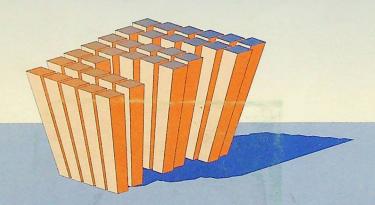
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# ECONOMICS TECHNICAL BRIGING NOTE

Measuring trade liberalization against public health objectives: the case of health services



WHO TASK FORCE ON HEALTH ECONOMICS

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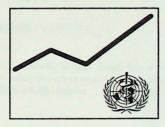
# HEALTH ECONOMICS

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**TECHNICAL BRIEFING NOTE** 

Measuring trade liberalization against public health objectives: the case of health services

Orvill ADAMS and Colette KINNON WHO Task Force on Health Economics



WHO TASK FORCE ON HEALTH ECONOMICS

December 1997

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#### **FOREWORD**

Building upon activities already undertaken in the area of health economics, the Director-General created the Task Force on Health Economics in November 1993 in order to enhance WHO's support to Member States<sup>1</sup>. Its goal is to further the application of health economics in the formulation and implementation of health policies, giving priority to countries in greatest need.

The Task Force aims not only to strengthen the technical content of WHO programmes so that they can better adapt the tools of health economics to country needs, but also to foster cooperation among development agencies in applying health economics at country level.

A series of documents in English and French is now available (listed on page ii) to help meet the information needs of both those involved in the organization, planning and financing of the health sector and health professionals whose expertise may lie in other areas.

The Task Force recently launched a new series of *Technical briefing notes* which tackle subjects of concern to health policy decision-makers, particularly in developing countries. They are intended to provide readers who are not necessarily familiar with the health economics aspects of a subject with information designed for nonspecialists.

The subject of trade in health services was first discussed at a meeting between the Director-General of WHO and the Group of 77 and China (Geneva, 17 December 1996), which was followed by the joint UNCTAD/WHO Expert Meeting on International Trade in Health Services (Geneva, 16 to 18 June 1997). The present paper was originally drafted as WHO's technical response to the UNCTAD Secretariat's Background Note for the Meeting, "International trade in health services: difficulties and opportunities for developing countries", which in turn drew from a report of the Pan American Health Organization on trade in health services in Latin America and the Caribbean issued a few years earlier. The WHO paper complemented UNCTAD's commercial standpoint with a qualitative health dimension. A compilation of papers presented at the Expert Meeting and other material will be published jointly by WHO and UNCTAD in the first half of 1998.

WHO's technical response has been reworked in the form of this Briefing Note in order to provide a concise and up-to-date overview of an area of growing interest for health and trade authorities alike.

<sup>&</sup>lt;sup>1</sup> Members of the Task Force are: F. S. Antezana (Chairman), M. Jancloes (Vice-Chairman), G. Carrin (Secretary), O. B. R. Adams, A. Alban, A.L. Creese, D.B. Evans, K. Janovsky, J.M. Kasonde, C. Kinnon, E.Lambo, C.L. Lissner, P. Lowry, M. Miller, J.H. Perrot, B. Sabri, Than Sein, G. Velasquez, C. Vieira, A.E. Wasunna, H. Zöllner.

Unpublished document TD/B/COM.1/EM.½.

<sup>&</sup>lt;sup>3</sup> D. Diaz, M. Hurtado, International trade in health services: main issues and opportunities for the countries of Latin America and the Caribbean. Washington, Pan American Health Organization, 1994 (Technical Reports Series No. 33).

#### PREFACE

# HEALTH SERVICES IN A CHANGING TECHNOLOGICAL AND ECONOMIC ENVIRONMENT

We at WHO appreciate it that UNCTAD chose to highlight the subject of trade in health services through an Experts' Meeting.<sup>4</sup> It reflects a recognition of the commercial potential of the sector and has provided us with the opportunity of working in a new area in order to put forward the public health viewpoint.

In fact, we have been able to add to the store of knowledge and experience we are gradually building up in relation to trade and the health sector as a result of the entry into force of the World Trade Organization agreements. The agreements on the application of sanitary and phytosanitary measures and on technical barriers to trade have spotlighted our work of setting international quality and safety standards in such areas as pharmaceuticals, biological substances, food products, or toxic chemicals. We have also been examining the implications of the intellectual property rights agreement on continuing access to low-price, effective medicines. This is now being complemented by the understanding we have gained of the potential effects for the health sector of international trade in services as promoted by the agreement on trade in service.

All this is an indication of the extent to which the health sector - and I am thinking especially of that in developing countries - has had to adapt to a wholly new set of parameters. This new context derives from, first, the steady advance towards free markets throughout the world, and second, increasing globalization of the economy. Health authorities have had to take on board the concept of cost-effectiveness of interventions, and the need to make hard choices as to priorities in the face of shrinking resources. They have had to accommodate to the private supply of services that had previously been considered a public responsibility par excellence; they might now have to face the challenge of handling foreign private investment. They have had to absorb a remarkable array of new high technology - will it prove a boon or a bane for a developing country? And now they have to face the reality that health services are a tradable commodity; that the health sector can be an entrepreneur, bringing in revenue not only from health interventions but also in nonmedical domains, such as health tourism.

The growing exchange of health-related goods and services between countries is a reality we acknowledge. However, the benefits derived from trade should be channelled, first and foremost, to improving the health and living conditions of the population. In this, we are convinced that international trade and public health action can be mutually supportive. Our

<sup>&</sup>lt;sup>4</sup> Joint UNCTAD/WHO Expert Meeting on International Trade in Health Services, Geneva, 16 to 18 June 1997.

concern is to guard against the risk of financial interests taking precedence over people's health. As trade develops, we want to be sure that agreements and policies provide for the protection of people's health, and the safety and quality of traded goods and services. But, most of all, we want these commercial activities to contribute to greater equity in access to health services, so that the needs of the poor and the marginalized are not overlooked in the process.

