. In addition, factors such as shortage of medical equipment, lack of sufficient investment in modern health care infrastructure and technology, a backward telecommunications sector, differences in education systems, and problems with marketing and information dissemination have also constrained China's trade in health services.

(d) *India*³⁰

India is one of the most prominent developing countries engaged in exporting health services. India exports health services primarily through movement of health service providers to both developed and developing countries. Indian doctors, nurses, and technicians go the Middle East, the US, Canada, UK, and Australia on short-term contracts, for training, and as economic migrants. There are an estimated 60,000 doctors of Indian origin in the UK and some 35,000 in the US. Although several developed countries also constitute important destination markets, outflows to the latter are constrained by recognition requirements and immigration regulations. The majority of outflows are to the Middle East and Gulf countries. India has bilateral agreements with six Middle Eastern countries and some others for providing private and government doctors on short-term assignments. Such short-term exchange is aimed at alleviating the

³⁰ Most of the discussion on India is based on Chapter 13 in UNCTAD/WHO (1998) and WHO, SEARO, 1999.

shortage of health professionals in these countries while also providing opportunities for greater exposure and skill upgrading for Indian medical professionals and foreign exchange earnings for the country.

However, much of this outflow is not short-term in nature and is more in the form of migration of qualified permanent doctors and nurses, particularly from public hospitals and institutes where wages are low and working conditions are poor. Given the shortage of high quality nurses and technicians in the country, such outflows have a significant adverse impact on the public health care system and strain existing resources further, necessarily hurting the availability and quality of health services for the poor in the absence of other safeguard measures.³¹ Moreover, since many of the emigrating doctors and nurses have received training which is subsidized by the Indian government at public sector medical and nursing colleges, the brain drain constitutes a major loss of public investment in human capital. There is little compensating inflow of foreign health service providers into India which mainly takes the form of visiting faculty from Canada, US, and the UK for short-term consulting and training assignments.

India also exports health services through consumption abroad based on the low costs and high quality of treatment provided at specialty corporate hospitals that are of international standard.³² Patients come for treatment from developed countries such as the UK and US as well as developing countries such as Bangladesh, Nepal, Sri Lanka, and

³¹ Although there are an estimated 500,000 nurses in the country, there is still a shortage of nurses due to the large numbers who emigrate to the Middle East and other countries.

³² However, a larger number of patients are going from India for treatment abroad than coming into the country for treatment.

countries in the Middle East for surgery and for specialized services in areas as wide ranging as neurology, cardiology, endocrinology, nephrology, and urology . India's main advantage in this mode lies in its availability of highly qualified doctors, nurses, paramedics, and hospital professionals and its ability to provide high quality but affordable treatment relative to that available in developed countries. For instance, a coronary bypass operation costs between Rs. 70,000 to Rs. 100,000 in India while it costs between Rs.1.5 to Rs. 2 million in Western countries. A liver transplant costs Rs. 7 million in the US and only one-tenth in India. Superspecialty hospitals such as Apollo get surgery cases from the US, from foreign tourists, nonresident Indians, and foreign residents for such treatment. In 1995-96, the highly reputed All India Institute of Medical Sciences, a public sector hospital and medical centre received 342 foreign patients. An estimated 50,000 patients come from Bangladesh each year seeking treatment in Calcutta and other Indian cities. Although India imposes no restrictions on entry of foreign patients, factors such as lack of portability of insurance coverage and lack of recognition of Indian medical qualifications by foreign insurance companies pose a constraint for India's exports under this mode.

A recent study on Bangladesh's imports of health services from India indicates the significance of consumption abroad based trade in India's health sector and the reasons underlying this significance.³³ This study finds that Bangladeshi patients spent some \$1.4 million on treatment in India in 1998-99, up from \$0.2 million in 1993-94,

³³ This refers to a study, titled, "Bangladesh-India Bilateral Trade: An Investigation into Trade in Services" (April 2001) prepared by Dr. Mustafizur Rahman, Centre for Policy Dialogue, Dhaka under the South Asian Network of Economic Institutes work programme.

mostly for specialized treatment concerning heart diseases, cancer, and kidney diseases. However, the latter estimates of expenditures by Bangladeshi patients in India are likely to be an underestimate since they only reflect official endorsements of foreign currency by the Bangladesh Central Bank for medical purposes. They do not capture other sources of funds. Based on a survey conducted by the author of this study, the choice of India as a destination is due to the superior quality of treatment and better surgical interventions in India, due to unavailability of specialists and lack of trained nurses and lab technicians in Bangladesh, and due to cultural, geographic, and linguistic reasons. Systems have also developed to facilitate consumption abroad in health services between the two countries. For instance, in the border areas of Bangladesh and India, there are agents who facilitate the process of obtaining medical services in India. Several medical institutions in India have made arrangements with Bangladeshi clients, including special counters to deal with Bangladeshi patients, speedy treatment, concessional rates, and contacts between doctors in the two countries.

Another niche area for India in the case of consumption abroad is traditional medicine. India has a large number of alternate traditional medicines, including unani, ayurvedic, and homeopathic forms of treatment. Holistic health care services have been developed at some health resorts in India, combining alternate systems of medicine. Many patients come to India for treatment in these alternate systems. The Indian state of Kerala is the main destination market for such patients. The Ayur Vaidya Sala (Ayurvedic school) at Kottakkal in Kerala is popular in the Gulf, Malaysia, Germany, the US, and the UK. There is a lot of scope to exploit India's comparative advantage in

traditional medicine further, through active marketing in markets where there is a high regard for such treatments and procedures, by combining health care services with tourism packages, and by augmenting health services to include spas, massages, thermal baths, and other rehabilitation services. Indian medical institutions are also engaged in exports of medical education services through the provision of seats to foreign students. While public institutions provide these services at subsidized rates, private hospitals such as Manipal charge very high fees to the tune of \$20,000 per year to foreign students. Thus, consumption abroad in medical education services is used both to generate resources and to promote bilateral cooperation among developing countries.

In recent years, with the growing corporatization of the health sector in India, foreign direct investment have become increasingly important in India's health sector. India has gradually opened the health sector to FDI and in some cases has permitted 100 per cent foreign equity ownership. Transnational companies are investing a lot of money in setting up new hospitals with state-of-the-art equipment in India. For instance, a German company has been given approval for 90 per cent foreign equity ownership for setting up a 200 bed hospital in Delhi. GMBH of Germany has been given approval for 100 per cent foreign equity ownership for setting up a state-of-the-art orthopedic clinic in Mumbai. Nonresident Indians have been given permission to set up high tech hospitals, often with 100 per cent ownership. There are also several super specialty corporate hospitals that are being built in collaboration between Indian and foreign companies. For instance, a \$40 million cardiac centre has been set up at Faridabad by a consortium between Australia, Canada, and India. Max India which has a three-tier structure of

medical services, including, consultation and diagnosis, multispeciality hospitals, and general hospitals has invested Rs. 200 crores in India's health sector. It has tied up with HM International for clinical trials of drugs which are under research abroad. Fortis Healthcare has invested Rs. 250 crores in setting up a 200 bed hospital specializing in cardiology at Mohali along with 12 cardiac and information centres in an around this town. The company plans to increase the capacity to 375 beds and to tie up with overseas partners. At present, the main constraints to inward commercial presence in health services include foreign equity ceiling, quantity limits, and differential treatment for the acquisition of land by foreign companies, although there is a trend towards relaxing such restrictions.

The emergence of modern corporate and investor-owned hospitals in the country is also helping attract Indian health care professionals working abroad. There are the first signs of reverse brain drain in the health care sector. Indian doctors working overseas are taking pay cuts to work in India. Fortis Healthcare has five doctors who have returned from the US to serve in their superspecialty hospital in Mohali. At Max, five out of the 35 doctors on board are from the US. Apollo Hospitals has 138 fulltime doctors who have returned from abroad. These professionals are being lured back by the emergence of world-class facilities due to increased capital flowing into health care, the chance to be part of a new delivery system, and the opportunity to give back to their country.³⁴

³⁴ *Economic Times* (April 6, 2001).

There is also growing interest in outward commercial presence by corporate hospitals based in India. The Apollo group of hospitals, India's first corporate hospital, has set up a hospital outside the country and plans to invest Rs. 2,000 crores to build 15 new hospitals in India, Sri Lanka, Nepal, and Malaysia. Other corporate hospitals in India, including Wockhardt and Gleneagles International also have major expansion plans within the region. Indian companies are increasingly investing in health facilities in the region in collaboration with foreign partners.³⁵

In addition to facilitating consumption abroad and improvements in the country's health infrastructure, commercial presence in health services has also created other avenues for exports of health services. Some corporate hospitals such as Manipal, have diversified their activities to areas such as medical studies, clinical trials, and research and generate additional resources through fees for such services.³⁶ With the emergence of more corporatized health care establishments in India, the opportunities for such export diversification are likely to grow in future.

In addition to trade via modes 2, 3, and 4, India is also emerging as a potentially important exporter of telemedicine services. Indian doctors have the expertise to provide diagnostic and advisory services such as MRI scans to neighbouring developing countries. Foreign owned hospitals in India can also provide such services to doctors in neighbouring countries. There is already some export of telediagnostic and telepathology services to Nepal and Bangladesh. The main constraints in this regard are infrastructure,

³⁵ UNCTAD (April 1997).

³⁶ Manipal hospital makes an estimated \$2,000 per year through such exports. UNCTAD (April 1997).

high internet connectivity costs, and recognition of Indian medical qualifications. With improvements in India's telecommunications infrastructure and insurance sector deregulation, the scope for telemedicine exports to neighbouring developing countries as well as developed countries is likely to increase.

Despite the many benefits associated with India's trade in health services, there is a general perception that there have been adverse effects on the public health care system and on equity and that these benefits have been limited to the affluent urban population. For instance, it is generally perceived that the presence of superspecialty corporate hospitals catering to foreign patients and to the affluent segment of the country has aggravated the existing dual market structure between the private and public Indian health care system in India, with private hospitals such as Apollo, Escorts, and Batra which are of international standards coexisting with public sector hospitals and institutions which are substandard in quality and facilities. Such dualism is also perceived to have encouraged internal drain of the most qualified professionals from the public health care system to the private corporate hospitals, given the better remuneration and working conditions in the latter. In a country where only 10 per cent of all doctors are in the government sector and the private sector accounts for more than 60 per cent of all hospitals and dispensaries, such internal brain drain from the public sector has major negative implications for equity and access to quality health services by the poor.³⁷ There is also some concern that in the absence of regulatory safeguards concerning standards, quality, and cost of treatment and given the lack of recourse to negligence or

³⁷ WHO, SEARO (1999).

malpractice (due to the outdated and ineffective Medical Council Act), there are possibilities for exploitation even in the private health care sector. Concern about the loss of financial and human capital investments due to brain drain of health care professionals from the country is long standing.

