“TRADE IN SERVICES: OPPORTUNITIES AND CONSTRAINTS”

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Report on

TRADE IN HEALTH SERVICES

Co-ordinator: Dr. Yogi Mehrotra

Chief Co-ordinator: Mr. B.K. Zutshi

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Introduction

Health and social services encompass a wide range of activities of economic and social significance in both developed and developing countries. The global health care industry has been growing rapidly in recent years, mainly in response to technological, regulatory, and demographic changes. Today, the global market in health services is estimated to be worth over US $2 trillion and expenditures in the health sector constitute a significant share of GDP in many countries. In addition, the sector has important spillover benefits to other parts of the economy in terms of employment generation, poverty alleviation, and various other development objectives.

Trade in health and social services is very modest. Even in the most advanced countries, the sector is a small contributor to trade. This modest role of trade in the health services sector is due to a combination of regulatory and institutional constraints to the movement of professionals across countries, to foreign commercial presence, and technology-related barriers. As a result, trade-related considerations have never been a major policy concern in the sector. Recent regulatory and technological developments have, however, enhanced the prospects for trade in health services With more and more countries introducing regulatory reforms and moving towards greater market orientation with increased private sector (domestic and foreign) involvement, and with technological improvements enabling electronic transmission of certain health care services, trade in health services is becoming increasingly important. In this context, the negotiations on health services at the WTO negotiations on trade in services in 2000 assume great significance.

India has a relatively well developed health services sector and is perceived to have tremendous potential for expanding trade in this area through various modes of supply. It is therefore important to identify the country’s opportunities and constraints to trade in health services, in preparation for the upcoming WTO negotiations.

Structure and Objectives

This paper discusses the prospects for trade in health services for India. It assesses the extent of liberalization that has already taken place in this sector under the GATS and the scope and strategy for further trade liberalization in health services, in view of India's interests and strengths in this sector.

Section 1 of the paper provides background information on the structure, trends, and current as well as potential trade in health services in India. Section 2 discusses the main domestic and external barriers to India’s trade in health services. Section 3 discusses the commitments made in the previous round under GATS and their implications for India. Section 4 outlines India's strategic interests in health services for the next round of service sector negotiations in the WTO. It notes the main issues and points to be negotiated in this round and the nature of the concessions to be sought from other countries as well as the commitments that India should be prepared to make. This section also outlines areas where multilateral guidelines have to be developed and issues for which a bilateral approach may be more appropriate. Section 5 discusses areas where autonomous structural and regulatory reforms are required in India to support India's position in the GATS and to take advantage of the opportunities thus created.

1. Overview of Health Services

This section highlights recent trends in health services in the world economy and in the Indian economy in terms of trade and contribution to value added. It also discusses the key structural and institutional features of this sector in India.

1.1 Health services in the world economy

Health care services are a major share of expenditures in most developed countries. Aging populations, expanding insurance cover, growing numbers of hospitals, and the availability of new and sophisticated equipment in the developed economies has led to rapid growth in health care expenditures in these countries in recent years. The OECD countries spend about US $2 trillion per year on health with per capita expenditure of about $3500 per year on health services. In most of these economies, health care spending accounts on average for more than 8 percent of GDP. In the US, spending on health care accounts for 15 percent of GDP while in Europe it stands at about 10 percent of GDP. In terms of the structure of this expenditure, hospital services tend to account for between 40 to 50 percent of total health spending, pharmaceuticals for 30-40 percent, and out-patient medical and paramedical services account for the remainder.

In developing countries, total health care expenditures are much lower at about $2 billion with average annual per capita expenditures of $5 in the least developed countries. The share of health expenditures in the economy is also much lower for developing countries. While some sources put it as 2 percent of the GDP, some other put it around 5 percent of GDP.

Although empirical evidence on trade in health services is difficult to obtain, available information indicates that the value of world trade in this sector is very small. Even for countries such as the US, which are important in the world health services market, trade in this sector is a mere fraction of total health expenditures. For instance, US exports of health care services covering the activities of US majority-owned health service suppliers abroad and health services provided to foreigners in the US, amount to less than 0.2 percent of total health care spending in the US. The modest size of trade in health services is in large part due to the fact that this sector is influenced by a wide range of regulations including licensing and qualification requirements and restrictions on the range of goods and services professionals and hospitals are allowed to provide.

At present, world trade in health services occurs under all four modes of supply covered by GATS, namely, cross-border supply, consumption abroad, commercial presence, and movement of professionals.

Cross border provision of health services is mainly in the form of telemedicine. While this has traditionally not been a major form of trade in this sector, technological developments have increased its importance in recent years. For instance, US suppliers provide commercial telemedicine services to customers in several Gulf countries. Jordan has established telemedicine links with the Mayo clinic in the US. There is also some trade in telediagnosis services between coastal provinces in China and patients in Chinese Taipei, Macao and other South East Asian countries, and several Central American countries have been sending medical samples for diagnosis to public health hospitals in Mexico.

The prospects for cross-border trade in health services are very promising due to developments in the telecommunication and software sectors. In future, this mode is likely to go beyond telemedicine to include services such as hospital management, data collection for statistical and educational purposes, and back-up advisory facilities for local staff abroad, provided public telecommunication networks and services are available on a reasonable and nondiscriminatory basis.

Overseas consumption of health services takes the form of (i) patients moving from developing to developed countries with the better off seeking access to high quality services abroad; (ii) patients moving from developed to developing countries in search of exotic therapies or simply cheaper treatment; and (iii) patients moving within the two country groups when the domestic suppliers are unable to provide a required service in time or to compete effectively in terms of price and quality. Often some countries may also have natural advantages in terms of endowment and climate.

Industrialized countries such as the US are the main suppliers of health services to foreign patients and most of the trade via this mode is among developed countries.[1] However, some countries have been making concerted efforts to attract foreign patients and to serve as regional hubs for treatment. Promotional methods used by the latter countries include combined packages for travel agencies and tour operators with medical service providers. The prospects for this mode are promising given improvements in transport and communication, deregulation in the insurance sector in many countries, and freer movement of persons across countries.

Trade via commercial provision of health services takes the form of foreign invested clinics or practices and occurs mainly between developed countries. While it is difficult to estimate the magnitude of such trade in the absence of quantitative information for most countries, evidence for the US economy shows that trade in this mode is significant in terms of exports as well as imports. US exports by foreign based affiliates of US majority owned health care providers amounted to $469 million in 1995 while its imports of health services in the form of sales by foreign owned health care suppliers amounted to $1.8 billion. There are also regional networks of medical and health care providers in Asia, including the Singapore-based Parkway Group and small-scale hospitals set up by China in the CIS countries and parts of Asia. With the move towards greater market orientation and a more liberal climate for foreign direct investment in many parts of the world, commercial presence in health care services is likely to become a more important mode for trade in this sector.

Finally, trade in health services through the movement of health professionals is a very important though highly regulated mode for trade in this sector. At present, most of the movement of professionals (doctors, nurses, and technicians) in this sector takes place from developing countries, with an estimated 56 percent of all migrating physicians originating in developing countries. However, the destination markets are not necessarily the developed countries and are quite diverse including countries in the Middle East, Africa, and the CIS. In some cases, movement of health professionals is linked to commercial presence. For instance, Chinese medical staff and personnel provide technical manpower to small-scale Chinese owned hospitals in the Middle East,

[1] Leading medical institutions like the Mayo clinics, Johns Hopkins Medical Centre, and the Mass General Hospital attract significant flows of foreign patients. In 1996, US exports of health care services in the form of foreign tourists receiving treatment in the US amounted to an estimated US $872 million. The main source countries were Canada followed by the UK, Germany, Mexico, Australia, and Japan. Imports of such services in the US were about US $550 million in 1996.

CIS countries, and in South East Asia, with the host countries providing buildings and equipment.

Opportunities for developing countries for trade in health services

There are various international forces that are influencing health services in all countries and are creating opportunities for developing countries in this sector. One major driving force is the need to contain cost. Both private and public health care funders are finding it increasingly difficult to cope with escalating costs of health care. Private health care funders in some countries such as the US are considering the possibility of contracting with cross border suppliers. Such a trend would greatly benefit developing countries who would be able to offer comparable services at lower cost. Cost containment in pharmaceutical research and development also presents opportunities for developing countries due to their lower salaries and lower risk of litigation. Another important factor affecting the scope for trade in health services is the increased mobility of health care consumers is to the advantage of the developing countries who could tailor make services for this category of patients. Their strategic advantage in this regard is their ability to provide health care services at lower costs, their ability to provide unique services due to local expertise, their potential to combine health and tourism, the availability of natural resources with perceived curative powers, and the increasing popularity of non-Western medicinal practices. The ageing population structures in the developed countries is another driving force being escalating health care demands and the attractiveness of developing countries providing good treatment at much lower costs.

The potential areas where present global trends favour trade initiatives by developing countries are summarized in the table below.