The innovative ideas discussed at the Experts' Meeting are helping to shape the guidance we provide to health authorities, so that they can take advantage of new opportunities offered by trade, while guarding against any erosion of the efforts to achieve equal access of everyone to quality health care. The interaction between health and trade should be a two-way process from which both sides can benefit. But the real winners will be people - for whom that process holds out the prospect of both healthier and wealthier lives.

Dr F. S. Antezana, Deputy Director-General a.i. Chairman, WHO Task Force on Health Economics

#### SUMMARY

This Briefing Note is intended to complement a commercial viewpoint of trade in health services with a qualitative public health dimension. It analyses systematically the four modes of trade identified in the General Agreement of Trade in Services from the standpoint of health systems in developing countries. In order to make a preliminary appraisal of the potential impact of this trade, three health policy objectives are taken as a yardstick: equity of access, quality of services and efficient use of resources.

Cross-border trade, which involves in particular telemedicine, together with certain support services, is not yet widespread in developing countries. Although it could help in the provision of services in remote areas, it requires substantial investment in equipment, communications infrastructure, and training of personnel.

Movement of consumers involves both patients seeking treatment abroad and students receiving foreign training. Flows are usually from developing to industrialized countries, but movement in the opposite direction is also occurring as developed country patients seek good quality treatment at lower prices abroad. Health authorities would need to ensure that any upgrading of services for foreign patients extends equally to domestic patients, and that these are not excluded from the services offered to foreigners.

Foreign education can help to upgrade the skills of personnel, provided that students return home, and the training they receive matches needs in the home country. Much attention has been given to designing incentives to encourage trainees to return, and to finding other solutions, such as setting up regional training facilities.

Foreign commercial presence in the health sector so far is limited in developing countries, and its penetration will depend on the size and value of the target market. It will be a sensitive area for health authorities to handle as it involves both foreign direct investment and private-sector supply of services. Such investment may not mesh with national health policy objectives, or may aggravate a trend to a two-tier system, with a different quality of service for the wealthy and for the needy. Competition among providers may also induce health facilities increasingly to invest in expensive high-technology equipment.

The movement of personnel to provide health services abroad has been a longstanding problem for developing countries. Their trained staff is often attracted by better working conditions and higher remuneration elsewhere. This can produce shortages of staff in the home country which might have to be compensated by an inflow of foreign health personnel. The home country has to support the cost of training without receiving the benefits, although this expenditure may be offset to some extent by the remittances sent home by workers abroad.

Health authorities will need in particular to strengthen their regulatory framework in order to ensure that national health systems derive maximum benefit from trade in health services in terms of equity, quality and efficiency, while reducing potential social cost to a minimum.



#### 1. LIBERALIZING TRADE IN SERVICES

Trade in services is a rapidly growing activity that accounts for a growing share of national product in both developing and industrialized countries. In order to regulate this trade according to the same principles underlying all agreements under the umbrella of the World Trade Organization (WTO) - notably, most-favoured nation treatment and nondiscrimination between sources of supply - multilateral negotiations to liberalize trade in services were introduced into the recent Uruguay Round. The outcome was the General Agreement on Trade in Services (GATS).

For developing countries, initially reluctant for services to be included in negotiations, the main objective was to ensure that priority was given to development, and that national laws and regulations would remain supreme.<sup>5</sup> In effect, under the Agreement, countries select the service sector or sectors which they agree to open to foreign suppliers; these schedules of "commitments" are an intrinsic part of the Agreement. Countries are also entitled to place limitations on these commitments, provided that they are clearly indicated. Although effects of the Agreement on each sector will depend on the specific commitments made, provision of a clearer regulatory framework should ease the barriers that limit services trade.

"Services" are difficult to define unambiguously. They tend to be described as being distinct from physical commodities, being "intangible, nontransferable economic goods". <sup>6</sup> For trade purposes, GATS defines services in terms of four ways in which they can be supplied:

- cross a border
- through consumption abroad
- through commercial presence
- through people who are service suppliers.

Applied to the health sector, examples of these four modes are, in the first case, all forms of telemedicine; in the second, patients travelling abroad for treatment; in the third, establishment in a country of foreign health providers, and lastly, health professionals working outside their home country.

Comparatively few countries have made commitments in the health sector under GATS. In all, some 27% of WTO Members (industrial and developing countries in equal numbers) agreed to open up hospital services to foreign enterprises, and 35% (also roughly even among the two groups) did so for medical and dental services. Some 19%, mostly industrial countries, scheduled the services of health personnel other than physicians.<sup>7</sup>

<sup>5</sup> UNCTAD, The outcome of the Uruguay Round: an initial assessment. New York, United Nations, 1994.

<sup>&</sup>lt;sup>6</sup> G. Bannock, R.E. Baxter, E. Davis, *Dictionary of economics*. London, Hutchinson Business Books, 1988.

<sup>&</sup>lt;sup>7</sup> C. Kinnon, WTO: what's in it for WHO?. Geneva, WHO Task Force on Health Economics, 1995. Unpublished document WHO/TFHE/95.5.



It would be premature to try to assess the impact of the Agreement specifically on trade in health services, especially as it is difficult even to quantify the volume of such trade for lack of consistent, disaggregated data. However, there is growing awareness of its potential for both industrial and developing countries. In a generalized context of rising health care costs coupled with a growing trend to reduce public spending in the social sectors, the advantages of exporting health sector skills and technology, or of attracting higher-spending foreign customers to health facilities become apparent. Additional financial resources, notably from foreign exchange earnings, can be channelled to improving national health services, and the upgrading of both infrastructure to meet a foreign demand and of human resources from contact with new technology should equally benefit the local population.