There is also some concern that the entry of foreign insurance companies in the Indian market will exacerbate this dualism and internal drain further driving down the quality of health services available to the general public. The government has often provided land at subsidized rates for corporate hospitals in prime locations of various cities but such facilities have mainly catered to the affluent urban population. The benefits have not accrued to the wider population given their much higher service costs relative to the public sector hospitals. Even though the government has imposed conditions in some cases to reserve a certain number of beds for poor and low income patients and to provide treatment to these groups at subsidized rates, evidence indicates that often such beds lie vacant or are used by upper and middle income people on the basis of connections.³⁸ Hence, commercial presence has not yielded wider benefits as it has not been linked up properly in terms of resource use and facilities with the public health sector.

(e) *Chile*

³⁸ Recent newspaper articles on Apollo hospital have written on this issue.

Since the 1950s, Chile has engaged in exports of health services. It has a strong regional presence in health services delivery within South America. Most of Chile's health service exports are in the form of consumption abroad. Due to its first rate medical centres, Chile has captured the market for middle and upper income patients from Bolivia, Peru, and Ecuador, all of which have much lower quality health care services in this region. Chilean centres are seen as an alternative or complementary to centres in the US. These centres provide specialized care or combine diagnosis in the US with treatment in Chile. In particular, Chile has targeted the Bolivian market through its private health insurance programme, ISAPRES, and through its national health care centres. Clinics in Chile have established agreements with Bolivian health care centres to provide treatment to Bolivian patients. The number of hospitalizations in tertiary care centres in Chile have increased from 236 in 1996 to 314 in 1998 for Bolivian patients with an estimated spending of \$2.5 million on such care and of \$1.2 million for outpatient care provided to over 600 Bolivian patients in 1998.³⁹ There are plans to expand the reach of such care to middle class households in Bolivia.

Chile also exports medical education services to professionals from various Latin American countries through its higher education centres. Along with Argentina, Brazil, and Uruguay, Chile plays an important role in the training of Bolivian, Ecuadorian, Peruvian, and Paraguayan health professionals. There is lot of scope for Chile to further expand its exports to the region by developing a system of provider centres, particularly in border areas, in certain specialized professional and technical areas in order to capture

³⁹ Leon (March 2000).

demand in Latin America and at a sub-regional level in the Andean countries. With the development of relatively similar health insurance systems across countries in the region and improved transport links among these countries, the scope for Chile's exports of health services will increase.⁴⁰ Chile is also diversifying its health service exports to services relating to thermal baths, spas, and rehabilitation, making use of its natural endowments, catering to a segment of the business and tourist traffic from developed countries interested in such differentiated services. Efforts are also being made to integrate health care with tourism.

Chile imports health services in the form of long-and short-term overseas training by Chilean health service providers in specialties and subspecialties and through joint ventures in the health sector. Imports of overseas training services have increased in recent years due to the need to build capacity in specialized services following modernization of Chile's health sector.

(f) Tunisia⁴¹

Tunisia is both an exporter and an importer of health services. The country has a technical cooperation agency which is concerned with promoting trade in health services.

⁴⁰ There are initiatives to increase the integration of health insurance systems in this region and to expand agreement on health cooperatives to facilitate consumption abroad among these countries. The regional trade prospects in health services in Latin America are discussed in detail in section 4 in the context of Mercosur.

⁴¹ The discussion on Tunisia is based on a country note prepared for the WHO Inter regional Meeting on Trade and Health, held in Washington DC, November 1999.

Tunisia's presence in the global health services market is partly due to conscious strategies to export health services under bilateral conventions and technical cooperation agreements and partly due to inherent factors such as geographic, linguistic, cultural, and historical affinities.

Tunisia exports health services through movement of persons to the Middle East and Gulf countries and to the West. In 1998, there were some 1,725 Tunisian doctors in Saudi Arabia, Oman, Qatar, and France. Entry by foreign nationals is subject to recruitment by the national health ministry to satisfy needs of the public health system which cannot be met by nationals. For instance, foreign specialists are hired from Western Europe in surgical specialties, gynecology, and anesthesiology. In 1999, there were over 100 doctors of foreign origin in Tunisia, practising mainly in certain specialty areas. Foreign paramedics are also recruited to meet domestic needs, provided their qualifications are recognized as equivalent to local qualifications by the public health ministry. There are also conventions with several East European countries (Bulgaria, Romania, the Czech Republic, and Poland) to promote the exchange of medical personnel and practice between Tunisia and these countries.

Tunisia exports and imports health services through consumption abroad. An estimated 12,000 foreigners came for treatment to Tunisia in 1998. Of these, many are from Libya and Algeria, and from poor French African countries. To facilitate treatment by its nationals in overseas markets, Tunisia has signed agreements with some countries to enable Tunisian nationals to receive the same treatment as foreign nationals for health

services consumed abroad. These include countries such as France, Italy, Belgium, Holland, Germany, and Algeria. There are also bilateral agreements on transfer of patients and consumers with the neighbouring countries of Libya, Mauritania, and Morocco.

There is some trade in telemedicine services, at present limited to teleconferencing between university hospitals in Tunisia and French medical institutions. Some telepathology and teleradiology projects have also been initiated. The scope for expanding trade via telemedicine is likely to remain limited since telemedicine services in Tunisia have mainly been developed to cover insufficiency in human resources and are specialized in certain areas and in regional hospitals to treat complex and special cases and for second opinions.

Tunisia is also engaged in export of medical education services. Foreign students make up 10 per cent of total medical students in the country. In 1998, there were 511 foreign students studying medicine, 123 dentistry, 180 pharmacology, and 101 were training as health technicians. These students are mostly from the Maghreb region and from the French African countries.

*(g) Indonesia*⁴²

⁴² Widiatmoko and Gani (October 1999).

Indonesia presents the case of a developing country which is primarily an importer of health care services. Indonesia is a net importer of health care services, of medical equipment, supplies, and pharmaceutical commodities. There is limited export of health services under all modes of supply.⁴³ One of the main form of health service imports by Indonesia is consumption abroad. Affluent Indonesians go abroad to Singapore, Australia, Japan, Germany, and the US for treatment. There are very few foreign patients who come for treatment to Indonesia since the general quality of health services falls well below international standards and there is also shortage of high quality professionals in the country. Treatment by foreign patients in Indonesia is mainly limited to traditional medicine. However, even in the area of traditional medicines, imports of traditional Chinese and other Eastern medicine from China, Taiwan, and Korea into Indonesia are far greater than the exports of Javanese traditional medicine to neighbouring countries.

Since the 1990s, Indonesia has been a recipient of foreign direct investment in the health care sector. While foreign investment is prohibited in medical and dental clinics and in small size health care centres, it is permitted in hospitals, subject to recommendation by the Ministry of Health and subject to certain conditions. Foreigners can build whole new hospitals or jointly operate existing local hospitals with local investors. The Ministry issues licenses upon authorization to the hospital which is to be operated in accordance with Indonesian standards. There is a requirement to

⁴³ There is little evidence to indicate trade in cross-border supply of health services. However, the importance of telemedicine is rising within Indonesia given its advantage in serving a country which is so geographically spread and the remoteness of many areas of the country.

accommodate more than 200 beds. The main investors in Indonesia's hospital services sector are Australia and Singapore. There is also interest by the Malaysians and the Japanese to invest in Indonesia's hospital sector. Foreign investment in health services is at present limited to cities such as Jakarta, Surabaya, and Bali. There are five foreign owned or managed hospitals in Jakarta. The Singapore based Parkway Group along with the Gleneagles hospital chain has established a hospital of 328 beds in Jakarta, 148 beds in Surabaya, and 243 beds in Medan. Healthcare, the leading hospital operator in Australia, has established hospitals in Jakarta and Surabaya. To ensure that foreign commercial presence yields benefits to the poorer sections, the government has a policy of reserving 10 per cent of hospital beds for the poor for in-patient services, regardless of ownership status. However, utilization rates for these reserved beds are low in most commercial hospitals.

Since Indonesia has a shortage of high quality doctors, nursing specialists, and resources for management and administration of hospitals, foreign service providers are recruited to meet such needs. These include foreign hospital managers who are hired to administer operations and medical and allied health specialists whose role is limited to that of consultants as they are not permitted to provide any direct medical services. Export of health professionals from Indonesia is insignificant and is limited to exports of nurses, arranged by private firms for Middle Eastern countries.

3.2 *Developed countries and trade in health services*

The preceding discussion has highlighted the experience of a wide range of developing countries with trade in health services. In several examples, the importance of developed countries as destination or source markets has also been discussed. It is thus important to look specifically at a few developed countries to understand better the nature of the trade relations between developed and developing countries in health services. The following discussion focuses on the UK and US as these are among the most important developed country players in the global health services market.

(a) United Kingdom

The UK has consciously adopted a policy of exporting health services. In 1988, it created the National Health Services (NHS) overseas enterprise as a marketing arm for the country's public health companies and institutions. The aim was to increase the financial capacity of domestic institutions, to increase the coverage and standards of public health care in the country, and to provide development opportunities to British health professionals through participation in overseas projects and in training and education programmes.

The UK is engaged in exports of health services in the form of consumption abroad. An estimated one-fifth of beds in London hospitals are occupied by foreigners. There are reciprocal arrangements with some 60 countries, mainly countries in Europe and some Commonwealth countries outside of Europe in which the NHS ensures treatment to nationals of these countries when they are visiting the UK. The reciprocal

deals ensure that the foreigners are dealt with in the same way as UK nationals. The NHS in fact offers very generous services to overseas visitors to the UK. However, such a liberal approach to consumption abroad is believed to have resulted in misuse of the National Health Service by foreign tourists, by encouraging hospital tourism. Patients come in as tourists and receive treatment in the UK at the expense of the NHS. There is also psychiatric tourism from consumers in the EU. Some 20 per cent of beds in Westminster were for instance occupied by patients from the EU seeking psychiatric treatment in the UK. Such hospital tourism is not only a drain on NHS resources but given the long waiting lists for British nationals for treatment under the NHS, such misuse has adverse implications for availability and efficiency of health services to the local population and also hurts equity. The NHS has recently been asking general practitioners in the UK to make such foreigners pay for medical services received in the country rather than free riding on the generous system.⁴⁴

The UK is also an important importer of health services, particularly in mode 4, or movement of persons. Like many other industrialized countries the UK has an excess of medical specialists relative to demand while it faces a shortage of general practitioners, nurses, and technicians. Hence, the UK has been a major destination market for doctors, nurses, and technicians from countries such as South Africa, India, Pakistan, and Ghana who come as economic migrants or on short-term contracts to fill positions unmet by local personnel. Inflows of health service providers have been encouraged by the NHS to alleviate domestic shortages in this sector. Recently, there have been statements by the

⁴⁴ Gish (Nov. 1999)

NHS about the need to recruit actively from India and countries in Eastern Europe to meet domestic shortages of not only doctors and nurses, but also medical technicians and paramedical staff, and to provide incentives through faster processing of work permits and possibilities for permanent residence in the country.