Mode of delivery	**Relevant categories of services/service providers**
Movement of personnel	Consultants Skilled health professionals
Commercial presence	Health management services Hospitals and clinics Pharmaceutical research and development
Movement of customers	Medical and dental services Non-emergency care Elective and chronic care Cosmetic Rehabilitation Educational services
Cross border trade	Support services Laboratory Radiology Management services Infrastructure development Hospitals and clinics Educational services and services provided by internet equipment and supplies

Challenges for developing countries for trade in health services

Despite the opportunities, developing countries also face considerable challenges to expanding trade in health services. One major challenge concerns the movement of health personnel. Most developing country governments are opposed to the movement of health professionals as it leads to a loss of scarce human resources. To prevent such brain drain, mechanisms such as time bound contracts for service outside the country, rotational systems that allow job sharing, competitive salaries at home, and agreements with host countries for time limits on work permits have been suggested. There is also the problem of divergent standards of health care training and treatment across different countries. This poses a challenge for developing countries who need to standardize their curricula, facilities, and training to overcome the problem experienced by their health professionals in recertifying and registering with national authorities in other countries.

1.2 Health services in the Indian economy

In India, health care services account for barely 2 percent of GDP. The low share reflects the grossly inadequate spending on this sector relative to population needs. India is also very small player in the global health services market, accounting for less than 1 percent of the world market. However, it is commonly perceived that India has tremendous potential for expanding trade in health services due to its many strengths in this sector.

One major strength is India's large pool of skilled and well trained doctors, nurses, paramedics, and technicians, many of whom are of international quality. Indian medical personnel are recognized for their skills and training in many parts of the world.

A second important strength is India's ability to offer low cost treatment particularly in comparison to the developed countries. For example, the cost of a bypass is between Rs. 2 to 3 lakhs in India while it is about Rs. 80 lakhs in the US and Rs 40-50 lakhs in the UK. Similarly, a bone marrow transplant costs about Rs. 12-15 lakhs in India as opposed to Rs. 60-80 lakhs in the UK and about Rs 1 crore in the US. According to a WHO study, Indian clinics have the capability to offer sophisticated treatment, including cardiovascular surgery as well as standard and specialized therapies at prices estimated at about one-fifth to one-tenth of those charged in industrial countries for similar interventions. [2]

In addition to its mere cost advantage, India also has the ability to combine low costs with quality hospitals and health care facilities. For instance, there are several private sector superspecialty hospitals such as Apollo and Escorts that provide treatment and facilities of international standards but at 10 to 20 percent of the cost for comparable treatment abroad. In all these above respects, India also has a significant regional advantage as it has the most developed health care facilities, personnel, and training institutions in the SAARC region.

The nature of India's trade in health services reflects the aforementioned areas of strength as well as demand requirements in the overseas markets. At present the main destination for India's exports of health care services are the Gulf countries, some African countries, and neighbouring countries in South Asia. Potential markets such as the South East Asian countries and industrialized countries such as the US, UK, Australia, and Canada remain largely untapped.

[2]India's potential for attracting foreign patients has also been noted in a WHO study.

India's trade in health services is mainly in the form of temporary migration of Indian doctors, nurses, paramedics, and technicians to countries in the Middle East, Africa, and neighbouring countries. Although empirical evidence is not available to assess the relative contribution of the different modes of supply to India's foreign exchange earnings; this mode is without doubt the main source of export earnings from health services at present. This reflects India's strength in terms of its large pool of skilled and well-trained professionals in the health services sector and the shortage of medical personnel in other countries.

Trade through the other modes of supply, although not so significant due to technological and infrastructural constraints, is nevertheless present. For instance, there is some trade through cross border supply in the form of telemedicine with neighbouring countries. Blood samples and histopathological slides are being sent from Nepal and Bangladesh for reporting to India. Data and images are being transferred to India from some countries for opinions and comments. Bangalore is becoming increasingly important as a centre for medical transcriptions.

There is also some trade in the form of consumption abroad. A large number of patients come from the Middle East to Bombay, from Bangladesh to Calcutta, from Nepal to Delhi, and from Sri Lanka to Chennai for treatment. [3] There are also no restrictions on outflows of Indian patients to other countries for treatment purposes, other than those by RBI on foreign exchange.

In the case of commercial presence, there is both consultancy presence and physical presence in terms of establishments. For instance, there are some tieups between Indian health care providers and local partners in other countries. Escorts have offered their consultancy presence in Nepal. The Apollo group has tie ups with Nepal, Bangladesh, Sri Lanka, and Dubai and is in the process of discussing tieups with Oman, Saudi Arabia, and Bhutan and has contributed to equity in projects at Dubai and Sri Lanka. The government of India has built hospitals in Nepal and the Middle East. On the import side, there is as yet no large scale foreign commercial presence in health services in the country. However, several foreign health care providers, mainly from Australia, France, the UK, and the US are keen on developing hospitals and health care facilities in India. There are a number of foreign healthcare groups, which have tied up with Indian groups for providing consultancy services and are contributing to equity as in the case of Gleneagles for a hospital project in Calcutta.

1.3 India's Potential for Trade in Health Services

India has a lot of potential for increasing its exports of health services. For instance, there is a lot of scope for expanding telemedicine with neighbouring and African countries as well as industrialized countries, given appropriate improvement in telecommunication services and reasonable telecom tariffs. Digital imaging, faster transmission via satellite and lowering of transmission rates will make telemedicine increasingly affordable. X-rays, CT Scans, MRIs, etc. would be possible to send through satellite for reporting in India. As the cost of professional opinion would be far less than in developed countries, the latter could opt for receiving opinions from India. With increasing use of the internet and greater dissemination of information on health and medicines, the scope for cross border supply of health services and telemedicine in particular should expand.

[3] It is troubling that there has been a drop in the numbers from the Middle East coming to Bombay.

There is a lot of scope for treating foreign patients from a wider range of countries, including not only the neighbouring countries but also countries from the wider Asia Pacific region and developed countries in the West given low treatment costs. Exchange of patients is an area with a lot of potential in terms of foreign exchange. This inflow of foreign patients is likely to be mostly in hospital based curative care and should therefore not significantly crowd out nationals. It is also likely to make domestic facilities more competitive and improve standards in India. One important growth area is in alternative medicines which is already attracting some patients from abroad. The different systems of medicines, if given special attention in India, can offer competitive services to foreign patients.

India also has a lot of potential for having a larger commercial presence abroad in the health services industry. It has developed the know-how of constructing and managing hospitals. Hence, it can export hospitals and diagnostic clinics as turnkey projects starting with the neigbouring countries, the Middle East, and Africa where its qualifications are recognized, followed by countries in South East Asia and even the industrialized countries in the west. There is also potential for foreign investment in the form of foreign health maintenance organizations (HMOs) setting up business in India. The recent trend for super specialty hospitals and polyclinics in India is a good one as it helps improve domestic standards and gain expertise and state of the art technology. One needs to be careful however that obsolete technology does not come in with the foreign investment and that truly there is some gain from foreign commercial presence. Indiscriminate setting up of corporate hospitals would be counterproductive and would hurt domestic hospitals.

Given technological, organizational, and regulatory changes in health services that are occurring both in India and abroad, the opportunities for tapping India's potential in health services and entering new markets are likely to increase.

The following table summarizes India’s current and future (short run) trade scenario for health services.

Trade Situation and Future Potential By Type of Trade and Type of Partner

Type Of Trade	To/From Developing Countries		To/From Developed Countries	
Types of Trade	**Current**	**Future**	**Current**	**Future**
Inflow of foreign doctors	No	No	Yes	Yes
Outflow of Indian doctors	Yes	Yes	Yes	Yes
Inflow of foreign nurses	No	No	No	No
Outflow of Indian nurses	Yes	Yes	Yes	Yes
Inflow of foreign “other health personnel”	No	No	No	No
Outflow of Indian health personnel (e.g., technicians)	No	No	Yes	Yes
Inflow of foreign patients	Yes	Yes	Yes	Yes
Outflow of foreign patients	No	No	Yes	Yes
Inflow of foreign capital	Yes	Yes	Yes	Yes
Outflow of foreign capital	Yes	Yes	No	No

Source UNCTAD, International Trade in Health Services--A development Perspective

Here it is important to highlight some of the major concerns expressed by certain sections in India, including the Ministry of Health on the issue of liberalisation of the health sector. Their major concern is about the likely implications of opening up of the health sector for the poor and for the rural sections of the economy. There is some concern that opening up the health sector would force India to adopt health standards that are applicable to the developed countries which could raise the cost of treatment significantly. Higher costs would have a direct adverse impact on the poorer sections of society as they would find it more difficult to afford medical facilities. Therefore, liberalization of the health services sector must be preceded by the establishment of adequate standards, quality assurance system, a properly functioning legal system, consumer protection laws, rapid and responsive surveillance systems, and strengthened public health care structures that would be able to withstand the pressures arising from liberalisation. However, opening up the health sector would also potentially benefit the sector by inducing greater competition in the system, creating a more uniform pay structure across the country, and by inducing improvements in quality and quantity of health care available in the country.