The competitive position of a health service will depend on various factors: the cost structure, the quality of health facilities and infrastructure, availability of skilled human resources, together with natural endowments, cultural affinities or geographical proximity. Developing countries can make the most of such comparative advantages as lower labour costs, a large skilled work force, or exclusive therapies. Different actors in a number of developing countries - governments, public and private sectors jointly, private sector associations or individual enterprises - are currently utilizing these advantages to benefit from trade.8

Yet the question remains: how can objectives of profitability and resource generation be reconciled with those of the improvement of the population's health status - the goal of every health system?

WHO has identified three interim policy objectives to further that goal: equitable access to care, quality of care, and efficient use of resources. Equitable access can be generalized as "equal utilization of health services for the same need" combined with "vertical equity", that is, users contributing according to their economic capacity. Quality refers to the standard of the health care system. Efficiency is related to the allocation of resources. Resources are used efficiently if a given output is produced at minimum cost, or maximum output is produced at a given cost.

In an attempt to assess whether the objectives of health and of trade could be compatible, the following sections look at trade in health services under the four modes identified in GATS (which in practice overlap to some extent) in order to measure its impact against the yardstick of the three health policy objectives. In doing do, it pinpoints potential positive or adverse effects on the health sector of such trade, particularly in developing countries.

<sup>&</sup>lt;sup>8</sup> See UNCTAD, International trade in health services: difficulties and opportunities for developing countries. Geneva, United Nations, 1997. Unpublished document TD/B/COM.1/EM.1/2.



#### 2. CROSS-BORDER TRADE

The rapid growth of information technology and telecommunications has greatly expanded the potential for providing health services across borders, even if they might at times need to be combined with such conventional means as postal services.

Such trade takes place chiefly in the form of telemedicine, defined as the practice of medical care using interactive audio, visual and data communications. This includes care delivery, diagnosis and treatment, and medical education. To a certain extent, it is a substitute for direct contact between health care provider and patient, or consultation among providers. It enables, for example, patients to consult senior physicians, medical students to follow the most up-to-date courses without the cost of travel, or local clinics to send radiological images by satellite for rapid interpretation by specialist centres.

For nonclinical purposes, computer-based information and communication systems provide access throughout the world to specialized data for such uses as management of health services at community, regional or national levels; laboratory testing, diagnosis and treatment; or surveillance of disease patterns and trends.

# Developing countries find market niches

For obvious reasons, cross-border trade in health services flows chiefly from North to South. For example, commercial telemedicine services exist between several Arab Gulf countries and the United States. In developing countries, with fewer high-technology telecommunication facilities and specialized health professionals able to undertake such services as telediagnosis, supply is limited. None the less, several are starting to exploit their comparative advantages in this area. For instance, in some of China's coastal provinces, telediagnosis services are provided to patients in Taiwan, Macao and other countries of south-east Asia.<sup>10</sup> Similarly, several central American countries send medical samples for diagnosis to Mexico's public health hospitals.<sup>11</sup> Further opportunities are opening in nonclinical services. For example, some companies transmit insurance claims and bills for processing in India, where labour costs are lower.<sup>12</sup>

<sup>&</sup>lt;sup>9</sup> Health informatics and telemedicine. Report by the Director-General. Geneva, World Health Organization, 1997. Unpublished document EB99/30.

<sup>&</sup>lt;sup>10</sup> Xing Houyuan, The trends of China's medical service exports. Geneva, UNCTAD/UNDP, 1997. Restricted document UNCTAD/MTN/RAS/CB23/Rev.1.

<sup>&</sup>lt;sup>11</sup> D. Diaz D, M. Hurtado, International trade in health services: main issues and opportunities for the countries of Latin America and the Caribbean. Washington, Pan American Health Organization, 1994 (Technical Reports Series No. 33).

<sup>12</sup> UNCTAD, International trade in health services.

#### HEALTH ECONOMICS



Although telemedicine and information technology evidently advance fastest in rich countries, it is the poorest countries that need them most in order to bridge the gaps that cannot be filled by conventional means. Considerable technical support is being provided to them through international cooperation involving both noncommercial bodies and some major corporations.<sup>13</sup>

#### POTENTIAL IMPACT ON THE NATIONAL HEALTH SECTOR

# **Equity**

It is difficult to judge whether increased use of telemedicine in developing countries would lead to more equitable access to health services, mainly because there are several options for financing the cost of such technology. First, imagine that during a number of years those costs are supported by donors only. District hospitals could take advantage of the services offered, and access of local populations to higher quality care would improve. In this case, there would be a movement towards equity. Second, were the costs covered by the public sector, the assessment would depend on the nature of public finance. Often dominated by indirect taxation, it might not not be considered equitable from the standpoint of vertical equity.\frac{14}{14} Third, should user fees or health insurance be involved in the financing of telemedicine, judgments about equity would depend on whether there are fee schemes or health insurance schedules that take account of people's relative incomes. Moreover, a combination of financing options could be used, which would make equity judgments even more difficult.

A further consideration concerns the mobility of health professionals. If work in telemedicine attracted skilled health workers away from other services, because of, for instance, opportunities to upgrade skills, higher wages or career prospects, the availability of human resources in the health system might become skewed towards telemedicine patients, thus reducing equity overall.

Nevertheless, there would be a significant equity gain if telemedicine realizes its potential to provide remote and underserved populations with otherwise inaccessible services. In general, clear government policy on the place of telemedicine in the health care system is needed to ensure that this new technology serves to improve equity.

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<sup>&</sup>lt;sup>13</sup> See Health informatics and telemedicine. Geneva, World Health Organization, 1997. Unpublished document EB99/INF.DOC./9.

<sup>14</sup> See section 1, penultimate paragraph, for definition.