The UK also imports health services in the form of consumption abroad. British nationals seek lower cost treatment or alternative treatment procedures in developing countries such as India, or specialized treatment in countries such as the US and Canada. Often consumption abroad is motivated by the need to avoid long waiting lists for treatment under the public health system. There have been recent statements by some British politicians suggesting arrangements between the NHS and medical establishments in other countries with good quality and affordable health care services, such as India, to facilitate consumption abroad by British nationals.⁴⁵

*(b) United States*⁴⁶

The US is one of the main players in the globalization of health services. This is not surprising given that the US has the highest expenditures on health care in the world. Annual spending on health services account for 14 per cent of US GDP at an estimated \$1 trillion. The health services sector is in fact the largest service sector in the US economy.

⁴⁵ Opponents to such tie-ups have cited the problem of non-uniform standards and difficulties in determining equivalence of standards in the health care sector between the UK and other countries.

⁴⁶ Most of the discussion on the US is based on USITC (1999), Chapter 13.

The US is a major exporter of health care services through various modes of supply. The largest part of US health service exports is in the form of consumption abroad. Foreign patients come to the US from developed and developing countries for specialized, high quality treatment. In 1998, mode 2 based US exports of health care services were to the tune of \$1.2 billion, with a 10 per cent average annual growth between 1993 and 1997. In recent years, US hospitals have also entered into agreements with foreign insurers to provide specialized medical services to foreign citizens who are unable to get these services in their home countries.

The US is also an important exporter in the form of commercial presence. Transactions by foreign based health care affiliates of US firms amounted to \$351 million between 1992-97, with average annual growth of 9 per cent during this period. The bulk of these earnings were from Europe based affiliates of US firms which recorded \$331 million in sales, mainly from tourists. Affiliates in Latin America accounted for \$20 million or 6 per cent of total sales. US companies in health care and in ancillary services are increasingly looking at entering foreign markets given reforms of state run health care systems and moves towards managed private care in many countries. With the privatization of health services in Europe, Asia, Latin America, and Africa, there are growing export opportunities for US health care companies in areas such as health care consulting, management, and administration. For instance, there are an increasing number of US health experts who are acting as consultants on the establishment and operation of private health care projects in foreign markets. There is a programme between the Centro

Internacional de Medicina in Mexico and Baylor University Medical Centre in Dallas which trains doctors and administrators in the former institution to enable improved organization of health care and administrative practices. US health care services and insurance providers are also increasingly forming alliances with foreign providers and health insurance companies to establish or enhance their presence in foreign markets. They have formed alliances with local hospitals to enable US consumers to receive quality health care while they are travelling abroad. Blue Cross has developed a global network of 130 foreign hospitals where US customers can get medical services in over 40 countries. With the trend towards corporatization of the health sector and integration of various health and related services for economies of scale and rationalization of capacity, US health care companies are likely to play an increasingly important role in overseas markets.

The US government has also undertaken initiatives to promote exports via telemedicine. One such initiative is the Highway to Health, an international communication initiative whereby private health care delivery organizations are initiating international telemedicine consultations to export their medical services. For instance, Stanford University Hospital has links to Singapore for continuing medical education. Johns Hopkins oncology centre is making preparations to link with Gleneagles hospital in Singapore to provide clinical consultations, medical education, and research opportunities for health care providers at Gleneagles and affiliated hospitals in South East Asia. The Mayo clinic has links with Jordan and is establishing links with a hospital in Greece.⁴⁷

⁴⁷ Highway to Health.

The US is also an important importer of health services, through commercial presence and movement of health service providers and to some extent through consumption abroad. There are many foreign firms in the health care or related sectors which have acquired or established health care facilities in the US. Purchases through US affiliates of foreign firms amounted to \$4.7 billion in 1997 with European firms accounting for 70 per cent or \$3.3 billion of the total. With privatization and restructuring of the health services sector, foreign health care firms are likely to take a greater interest in large markets such as the US.

The US is also an important destination market for health service providers from developing and developed countries. The US market attracts general practitioners, nurses, and technicians from developing countries such as India, the Philippines, and Jamaica and specialists from countries such as the UK and Canada. In 1970, there were 57,000 foreign medical graduates practising in the US. By 1993, this number had risen to 150,000 with India, Pakistan, and the Philippines providing 45 per cent of all the international medical graduates practising in the US. These inflows have been driven by demand-supply imbalances in the source countries and in the US and by the higher wages and better working conditions in the US. There has been resistance to these inflows by local professional bodies such as the American Medical Association for some categories of health professionals where there is oversupply. Licensing and immigration regulations have constituted the main entry barriers.

The US government has, however, actively encouraged inflows of certain categories of health service providers under special visa schemes. Such schemes have been oriented to meeting domestic shortages in certain segments of the health care sector.⁴⁸ One such area is nursing where there has been a shortage in the US since the late 1980s. Despite payment of prevailing wages and active recruitment and training programmes for local nursing schools, US hospitals have had difficulties in recruiting registered American nurses despite active advertising campaigns.⁴⁹ The only alternative to filling nurse vacancies other than overtime for existing staff is to hire through nurse registries, a very costly option given wage rates of \$55 per hour, and also posing problems for stability and continuity of care.⁵⁰ In 1989, the US Congress passed the Immigration Nursing Relief Act which permitted temporary H-1A visas to be granted to foreign educated nurses for a period of five years to address potential areas of shortage. These nurses could occupy permanent positions temporarily with no certification required by the US Department of Labour. The goal as stated by the Immigration Nursing Relief Advisory Committee was to address the continuing need for foreign nurses in certain specialties and localities where there were an inadequate number of domestic registered nurses, to lessen the employers' dependence on foreign registered nurses, and to protect the wages and working conditions of US registered nurses. The US Secretary of Labour

⁴⁸ Gish (Nov. 1999) . There was a projected shortage of 35,000 general physicians and a surplus of 115,000 specialists in 2000.

⁴⁹ Details on the nursing profession in the US discussed in this section are based on "The Health Professional Shortage Area" (Nov. 1997).

⁵⁰ A case in point is St. Bernard hospital in the outer Chicago area. The extra cost from hiring nurses through nurse registries was a substantial \$2 million per year. The hospital made a huge recruitment effort to hire local nurses. In response, it received 200 applications for nursing posts. Of these, 145 applicants did not interview due to the location, 22 were found to be unqualified, and of the remaining 33 who were interviewed, 31 were offered jobs, of which only 15 finally accepted. The recruitment effort proved to be very expensive relative to the gains in terms of the final number of nurses recruited.

was authorized to oversee the process and to impose penalties for noncompliance to ensure that the hiring of foreign nurses did not adversely affect the working and wage conditions of domestic nurses.

In the 1990s, the H-1A programme was replaced by the H-1C programme, another visa programme for temporary registered nurses under which 500 visas were designated per year for foreign nurses. The H-1C scheme was stricter in its terms and conditions and lengthier in its processing time than the H-1A scheme.⁵¹ It required foreign nurses to pass the National Council Licensure examination for registered nurses, which was not the case with the H-1A scheme. Hospitals hiring foreign educated nurses under the H-1C scheme were required to file an attestation and to renew the visa on a yearly basis with the Department of Labour indicating the intent to use foreign educated nurses in accordance with established criteria. Employers of H-1C nurses had to pay the prevailing wage and establish a recruitment and retention programme to reduce the reliance on foreign educated nurses. To prevent misuse of these visas, civil penalties could be imposed, including payment of backwages for failure to pay the prevailing wage required by law. The tightening of the visa programme was in response to concerns by local professional bodies about potential misuse of such temporary visa schemes to enter the US labour market on a permanent basis as well as concerns about potential exploitation of foreign nurses by contract agencies and hospitals in the form of advance payments for jobs and substandard working conditions.⁵²

⁵¹ It takes between 6-12 months for an H-1C visa to be processed.

⁵² There had been reports of substandard working conditions and threats of retaliation against nurses who complained about their pay and working conditions under the H-1A scheme.

In addition to the H-1A and H-1C programmes, the US has also had two other non-immigrant visa schemes for recruiting foreign health service providers. Under the H-1B scheme, persons with a Bachelors degree, including those in nursing specialty occupations which require a bachelors degree, can be recruited. Under the H-2B non-immigrant programme, persons can be recruited for temporary nursing jobs. A 1994 Act further gives each state's department of public health the right to waive up to 20 physicians per year to work in the US in areas where there is a shortage. The US also introduced labour mobility provisions in 1989 under its free trade agreement with Canada (CUSTA) and in 1993 under the North American Free Trade Agreement (NAFTA) to facilitate entry for highly skilled professionals from Canada and Mexico.⁵³ Under NAFTA TN visas were also introduced for highly skilled Canadians, including doctors and medical specialists with bonafide job offers, subject to quota limitations and without requiring labour market tests and costly, time consuming certification processes.⁵⁴

As a result of such visa schemes, and in particular the H-1A visa scheme, there has been a considerable increase in the number of foreign nurses employed in the US over the last decade. In 1996, there were 110,000 nurses employed or residing in the US who had got their basic nursing education in a foreign country. Forty-three per cent of these nurses (47,400) came from the Philippines, 19 per cent (21,400) came from Canada,

⁵³ The policy aimed at increasing the number of NAFTA and FTA visas to 27,000 per year by 1996.

⁵⁴ Labour mobility provisions in the context of NAFTA and CUSTA are discussed in more detail in a later section on regional trade in health services.

15 per cent (11,500) came from the UK, and 9 per cent (10,000) came from India.⁵⁵ The changes in immigration policy greatly increased the emigration of nurses and physicians from Canada to the US between 1990 and 1996.⁵⁶

The US also imports health services in the form of consumption abroad. Health care services consumed by US tourists abroad as well as expenditure by US patients seeking lower cost treatment for procedures such as bypass surgery and organ transplants, and patients seeking alternative medicines, constitute an important market for some countries. For instance, US patients can get a bypass operation done in India for Rs. 35,000 to 40,000, which is less than \$1,000 while the same operation costs \$3,000 in the US. For some other procedures, the cost of treatment in developing countries such as India can be one-tenth or one-thirtieth of the cost of similar treatment in the US.⁵⁷ There is also considerable consumption abroad of health services between the US and Mexico. US patients going to Mexico include those of Mexican origin or Spanish speaking persons in the US who have a linguistic or cultural affinity with Mexico, elderly Americans who take advantage of the climate and the cost of treatment in Mexico, and those who are marginally ill. Some go for private medical services while some enroll in

⁵⁵ See, "The Health Professional Shortage Area" (Nov. 1997).