Even though the concern of Ministry regarding the increase in cost of health care is quite correct, we have to set International standards in the Health Care sector for all sections of the society. The Government may have to spend more initially but the benefits would be enormous in the long run in terms of increased productivity and better living standards. This process would take some time, may be a span of 5-10 years, but this process has to be started.

1.4 Status of the health services sector in India

This section discusses the main institutional and structural features of the health services sector in India, including delivery of such services, training, institutional set up, and standards. The areas highlighted in this section serve as a background for the later discussion in this paper on constraints, reforms, and strategies for expanding trade in health services.

Health care delivery

The health services sector consists of primary, secondary, and tertiary care. The sector has primarily been in the government domain given its significance in terms of social and developmental objectives. Health care delivery has been mainly provided by government hospitals, supplemented by general practitioners and small nursing homes in the private sector. There are also specialized government hospitals such as the All India Institute of Medical Sciences and JIPMER at Pondicherry.

A look at the health and socio-economic indicators reveal that Indian population are generally worse off than those of developed countries like the United States and also of a country in the region like Sri Lanka. Although India is faring better than some of the other developing countries in the region like Bangladesh, it still has a long way to go towards achieving health for all. Infectious diseases are still a major cause of mortality and morbidity in India, with non-infectious diseases on the rise. There are newer diseases like AIDS and Hepatitis spreading rapidly and some others like malaria, dengue and tuberculosis re-emerging at an alarming pace. These facts and the dual development with a large poor population and an increasing middle and upper income class imply that India will have to invest in preventive and promotive health care as well as in curative health care in the near future.

	United States	Sri Lanka	India	Bangladesh
Life expectancy 1997	76	73	63	58
Infant mortality rate, 1991 (0/000), 1998	7	14	63	57
Crude Death Rate 1997 (0/000)	8	6	9	10
Crude Birth Rate 1997 (0/000)	15	19	27	28
Median age at Death 1990	76	73	37	12
GNP per capita (in US$) 1997	28310	770	392	352
Adult Literacy rate, 1997	99	90.7	53.5	38.9

Source: World Bank
Human Development Report

Available statistics on the health sector indicate that India ranks poorly in terms of health infrastructure and services. The table below gives the health personnel and infrastructure for four countries. It indicates a relative shortage of hospitals, hospital beds, and dispensaries.

Selected Indicators Of Health Infrastructure And Services

	UNITED STATES	SRI LANKA	INDIA	BANGLADESH
Doctors/1,000	2.4	0.14	0.41	0.15
Hospital beds/1,000	5.3	2.8	0.7	0.3
Nurses to doctor ratio	2.8	5.1	1.1	0.8
Nurses/ midwives per 1,000	NA	0.74	0.4	0.08

Source: World Development Report 1993
Regional Health Report 1996

Evidence indicates that these services are much worse in the rural areas with fewer doctors, nurses, hospitals, and beds.

Although the government has been the major provider of health services in India, increasingly, the role of the private sector has become important in given resource constraints in the public sector. Today, 30 percent of hospital beds in India are in the private sector, including a large number of nursing homes and some 80 percent of general practitioners and medical personnel are employed by the private sector. Corporatization has been made possible by changes in government regulations which now permit hospitals to borrow on commercial terms.

The table below provides the distribution of hospital and hospital beds by private and public ownership as well as the relative growth rates of these facilities.

Distribution Of Health Facilities And Beds

	Total	Rural/Urban (%)		Public/Private(%)	
Hospitals	13.692	20.5	79.5	33.4	66.6
Hospital Beds	596,203	15.8	84.2	64.6	35.4
Dispensaries	27,403	40.0	60.0	37.0	63.0
Dispensary Beds	25,173	51.6	48.4	57.9	42.1

Growth Rate Of Hospitals And Hospital Beds

	Hospitals		Hospital Beds	
	Government	Private	Government	Private
1974-78	6.4	43.7	11.3	20.1
1979-84	1.0	12.1	1.9	3.9
1984-88	2.6	17.2	3.3	6.8

Source: UNCTAD, International Trade in Health Services==A development Perspective

Private care is more extensive in India in the form of curative care and is more urban based. A recent trend has been the rapidly expanding number of corporate hospitals like Apollo, Escorts, and Batra. Health care provided by these centres are supposed to be of higher quality and is available to those who can afford to pay for it.

Overall, there are a number of government and private sector hospitals in India, which are comparable to the best hospitals abroad. These include the Apollo group of Hospitals in Chennai, Hyderabad, and Delhi, Escorts in Delhi and Madras, The Medical Mission in Chennai, AIIMS in Delhi, Sankar Netralaya in Chennai, L.V. Prasad in Hyderabad, VIMANS-Delhi Cardiac Centre of Railways at Perambur, Jaslok, Hinduja, and Tata Cancer hospital in Mumbai and a host of other hospitals.

Taking the private and public sector together, there is a shortage of health personnel and infrastructure in the country. This is an important point if one is to assess the potential for trade, especially through the exports of health personnel and through treatment of foreign patients in the country. From the recent growth in private health care services, it is evident that there is a large unmet need for health services. Moreover, due to significant discrepancies in the remuneration of private versus government sector practitioners as well as differences in working conditions, there has also been a recent trend of government doctors resigning and joining the private sector. Given that government hospitals are supposed to provide inexpensive care to mainly the lower income groups, losing good doctors has an adverse impact on the availability of health care for this segment of the population.

As regards nurses, there is need to improve the availability of nurses. Although there are currently about 500,000 nurses and there is a steady increase in the supply of nurses every year, evidence indicates that many are migrating to the Middle East and other countries. Thus far, supply exceeds demand for nurses but this situation could change with the growing private medical sector. With regard to technicians, at present India has a shortage of well trained technicians. This is mainly because the Indian health system is heavily dependent on doctors which is often to the detriment of a system of quality health care that includes well trained nurses and technicians.

Training and education: Institutions and standards

Today, there are 164 medical colleges in the country of which over 100 are government colleges. There are also a large number of nursing schools and training institutes for technicians, physiotherapists, and other ancillary staff. While training and education in health services has been primarily provided by government run medical colleges and training centres, due to the paucity of government funds in relation to population needs, the role of the private sector has become important in recent years. This is evident from the proliferation of private medical colleges in the country, including the emergence of leading private institutions such as Manipal.

Enforcement of standards and recognition of personnel as well as training centres in health services is under the purview of central as well as state level statutory bodies. The requirements for qualification as doctors, nurses, technicians, dentists, and pharmacists are specified by the relevant statutory bodies which also regulate the syllabi, registration in the profession, and ensure the adequacy of training facilities.

(i) Doctors

To qualify as a doctor, the requirement is four and a half years of training after high school graduation followed by one year of compulsory internship. A post graduate degree requires another three years of training with an additional two year requirement in the case of a superspeciality. There are two agencies that currently certify degrees in medicine. These are the Medical Council of India and the National Board of Examinations. Both are statutory bodies formed by the government of India to enforce uniform standards for training and education in medicine in the country.

The Medical Council of India sets standards and recognizes both undergraduate and postgraduate degrees through inspections.[4] In addition, the Council also deals with the issue of reciprocity with foreign countries in terms of mutual recognition of medical qualifications, continuing medical education, permanent recognition of doctors with recognized medical qualifications, registration of additional qualifications, and issuance of good standing certificate for doctors going abroad to commonwealth countries. At present, 148 medical colleges are recognized by the MCI of which 105 are government colleges. The main problem with the current standard setting role of the MCI is that although the degrees and institutions recognized by the MCI are supposed to be uniform, in practice, they are not. This is because exams are conducted by the individual state universities with varying standards.

The National Board of Examination is the other body responsible for standardizing medical degrees and recognizes post graduate degrees in medicine. The National Board conducts an all India exam thereby requiring equal standards for doctors appearing from different parts of the country. The exam is held twice a year, in February and in August in three or four centres around the country. It consists of two parts. The first part is for basic medical sciences and can be taken any time, even during the internship period. The second part is clinical and can be taken only three years after registration and after having worked in recognized institutions. The National Board recognizes most of the medical colleges as teaching units and also recognizes a number of public and private sector hospitals. Those holding degrees or diplomas from

[4] The Medical Council of India was established as a statutory body under provisions of the Indian Medical Council Act (1933) and repealed by the Indian Medical Act of 1956 with minor amendments in 1958. A major amendment was made to the 1956 IMC Act in 1993 to stop the mushrooming of medical colleges, increased number of seats, and new courses without prior approval of the Health and Family Welfare ministry.

recognized medical colleges are exempt from part 1. The main problem with the National Board's certification process is that the pass rate for its exam is very low due to the lack of any formal training programmes by the Board.