# Quality

Use of telemedicine can clearly improve the quality of the health system. It offers new possibilities both to enhance the timeliness and efficacy of health interventions and to improve the training of health providers. For example, a general practitioner could seek advice or expert opinion anywhere in the world; or a health worker could obtain from a distant location guidance of a physician in attending a patient. Use of teleimaging can provide rapid and reliable diagnoses that local facilities might not have the skills or equipment to supply. None the less, appropriate mechanisms would be needed to maintain standards of care and of training associated with use of this technology.

# **■** Efficiency

The effect of telemedicine on the efficiency of health services needs to be carefully assessed in developing countries in view of the costs involved. These include not only communications infrastructure, equipment and operation, but also the training of skilled personnel to run a communications system.

Here again, the source of funding is an essential element in assessing potential efficiency gains, and both the public and private sectors are likely to be involved. In view of the considerable capital investment required, solely private funding is rare in this market; firms often receive government subsidies in the form of tax exemptions. (The volume of investment might also provide an argument for maintaining this technology once in place.) Yet use of public funds to pay for telemedicine raises the question of cost effectiveness. Investments in less sophisticated types of care or inputs may be more efficient in terms of reduced morbidity or mortality (or a larger number of quality-adjusted, or disability-adjusted, life years), and therefore more cost effective.

Other questions that need to be considered are which services will not be provided if scarce resources are reallocated to resource-absorbing technologies such as telemedicine, and the cost of development and management of the appropriate legislation and regulations.

Nevertheless, with regard to training, the development of communications for education could eventually result in fewer trainees or health professionals going abroad to study. Moreover, the training possibilities offered by telemedicine are likely to be less expensive for the government than subsidized study overseas. So is therefore a potential for saving resources in the long term, although it is doubtful whether there would be much effect on the loss of qualified professionals through migration (see also section 5).

#### 3. MOVEMENT OF CONSUMERS

Movement of health services consumers include both patients seeking treatment abroad and students studying abroad. The two groups are discussed separately in the section below.

#### 3.1 MOVEMENT OF PATIENTS

Patients might seek health care abroad for various reasons. Wealthy patients in particular might wish to take advantage of advanced, specialized treatments unavailable in the home country or perceived as better quality, or to avoid long waiting lists in the home country. Industrial countries receive most of these patients, foremost the United States.

Others might go to certain developing countries to benefit from lower-price treatment of equal quality, including medical and dental outpatient care or paramedical services; or to convalesce or benefit from such natural endowments as hot springs or spas.<sup>15</sup> The trend is enhanced by rising consumerism that is driving demand for such services as "exotic" or exclusive therapies or for more affordable sources of services not covered by health insurance, such as cosmetic surgery.<sup>16</sup> Other attractions might be easier access to personal care, or more human relations with health professionals.

Patients might also travel between developing countries because the home country cannot provide basic primary or hospital care, or those services are of much lower quality. Others might be refugees or migrants who demand health services in the host country. In order to qualify as trade, however, it is assumed that such "intra-South" movement involves the capacity to pay for services.<sup>17</sup>

Developing countries might seek to attract foreign patients in order to increase foreign exchange earnings, provide employment for health personnel, and benefit from economies of scope that would help to upgrade their health services as whole. Although few give priority to the development of a specialized subsector, some have invested in improving facilities for the purposes of receiving foreign patients, often from other countries in the region. They are in a position to offer good-quality services at lower costs, well-qualified staff, or exclusive forms of alternative medicine that appeal to customers in industrial countries. In view of

<sup>15</sup> UNCTAD, International trade in health services.

<sup>&</sup>lt;sup>16</sup> G. Wolvaardt, Strengthening the capacity and expanding exports of developing countries in the service sector: health services. Unpublished document, 1997.

<sup>17</sup> This may be the case even of refugees. In south-east Guinea, for example, refugees did have capacity to pay and were "inserted" into the local health systems.



rising health care costs, to which services consumed by a growing number of older people will increasingly contribute, these advantages lead one expert to suggest that if retired people's health insurance were portable, more might choose to live in certain developing countries. Both sides would benefit: the sending country from better contained cost of health services and the host country from increased revenues.<sup>18</sup>

# Foreign patients as a source of revenue

A recent study suggests that India has considerable potential for consumption of health services by foreign patients. With the easing of foreign exchange restrictions in many neighbouring countries for medical treatment overseas and with few obstacles to impede patients travelling from industrial countries, India sees itself in an advantageous position. It can offer both "superspecialties" such as cardiovascular surgery, and certain exclusive alternative therapies, highly qualified medical personnel, and a well-developed pharmaceutical sector. Its chief advantage lies in competitive prices, which are estimated at around one-fifth to one-tenth those of industrial countries for the same intervention. Although some improvement might be needed in postoperative treatment, good marketing should "dispel any misgivings about the quality of services".<sup>19</sup>

Similarly, Cuba has been developing a supply of services designed specifically for foreign patients. They are marketed through Servimed, an agency set up ten years ago to generate foreign exchange from the sale of health tourism packages and to establish joint ventures. The agency has associated itself with tourist agencies and tour operators abroad in order to promote the sales of various packages of medical treatment and stays in resorts and spas. Specialities include cardiovascular and ophthalmological surgery, treatment of pigmentary retinopathy and vitiligo, orthopaedics, substance abuse rehabilitation, "anti-stress" therapy, and cosmetic surgery. Advantages lie in competitive prices due to low labour costs, highly qualified health professionals, and certain exclusive treatments, which draw patients essentially from Latin and North America.<sup>20</sup>

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<sup>&</sup>lt;sup>18</sup> D. Warner, Some developments in trade in health services. Texas, 1997. Unpublished paper.

<sup>&</sup>lt;sup>19</sup> H.A.C Prassad, Healthcare exports under consumption abroad mode: opportunities, obstacles and challenges for developing countries in general and India in particular. New Delhi, Indian Institute of Foreign Trade, 1997. Unpublished document.