⁵⁶ The increased outflow of health care providers from Canada to the US during the first half of the 1990s, following the changes in immigration policy and the introduction of labour mobility provisions under regional trading arrangements, raised a furore in Canada about brain drain in the health sector. Several studies estimated the costs due to productivity loss, educational replacement, and subsidies arising from such outflows. The estimated cost to the Canadian economy was \$6.6 billion between 1989-96 as a result of these outflows. Several policy recommendations were made at this time in Canada to stem the brain drain in health care. These included raising expenditures in health care, offering tax rebates, making work conditions more attractive in Canada, and raising the quantity and quality of immigrant replacements in the health sector. See, De Voretz (September 1999) and (CMAJ 1999).

⁵⁷ UNCTAD/WHO (1998), Ch 13.

the Mexican Public Health System. Mexican patients who go to the US mainly seek specialized treatment. On both sides, the cross-border flow of consumers is mainly based on geographic proximity to the host country market and is concentrated between bordering towns in the US and Mexico. In 1994, in an average month, there were 300,000 border crossings from US to Mexico and vice versa for consumption of medical services. Of these, some 50,000 were from bordering towns in Mexico to San Diego and some 250,000 were from bordering towns in the US to Tijuana.⁵⁸ American residents make use of dental and ophthalmological services in Mexican border cities as these are cheaper than in the US.⁵⁹ The main constraint to such trade thus far has been the lack of insurance portability.

IV Regional trade in health services

Many of the cases discussed above illustrate that trade in health services has strong regional dimensions. This is not just limited to trade between neighbouring countries, such as between the US and Mexico or between India and Bangladesh, but is also an important part of trade within regional trading blocs. Trade in health services and various issues such as recognition, standards, and insurance portability, which have bearing on such trade, have been addressed in the context of several regional trading arrangements as part of their broader initiatives to liberalize regional trade in services. For instance, health services are included in NAFTA, Mercosur, and the EU. Some

⁵⁸ See, Chapter 10 in UNCTAD/WHO (1998). Regional trade between the US and Mexico in the context of NAFTA is discussed in section 4 of this paper.

⁵⁹ Similar trade patterns are observed between the US and Canada in the case of consumption abroad of health services.

countries have also made concerted efforts to establish regional markets for trade in health services, even outside formal regional trading arrangements.

The following section discusses the experience with health services trade in the context of three regional trading blocs, namely, Mercosur, NAFTA, and the EU. The discussion indicates the scope for expanding regional trade in health services and for using such trade to improve the health status of poorer countries within a region.

4.1 Mercosur⁶⁰

Within Mercosur, attention has been focused on promoting cross-border mobility of consumers among the member countries. One of the main initiatives has been to establish exchanges among health insurance programmes to cover tourists in the region and to develop pilot experiments in order to integrate their health insurance systems at the regional level. There is also discussion on linking tourism and health services to expand the scope for exporting health services to tourists and temporary foreign residents by including coverage of travel insurance within the health plans of public and private insurers in the member countries of Mercosur.

To facilitate cross-border consumption of health services, there is also a current agreement on exchange of services between health cooperatives in the member countries. These health cooperatives have been set up under the Tarjeta Mercosur scheme which enables patients in the health cooperative of one member country to get care in another

⁶⁰ Discussion on Mercosur is based on Wasserman and Cornejo (Nov. 1999).

member country through an associated cooperative. This agreement is specifically focused at promoting consumption abroad for patients in the bordering areas of poorer member countries. For this purpose, some initiatives have been taken to make the required investments in these bordering areas through establishment of health centres, general infrastructure, and improved transport links between the member countries. There is also an attempt to develop systems of provider centres in the more advanced member countries such as Chile and Argentina to focus on specialized services such as treatment of the elderly, for patients in the border areas of countries such as Bolivia and Paraguay

Some attention has also been paid to facilitating cross-border movement of professionals and exchange of health sector personnel in the Mercosur region. There is an initiative for long-and short-term training of specialists and technicians within the region and abroad. For instance, there are initiatives to expand presence by Chilean health service providers in the Bolivian market based on improved transport facilities and integration of health insurance programmes across countries in the region. There is thus considerable room for complementarity across health care systems within the region to actually use cross-border flows of service providers and of consumers to benefit the poorer member countries within the region.

Telemedicine is another area with great trade potential within Mercosur, although there are as yet no initiatives. Several of the member countries, including, Argentina, Brazil, and Chile have potential for telemedicine and the capacity and expertise to establish the required infrastructure for telemedicine. Argentina, for instance, has

telemedicine projects to increase quality of health services and access to the country's remote areas. Such initiatives can be regionalized through establishment of telecommunications links between health care centres in the advanced member countries and also between centres in the latter countries and those in the bordering areas of the poorer countries. Taking a wider regional perspective, there are even more opportunities for telemedicine. Cuba, as noted already, has one of the most advanced telemedicine infrastructure in this region and already provides services to some countries in the Caribbean and Central America. Mexico is another potential exporter of telemedicine services. It has six telemedicine projects relating to dissemination of health related information and consulting services to the region. Wider integration between various trading blocs could facilitate the use of existing projects such as Funsalud of Mexico and Infomed of Cuba for cross-border trade in health services in the Latin American and Caribbean region.

Finally, there is some scope for diversification of health services and linking it to the delivery of other services in the Mercosur region. For instance, studies indicate that the expansion of health care for the elderly or sixty plus group has great potential and thus some specializations and modalities of care targeted at the aged need to be developed in the region. Other areas for diversification are in rehabilitation services, thermal baths, spa services which would make use of the national endowments of the region. Such diversification would also enable a better linkage between health care and tourism services noted earlier. Finally, another important area in health services trade is medical education and training services. In this region, Chile along with Argentina,

Brazil, and Uruguay plays an important role in the training of Bolivian and Paraguayan health professionals. There is scope to expand regional exports of medical education services from the more advanced countries in Mercosur to the poorer countries especially in certain specialties and subspecialties of health services.

4.2 *NAFTA*⁶¹

Health services has been a sensitive subject within NAFTA on account of the very different health care systems in the three member countries of US, Canada, and Mexico. The needs, interests, and attitudes of the member countries in this sector have been very different.⁶² As a result, there have been limited initiatives to address regulatory measures concerning trade in health services. However, there is evidence to suggest that trade in health services, even in other modes, has been stimulated by the formation of this regional trading bloc.

NAFTA has a provision for the temporary movement of service providers within the region. However, this excludes movement of health care professionals.⁶³ Mobility of providers in this sector remains subject to the regulations of the host country where the professional wishes to work. This includes meeting the host country licensing and certification requirements to be eligible to practice. These requirements and procedures

⁶¹ Discussion on NAFTA is based on USITC (1999).

⁶² The US has been pushing for harmonization of the three health systems. This has, however, been resisted by Canada and Mexico.

⁶³ Physicians and paramedics are, however, allowed from the US to Mexico in extreme and emergency situations.

remain are very different across the three member countries and to date, there has been little progress in harmonizing them.⁶⁴

Although the three member countries agreed to continue with their existing regulations and licensing and certification provisions in health services, provisions were included in NAFTA to encourage cross-border mobility of health service providers and facilitate mutual recognition of qualifications and training among the countries. For instance, the NAFTA annex on mobility of health care providers calls upon professional bodies in the member countries to discuss criteria concerning licensing and certification of professional health service providers, possibly leading towards some degree of subregional harmonization in the delivery of health care services.⁶⁵ In addition, by January 1, 1996, all requirements of nationality and permanent residency for professional practice were removed under NAFTA, although recognition was still not made automatic. The agreement further allowed health service providers to freely choose the site where they provide their services without being subject to requirements of establishing a representative office or branch. NAFTA also contains a provision to facilitate the temporary admission of business people, including physicians and their associates for teaching and research purposes, subject to specified quota limits. While this provision does not modify existing immigration and labour market regulations, it simplifies entry procedures by removing the discretionary scope of border officials in granting visas to

⁶⁴ In Mexico, licensing is on a national basis whereby professionals are permitted to practice in any state based on the national license while in the US and Canada, regulations vary across states and provinces, respectively, and local professional associations play a very important role in ensuring quality and standards.

⁶⁵ These provisions are to be found in Chapter 12 of NAFTA which contains an article and an annex on cross-country mobility of health service providers.

physicians. In the case of nursing, a trilateral initiative for North American nursing was undertaken under NAFTA in 1994. This is a collaborative venture between nursing personnel from the three member countries. It aims at working towards the development of mutually acceptable standards for licensing and certification for nursing and harmonization of standards, to ensure nondiscriminatory treatment towards each other's nurses, and to have clear, measurable, and verifiable licensing and recognition requirements.

NAFTA also contains a provision to facilitate foreign direct investment in the health sector within the region. Up to 100 per cent foreign investment is permitted in hospitals and clinics. Although there have not been any specific initiatives to promote foreign direct investment in health services under NAFTA, evidence indicates that cross-border establishment of health care facilities has grown following the creation of NAFTA. There has been increased interest among US firms to invest in the Mexican health sector, particularly in hospitals, clinics, and HMOs. US firms have established health care facilities in several Mexican cities during the 1990s. The International Hospital Corporation, a Dallas based company, has developed with CIMA, a private health care system in Mexico by establishing two private hospitals in Hermosillo and Chihuahua.⁶⁶

⁶⁶ Hospitals are also being planned for construction in Puebla, Mexico and San Jose, Costa Rica. US firms have also shown interest in investing in Canada's health services sector and vice versa given the aging population, high per capita income and high demand for health services in both these countries. However, there have been problems in this regard between the US and Canada. US firms view Canadian government subsidies in the health sector as a trade barrier to their exports of health services while there is concern in Canada about the impact of removing subsidies and entry by US health insurance companies for the country's public health insurance system.

Finally, NAFTA has also given a boost to the cross-border mobility of consumers within the region. Private clinics in Canada are, for instance, tapping the American market, relying on their high quality of services and lower prices. With the integration of Canadian and American health care, insurance companies and HMOs in the US and clinics in Canada can jointly provide medical services to US customers at a lower cost. It must be noted, however, that even outside the NAFTA, there has always been cross-border movement of patients between the US and Mexico, as discussed earlier.