(ii) Nurses

Nursing education consists of five levels. These include auxiliary nursing and midwifery services, general nursing and midwifery services, a Bachelor's in Science in nursing, a Master's degree in nursing, and an MPhil or PhD in nursing. At present, mainly two streams are taken. These are the diploma and the BSc streams. A diploma can be obtained with three years of nursing training following high school graduation. A BSc in nursing can be obtained with four years of training following high school graduation. The majority of nurses in the country take the diploma stream.

Individual State Nursing Councils are responsible for setting standards for the training of nurses, recognizing training centres for nurses within the state, and holding state level exams. In addition, there is a Central Nursing Council of India, a statutory body constituted by the Indian Nursing Council Act of 1947 which lays down minimum standards of nursing education and prescribes syllabi and norms for various nursing courses. It also extends recognition and oversees the function of the state councils.

(iii) Technicians

To qualify as a technician, two years of technician's training is required after high school graduation or after the tenth standard. There is no separate body for setting standards and granting recognition. Each state has the authority to grant recognition to technical training centres. As there is no central statutory body, there is quite a disparity in training standards across different states and regions of the country.

In addition to the aforementioned institutions and regulations, there are several other statutory bodies and acts for the enforcement of standards in other areas of health services. These include the Dental Council of India (established under the Dentists Act of 1948) to regulate dental education and the dental profession.[5] There is also a Pharmacy Council of India (constituted under the Pharmacy Act of 1948) to regulate and maintain uniform standards of training for pharmacists, prescribe syllabi for diploma courses in pharmacy, and regulate the registration of pharmacists.[6] Thus, the health services sector is subject to many regulatory and institutional influences and constraints to ensure standards and quality, reflecting the socio-economic significance of this sector.

There are also many doctors and medical practitioners who go abroad for training. Roughly half of these doctors subsequently return to India. The available data on such persons is provided in the table below.

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[5] There are 104 dental colleges at present with admission capacity of 5,220 students in the BDS courses There are 336 institutes which offer diplomas in pharmacy with a capacity for 19,807 students per year and 88 institutes which offer degrees in pharmacy with a capacity for 4,207 students per year.

[6] There are several other important institutions in health services. The National Academy of Medical Sciences, established as a registered society, recognizes talent and merit and implements a programme of continuing medical education too keep medical professionals informed about new problems and to update their knowledge for better delivery of health care services. The Central Health Education Bureau is the apex institute for health education. It provides in-service training to all categories of personnel in health and related sectors at the state and district levels and also provides up to date information on current issues and developments in health education.

Distribution Of Doctors Trained Abroad And Returned

Countries Of Destination	Total Trained	Percent Returned	Major Specialties
United Kingdom	3653	48%	Surgery, obstetrics and gynaecology, general medicine
United States	1,062	50%	General medicine, veterinary science, surgery
Germany	82	41%	General medicine, veterinary science,
Other European Countries	279	52%	General medicine, surgery, veterinary Science
Australia and New Zealand	48	17%	Surgery
Other	649	47%	General medicine, Surgery
Total	5,949	48%	

Source Health Information of India 1993

The data shows that the main destination for overseas training is the UK followed by the US. The fact that about fifty percent of doctors who go abroad for training remain abroad may reflect the lack of health care facilities and state of the art equipment in India. The evidence on overseas training and returns is important in the context of discussing temporary versus permanent outflow of health personnel and the concerns about brain drain that arise when discussing mobility of health care personnel.

2. External and Domestic Constraints to Health Service Exports

The preceding discussion indicates that trade in health services is meagre in the Indian economy. This is in large part due to various external and domestic constraints in the form of trade barriers, infrastructure, technology, and regulations.

2.1 External Constraints

The single most important external constraint to India's trade in health services is that qualifications of Indian doctors, nurses, and technicians are not recognized in many countries. These consequently limit the mobility of health service professionals from India to these countries. Most of these limitations are limitations on national treatment.

Important potential export markets such as the US and the UK do not recognize Indian medical degrees. Indian medical graduates wanting to go to the US have to clear the US Medical Licensing Examination (USMLE) in order to be certified and be able to practice. This exam which is also applicable to US medical students assesses knowledge and understanding of basic biomedical science as well as clinical science.[7]

[7]There are three steps to the USMLE. The first step assesses knowledge and understanding of key concepts of basic biomedical science with stress on principles and mechanisms of health, disease, and modes of therapy. The second step assesses medical knowledge and understanding of clinical science considered essential for patient care under supervision, including stress on health promotion and disease prevention. The third step assesses medical knowledge and understanding of biomedical and clinical science considered essential for the unsupervised practice of medicine

Once certified, an Indian graduate can then apply for a job based on which he can obtain a visa that is valid for the period that he has the job. For persons holding Indian post graduate degrees, in order to be recognized as a specialist, certification is required by a specialty board following a three to five year programme that includes work in a recognized hospital.

As in the US, Indian medical degrees are also not recognized in the UK. Indian medical graduates and post graduates are subject to stringent certification requirements in the UK. An Indian medical graduate or post graduate is required to take a PLAB (Professional and Linguistic Assessment Board) exam in the UK. Only after clearing the PLAB can he be entitled to registration, and to a job in the UK. However, here again there are limitations as the registration is for only a limited period of 5 years and the PLAB exam can be taken only in the UK and not in India or a third country. Post graduates are subject to further requirements in order to be eligible to practice, despite holding a MD or MS degree from India. They are required to clear the fellowship or membership and only after clearing an Open General examination are they eligible for selection to a consultant's post.[8] Similar procedures for certification and registration apply to Indian medical graduates seeking to practice in Canada and Australia.

Although Indian medical qualifications are recognized in the Middle East, Africa, and parts of Asia, some of the latter countries are now beginning to require Indian medical graduates and postgraduates to undergo exams to qualify for practice. In addition, there is also discrimination against Indian medical graduates in the Middle East in terms of the compensation package relative to professionals holding equivalent English or US degrees and diplomas. [9]

The problem of recognition has a direct adverse impact on India's exports of health services through the movement of health professionals. The stringent requirements for licensing and certification limit entry by Indian medical professionals into the health services sector of important destination markets such as the US and the UK and thereby constrain the potential for foreign exchange earnings in this sector.

The need to requalify in the overseas host country also affects the scope for trade via other modes of supply with these markets. In the case of telemedicine for example, although there are no bars at present on transferring images and data from one country to another (except for technical and cost related reasons), there are medico-legal issues that result from the non-recognition of Indian medical degrees. A medical opinion conferred by an Indian doctor in telemedicine may be subject to litigation in the US or UK and may not hold up in a court of law as the Indian medical degree is not recognized in the first place. Therefore, the scope for expanding cross border trade in health services and diversifying export markets is limited.

Similarly, in the case of commercial presence, recognition and professional mobility issues are a major factor. Although India has the capability to establish and staff hospitals and clinics overseas, due to barriers to associated movement of medical

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with stress on patient management in ambulatory settings. The first two steps can be taken in any order but the third one can only be taken once the first two have been cleared.

[8]The Open General Exam consists of five papers, Paper A--a multiple choice question paper, paper B--a comprehensive English paper, paper C-- a medical short answer paper, paper D-- a written English paper, and paper E --an oral examination.

[9] There is even further discrimination in that an Indian holding an English medical degree is still paid less than a westerner holding the same degree. However, this is more a case of racial discrimination than a direct recognition issue per se.

personnel to practice and manage these overseas hospitals and establishments, the scope for such presence is limited. Moreover, there are also restrictions on commercial presence in the form of foreign equity restrictions, quantitative limits, and economic and local needs tests.

Non-recognition also constrains trade via mode 2, or consumption abroad. If India is to attract insured foreign patients from countries such as the US and the UK, the foreign insurance companies must recognize Indian hospitals and Indian professional qualifications to cover medical costs of the foreign patients seeking treatment in India. Without such recognition, in case of a mishap, the foreign insurance companies are liable to criminal proceedings for using unrecognized doctors.

Similar recognition problems arise in the case of nurses, technicians and other paramedical staff. Nursing and technical qualifications from Indian institutions are not recognized in the developed countries, limiting the movement of such professionals as individual service providers or as part of Indian commercial establishments overseas.

Apart from the issue of recognition there are other restrictions to market access. In the United States the wages paid to the person should be same as those paid to nationals in that profession. No labour management dispute should be in progress at the place of the employment. No worker should have been laid off in the preceeding six months and no American worker should be displaced in the 90 day period preceeding and following the filing of any visa petition supported by an application. The employer should have taken and should take timely and significant steps to recruit and retain sufficient American workers in the specialty occupation.

Another difficulty that arises for the fourth mode of services provision is that in the matter of taxation, foreigners are treated in the same way as United States citizens. Since natural persons, as provider of service for short period may be subject to taxation in their home country, being treated in the same way as an United States citizen implies that they might suffer double taxation.