<sup>&</sup>lt;sup>20</sup> D. Diaz, M. Hurtado, op. cit.



#### POTENTIAL IMPACT ON THE NATIONAL HEALTH SECTOR

# Equity

The overriding concern related to equity is that the delivery of health services to paying foreign patients should not have adverse effects on the health coverage of nationals or their access to services. In this regard, it is important to consider the source of funds, that is, who really pays for the services. Use of public funds to subsidize care providers - and even privately funded services often have some elements of public subsidies - may reduce the access of the domestic population to health services. The supply of services in the domestic market could also be affected in cases where public sector providers (physicians, nurses, and other health professionals) attend foreign patients. Especially when the capacity of a health care system is limited, foreign patients might compete with domestic ones for services.

# Quality

Countries must be able to provide quality services if they wish to attract foreign patients; this usually involves the upgrading of human and physical resources. Naturally, any improvement in services stemming from a policy of treating foreign patients should benefit as much as possible the local population. If separate facilities or health personnel provide care for foreign patients, quality gains may not spread throughout the system. On the other hand, if these providers also attend to the general population (for example, through a contractual arrangement between the government and the provider to supply services to the local population), more generalized quality gains can be expected.

# ■ Efficiency

Developing countries may be either providers of health care or a source of patients. In the first case, if they use public funds for upgrading of health services to attract foreign patients, and if such upgrading is based on the acquisition of expensive high technology, there would be a social cost: fewer resources would be available to improve quality and equitable access in the rest of the health care system. On the other hand, revenues generated from provision of care to foreign patients could be allocated in part for upgrading quality or improvement of access in general, for example, through cross-subsidization. Agreements on portability of insurance coverage for treatment abroad will be essential for further development of this kind of activity.

In the second case, a number of governments subsidize the care of their nationals abroad if a specific treatments is not available in the home country, but the public health sector has to face difficult policy options. Will these services be provided as a public benefit, and if so, to which



range of services will the benefit apply? Concerns have been expressed that where the benefits exist, they are not always used efficiently (or equitably). For example, patients may receive services abroad that could have been provided domestically. Where it is cost-effective for developing countries to use public funds to treat selected patients abroad, it is essential that related mechanisms should be well managed.

#### 3.2 MOVEMENT OF STUDENTS

The movement of students for undergraduate and for postgraduate education in the health professions takes place between countries at all levels of development: from developing to industrial countries, between industrial countries, and also between developing countries. Trainees may study abroad for various reasons: educational institutions or specific programmes may not be available in the home country, or all available training places may be filled. The choice of country for study may also depend on the fellowship or scholarship awarded. Another incentive may be the international reputation of the receiving medical, public health, or nursing schools and the potential for a good educational experience, which should contribute to better employment possibilities. In some cases the cost of studying abroad might be lower, although many developing countries now require foreign students to pay higher fees than nationals in order to capture some of the education subsidies that benefit national students. The costs of travel and accommodation also have to be taken into account.

On the other hand, foreign diplomas or certificates may not be recognized in the student's home country. Further study - sometimes in the form of internships - and assessment is often required before a licence to practice is given.

Developing countries have long been worried by the loss of their trainees who remain abroad after completion of study. Their concern was reiterated at a recent meeting of Portuguese-speaking African countries; efforts to retain qualified human resources was one of the chief priorities in their health sector.<sup>22</sup> The situation has also started to preoccupy countries that supply educational services: they apprehend the saturation of their markets by foreign graduates who do not return home, or the loss of training possibilities to foreign students paying higher fees than nationals.

<sup>&</sup>lt;sup>21</sup> See A. Mejia, H. Pizurki, E. Royston, *Physician and nurse migration: analysis and policy implications*. Geneva, World Health Organization, 1979.

<sup>&</sup>lt;sup>22</sup> Final report of the International Consultation on Human Resources for Health for Lusophone African Countries, Lisbon, May 1996. Geneva, World Health Organization, 1997. (Unpublished document HDP/97.2).



It appears, however, that the number of developing country nationals studying abroad are gradually falling as a result of initiatives by both countries that consume and those that supply medical education. Some consuming countries are establishing their own training institutions or are using facilities within the same region where appropriate and feasible.<sup>23</sup> For example, WHO's Regional Office for Africa explicitly encourages WHO fellowships to be used in the African Region. The increasing use of telecommunications in medical education (see section 2) may also reduce the need for study abroad, although certain new health disciplines will still require training in the developed countries. Some supplying countries, such as Canada and the United States, are drawing up more comprehensive plans for health human resources that include measures to regulate the number of foreign students who can be licenced to practice in the health care system.

#### POTENTIAL IMPACT ON THE NATIONAL HEALTH SECTOR

# ■ Equity

Access to health services in developing countries will be affected if overseas students do not return home, since fellowships are usually awarded for study in disciplines in short supply in the home country. Moreover, a mismatch may exist between the training received by the student and the needs of the home country. Where this occurs, returning trainees may be reluctant to go to needy areas in the country and/or they may not be adequately trained to perform their duties. The returning provider may also go to the private sector (even though the need is in the public sector) or may seek positions abroad. In either case, both equity and quality are affected.

# Quality

The return of qualified health personnel clearly improves the quality of health services, provided that they have received training appropriate to conditions in the home country. Training within the same region would help in that regard. However, one of the barriers to a greater use of training facilities within developing countries is the lack of recognition of their qualifications. Degrees and diplomas from developed countries are often valued more highly. The design of agreements for mutual recognition of qualifications within and between regions would help in this respect. On a more global level, countries that supply and those that consume medical education need to agree on the content of curricula to ensure that it is relevant to conditions in the students' countries of origin.

<sup>&</sup>lt;sup>23</sup> D. Diaz, M. Hurtado, op. cit.