4.3 *European Union*⁶⁷

Of all regional trading arrangements, the European Union has perhaps made the most progress in key regulatory areas pertaining to trade in health services. There have been initiatives under the EU to harmonize professional standards and qualifications among the member countries. As early as 1975, the EC countries adopted harmonization directives for physicians. In 1977, a similar directive was adopted for nurses. There are also directives for veterinary surgeons, midwives, and pharmacists. The aim of these directives has been to facilitate mutual recognition of qualifications and training in the health care profession among the EU countries. There is also a larger goal of developing a European model for graduate medical education and for baccalaureate nurses.

To facilitate regional mobility of professionals, including health professionals, the EU has provisions for convergence and coordination of qualifications and standards. There is a system for ensuring equivalence of university diplomas. The system is based

⁶⁷ Discussion on the EU is based on UNCTAD (April 1997).

on the principle of mutual confidence and comparability of training levels except where there are major differences in the training courses. In the latter instance, the host country can require a member country health care provider to compensate for this difference by undergoing an adaptation period to bridge the gap in qualifications or by taking an aptitude test. The EU also prohibits discriminatory treatment of other member country nationals for the establishment and provision of services. However, despite such initiatives, to date, there has been little progress in developing a common regulatory framework for health services or in establishing common standards of training and practice. Regulation of professional practice in health care remains very different across the member countries. Hence, regional mobility of professionals in health services remains quite limited.⁶⁸

The EU has also addressed constraints such as insurance portability and payments arrangements to facilitate cross-border consumption of health services within the region. Patients from member countries are entitled to insurance coverage in the country where they receive treatment, in accordance with the legislation of his country of residence. Once the service is rendered, the bill is submitted to the health insurance company of the patient's home country for payment. There are also bilateral agreements between the EU and nonmember countries allowing for total or partial portability of public health insurance.

⁶⁸ Language has been one of the main constraints to regional mobility of health and other professionals. There are, however, few other restrictions to mobility.

In addition to the preceding cases, there are also examples of informal regional arrangements to promote trade in health services. One such example is Australia which has undertaken various initiatives to promote exports of health services to the Asia-Pacific region through consumption abroad, through commercial presence in the form of joint ventures and consortiums in the health sector, and through exports of consulting, management, and educational services to the region. It has recently introduced a medical visa for persons seeking health care and has established specialized international departments in some of its teaching hospitals. Australia is also an importer of health service providers from the region. To facilitate such inflows, it has nine classes of temporary residency visas and entry permits which are applicable to specialty personnel, including medical practitioners and educational personnel.⁶⁹

These regional examples indicate the considerable scope for regional collaboration in health services through cross-border exchange of personnel, cross-border flows of consumers, education and research, telemedicine, management, consultation, and investment. The spillover benefits for the region, in terms of employment generation, skill development, foreign exchange earnings and remittances, can be significant. The evidence further suggests that it has proved difficult to harmonize standards and establish common regulatory frameworks in health services even within formal regional trading arrangements. However, such arrangements have been more successful in enabling a wider discussion on these and other issues such as insurance portability than has been possible under unilateral or bilateral initiatives.

⁶⁹ UNCTAD (April 1997).

V The multilateral trading system and health services⁷⁰

The globalization of health services is drawing increased attention to various regulatory interventions and measures such as licensing and certification requirements which currently constrain trade in health services. There is growing concern about the need to harmonize standards across countries and to introduce multilateral disciplines which prevent the use of discriminatory market access barriers, while also protecting national interests and public health objectives. As a result, the sector is increasingly coming under the purview of the multilateral trading system.

The General Agreement on Trade in Services (GATS) covers trade in health services, and aims to liberalize market access in this sector through multilateral negotiations. Although limited liberalization has occurred thus far in this sector under the first round of GATS negotiations, given recent privatization and commercial trends in this sector, there is likely to be greater interest and pressure by some countries to open up health services to trade and foreign direct investment, under the current round of discussions. The following section highlights the nature of liberalization that has been undertaken in health services so far under the GATS and the prospects for liberalization in the ongoing round of negotiations.

⁷⁰ Most of the discussion in this section is based on WTO (Sept 1998).

5.1 Assessing GATS commitments in health services

Health services under the GATS include general and specialized services of doctors, deliveries and related services, nursing services, physiotherapeutic and paramedical services, all hospital services, ambulance services, residential health facility services, and services provided by medical and dental laboratories. Professional services provided by doctors and nurses are separately treated from hospital services. However, the GATS does not cover all health services. It excludes services which are provided “in the exercise of governmental authority”, which according to GATS Article 1:3 (c) refers to services that are supplied neither on a commercial basis nor in competition. A case in point of excluded activities is the provision of medical and hospital treatment directly through the government, free of charge. However, health services which are provided directly by the private sector or by the public sector on a commercial basis are subject to negotiation and commitments under the GATS.⁷¹

There are several provisions under GATS which address the main regulatory measures governing trade in health services. These regulations include qualification and licensing requirements for individual health professionals, approval requirements for institutional suppliers, and rules and practice governing reimbursement under mandatory insurance schemes. Relevant GATS provisions bearing on these regulations include:

Article VIII:2 which requires members to ensure that monopoly positions are not abused in areas outside the scope of the monopoly; Article VI which requires all domestic regulations to be administered in a reasonable, objective and impartial manner and not be more burdensome than necessary to ensure the quality of the service; and Article VII on recognition which requires members not to accord recognition in a manner which would constitute a means of discrimination or a disguised restriction on trade.

Under the first round of negotiations, there have been very few commitments in hospital and professional health services. In fact, the fewest commitments have been in this sector since many countries have chosen not to schedule it given its public sector nature and thus its exclusion under Article I:3 provisions. Only one-fourth of the 134 member countries have made market access commitments in health services. Even here, some countries have only bound the status quo in their schedules or have not committed in sensitive areas and important modes of supply.

Tables 1 to 4 summarize the commitments made in health services for each of the four modes of supply discussed earlier.

⁷¹ This distinction raises some difficult questions about the nature of the competitive relationship between the public and private health systems and thus to what extent GATS is applicable to the health services sector. Do public hospitals fall under Article I:3? How should one treat various types of direct private/public sector cooperation in the operation and establishment of health facilities, such as under Build-Operate-Transfer arrangements under the GATS? What constitute government regulated commercial activities as opposed to government procurement of the services involved? The answers to such questions depend on the specific arrangement and the rights and obligations conferred in each case. Hence, the applicability of GATS to health services may vary depending on the terms and conditions under individual cases.

Table 1**GATS Commitments in Health and Related Services for Cross-Border Supply**

	MARKET ACCESS			NATIONAL TREATMENT	
	Unbound	None	Measures	Unbound	None
<i>Cross-border trade</i>					
Medical and Dental services	20	16	1 no portability of insurance	24	13
Services provided by midwives, nurses, Physiotherapist, and paramedical	5	6	1 no portability of insurance	5	7
Hospital services	16	10		13	13
Other human health Services	6	4		5	5

Source: UNCTAD/WHO, *International Trade in Health Services: A Development Perspective*, Geneva, 1998.

Table 2**GATS Commitments in Health and Related Services for Consumption Abroad**

	MARKET ACCESS			NATIONAL TREATMENT	
	Unbound	None	Measures	Unbound	None
<i>Consumption Abroad</i>					
Medical and dental services	2	34	1 no portability of insurance	4	33
Services provided by midwives, nurses, physiotherapist, and paramedical	0	11	1 no portability of insurance	0	12
Hospital services	2	22	1 no portability of insurance	2	21
Other human health Services	1	9		1	9

Source: UNCTAD/WHO, *International Trade in Health Services: A Development Perspective*, Geneva, 1998.

Table 3
GATS Commitments in Health and Related Services For Commercial Presence

	MARKET ACCESS			NATIONAL TREATMENT	
	Unbound	None	Measures	Unbound	None
<i>Commercial Presence</i>					
Medical and dental services	4	18	21	5	37
Services provided By midwives, nurses, Physiotherapist, and paramedical	0	8	14	0	22
Hospital services	3	12	19	4	31
Other human health Services	0	9	1	1	9

Source: UNCTAD/WHO, International Trade in Health Services: A Development Perspective, Geneva, 1998.

Table 4
GATS Commitments in Health and Related Services for Movement of Natural Persons

	MARKET ACCESS			NATIONAL TREATMENT	
	Unbound	None	Measures	Unbound	None
<i>Movement of Natural Persons</i>					
Medical and dental services	32	1	11	39	5
Services provided by midwives, nurses, physiotherapist, and paramedical	23	0	8	21	2
Hospital services	22	2	7	31	7
Other human health Services	10	0	1	10	0

Source: UNCTAD/WHO, International Trade in Health Services: A Development Perspective, Geneva, 1998.

A mode-wise analysis of the commitments indicates an unevenness in market access offer across the four modes of supply. In particular, commitments on mode 4, or movement of service providers, trail far behind the commitments undertaken for the other three modes. Since movement of persons is one of the most important if not the most important mode of trade in health services, the lack of commitments in this area greatly reduces the significance of the liberalization achieved in health services under the GATS. The main problem with commitments in mode 4 is that they are mostly horizontal and not sector-specific and even the horizontal commitments are subject to many limitations. For instance, among the 55 countries that have committed on medical, dental, and veterinary services, only two countries have not made any limitations for mode 4. Five countries have not undertaken any commitments for this mode, 32 have maintained horizontal limitations, and 16 have scheduled sector-specific entries. Among the countries that have scheduled horizontal commitments, 12 have further narrowed these commitments by adding various requirements.

In general, the value of the commitments made on mode 4 is greatly reduced by the horizontal limitations. Most of these limitations are relevant to trade in health services. These limitations include: economic needs and local market needs tests; manpower planning tests; discriminatory licensing, accreditation, and recognition requirements for foreign professionals; nationality and residency requirements; state and provincial requirements with regard to residency and licensing; immigration regulations including quota restrictions which are both quantitative and qualitative, based on the

needs and capabilities of the health sector; restricted access to certification exams; foreign exchange controls; repatriation restrictions; and regulation of fees and expenses of foreign health service providers. In particular, economic needs tests and recognition related limitations on mode 4 are used by most of the countries that have scheduled health services.

What further reduces the value of mode 4 commitments with regard to mode 4 is that only a limited range of service providers are addressed by these commitments. Market access offers are limited to intracorporate transferees, that is, those associated with commercial presence, business visitors, and managers, executives, and specialists. Such commitments limit the scope for cross-border movement of persons in health services to areas such as management consulting, research and development, health education, and some specialized services. Even in the latter context, there are few commitments in specialty occupations where there is demand for cross-border movement of professionals. Important categories such as independent professionals and contract service providers, where the bulk of mode 4 based trade in health services occurs, are not addressed by the existing mode 4 commitments. If one looks at the sector-specific entries on mode 4, one finds that there are few commitments for medical and dental services, midwifery services, veterinary services, nurses, physiotherapists, paramedical personnel, and pharmacists. Thus, there is virtually no liberalization of market access for health service providers under the existing GATS commitments.