Several countries restrict the export of services via Mode 2 by limiting the reimbursement of medical expenses. For example, for consumption of medical services by United States citizens, federal or state government reimbursement of medical expenses is limited to licensed, certified facilities in United States or in a specific American state. In United Kingdom and other EC countries, there is a system of subsidization of health care and provision of free treatment under the National Health Service scheme, which is financed by the government. These measures obviously come in the way of consumption of health care facilities abroad by the citizens of these countries.

This is an area in which greater trade can be achieved through negotiations on reimbursement facilities. One particular action that can be taken is to ensure that if United States and European Union investors set up hospitals in India then reimbursement of medical expenses should be allowed for their citizens treated in such hospitals.

The most common restriction applied to the export of health services through Mode 3 is through the application of foreign equity restriction. Apart from this there could be other restrictions on commercial presense. For example, the United States has maintained its right to impose a need based quantitative limit on the establishment of hospitals and health care facilities. Another obstacle in this regard is that foreign and domestic enterprises may not receive the same treatment in the matterof acquisition of land. An

Indian entreprenuer trying to set up hospital in the United States may face difficulties in acquiring land for this purpose.

2.2 Domestic Constraints

There are also several domestic constraints to expanding India's trade in health services. These can be classified as infrastructural, technical, and regulatory/structural constraints.

Infrastructural constraints are very severe in the health services sector in India. This is reflected in the small share of this sector in the total economy, noted earlier. Health care facilities are grossly inadequate relative to population needs. For instance, there is one hospital bed for every 1,250 persons in India, compared to a ratio of 1 bed for 250 persons in Japan, 350 persons in Europe, and a WHO recommended ratio of 1 bed for every 750 persons. In addition, many hospitals, particularly in the government sector are below international standards in terms of health care facilities and the quality of the infrastructure and associated services often require major upgrading. Such constraints affect India's ability to earn foreign exchange particularly through mode 2, i.e., the treatment of foreign patients in the country.

Another important infrastructural constraint is the Indian medical equipment industry. Only low tech medical equipment is available at reasonable cost and quality. High end technical equipment like MRI, CT, multichannel monitors, Gamma camera, Linear Accelerators, Endoscopes, Laproscope are all imported at present, raising costs in this sector. The middle technology equipment like OT tables, lights, etc., although manufactured in India are of substantially lower quality than similar imported equipment. Inadequate quality and availability of medical supplies and equipment limit India's potential for providing treatment of international standards to foreign patients and establishing commercial presence abroad. It also reduces India's cost competitiveness.

Technical constraints affect the potential for telemedicine in the country. Telecommunications tariffs at present are too high to make this mode of supply cost effective. Barring the issue of recognition discussed earlier, without telecommunications reform and tariff reduction, India cannot be competitive in trade via telemedicine.

Regulation of the insurance sector is another constraint to expanding trade in health services. As noted earlier, without recognition of Indian medical qualifications by foreign medical insurance companies, it is not possible to expand trade in the form of telemedicine or consumption abroad. This problem is all the more binding because currently foreign insurance companies are not permitted to enter the domestic health care market or form joint ventures with Indian insurance companies.

There is a wide spread fear that opening up of the health sector will not be beneficial to the weaker section of the society as costs will go up and they will be deprived of adequate medical facilities. However, this concern might be overstated as the fall out of liberalisation will be felt for all sections and areas. With increased competition, the public sector will be induced to provide better facilities to the poorer sections of society. In the absence of liberalization, there is likely to be stagnation in terms of development of health services and India's standards would continue to lag behind those of the developed world.

Finally, perhaps the most serious domestic constraint to trade in health services concerns the standard of training and education in this sector in India. As pointed out earlier, there is a lot of disparity in standards within the country since the degrees

recognized by the MCI are based on exams that are set by the individual states with very different standards of training and institutions. This is unlike the case in the US or the UK where degrees are conferred on the basis of a common country-wide exam ensuring uniform standards for all those who qualify. In India, degrees from different institutions and regions of the country are not equivalent. A degree from the AIIMS is not equivalent to a degree from a regional university, though both institutions may be recognized by the MCI. Similarly, in the case of the National Board, although there is a common countrywide exam, there is no country-wide formal training programme conducted by the Board, again leaving open the possibility for divergent skills and training levels. Thus, not only is there a need to reduce the disparity of medical training standards within the country but also to raise standards to international levels along with examination practices that are similar to those in the west. The problem of non-uniform training standards and the current certification system is a major impediment to the recognition of Indian medical professionals abroad.

In the case of nurses and technicians also, there is a lot of disparity in domestic training standards. Degrees or diplomas conferred by different institutions are not necessarily equivalent. Nursing degrees or diplomas are under the purview of individual state nursing councils giving rise to divergent standards. In the case of technicians, the problem of standards is all the more severe as there is no central technician's council to oversee enforcement of some minimum standards and training.

The shortcomings in the current training and certification setup are exacerbated by the infrastructural constraints noted earlier and by the lack of cooperation between private and public sector medical colleges and hospitals in the present educational framework. For instance, trainees in medical colleges may have adequate clinical material but may not have adequate supply of high-tech equipment while trainees in private and public sector hospitals may have sufficient high-tech equipment but not enough supply of clinical material. The present training framework prevents rotation of trainees among the three units in order to overcome the problem of infrastructure and equipment. Ultimately, such constraints adversely affect the quality of the training provided and the adequacy of associated equipment and facilities required for Indian medical professionals to be at par with international standards and to receive recognition abroad.

Thus, from the preceding discussion of domestic and external constraints it is evident that the overriding factor limiting India's potential for trade in health services is the recognition of qualifications. Trade via all four modes of supply either directly or indirectly hinges on recognition. Moreover, it is apparent that the domestic and external constraints are interrelated. Shortcomings in the domestic regulatory and institutional mechanisms often contribute to the external barriers.

3. GATS and Health Services

This section discusses the relevance of principles and disciplines under GATS for the health services sector. It also outlines the status of commitments in this sector, the extent of liberalization implied by these commitments, and the implications for India.

3.1 Relevance of GATS to Health Services

The GATS does not cover all health and social services as defined in Division 93 of the United Nations Provisions Central Product Classification. In the GATS list (MTN.GS/W/120) which has been used for scheduling purposes, medical and dental

services, veterinary services, and services of nurses, midwives etc. have been left out and grouped separately under professional services. However, there exists strong complementarity between what has been referred to as Professional Health Services and Hospital/Medical services and these services cannot be easily separated. Thus it is necessary to have a wider coverage of the entire sector.

There are several GATS disciplines that are very relevant to health services. This is mainly because health services are subject to a significant degree of regulatory intervention in all countries. These regulations fall into three categories. The first include professional licensing requirements to ensure the qualification and integrity of medical professionals, regulate access to the profession for cost related reasons, protect current incumbents from new entrants, and ensure adequate distribution of health services across the country. The second set of regulations pertains to approval requirements for institutional suppliers such as clinics or hospitals. The third category of regulations concerns rules and practices governing reimbursement under mandatory insurance schemes.

Articles under the GATS that are most relevant to the aforementioned categories of regulations and thus for scheduling purposes in this sector include Articles XVI, XVII, VI, VII, and IX. These articles mainly touch upon the issue of recognition and licensing requirements and the scope for discretion in this regard.

Measures falling under Article XVI of the GATS include quota restrictions or economic needs tests to regulate the number of hospital beds, doctors, nurses, technicians, etc. Measures subject to scheduling under Article XVII include nationality requirements as well as any other measure, which adversely affects the competitive conditions of foreign services or service suppliers. Article VII:3 is important in the context of recognition issues as it requires that recognition not be accorded in a way that would constitute discrimination or disguised barrier to trade. All of these Articles are very important as they not only directly affect the mobility of professionals to practice abroad without requiring additional tests and exams but also affect the portability of insurance, prospects for telemedicine, and even commercial presence.[10]

Article VI covers domestic regulatory measures that are not reflected in the schedules of commitments. It provides that domestic measures be administered in a reasonable objective and impartial manner and not be more burdensome than needed to ensure the quality of the service. However, it needs to be noted that the provisions of Article VI cannot be applied on a uniform, general basis. This is because the criteria for quality, standards, etc. in health services vary a lot between different countries and also for different activities within the health sector making possible a lot of discretion in applying domestic regulations such as qualification and licensing requirements to foreign service providers. For instance, a university degree or a comparable level of education may be a precondition for some practitioners while for others a higher level of qualifications may be required. Hence, the provisions of Article VI need to be considered on a case by case basis in the health services sector. Other relevant GATS provisions include those for consultation and information under Article IX in case of practices that impede competition and trade.

[10] With the opening up of the insurance sector in many countries, the portability of insurance will become an increasingly important issue in trade in health services. Likewise, with technological developments, telemedicine will become an increasingly important mode of trade in health services and whose prospects will depend in large part on recognition of qualifications, as discussed earlier.