# Efficiency

Developing countries allocate significant public funds to training abroad; returns to investment are therefore a major consideration. The issue of who pays for training may be complicated by mixed sources of funding: undergraduate training is mainly subsidized by public funds, postgraduate training might be acquired abroad privately. A trainee who remains abroad means loss at least of the cost of undergraduate training. For this reason a number of countries offer, on a domestic or regional basis, incentives to repatriate. Further, resource allocation is likely to be inefficient if training abroad does not address health problems of priority in the students' countries of origin.

Nevertheless, where the foreign educational programme is well managed and oriented to sending countries' needs, it might be more efficient for a developing country to continue to support students abroad than to set up its own educational institutions. In this case regional cooperation may offer a an alternative through the establishment of joint training institutions tailored to the health needs of a given region.

# 4. FOREIGN COMMERCIAL PRESENCE

The extent to which governments might wish to open their health sector to foreign service suppliers is a policy choice which is likely to depend on their prior experience of national private provision of health services or - and perhaps more important - of managing contracts for those services.

In fact, restrictions to foreign commercial presence in the health sector remain in most countries. Others have only recently started to open up their health sector to foreign investment, expecting that this will help to improve services, contain costs, and take pressure of the public sector.<sup>24</sup> Investment so far is usually in hospital operation or management or in health insurance. There is no evidence that foreign health service providers are seeking especially to invest in developing countries, where only a small percentage of the population can afford private treatment.

A common pattern of investment is for a foreign provider to enter into a joint venture with local partners, which helps to ensure access to qualified local health personnel, a supply of paying patients and a better understanding of local characteristics. Or foreign firms might offer "managed care" services, which integrates the financing and delivery of medical care through contracts with physicians and hospitals and links with insurance companies.<sup>25</sup>

#### China's health investments abroad

Investment by health service providers may not necessarily flow from North to South. Since China launched its "open-door" policy some twenty years ago, a number of domestic enterprises invested abroad, including either wholly Chinese-owned clinics or small joint-venture hospitals with local partners. By 1995, more than 100 of these small facilities were registered in some 20 countries, of which one fifth are in the public sector and the rest, privately run. In joint ventures, mainly small clinics practising traditional Chinese medicine, the Chinese partner usually provides technology, services and labour, and the local partner, buildings and equipment. They are located in countries of Asia, the Middle East, the former Soviet Union, and Eastern Europe. 26

<sup>&</sup>lt;sup>24</sup> UNCTAD, International trade in health services.

<sup>25</sup> Ibid.

<sup>&</sup>lt;sup>26</sup> Xing Houyuan, The trends of China's medical service exports.



#### POTENTIAL IMPACT ON THE NATIONAL HEALTH SECTOR

# Equity

A foreign commercial presence in the health sector, in the form of hospitals or health insurance schemes might improve delivery of health services, but gains in most developing countries are likely to accrue to the more affluent segments of the population. The poor would only benefit from better access to health care if resources were reallocated within the public sector as a result of a greater use of the private sector by those who could afford to pay. The presence of foreign commercial firms might also distort the health care market by provoking an internal brain drain. For countries facing real shortages of skilled health professionals, an exodus of providers from the public to the private sectors would leave fewer skilled physicians and nurses working in the public sector to serve the majority of the population. The health system would risk becoming increasingly two tier, with different subsystems serving different population groups.

Increased foreign presence in health facility management does not have any obvious implications for equity in access to health services.

# Quality

A new or increased foreign commercial presence in hospitals and health management may improve quality through the introduction of better management techniques and information systems. Better quality may be perceived, however, as a greater concentration of sophisticated medical technology, to the detriment of a more realistic and comprehensive approach to quality in health care. In this case, governments may face pressure to allocate resources to high technology services rather than to meet their broader societal priorities. Further, the arrival of foreign hospitals and insurances might cause a substitution effect, with private services gradually replacing certain publicly provided services. This would attract resources from the public services, making it difficult for them to maintain whatever quality they have. In short, foreign competition in the health sector does not necessarily lead to an improvement in quality. Evidence suggests that for this to happen, the health sector must be well structured and regulated.

Foreign commercial presence in medical education may have positive externalities for national educational institutions if there is a sharing of teaching methods, curricula and other materials. However, if the public sector loses qualified teachers to the private sector, the quality of its education will suffer.



# Efficiency

The impact of new or increased foreign commercial presence on the efficient use of a country's health sector resources may vary. The presence of foreign firms, through their investment in health care (e.g. hospitals, health insurance companies, educational institutions), is likely to increase the overall level of funding in the sector. Under certain conditions, this inflow of financial resources might reduce the financial pressure on governmental health-related expenses, allowing public funds to be reallocated in a more efficient (and equitable) manner. In general, though, these conditions are not obtained because even private services are usually subsidized to some extent (directly or indirectly). Moreover, public investments - possibly substantial - might be necessary to attract foreign firms. At a minimum, these would include a clear and attractive set of regulations concerning the presence of foreign firms. Thus, an expansion of foreign private firms might actually absorb more public health funds rather than free them.

In principle, an influx of foreign firms should increase competition in the delivery and financing health services. Unlike most other segments of the economy, however, the pervasiveness of market failures in the health sector (especially with respect to information) means that greater competition among providers does not necessarily improve efficiency. It may lead to an increased volume of services (known as supplier-induced demand), and greater investment by hospitals in high-technology equipment in order to attract patients. Both these trends contribute to a rapid escalation of costs. Private competing insurance companies might also engage in "cream skimming": trying to select only good risk (i.e. healthy) clients, leaving the public sector to manage the costs of the higher risk population.