Market access commitments in modes 1, 2, and 3 are more wide ranging than for mode 4. Members have generally made more commitments on health-related professional services than on health and social services, that is, hospital services for these three modes. While 49 members have undertaken commitments for medical and dental services, only 39 members have committed on hospital services. Moreover, within these two groups, commitments are positively related to the human capital intensity of the activities concerned. For instance, medical and dental services and hospital services which are more human capital intensive than services provided by midwives, nurses, and technicians, have received significantly more commitments.

Commitments in mode 1 are mostly unbound for technical reasons, indicating an element of uncertainty about the cross-border tradability of health services at the time of the negotiations. There are few limitations on consumption abroad of medical, health, and dental services. Most governments have taken a liberal approach towards treatment by their nationals in overseas markets, albeit subject to constraints imposed by non-portability of public medical insurance schemes and foreign exchange restrictions. By contrast, limitations are more frequent in the case of mode 3, particularly to medical and dental services, hospital services and social services. These limitations include economic needs tests, nationality requirements, equity ceilings, joint venture requirements, and various approval and authorization requirements. One-third of the countries that have scheduled health services have committed to opening up hospital services to foreign participation and another one-third have committed to opening up medical and dental services under professional services to foreign competition.

Overall, an analysis of the offers made in health services indicates very little progress in terms of increased market access and elimination of discriminatory treatment. Of the two main modes of trade in health services, namely, consumption abroad, and movement of persons, the latter is not addressed at all. Even though there are liberal market access offers on consumption abroad, the latter remains constrained by limitations due to portability of medical insurance and foreign exchange restrictions and thus the progress made in liberalizing the financial and insurance services sectors. Commercial presence, an important emerging area in health services trade, is also subject to limited liberalization. The significance of whatever commitments have been made in health services is further limited by the narrowness of the commitments and the highly nontransparent and discretionary nature of many of the limitations listed in the schedules.

5.2 Prospects for liberalizing health services under the GATS

In the current round of GATS negotiations, if progress is to be made in liberalizing trade in health services trade, then more member countries will need to schedule this sector. In addition, countries will need to make improved market access commitments in this sector and in related professional services as well as multilaterally discuss regulatory issues pertinent to this sector.

As noted earlier, few countries have currently scheduled health services. The first step towards multilateral liberalization in this sector is for more countries to schedule the health services sector and agree to negotiate commitments in this area. Given

privatization trends and greater public-private cooperation in the delivery of health services around the world, often necessitated by declining public sector resources, more countries may be willing to table health services in the current round of GATS discussions. Moreover, countries must make more liberal commitments in this sector and in relevant categories of professional services. This includes making sector-specific commitments in mode 4 as opposed to horizontal commitments which are general in nature and may not specifically address the needs of the health services sector. This also requires removal of and/or greater transparency in the limitations which currently undermine the existing commitments in modes 3 and 4. Limitations in the form of economic needs and manpower needs tests need to be reduced or made transparent in terms of the criteria being used and in their administration. At present, the commitment schedules do not clearly spell out the basis for these tests or how they are to be administered and translated into market access restrictions. Similarly, discriminatory aspects of recognition requirements such as nationality or residency conditions or professional registration requirements which are in turn dependent on nationality conditions, need to be eliminated.⁷²

Among the main issues pertinent to health services which require multilateral discussion, are recognition requirements and insurance portability. There is need to encourage notification of existing or impending recognition agreements, quality standards, and licenses under Article VII:4 of the GATS. There is also need to establish

⁷² The Indian position paper on movement of natural persons outlines strategies for increasing cross-border mobility of service providers. Many of the strategies recommended in that paper are relevant to trade in health services. See, Chanda (1999).

multilaterally agreed criteria for recognition and its extension to other member countries under Article VII:5 of the GATS. Discussion is also required on the establishment of common international standards in the professional health services and hospital services sectors. There is need to identify priority areas for international portability of insurance entitlements and to distinguish between recognition measures relating to the quality of treatment and adherence to standards and recognition measures for reimbursement purposes. In addition to these issues, multilateral discussion is required on one fundamental issue—the interpretation of “services supplied neither on a commercial basis nor in competition” (Article I:3) and on the kinds of health services and forms of delivery which fit into this category. In the absence of a clear interpretation of this provision, countries may continue to carve out the health services sector from discussions thus precluding the possibility of improved market access in this area.

VI Emerging opportunities in health services trade

Over the last decade, several new forms of health services delivery have emerged. One of the most important trends is telemedicine and the integration of information technology with health care services.⁷³ The current industry expenditure on IT is about 2 per cent of revenue and is expected to rise to 6 or 7 per cent in five years.⁷⁴ Global demand for direct patient care for telehealth services was worth an estimated \$800 billion in 2000 with the main demand being in specialty skills in areas such as teleradiology,

⁷³ There are many other emerging areas for globalization in health services. These include: education services; database and information dissemination services; clinical, investigation, diagnostic and specialized services; insurance services; and consulting services associated with maintenance and management of health care delivery.

⁷⁴ USITC (1999), Chapter 13.

telecardiology, teledermatology, telepsychiatry, and emergency medicine.⁷⁵ The use of information and communication technologies in health services is likely to change the very nature and potential for trade in health services.

6.1 Cross-border initiatives in telemedicine and prospects

Several developed and developing countries have launched cross-border initiatives incorporating IT into the delivery of health services.⁷⁶ For example, there is a link between King Faisal specialist hospital and resource centre in Saudi Arabia and several top university hospitals as well as commercial enterprises in the US. The latter diagnose data and images and provide support in emergencies through video conferencing. Under Singapore's IT 2000 initiatives, international links have been established, such as between Singapore general and Stanford University hospital for second opinion and medical education. Japan cooperates with some countries in the Asia Pacific region over satellite links and some of its expert university hospitals are linked with health care sites in Cambodia, Fiji, Papua New guinea, and Thailand.

There are countries such as Australia and Canada which are consciously targeting exports of telemedicine services. For instance, Australia has a telemedicine export programme with a consortium consisting of the University of New South Wales, Sky TV, NEC Australia, and Seacom Australia. The objective is to establish a satellite-based China telemedicine network to include over 1,000 Chinese hospitals in order to support

⁷⁵ Canadian Life Sciences Industry Overview.

⁷⁶ See, Chapter 6 in UNCTAD/WHO (1998) for examples of telemedicine initiatives in different countries. A few of these cases are highlighted here.

teleconsultations, exchange of records, lab tests, and teleradiology.⁷⁷ This exchange would also enable Australian health professionals to receive access to Chinese medicine and techniques.

Canada's 1999/00 strategy in the health sector focused on telehealth. More than 300 Canadian companies are involved in telehealth of which many are new small and medium enterprises and some are multinational enterprises. In 1999/00, opportunities for telehealth were targeted at the US, EU, and Japan, the three main markets for such services, with possible expansion to other markets such as Argentina, the Czech Republic, India, Malaysia, South Africa, and the UAE.⁷⁸

There are several examples of cross-border telehealth initiatives which have been directed at capacity building in the recipient countries. For example, the University of Zambia was having difficulty in getting evidence based medical literature in the early 1990s. With the help of the Health Foundation of New York, it got the required equipment and formed a partnership with the University of Florida Health Science Centre library. As a result, by 1994, it had become an intermediary for resource and information between district hospitals, and also between doctors, teachers, lecturers, and researchers in medical schools in the country. Similarly, McGill University medical school is a partner to the informatics centre at University Eduardo Mondlane in Mozambique, again helping in the dissemination of medical knowledge. Stanford University School of Medicine's internet start-up company, e-skolar relays information via the internet to

⁷⁷ WHO, SEARO(1999).

⁷⁸ CIBS (1999-2000).

periphery health care centres in several developing countries on the use of low-cost digital radiology to teledermatology and telepathology. There is also an Andean network of Epidemiological Surveillance among Bolivia, Chile, Colombia, Ecuador, Peru, and Venezuela through the use of information and communication technologies.⁷⁹

Notwithstanding many such initiatives in telehealth and telemedicine, the existing evidence indicates that to date, cross-border delivery of health services through information and communication technologies has had limited applications such as in medical education, distance training, and specialized services, and has been limited to a few institutions and sections of the population. Often the links are between top tier institutions across countries. There is little evidence of linkages to the public health system at large, particularly in the delivery of basic preventive and curative health services. In contrast, national telehealth programmes have focused on access to quality health services in rural and remote areas and established links to benefit a wider population.⁸⁰ Thus, the cross-border potential of telehealth has not really been tapped for meeting national health objectives. It should, however, be possible to develop national health information structures which are oriented towards meeting domestic health objectives and also linked to the global health infrastructure.

The future prospects for the integration of IT into the delivery of health care services are very promising. There are several areas where there is potential for

⁷⁹ Royall (May 2000).

⁸⁰ There are several examples of national telemedicine programmes such as in Mexico, Senegal, Kenya, and Thailand that are aimed at increasing access to health care services for the poor and remote areas in these countries. See, Chapter 6 in UNCTAD/WHO (1998) and IDRC (1997).

expanding telehealth exports. These include teleassisted services related to home care for the elderly and rehabilitation services, professional education services, and online health information services. The US homecare market for telehealth alone is estimated at \$16 billion and is the most rapidly growing segment of the US health care market. By 2030, this market is estimated to consist of 5 million Americans in nursing homes at a cost of \$1 trillion per year from the present \$70 billion. In 2000, the global market for online health information services was an estimated \$21 billion and the global market for continuing professional education, including for medical education, an estimated \$3.9 billion.⁸¹ However, if the opportunities for integrating IT in health services are to be tapped, then a large number of issues will need to be addressed. These include recognition of professional credentials, treatment of malpractice insurance, remuneration for remote consultations and other services, remuneration for providers outside jurisdictions, payments arrangements, cross-border licensing, patient confidentiality and privacy, ethical and legal concerns, the adaptation of IT to local cultures, and the use of IT in providing basic preventive and curative health services to the poor. This will require international cooperation and the development of national as well as international regulatory mechanisms.

6.2 *Other emerging areas in health services trade*

Several other areas are becoming very important for trade in health services. Trade in health-related educational services is one such area. It can make an important contribution to upgrading capacity and skills in the health sector. It is taking the form of

⁸¹ UNCTAD (April 1997).

commercial presence, electronic delivery, and consumption abroad, and movement of professionals. Joint ventures and alliances are being formed between medical schools, universities, and training institutions across countries, as noted earlier. In addition, export of medical educational services is also occurring through movement of students. Some developing countries are using the reputation of schools, special training, and their cost advantage to get students from other countries.