3.2 Status of Commitments in Health Services under GATS

Commitments in health services under GATS trail behind those made in most other sectors. Forty nine members have committed on medical and dental services and thirty nine have committed on hospital services. The level of commitments are positively related to the capital and/or human capital intensity of the activities concerned. Medical and dental services as well as hospital services have drawn more commitments than services provided by midwives, nurses, technicians, etc.

Broadly, the mode-wise profile of the sectoral commitments indicates that most of the liberalization is in modes 1 and 2, with some limited liberalization in mode 3. Many developing countries have made wide ranging commitments for modes 1 and 2 and to some extent even mode 3 without exclusions/limitations on market access and national treatment. In addition, limitations/restrictions filed under these modes mainly reflect the technical and economic specificities of the activities covered. Commitments are far less extensive in the case of mode 4, which as noted earlier, constitutes the most sensitive and most regulated area in trade in health services. Most of the commitments under mode 4 are simply extensions of the members' horizontal commitments and restrictions.

For mode 1, the degree of liberalization is subject to some uncertainty due to technical reasons. Of the 29 countries that have committed on hospital services, 11 have undertaken full bindings for mode 1 (none) while 27 have not undertaken any commitments (unbound). Of the latter group, 13 have done so on technical grounds indicating technically not feasible in their schedules.

For mode 2, few countries have limited consumption abroad of medical, health, and dental services. However, some countries have effectively restricted the scope for trade in this mode by limiting the coverage of health services consumed abroad under public medical insurance schemes.

Under mode 3, some countries have limited market access and national treatment, particularly for medical and dental services, hospital services, and social services. These limitations provide cover for economic needs test, nationality requirements, equity ceilings, joint venture requirements, and other licensing and approval procedures.

Commitments on mode 4 are far fewer. Among the 55 countries that have committed on medical, dental, and or veterinary services under mode 4, only 2 countries have not made any limitations for this mode. Five have made no commitments, 32 have maintained horizontal limitations, and 16 have made sector specific entries. Within this last group, 12 countries have in effect further narrowed their horizontal commitments by adding nationality or residency requirements to their sector specific entries. Moreover, health professionals would remain subject to the regulations of relevant professional bodies. They would be required to satisfy the requirements of professional qualification in order to provide the service. For persons taking up short term assignments, these regulations pose a major impediment.

An analysis of the health services commitments by important countries such as the US and EU member countries also indicates a similar mode-wise profile. With regard to market access, for most of these countries, mode 1 is "unbound", mode 2 is unrestricted, mode 3 is subject to restrictions on equity or nature of establishment, needs-based quantitative limits, and authorization, and mode 4 is either unbound except as indicated in horizontal commitments or subject to authorization, limitations on the scope of activities, and needs-based tests. With regard to national treatment, there are

generally no restrictions with mode 4 being subject in most cases to horizontal commitments.

It must also be noted that many of the countries which have opened their health related services have asked for exemptions from applying most-favoured-nation treatment. These countries, including the US, have retained the right to offer preferential treatment to health service providers from certain countries, such as those belonging to a trading bloc or those with whom they have bilateral investment or recognition agreements.

India has filed commitments in health services. In the case of market access, it has left mode 1 unbound for technical feasibility reasons, filed unbound for mode 2, and unbound for mode 4 except as indicated in the horizontal commitments. In mode 3 it has restricted commercial presence to incorporation with foreign equity ceiling of 51 percent. In the case of national treatment, India has filed unbound for modes 1 and 2, filed for no restrictions under mode 3, and filed unbound except for its horizontal commitments in the case of mode 4. India has not filed for MFN exemptions directly in this sector or under professional services pertaining to medical and health services.

The following table summarizes the status of commitments in the health and related services sector for the four different modes of supply.

GATS Commitments In Health And Related Services For Cross Border Supply

	MARKET ACCESS			**NATIONAL TREATMENT**	
	Unbound	None	Measures	Unbound	None
Cross border trade					
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, International Trade in Health Services--A development Pzerspective

GATS Commitments In Health And Related Services For Consumption Abroad

	MARKET ACCESS			**NATIONAL TREATMENT**	
	Unbound	None	Measures	Unbound	None
Consumption Abroad					
Medical and Dental services	2	34	1 no portability of insurance	4	33
Services provided By midwives,	0	11	1 no portability of	0	12

nurses, Physiotherapist, and paramedical			insurance		
Hospital services	2	22	1 no portability of insurance	2	21
Other human health Services	1	9		1	9

Source: UNCTAD, International Trade in Health Services--A development Perspective

GATS Commitments In Health And Related Services For Commercial Presence

	MARKET ACCESS			NATIONAL TREATMENT	
	Unbound	None	Measures	Unbound	None
Commmercial Presence					
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, International Trade in Health Services--A development Perspective

GATS Commitments In Health And Related Services For Movement Of Natural Persons

	MARKET ACCESS			NATIONAL TREATMENT	
	Unbound	None	Measures	Unbound	None
Movement of Natural Persons					
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, International Trade in Health Services--A development Perspective

3.3 Implications of the commitments in health services

As is evident from the preceding discussion, the extent of effective liberalization in the health services sector given existing commitments is neither extensive nor deep. The most significant mode of supply, namely mode 4, remains very restricted in most

countries, including the most important developed countries. There are either few sector specific commitments in this mode and there is continued application of restrictions relating to licensing and approval requirements, with significant scope for discretion. The failure to liberalize in mode 4 has also limited the benefits to be realized from commitments under mode 3. This is because the main benefits accruing from commercial presence are due to the presence of skilled and less costly professional service providers abroad in the establishments rather than the actual buildings and construction of hospitals. The commitments do not really address the link between commercial presence and the movement of service providers although the two modes of supply are closely interdependent in the health sector. The lack of liberalization under mode 4 also affects the scope of commitments made under modes 1 and 2 since recognition and authorization issues are also relevant to telemedicine and the portability of insurance for overseas consu
mption of health services.

Moreover, disparity in the level of commitments further limits the extent of effective liberalization that has occurred in health services. For instance, of the 59 members that have committed on medical or hospital services, 19 have not committed on health insurance services. Of the remainder who have made commitments on health insurance services, 35 have not committed on medical or hospital services. Thus failure to make complementary commitments has restricted the scope of liberalization under the existing commitments. Moreover, the issue of portability of insurance has not been addressed by the existing commitments. This is essential if one is to improve the available options of medical care to consumers worldwide and would also help minimize to some extent the overall costs of insurance. The commitments also do not take into account the negotiations in other service sectors, especially commitments on cross industry measures such as in telecommunications and financial services. Commitments in the latter areas have to be taken into account as they may offset or even nullify existing commitments in health services.

As regards the implications for India, the commitments made by other countries are not likely to have much impact on India's exports of health services. This is because India's main external constraint to exporting health services, i.e., non-recognition of Indian medical qualifications remains due to the limited liberalization under mode 4. A close look at the wording used in the commitments filed by important markets such as the US and the EU member countries further reflects the scope for discretion that is retained by these countries in granting approval, determining local needs, and the application of various economic and social criteria.

In terms of India's own commitments in this sector, there are no major implications as for the most part India has retained the right to impose restrictions on modes 1,2, and 4. The commitment on commercial presence permitting upto 51 percent foreign equity participation is, however, significant. It provides opportunities for large scale hospitals and medical establishments by foreigners in India with majority ownership and thus the resulting benefits in terms of improved infrastructure, equipment, and management in this sector.

4. Strategy for Future Negotiations on Health Services

It is evident that there is need to expand the breadth and depth of the commitments made in health services. This section highlights the stand India should take with regard to each mode of supply in health services, both on the export as well as the import side. It then discusses in some detail the strategy for addressing sensitive and contentious issues such as recognition and standards.

4.1 India's demands and concessions

(i) Cross-border Trade

India should push other countries to fully commit in this mode given its interest in expanding trade via telemedicine. In particular, the markets it should target include countries of interest that have filed commitments in this sector but have left this mode unbound as well as countries that are potential or currently important destination markets for health service exports but which have not filed commitments in this sector. The former group includes the US, the EU member countries, Australia, Malaysia, and Kuwait, none of which have bound cross border trade in health services. The second group includes countries in Asia such as Singapore, Thailand, Japan, Bangladesh, Nepal, and Sri Lanka. In addition, African countries should also be targeted. It needs to be noted that India must focus on market access in telemedicine not only due to its future prospects in this area given technological developments but also in view of this mode being a substitute for movement of professionals for which barriers will be much more difficult to remove.