If governments aim to improve the efficiency of the health sector by allowing foreign commercial presence and stronger competition, they will need a sound capacity for budgeting and contracting for private actors, and the ability to povide an effective regulatory framework. Foreign firms, such as transnational insurance or hospital corporations, might be considerably more sophisticated than the regulatory arms of government and could to take advantage of underregulated environments in ways that might be detrimental to the overall equity and efficiency of the sector. Most important, governments need first to frame clear national policies on health and health care financing, then determine the scope for an expanded foreign presence within them.

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# 5. MOVEMENT OF PERSONS SUPPLYING SERVICES

The emigration of qualified health personnel professionals, attracted by better living conditions, higher remuneration, and career opportunities elsewhere is a problem with which health authorities in developing countries have had to grapple for many years. Indeed, it has been estimated that 56% of all migrating physicians come from developing countries;<sup>27</sup> the figure for nurses is likely to be higher. Among doctors it is often the categories that are in short supply who go abroad. In Ethiopia, for example, it is reported that between 1984 and 1994, 55.6% of the pathology graduates from the Addis Ababa Faculty of Medicine, left the country.<sup>28</sup>

Migration of personnel to the United States and Canada is a significant contributing factor to the shortage of health care personnel in Jamaica. Yet the flow of skilled health personnel is not necessarily towards the industrial countries of the North. A recent study found that doctors and nurses from India also go to the Gulf States and Middle-Eastern countries, often on short-term contracts, but many as migrants.<sup>29</sup>

Many factors contribute to sustaining the outflow. Potential earning differentials between countries may be a big incentive, but poor working and living conditions in the home country may also pay a big part in the decision to emigrate. Moreover, job-seeking abroad is facilitated by the fact that health services are particularly labour intensive and the scientific knowledge acquired has universal application.

# Migration of health personnel: filling the gaps

Of graduates of the University of Ghana Medical School between 1985 and 1984 there was an annual average loss of 8.2%. The cohort that graduated in 1985 numbered 65; by 1997 only 22 remained in the country. In order to overcome the shortage of physicians, doctors are being recruited from Cuba on defined limited-term contracts between the respective governments. The imported doctors work primarily in rural settings in Ghana.

<sup>&</sup>lt;sup>27</sup> A. Mejia, H. Pizurki, E. Royston, op. cit.

<sup>&</sup>lt;sup>28</sup> S. Ababulgu, Problem of physician migration in Ethiopia. Addis Ababa, St. Paul's Hospital, 1997. Unpublished document.

<sup>&</sup>lt;sup>29</sup> I. Gupta, B. Goldar, A. Mitra, Trade in health services: a case study of India. Delhi, Institute of Economic Growth, 1997.

<sup>30</sup> Volta Regional Research Team, The doctors are out – Where are they? Accra, Ministry of Health, 1997.
Unpublished document.



As a result of the outflow from Jamaica of all kinds of skilled health personnel - public health nurses, therapists, midwives, technicians and certain categories of medical specialists - 50% of posts for registered nurses and 30% of midwifery posts remained unfilled in 1995. I Jamaica is currently trying to overcome the shortage by recruiting nurses from African countries, including ... Ghana.

#### POTENTIAL IMPACT ON THE NATIONAL HEALTH SECTOR

## Equity

The outflow of health personnel will have a clear impact on equity if it produces shortages in the home country, thus reducing access to the services that would have been provided by the migrants. The loss of specific categories of health professionals will also reduce the range of services available. In cases where the number of highly specialized professionals, such as public health specialists, is very limited, emigration of even a few people could mean that a whole service area becomes inoperative. On the other hand, if the categories of health personnel involved are those in which the home country has an oversupply, the question is more one of efficiency than of equity.

# Quality

The quality of health care will also suffer if a country is losing its best health professionals. The outflow of health personnel could be compensated by an inflow of foreign labour, but if the quality of training is below that of migrating resources, the quality of care can be expected to deteriorate. Recruitment of health personnel is therefore sometimes restricted by regulation so as to assure high-quality candidates.

Temporary movements of health personnel could nevertheless have a positive effect on the quality of care by contributing to a general upgrading of skills and knowledge when returning individuals resume their activities in their home country. Returnees may not, however, be prepared to work in rural centres or district hospitals unless that was their experience abroad.

# Efficiency

Economics is a major consideration in the movement of health professionals, as the entire human resources chain is affected, from production to deployment. In most countries the

<sup>31</sup> PAHO internal document. Washington, Pan American Health Organization, 1995.

education of health personnel is largely subsidized by public funding and requires significant investments (see section 3.2). The outflow of health personnel in effect provides a subsidy to the receiving country for which there is no direct compensation. Measures to compensate a shortage of health personnel as a result of migration would entail additional costs. Costs may be partially offset by the remittances that migrants send home, which are substantial in such countries as the Philippines, but the public sector itself is not directly compensated (see below).

Arrangements to compensate for the benefits host countries gain from the movement of health personnel could be one way of minimizing the loss of investment in education and training suffered by developing countries. Governments could arrange contracts for the temporary employment of health personnel, but seem feasible only if they own the labour (as in the case of Cuba). Alternatively, some countries have introduced either negative incentives to migration, such as a migration tax or (partial) refund of tuition by the professional that leaves too soon after graduation, or positive incentives for professionals abroad to return, such as tax exemptions or deductions.

The loss of health personnel from needy countries to wealthier ones is already a serious problem. If barriers to this type of movement are reduced without an appropriate regulatory framework and/or improvement in working and income conditions in the domestic health system, equity, quality and efficiency will all suffer. It is worth noting, however, that GATS places limitations on the presence of persons supplying services, and its provisions do not apply to people seeking access to foreign labour markets. 32

The movement of health personnel also involves broader, macoeconomic issues, such as the effect of net foreign income and transfers as a result of widespread migration (usually welcomed by ministries of finance and central banks), or increased household incomes among certain population groups derived from remittances of family members working abroad.