Countries such as Australia are taking major initiatives in this field by actively recruiting students from abroad, including developing a separate medical visa for training of foreigners in its medical schools. An estimated 20 per cent of university budgets in Australia come from such training programmes. Australia has also established joint ventures with foreign medical universities and institutes, created specialized international departments, and opened medical schools in target markets. Countries such as China are also moving towards the delivery of medical education services on a commercial basis as opposed to providing them under technical cooperation agreements and programmes. With the growth of telemedicine and increased use of IT in health services, the scope for cross-border medical education services will increase in future.

Another emerging area is home based health care services, including assisted living care for disabled and elderly individuals and services for persons with chronic health conditions or those recovering from surgical procedures. This is one of the fastest growing areas given demographic trends in the developed countries. Opportunities for globalization are also growing in areas such as distance consulting, particularly in

specialty care, in traditional healing and alternative medicines, in spa and rehabilitation services, and in health tourism.⁸² Developing countries have potential to export in all these emerging areas. They can market cost competitive alternative health services and health and eco-tourism packages. Those with good quality health training infrastructure can export training, including distance training. While such trade would not directly improve access of health services to the poor, it would help upgrade quality, standards, and skills in the domestic health sector and generate foreign exchange earnings.

VII Important issues and concerns and policy priorities

The preceding discussion on the regional and country-specific experience with health services trade, highlights several common and interrelated issues and concerns. It also suggests certain directions in which policies need to be taken and possible policy measures to address these concerns. Chief among these issues and policy priorities are: (1) to address the problem of brain drain; (2) to upgrade and invest in human and physical capital in the health care sector and to prioritize these investments in keeping with the needs of the population; (3) to promote linkages between the public and private health care linkages; (4) to exploit niches in alternative medicines and to differentiate services provided within this sector; (5) to tap regional markets and opportunities arising from cultural, linguistic, and social factors; (6) to integrate health care services with other sectors of the economy; and (7) to promote international cooperation in various areas in

⁸² According to a Harvard University study, an estimated 9 million Germans consume spa services each year and one-third of Americans spend over \$25 million on alternative therapies, which is not reimbursed by insurers. See, Royall (May 2000).

order to facilitate trade in health services. Each of these issues is discussed in turn below along with associated policy recommendations or directions.

7.1 Brain drain

One of the most pressing considerations associated with health services trade is brain drain, both internal, that is, within developing countries from the public to the private sector and external, that is, between countries, typically from developing to developed countries. The cases of India, South Africa, and various other developing countries discussed earlier, clearly highlight the problem of external and internal brain drain. The common underlying factors contributing to this brain drain are, as mentioned earlier, low wages, poor working conditions, poor infrastructure and facilities, inadequate investment in health care, lack of opportunities for upgrading of skills and knowledge, and also political and social conditions. This implies that if brain drain is to be tackled, either by retaining health professionals or by attracting back those who have left the country, then these root causes have to be addressed.

The various country cases discussed above indicate that most countries have done little to address these underlying conditions. A few countries such as India and South Africa have introduced policies to delay emigration such as by insisting on a period of public service following graduation or by delaying certification till after public service has been rendered. The cases of Cuba and China are, however, useful for highlighting the possibilities for exporting health service providers on short-term contracts whereby the

benefits of such outflows in terms of foreign exchange earnings, exposure, and bilateral assistance are reaped without the attendant problem of brain drain.

Policies need to be introduced, unilaterally and in cooperation with key host countries, to address brain drain. Some concrete measures are outlined below.⁸³

- Movement of persons can be permitted on *short-term bilaterally negotiated assignments* between developing and developed countries for fixed periods or on short-term exchange programmes. This would yield benefits associated with increased exposure and upgrading of skills for health professionals and foreign exchange earnings while overcoming the problem of permanent outflows. The preceding discussion has highlighted the case of countries such as Cuba that have adopted this strategy.
- There is need for *bilateral cooperation* between receiving and sending countries to manage cross-border flows of health service providers in line with host and home country supply and demand conditions. Bilateral cooperation could be in the form of host countries compensating the sending countries through assistance agreements or ensuring that the latter's health professionals return after serving a fixed period. This is also possible through cooperation on *immigration and labour market policies*, such as under special visa schemes and recruitment programmes for overseas health professionals, so as

⁸³ The existing literature on brain drain can provide further insights in this regard.

to regulate the movement of health professionals in accordance with the needs and interests of both receiving and sending countries. Bilateral cooperation is also required to promote links between emigrating professionals and skilled nationals to reduce the negative effects of brain drain in the sending countries.

- Unilaterally, source countries can adopt several policy measures to stem brain drain. In cases where sending countries have a major shortages of health service providers and where outflows could seriously hurt availability and quality of services in the public health system, *negative incentives* could be introduced to reduce emigration, such as through a migration tax or by requiring emigrating professionals to refund the training costs incurred by the government.
- Positive incentives in the form of deductions and tax exemptions and measures to improve working conditions and facilities and to increase opportunities for professional development, need to be considered. Emigration can also be delayed by asking health professionals to serve a mandatory period within the home country following their training so as to pay back society. Where public services are involved, countries could delay the training period to ensure that certification follows a period of public service rendered to the home country.

- Efforts can also be made to induce expatriate health professionals practising abroad to contribute to their home country's health sector. This can take the form of official programmes to attract health care professionals to return to their home countries under return of talent programmes (as some countries have done), by establishing arrangements whereby expatriate health professionals can provide services to the home country through visiting and contractual appointments and through collaborative research and teaching arrangements, by setting up "brain gain" networks of expatriate health care providers, by establishing on-line communication with doctors and medical professionals, and by encouraging foreign investment by the expatriate community.
- There is also need for international cooperation to establish multilateral guidelines on cross-border movement of health care (and also other) professionals. Such cooperation can be undertaken in the context of multilateral discussions on movement of natural persons or mode 4 (one of the four modes of trade in services) under the General Agreement of Trade in Services. (Specific proposals in this regard are discussed later in this paper in the section on international cooperation).

7.2 Increasing investment and better prioritization of expenditures in the health sector

The health care delivery system in many developing countries is characterized by inadequate funding, improper use of resources, and unevenly mixed-up priorities.

Inadequate allocation of resources in the health sector is a common feature in most developing countries. Most developing countries spend less than five per cent of their GDP on health care. This has resulted in a shortage of physical and human resources in this sector. Just to highlight a few examples, in India, the population per bed ratio is one per 1,000 relative to the WHO norm of one bed per 300 persons. The health sector receives only about three per cent of total budgeted expenditure and there is insufficient investment in preventive and curative care and basic health services for the poor. The infrastructure in the public health system is lagging and there is a serious shortage of beds, dispensaries, and even of qualified personnel, especially in rural areas. In Indonesia, the shortage is acute with 161 beds per 100,000 population in Jakarta and with the number falling to 26 beds per 100,000 persons in the remote areas of the country. In 1998, Indonesia had only one doctor for every 7,000 persons and one specialist for 27,000 persons. The shortage of human and physical capital in both basic and specialized health care services is severe in poor African countries, as highlighted in several of the cases discussed earlier. Demand for health services far exceeds the supply capacity of the existing medical delivery system in most developing countries.

From the perspective of exporting countries where there are shortages and inequities in the health care system, trade can worsen such problems. This was evident from the cases of India, Indonesia, South Africa, Nigeria, and Ghana, discussed above. In the presence of resource constraints, trade may aggravate problems of brain drain, increase disparities between public and private health care standards and facilities, and lead to crowding out of the local population. In the case of importing countries, while

trade in health services can help alleviate shortages, there are still attendant problems of equity. Imports of health services in the form of consumption abroad often result in spending of valuable foreign exchange by the affluent segments of the population who can afford to get treated abroad while doing nothing to alleviate the resource crunch and improve the availability of services for the poor. This has been the experience of Bangladesh which has spent a huge amount of foreign exchange on imports of health services from India to address its supply constraints at home, while the benefits have accrued mainly to the affluent few. Hence, the highlighted examples indicate that benefits from trade in health services are likely to be greater in the presence of good health care infrastructure and adequate allocation of resources to this sector and the negative consequences of trade are likely to be exacerbated when investment in the health sector is inadequate.

The examples that have been highlighted also indicate the importance of prioritizing expenditures in the health care sector. The problems of brain drain and dualism partly reflect the poor prioritization of investments in health services in many countries, in particular, the overinvestment in production of medical graduates and specialists relative to absorption capacity and less focus on training of nurses, generalists, technicians, and lower level health practitioners in many developing countries. Such misallocation of investment relative to the needs of the population has led to an outflow of specialists and highly trained health professionals from countries such as Pakistan, resulting in a loss of subsidized training and investment provided by the government and a shortage of both generalists and specialists in the country. Allocating more resources to

training of specialists when there is a dearth of technicians and nurses, as many developing countries have done, is an inefficient use of resources.

Thus, the discussion clearly indicates the need to both increase expenditures on health care and to allocate these expenditures efficiently, in line with local needs and local demand conditions and priorities. In this regard the following measures are required:

- Countries need to increase their budgeted expenditures on health care to improve the availability and quality of human and physical resources in this sector. In most developing countries, the priority would be to increase the number of hospitals, dispensaries, beds, and the supply of doctors, nurses, and technicians to better meet the needs of the population.
- Other possible measures that could be considered include, reducing the high cost of land in urban areas and providing land at subsidized rates in urban areas for setting up medical establishments and facilities, providing financial assistance such as soft loans for hospital construction and equipment, sharing of specialized and high cost facilities by institutions to rationalize costs, and revamping management procedures to increase the efficiency and reduce the cost of health care services.
- Revenue generated from trade in health services can be partly used towards development of the domestic health care sector. Taxes collected from foreign

owned commercial hospitals could be invested back in the public health system.

- There is need to enforce uniform standards of training and practice within the country to standardize and register private hospitals, clinics, nursing homes, and other medical centres to ensure the quality of health services available to the public. Such measures would help address the problem of non-uniformity in standards and working conditions which is one of the main reasons for internal and external brain drain and creation of a dual market structure within the health care sector.
- Countries need to assess their needs in specific segments of the health profession and accordingly invest in training and facilities.

7.3 Linking public and private health care services

Several of the highlighted examples indicate the importance of establishing linkages between the public and private health care systems. Such linkages can help in augmenting the financial capacity of the public health sector to improve the overall availability and quality of services for the public at large, and to reduce disparity in standards and working conditions between the two segments. Linkages can be promoted in various ways.