India should on its own part be prepared to make a full commitment under cross border trade. At present, India has not bound this mode for technical reasons. But given the likelihood of major telecommunications reform in the near future and lowering of tariffs in this sector, the costs of transferring data and images via satellite and internet are likely to come down removing present technical constraints to telemedicine. [11]

India has a definite advantage in Cross Border Supply as it has a high degree of technology in software and have hospitals, which are of international standards. As a result of this, India can use this mode extensively to its advantage. India's medical and paramedical professionals constitute one of the largest and well trained group in the world. Further with opening up of this sector and its subsequent development, the fall out on improvement of domestic services would be high.

(ii) Consumption Abroad

Since most countries, including important ones like the US, EU, Australia, and Malaysia have not placed restrictions on this mode, India's main objective here should be to get other countries of interest that have either not filed commitments in health services (e.g., Singapore, Thailand, Japan, Bangladesh, Sri Lanka, and Nepal) or countries that have left this mode unbound (e.g., Kuwait) to make an unrestricted commitment.

In turn, India should also bind this mode without limitations. At present, India has left this mode unbound, despite the fact that there are currently no restrictions on overseas consumption of health services by Indians barring the RBI's foreign exchange limitations (which too are being relaxed). Given that India can provide health care services of international standards at a fraction of the cost, except perhaps some superspecialized treatment, there should be no concern about losing domestic patients to the overseas market. Moreover, the commitment should reflect at least the status quo and not leave open the scope for restrictions in this mode. A binding nonrestricted commitment under consumption abroad would also go towards reciprocating the liberal conditions that have been guaranteed by the countries of interest to India.

[11] The strategy paper for the telecommunications sector should note the implications of opening up the telecom sector for export prospects through modes such as telemedicine.

(iii) Commercial Presence

India could have a commercial presence overseas in health services either through consultancy services in overseas establishments or through the actual physical creation of assets abroad. The main markets to focus on are the SAARC countries and countries in the Middle East and Africa where India has the ability to establish commercial presence both through consultancy and through physical presence. Some of these target countries (e.g., Kuwait, Zambia) have made no restrictions on commercial presence. Some others (e.g., Bangladesh, Sri Lanka) have made no commitments. India should negotiate with the latter group to get commitments in this mode both for liberal conditions in establishing hospitals and other health care facilities and for having consultancy presence in these commercial establishments.

India's position with regard to industrialized markets such as the US and the EU countries which have made limited commitments in this mode would be to negotiate for more liberal commitments. In particular, it should negotiate for the removal of economic needs-based requirements, quantitative limits on the number of hospital beds and other facilities, procurement requirements, and local authorization requirements without clearly specified criteria. In the latter developed country markets, India's focus within the commercial presence mode should be more on the consultancy services part through joint ventures with foreign establishments.

In terms of India's own commitment in this mode, the limitation of 51 percent foreign equity participation should be removed. This is because 51 percent equity already enables majority ownership.[12] There should therefore be no restriction on allowing greater access. Joint ventures in health services should also be encouraged. India should also be open to foreign consultancy presence in foreign commercial establishments in the health sector. There is already presence of foreign consultants in health services in India and the domestic market has been able to cope with this competition.. Liberal conditions for foreign commercial presence, in the form of consultancy or presence of establishments would benefit the country in terms of infrastructure facilities, equipment, management, and standards. The latter would help further India's own interests in establishing overseas commercial presence. It would also improve trade possiblities under mode 2 by giving assurance to foreign patients about the quality and standard of the treatment they can receive in India.

(iv) Movement of natural persons

As pointed out earlier, restrictions on the movement of health professionals constitute the main constraint to expanding India's trade in health services, not only in this mode but also in the other three modes. These restrictions mainly take the form of licensing and certification requirements and in some cases residence and nationality requirements.

Very few countries have made commitments under mode 4 and thus for most countries trade via this mode will continue to be limited by the number of professionals that can enter based on need and by non-recognition of qualifications. In the former case, it may be difficult to negotiate away all needs-based restrictions as health services serve many social and developmental objectives but greater transparency should be required in the application of such criteria. The issue of recognition and qualifications should, however, be taken up at the WTO negotiations firstly to prevent discrimination against Indian

[12]The only issue that needs some consideration here is whether entry should be restricted on a need basis as many countries have done under this mode. This would restrict entry into areas where there is excess capacity.

health professionals when they hold equivalent qualifications as others and secondly, to get Indian medical and health care degrees recognized by the developed countries so that they can be automatically recognized the world over.

In order to address the problem of non-recognition of Indian medical qualifications in important overseas markets such as the US, UK, Australia, and Canada, a two-pronged approach is required. The first track would be to negotiate bilaterally for mutual recognition of qualifications with the concerned countries, chiefly the aforementioned countries where India would like to have a greater presence. There are a number of recognition measures that exist in health services, either autonomously or through mutual agreement. India should carefully analyse the features of these mutual recognition agreements, especially those including the countries we would like to have MRAs with (between the US and Canada, the US and the UK, Australia and New Zealand), and frame similar recognition agreements with the concerned countries.[13] The MRAs should require some minimum standards and skill levels of the health care professionals as would be certified by the receipt of a specified degree or diploma from a recognized institution. Where required, additional requirements could be included to ensure the standard of the training institution and the particular programme. The MRAs should also include a safeguard mechanism to ensure transparency in treatment of professionals/ institutions that are deemed to be of a very different standard from those in the recipient country. This would minimize the scope for discretionary application of domestic measures where standards are divergent. In the latter case, the approach taken by the EU countries could be used, i.e., to require the professional to perform additional tests or to undergo an adaptation period.

In order to frame the MRAs, it would be useful to consider the existing regional initiatives for harmonizing education and certification standards, including the Trilateral Initiative for North American Nursing between Canada, US, and Mexico, efforts in Central, South, and East Africa for common standards and competencies in nursing, and efforts in the EU to establish an internal market for health care services. There is a large body of EU legislation to ensure free movement of health service professionals based mainly on mutual recognition of professional qualifications, which would be very useful.

The mutual recognition approach needs to be supplemented by a set of multilateral guidelines under the WTO (as has been done for the accountancy sector) to guarantee transparency and non-discrimination and multilaterally accepted standards for professional certification/licensing in the sector. One possibility is to establish an international certification body, which would certify training institutions and thus narrow the scope for discretion in recognizing qualifications. Those receiving degrees/diplomas from the certified institutions would not face any recognition problems in other countries and would be allowed to practice and register in these other countries without any additional requirements. Those not certified by the international body would be subject to the additional screening and licensing procedures that currently exist before they are permitted to register and practice in another country. The problem with the latter suggestion, however, is that it leads to a branding of institutions within the country, one set of institutions that are internationally certified, and another set that are not. Such differentiation may be difficult to accept for social and political reasons.

Alternatively, there could be a common internationally accepted screening exam (perhaps the USMLE/certain sections thereof) which could be administered by the

[13]The National Board is discussing the possibility of reciprocal recognition with the College of Surgeons in the UK. To date, nothing has materialized.

proposed international certification body in member countries. Passing this exam would qualify one for overseas practice and for automatic recognition by all WTO member countries. This would overcome the problem of non-transparency in certification procedures used in individual countries and also reduce the logistical and other financial costs associated with meeting current licensing requirements in many developed countries. The terms of reference for this international body and other details will need to be given some thought.

5. Domestic Reforms in the Health Sector

The proposed strategies in Section 4 would need to be supported by domestic measures and reforms. Such autonomous measures would enable India to take advantage of the opportunities created by GATS and also to make the kinds of commitments likely to be demanded from India by other countries. These domestic measures would be complementary in nature and mutually supporting.

(i) Standards

The main area for reform is that of standards. It is essential to have uniform and internationally comparable standards of health education and training within the country to facilitate recognition of Indian medical qualifications overseas. Two things are required in this regard. The first is to reduce the disparity in standards across different regions and institutions within India by requiring a common certification exam across the country, for doctors, nurses, paramedics, and technicians, respectively. For instance, there could be a common exam for MBBS along the lines of the USMLE. The main problem with this approach may be the large number of students who would have to be covered by this exam. However, with computerization the latter should not be an insurmountable problem.[14] The exam can be administered at various centres but should be under one examination board rather than two (MCI and National Board) as is the case at present. Similarly, the National Board should take over the examination at the post graduation level making the MD and MS degrees redundant.

The present councils which oversee standards in the medical and nursing professions should ensure uniformity of skills and training and take appropriate measures to make this possible. In the case of technicians, a Central Technicians Council needs to be established as the current disparity of standards across different states is very large in this field.

As a result of existing disparities in the standards of various institutes there is likelihood that the degrees of certain institutes may be recognised internationally while those of other institutes may not be recognised. This will inevitably lead to development of some sort of a rating system within the country of various health institutions and training institutes. While it is true that so long as the standards are not uniform there would be some kind of rating system, but as has been suggested earlier, the examination of National Board, which is a national exam should be recognised. Furthermore there has to be standardization of the training in all institutes and the examination, specially for the post graduates should be a common one.