<sup>32</sup> General Agreement on Trade in Services, Annex on Movement of Natural Persons Supplying Services under the Agreement, paragraph 2.



#### 6. TRADE-OFFS FOR DEVELOPING COUNTRIES

There is increasing interest in the possibilities that trade in health services might offer, essentially to increase foreign exchange earnings. In a social sector such as health, governments will have to make judicious choices in order to reconcile commercial considerations with the social priority of ensuring access of all the population to good quality and efficient services. Developing countries in particular are vulnerable to market distortions which may be detrimental to that objective, as well as being prone to certain chronic problems, such as those related to the movement of persons supplying health services. Ideally, a policy to promote such trade should be chosen for the purpose of furthering public health objectives.

#### INTERNATIONAL TRADE IN HEALTH SERVICES: ANALYSING TRADE OFFS FOR DEVELOPING COUNTRIES

Modes of trade	Health policy objectives			
Miodes of trade	Equity	Quality	Efficiency	
Cross border	Serving remote areas	Improved quality	v. substantial investment	
Movement of consumers Inflow of foreign patients Outflow of students	"Crowding out" nationals	v. improved quality Upgraded skills	v. possible loss of investment	
Foreign commercial presence	Possible "two-tier" system		v. possible freeing up of resources	
Movement of persons supplying services	Reduced access to services	Loss of quality	Loss of public investment v. foreign exchange remittances (private benefit)	

Policy-makers need to compare the different options available with national priorities; one way to do so is through a framework of the kind shown above. This matrix sets out schematically some of the key issues, presenting the modes of trade along the vertical axis and the health policy objectives along the horizontal. Some potential trade-offs can be observed between the policy objectives for a particular mode of trade, as discussed in the preceding sections.

Naturally, other elements have to be taken into account aside from the three public health objectives indicated here. There is little evidence as yet of the impact of trade on the performance of health services, although it is likely to depend on a country's level of the

#### HEALTH ECONOMICS



economic and social development. These effects will need to be examined within the context of health sector reform in order to determine necessary adjustments. Analysis might also be needed of the impact of trade flows on the poorest population groups, which may not be in a position to express their views. Trade in health services will also have repercussions on economic sectors - education, tourism, transportation, infrastructure, for instance - and at a macroeconomic level, for example on employment and immigration policy. These linkages also need to be better understood. The starting point for all research of this kind is comparable, disaggregated data, few of which are currently available.

A further step would be to encourage participation of civil society in the decision-making process related to trade liberalization and the use of health resources, which would help to assess the acceptability of new policies.

In an optimal situation, a perfectly functioning market in the health sectors (as in others) would assure the efficient allocation of resources, but that is likely to be incompatible with social objectives. Governments might therefore seek "second best" solutions in order to minimize possible damage to public health objectives, while maximizing economic and social benefits to be obtained from trade in health services. Possible options could include allocation of part of the revenue from trade to domestic health development, mechanisms to secure the interaction between foreign (imported) and domestic health services to the benefit of the whole population, incentive systems to discourage migration of highly qualified health professionals, and so forth, backed up by greater cooperation among countries, especially within regional trade groups.

Ultimately, and despite the cost to the health system, all considerations point to the need for governments to provide a strong and effective regulatory framework for the private actors involved in trade in health services. But, above all, and especially in developing countries, they have to be able to enforce it.

In this regard, it may be useful to look beyond national boundaries to the international context. National health systems are becoming increasingly linked through various aspects of globalization - one of which is trade. Regulations and standards intended to ensure the quality and safety of traded health services will increasingly be established on an internationally agreed basis. This means that governments, when framing policy, setting standards and drafting legislation will have to take account of the regional and international context. In turn, a sound international legal and normative framework should both facilitate their task and complement the national regulatory environment.



#### **BIBLIOGRAPHY**

Ababulgu S, Problem of physician migration in Ethiopia. Addis Ababa, St. Paul's Hospital, 1997. Unpublished document

Diaz D, Hurtado M, International trade in health services: main issues and opportunities for the countries of Latin America and the Caribbean. Washington, Pan American Health Organization, 1994 (Technical Reports Series No. 33)

Final report of the International Consultation on Human Resources for Health for Lusophone African Countries, Lisbon, May 1996. Geneva, World Health Organization, 1997. (Unpublished document HDP/97.2)

Gupta I, Goldar B, Mitra A, Trade in health services: a case study of India. Delhi, Institute of Economic Growth, 1997.

Health informatics and telemedicine. Geneva, World Health Organization, 1997. Unpublished document EB99/INF.DOC./9

Health informatics and telemedicine. Report by the Director-General. Geneva, World Health Organization, 1997. Unpublished document EB99/30

Kinnon C, WTO: what's in it for WHO?. Geneva, WHO Task Force on Health Economics, 1995. Unpublished document WHO/TFHE/95.5

Mejia A, Pizurki H, Royston E, Physician and nurse migration: analysis and policy implications. Geneva, World Health Organization, 1979

Prassad HAC, Healthcare exports under consumption abroad mode: opportunities, obstacles and challenges for developing countries in general and India in particular. New Delhi, Indian Institute of Foreign Trade, 1997. Unpublished document.

The results of the Uruguay Round of Multilateral Trade Negotiations: the legal texts. Geneva, World Trade Organization, 1995

UNCTAD, International trade in health services: difficulties and opportunities for developing countries. Geneva, United Nations, 1997. Unpublished document TD/B/COM.1/EM.1/2



#### **HEALTH ECONOMICS**

Volta Regional Research Team, The doctors are out -- Where are they? Accra, Ministry of Health, 1997. Unpublished document

Xing Houyuan, The trends of China's medical service exports. Geneva, UNCTAD/UNDP Regional, 1997. Restricted document UNCTAD/MTN/RAS/CB.23/Rev.1.