- The public and private health care systems can be linked through professional exchange, cooperation in training, use of facilities, telemedicine, sharing of information and research, and provision of complementary or specialized treatments. Governments need to consider introduction of such collaborative arrangements.
- Policies such as cross subsidization between the public and private health care sectors through transfer of tax revenues collected from the latter, or provision of beds at free or subsidized rates in high quality corporate hospitals could be introduced. Such linkages would enable the public health care segment to gain from foreign direct investment and consumption abroad in health services. In this context, monitoring systems would need to be introduced to ensure that such provisions are being enforced.
- Incentives should be given to the private sector to provide services in rural and peripheral areas. Independent practitioners in private practice could be given support through funds and other amenities for their practice so as to encourage them to provide services in underserved areas.
- There is need to ensure that investments in areas such as telemedicine or specialized health services in the private sector are not at the expense of resources allocated to the public health system, and that they complement the needs of the latter.

7.4 *Exploiting niches within the health care sector*

Several of the cases highlighted above, including those of China, Cuba, India, and Chile indicate the importance of establishing niche areas of specialization and differentiation of services provided within the health care sector. Another example is Thailand which exports services such as Thai massages, spa services, rehabilitation services, and traditional medicines to tourists and businessmen. Like Cuba it has also differentiated itself through health tourism. It is important to note, however, that the cases highlighted do not suggest that specialization in these niche services and such differentiation has yielded direct benefits for the population at large. The target market for these services have tended to be narrow, focused on certain overseas markets and business visitors and tourists. There is little evidence to suggest that there have been conscious policies to link these services to the public health system or to use the resources generated from the delivery of such niche services to augment the financial capacity of the public health system.

Given the variety of alternate medicines and healing practices and the rich natural endowment in many developing countries, coupled with growing awareness of these alternate practices, there is considerable scope for promoting trade in such niche areas. In this regard the following actions need to be taken:

- Countries should exploit niche areas in health services by marketing traditional medicines and practices and disseminating information on alternate techniques and procedures.
- Countries should link the delivery of specialized and niche services with other activities such as eco-tourism, rehabilitation, and business travel.
- Target markets should be identified based on cultural, geographic, linguistic, and other factors.
- To ensure that benefits are widespread, mechanisms have to be established for transferring part of the resources generated by such specialized services to the public health care system and by promoting linkages between these niche areas and basic health care services.

7.5 Tapping regional and other opportunities for trade in health services

An important common feature in several of the cases highlighted above is the significance of regional markets for trade in health services. For instance, Cuba and Chile are important exporters of health services in the Latin American and Caribbean region, India is an important exporter in the South Asian region, Tunisia in the Maghreb region, Thailand and Philippines in the South East Asian region, and Jordan and Egypt in the Middle East. The significance of regional trade in health services is due not only to the reduction in costs and the conveniences associated with geographic proximity, but also

due to cultural, linguistic, historical, and social affinities that are often present between countries in a region. The cases of trade in health services between Bangladesh and India, between Tunisia and France and other Maghreb countries, and between Indonesia and countries in South East Asia, illustrate this point. The Chinese case further suggests that factors such as language proficiency and presence of a large overseas diaspora with strong cultural and linguistic affiliations can be helpful in developing target markets for health services exports on a global scale. The various cases also highlight the potential benefits of regional trade in health services for the poorer countries in a region, by helping the latter to overcome shortages through consumption abroad and inflows of personnel, and by helping them develop infrastructure and skills through inflows of capital and imports of medical education, training, and health management services. Evidence further indicates that some progress has been made in liberalizing health services trade under regional and sub-regional agreements and in addressing difficult issues such as recognition and insurance portability in the regional context.

- There should be conscious policies aimed at promoting health services trade with neighbouring countries and with target groups around the world (such as expatriate communities). Links between service providers, health care establishments, and exchange in the form of training, research, consultation, and other services and facilities should be promoted within regional markets.
- Lessons should be drawn from the regional experience with health services trade for addressing issues such as harmonization of standards and cross-

border mobility of health professionals and consumers at the multilateral level at the WTO. The experience of regional trading arrangements such as the EU and NAFTA with health services trade should be used to provide an impetus to multilateral trade liberalization in this sector by highlighting the areas and the ways in which progress can be made and by learning from the associated difficulties.

- Provisions relating to cross-border movement of health care providers, consumers of health services, and investment in the health sector and associated issues of insurance and cross-border payments systems need to be considered in the context of regional trading arrangements where there is scope for trade in health services.
- The possibility of setting up regional systems of mutual recognition and harmonization of licensing and certification procedures needs to be considered.

7.6 *Integrating health services trade with policies in other sectors*

The country and regional level experiences discussed in this paper highlight the need to *integrate trade in health services with other sectors* of the economy. National and regional policies need to consider health in conjunction with other related sectors to provide a supporting infrastructural and regulatory environment.

- Countries need to consider the scope for linking health services with travel and tourism services. The evidence from several countries and regions indicates the importance of linking these two sectors. Health and tourism services can be marketed in a composite package to foreigners. Governments can set up agencies to provide such packages or allow private agencies to deliver such services.
- Trade in health services needs to be linked with regulatory developments in the insurance sector. As discussed earlier, lack of portability of insurance coverage is one of the main constraints to health services trade in the form of consumption abroad. Thus, opening up of the insurance sector to foreign direct investment and arrangements between governments on insurance coverage across countries such as seen in the case of the EU and Mercosur, can help promote trade in health services.
- Trade in health services can also be integrated with medical and paramedical education and training services. Policies concerning setting up of medical training establishments and joint ventures in this area, reservation of seats for foreign students, pricing of such services, and immigration regulations affecting movement of students and trainers have relevance for trade in health services.

- Governments need to consider the implications of supporting policies in telecommunications, including foreign direct investment and tariff restructuring in this sector, for the tradability of health services through telemedicine and outsourcing activities.
- National policies on procurement of medical supplies, equipment, and drugs, and in particular, import duties and taxes, and pricing of the latter should not hurt a country's export-competitiveness in health services by raising costs and constraining the availability and quality of health services that can be provided. Fiscal support may be required to reduce the cost of importing essential drugs and equipment.

7.7 International cooperation

The preceding discussion has clearly indicated the need for international cooperation and the establishment of international regulatory mechanisms in several areas. In this regard:

- Multilateral disciplines should be developed and strengthened within the GATS framework to facilitate cross-border movement of health care professionals, mutual recognition of qualifications, and ensure that domestic regulations in this sector are administered in an objective and transparent manner.

- Specifically, on the issue of cross-border movement of health care providers, there is a need to strike a balance between trade objectives, on *the* one hand, and public interest concerns, on the other. Commitments made by countries under the GATS and the provisions of the GATS should encourage trade in health services through cross-border movement of health care providers while also establishing mechanisms to ensure that this movement is temporary.

One specific proposal that has been made in this context is to create a separate visa category, such as a **GATS visa** which would be distinct from the usual immigration visa categories. This visa would be granted to service providers deputed abroad by their employers or those going abroad in an independent capacity, as is likely to be the case in the health sector, in accordance with the terms and conditions listed in the commitment schedule of the receiving country, for a particular sector and type of professional. This visa could be granted more easily without the usual problems of non-transparency and discretion that characterise immigration procedures, thus enabling countries to export human capital and earn foreign exchange in this sector. At the same time, there would be in-built mechanisms to prevent this visa from being used for permanent entry into the host country's labour market, such as by delinking it from other visas which can translate into permanent residency and citizenship in the host country. The introduction of such a multilateral visa would require considerable cooperation and agreement among countries to review and change their immigration policies

and procedures. Chanda (2001) discusses in detail the possible features of such a visa and the gains therefrom.

- The GATS framework also contains a number of provisions, which if strengthened, could play an important role in shaping cross-border flows of service providers and in mitigating some of the associated adverse effects of such flows in sectors such as health. For instance, GATS disciplines on domestic regulation requires member country policies that have bearing on their liberalisation commitments under the GATS to be administered in a transparent and reasonable manner. However, labour market policies such as economic needs tests and manpower planning requirements which are used by many governments to regulate the entry of foreign health care providers, are often highly non-transparent and without clear criteria on their use and administration. Thus, by establishing stricter norms on the use of regulations, such as needs based tests, the GATS can facilitate the opening up of the health sector.
- A system of international accreditation of health personnel and of health care institutions needs to be considered. This will require cooperation among professional bodies and associations across countries. The Working Party on Professional Services under the WTO's Council for Trade in Services can be responsible for progress in this regard. In this context, cooperation among nodal ministries in member countries, professional associations in these countries, the WHO, and the WTO is required.

- Issues arising in the context of telemedicine, including, malpractice liability, confidentiality of information, recognition, and cross-border payments need to be discussed multilaterally. Efforts should also be made to apply IT to addressing basic preventive and curative needs in the health sector and to benefit remote and poor areas through actual delivery of services or through capacity building in the form of information dissemination, training, and consultation facilities.
- There is need to improve data on trade and investment transactions in the health care sector. This will require coordination among professional associations, ministries of health and ministries of commerce, and multilateral agencies such as the UN, the WHO, WTO, IMF, and the World Bank to develop a comprehensive and systematic way of collecting data in this sector which also covers all four modes of supply. In-depth case studies also need to be conducted such as done by the regional offices of the WHO to assess the potential costs and benefits of trade in health services for individual countries and regions.

Conclusion

This paper has indicated that trade in health services is globally widespread. A wide variety of developing and developed countries are engaged in this trade, as exporters and as importers. The nature of trade flows in this sector are dictated by sectoral needs and specificities in the exporting and importing countries and by a host of

regulatory and infrastructural constraints. Comparative advantage in trade in health services is based on costs, natural endowments, availability of human, financial, and physical capital, presence of niche areas within the sector, and the supporting policy environment and infrastructure.

Trade in health services takes many forms, including movement of health professionals, movement of consumers, foreign direct investment in health services, and electronic delivery. Each mode of trade has associated with it positive as well as negative implications. The main positive implications of trade in health services include upgrading of infrastructure, increased exposure for health service providers, foreign exchange earnings and remittances, greater availability of quality health services and thus reduced pressure on public resources and domestic capacity. The main negative implications of trade in health services include brain drain of quality service providers to overseas markets, creation of a two-tier structure within a country, internal brain drain from the public health system to the private health care sector, crowding out of nationals, overinvestment in specialized and capital-intensive segments at the expense of investments in core health care services, and adverse effects on equity in the public health sector.

Overall, the study makes clear that trade in health services raises a variety of difficult questions. The answers to these questions cannot be generalized. They depend very much on country-specific circumstances and the policy environment. However, one of the main points highlighted by this study is that it is possible to enhance the gains from

trade in health services and to mitigate the associated negative consequences through well-conceived policies and initiatives at the national, regional, and multilateral levels.

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