In addition to reducing the disparity of standards within the country, it is also necessary to raise our training standards to those of the developed countries where we would like

[14]Normally, on average there are over 100 students per medical college which means that a maximum of 12-15 thousand students would appear for the MBBS exam at any one time. It should not be a major problem to handle such numbers of students.

to establish our presence. For this it is proposed that training patterns be made along the lines of those in the US or UK. There is need to compare the training patterns of the National Board of Examinations with the American Board and the College of Physicians and Surgeons of the UK. Some efforts are already being made in this respect. Uniformity in skills and training levels and higher standards can also be facilitated by opening up our training institutions and facilities to international accreditation.

There is also need to improve the standards of health care to international levels at reasonable cost across a wider range of hospitals and nursing homes than is the case at present. For this it is first necessary to ensure some basic standards in Indian hospitals and health care centres and to grade them. This is an issue that should be given some consideration by the Indian health care federation. One possibility is to establish an independent health care regulatory body, similar to the TRAI or the insurance regulatory body, to set standards for categorizing hospitals and health care centres. At present, although states have a set of standards that are applied before registering a hospital or nursing home under the nursing home registration act, these standards do not provide for grading of these facilities. Such categorization or grading is required if one wants to ensure confidence in the public and in foreign patients regarding the quality of health care in the country. The proposed independent statutory body would have the function of accrediting and constantly monitoring hospitals and health care centres.

(ii) Health insurance

The health insurance sector will have to be opened up if India wants to expand its trade in health services, including diversifying its export markets in this sector. Deregulation of health insurance would enable entry by foreign health insurance companies into the Indian market and tieups with Indian hospitals. This would not only help in raising standards in Indian hospitals and health care centres but would also help in tapping the large market of insured foreign patients from developed countries for treatment in India. The overseas insurance companies would be willing to divert some of their cases to India if they were guaranteed quality treatment at lower costs, even after including transport costs, etc. Deregulation of the insurance sector will also facilitate import of health services through consumption abroad. It may also be useful to enter into preferred-provider contracts with health care funders in developed countries to overcome the problem of nonportability of health insurance.

The complimentarity between health insurance and medical/hospital services makes it absolutely imperative that commitments are to be linked. Commitments in the latter without corresponding opening up of the health insurance sector will not serve the objective. India mus6 undertake privatization of health insurance as without it the entire liberalisation process will lose a great deal of its effectiveness.

(iii) Infrastructure

Improved infrastructure in the health care sector is essential. This is in part related to the issue of setting standards in hospitals, but also covers a wider range of facilities. As noted earlier, hospital facilities and spending in health services are inadequate relative to the country's needs. It is proposed that health services sector be given the status of an infrastructure sector so that existing facilities can be upgraded and expanded. This is essential if India is to be able to cater to foreign patients or engage in telemedicine, or commercial presence overseas.

One area for infrastructural reform is in telecommunications. It is necessary to reduce connectivity charges and transmission rates to make transferring of images, transcriptons. and telediagnosis more cost effective. Policy measures to support advances in information technology would benefit telemedicine.

Another area of infrastructural support is the medical equipment industry. It is important to develop a large base of medical equipment manufactures in the country to lower costs, improve quality, and improve utilization. Instead of protecting this industry as has been the case till now, it would be better to have foreign collaboration in the manufacturing of high and middle level technology medical equipment.[15] The latter would help raise the standards of training and health care facilities in the country and further trade via modes 1, 2, and 3.

Thus there is a need for increased liberalisation in the medical equipment industry. Unless India is able to produce quality equipment, it will remain dependent on the West for even old technology. However, this has to be a step by step process as in industry and based on current demand and supply conditions in the domestic market. At present, there is a demand for only mid technology equipment. In the next 3-5 years high technology equipment is likely to become viable.

(iv) Export promotion

Specific policies and institutional frameworks are also required to promote exports of health services. An Export Promotion Council for health care can be set up to implement directed strategies to increase exports in health services. For example, a Medical Park can be established exclusively for foreign patients coming for treatment to India. This idea is being considered by the Apollo Group for Bangalore. The government can also take steps to attract certain target groups overseas for treatment at such centres. One such focus group is the NRI population, which can be targeted for cheaper treatment than in the west. It must be noted, however, that one should not have hospitals or medical treatment centres solely for foreigners and NRIs as this would be discriminatory. It would be more appropriate to have many hospitals recognised as suitable for NRIs and foreigners. These hospitals would be able to avail the benefits of the new EXIM policy whereby services have been given export status.

Another promotional scheme is to provide package deals that combine medical treatment with tourist attractions and accommodations in resorts, etc. as has been done by Singapore and Thailand. This way tourism can be combined with health service exports. In all of the above, commercial attaches of Indian embassies would need to be actively involved in promoting this sector's exports and projecting India's image as a provider of international class health care.

Promoting consumption of health services by foreigners in India would also require:

(a) Developing international marketing mechanisms to promote developing country services;
(b) Overcoming prejudice and lack of awareness among potential consumers from developed countries through aggressive marketing, rigorous quality control, and alliances with acknowledged centres of excellence in developed countries;

[15]Today Singapore is the hub for South East Asia and the Far East for the supply of spare parts. It is possible for India to be an important player in this market. For this, medical consumables of companies based in the US, UK, and Europe have to be sourced from India which is possible if the big foreign companies in the manufacturing of medical equipment are allowed to operate in India as manufacturers and not merely as traders as is the case at present.

(c) Ensuring that visa requirements do not bar consumer access;
(d) Measures to facilitate the portability of health insurance (as noted above).

There is a need to ensure that corporatization and export promotion measures to induce consumption of health services by foreigners in India do not lead to a decline in the standard and quality of medical facilities available to the poor segments of society. There is concern among some, including the Ministry of Health that corporatisation would lead to a brain drain towards the more lucrative segments of the health care industry. More and more specialists and professionals would move from the public sector to the new corporatised sectors in lure of big money and higher salaries. This would be likely to raise the cost of treatment and would crowd out the poorer sections of society. It would also result in a dual system of care, where on one hand there would be big hospitals with most advanced medical facilities but which only the rich sections of society could afford and on the other extreme, public sector hospitals with second grade professionals and outdated equipment which would be the sole refuge for the poor and disadvantaged.

However, the Ministry of Health's concern about Brain Drain to the Corporate Sector should not be very serious as in most of the Private Hospitals the salaries and perks of the Paramedical staff i.e. nurses and technicians is lower than that in Government. The concept as regards Medical Professionals is of Payment by Performance and it is a very small percentage who earn considerably than Government Sector. There might be a need to pay the Medical Professional more than what they are getting today and pay them as per the market.

The total salary bill may also not go up as by rationalising the staff this may come down. Further the Brain Drain is nothing compared to Indian doctors going abroad and not coming back. The improvement of services and working conditions would prevent this.

Several measures would help prevent the creation of such a dual and discriminatory system of health care. Some of these measures include:

(a) Ensuring comparative quality of care through international quality assurance programmes such as hospital accreditation schemes;
(b) Finding ways through joint public and/or private sector initiatives of ensuring that services customized for international patients do not affect equity in the host country by promoting a two-tier system;
(c) Pricing services at a level where actual costs are recovered to prevent cross-subsidization by taxpayers;
(d) Finding ways to ensure that foreign students return to their country of origin after completing their studies through contracts and restrictions on work permits

(v) Monitoring and Legal Enforcement

It would also be important to set up appropriate monitoring systems and legal mechanisms to ensure that trade in health services does not become a means to exploit the poor. For instance, along with measures to promote consumption of health care facilities in India by foreigners, one would also need to ensure that there is no misuse of these facilities, such as in the form of organ sales and transplants. The legal system will need to be strengthened and appropriate safeguards and recourse to legal action should be present to prevent unethical practices under the guise of trade in health services. The independent autonomous body suggested earlier could be responsible for enforcing ethical behavior and for taking legal action against violations.

Concluding Remarks

The discussion in this paper indicates that are several barriers to India's trade in health services, the most important of these being the non-recognition of Indian medical qualifications. As a result, India's strategy in the WTO negotiations should be to get recognition for Indian health professionals through bilateral as well as multilateral agreements. An important proposal in this context is the creation of an International Accreditation Body in health services which recognizes qualifications in different member countries based on multilaterally accepted guidelines and enables professionals to get automatic recognition in all signatories of the WTO subject to their accreditation by this body. However, since recognition will be difficult to realize, India should also simultaneously try to reduce its present dependence on movement of health professionals in this sector by negotiating for more liberal access in the other modes of supply.

India should also in turn be prepared to liberalize market access and working conditions under all modes, not only to reciprocate its demands for liberalization from other countries but also to strengthen its domestic health care sector by facilitating competition and improved standards in the country. Finally, given that there are many domestic constraints impeding trade in health services, steps would also have to be taken to remove these constraints and to take measures that are specifically aimed at promoting exports in this sector. In all of the above, there is need for public and private sector cooperation and a change in mindset about the significance of health services for trade in the Indian economy.

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