TITLE

PUBLIC POLICIES FOR FACILITATING MEDICAL TOURISM INDUSTRY IN ASIA

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ABSTRACT

The paper attempts to analyze the role of public policy adjustments in facilitating the medical tourism sector in Asian countries in response to recent global economic events. While falling incomes may encourage prospective clients in developed countries to opt for medical services in Asia, there exist significant risks and weaknesses that can impede this phenomenon. A SWOT analysis suggests that the biggest threats arise from possible resistance from stakeholders, both within the country and abroad, due to its adverse impacts on local healthcare markets, and falling revenues for providers in the source countries, respectively. Government policies should aim for facilitating medical tourism while minimizing its adverse impacts on local healthcare. Facilitation can be achieved by improving the regulatory environment, allowing ease of entry and regulating quality by credible and mandatory accreditation. Both fiscal and financial incentives may have a role and can also be used for expanding local healthcare, if necessary, by cross-subsidy, the design of which will need to be carefully planned to optimise its impact. It will be necessary to ensure adequate supply of trained manpower by either expanding the capacity of training institutions, or by liberalizing immigration of skilled workers.

(6,382 words)

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1. Introduction

Labour surplus in developed countries has often caused immigration of skilled workers, including medical and paramedical personnel, to developed countries. In recent times, the same labour surplus has created opportunities for outsourcing of services from developed to the lesser developed world. During last few years, such outsourcing is increasingly observed in the field of medical care, where it initially began with medical transcription and other supportive services, but now has begun to encroach upon actual medical care in a form that is often referred to as 'medical tourism' and is growing throughout the globe, including Asia. Thailand, India, Singapore, Malaysia and Philippines are increasingly experiencing the inflow of patients from outside their borders, thereby making medical tourism an industry in its own right with significant potential for growth. Tourism industry is a significant revenue earner and one of the biggest employment generating industries. However, little effort has been made so far in most countries to analyze it from the perspective of challenges and opportunities that it faces or with a view to identify appropriate public policies that will maximize its potential as a tool in their economic development.

As a growing sector, medical tourism holds a lot of promise, but whether it will actually be able to deliver on them will largely depend on the public policies that facilitate its growth while containing factors that can stall it. This paper attempts to examine the current trends of medical tourism in some Asian countries, identify the challenges and concerns faced by it and suggest policies that may help it grow as an important economic contributor for the host countries.

2. An overview of Medical tourism

2.1 Medical tourism: meaning and scope

'Medical tourism' is a term used frequently in media and reports. However, different commentators tend to include different ingredients within the scope of its definition. It is usually used to refer to persons who travel outside their countries to obtain medical care, but often, foreign tourists who require some medical care during their stay in the destination country, even

though medical care was not the primary purpose of their travel, are also included within its ambit. Sometimes expatriates and their families living in the country and seeking medical care are also included, whereas others also include tourists availing traditional healing methods and health promoting services like spa and massage. Such variance in the use of the term has created a significant limitation in the comparison of statistics and trends.

Another term often used is 'medical traveler', defined as a person who travels beyond her country with the primary intent of obtaining medical care. The narrower scope of the term excludes the incidental medical care sought by tourists and expatriates, and hence is more specific. Some authors have also attempted to create a differentiation between 'traditional medical travel' defined as travel undertaken by persons from less developed countries to more developed countries for obtaining advanced medical care not available in their state, and the more recent phenomenon of 'medical tourism', which refers to a reverse process of travel for obtaining medical care from more developed countries to less developed ones due to various considerations (Horenwitz, Rosenburg and Jones, 2007).

Medical tourism is considered different from 'health tourism', which is a broader term encompassing in its scope all travelers who avail of some service related to heath, and includes travelers whose primary aim of travel is recreation and health related services are only a part of such recreation (Carrera and Bridges, 2006). In recent literature, more interesting terms have appeared like 'medical refugees' defined as "seriously ill middle-income Americans evading impoverishment by expensive, medically necessary operations, as health care services are increasingly included in international economic trade" (Milstein and Smith, 2006).

2.2 Origin of medical tourism and its recent upsurge

Medical travel initially consisted of patients travelling from developing countries to developed countries to seek high quality, advanced medical care, unavailable in their own countries. During the last few decades, this trend has begun to reverse, largely because of two developments. First, there has been wide dissemination of medical technology, and the available technology and

¹ Dr Jason Yap, Director (Healthcare Services), Singapore Tourism Board prefers the use of term 'medical traveler' instead of medical tourist, as the term itself denotes individuals traveling across borders for the primary purpose of medical care, and differentiates them from other tourists and expatriates seeking incidental medical care in a foreign country.

expertise in many developing countries is reaching levels at par with those available anywhere else. Second, the developed countries have experienced a consistent rise in demand and cost of medical care. Since medical care is primarily a service and involves skilled labor, the labor costs become a very important factor, providing cost advantage to institutional medical care in developing countries, and thereby opening up new opportunities. Out of the global healthcare market estimated at over US \$ 4 trillion, the global medical tourism accounts for only \$ 40 to \$ 60 Billion, with an estimated annual growth rate of 20%. During the last decade, Asia has become a growing destination for medical travelers, not only from within Asia but also from outside, including countries like the United States, United Kingdom and Canada. Between 7,50,000 to one million Americans were projected to travel abroad for procuring medical care in 2007, and this figure is projected to rise as high as 6 million in 200 (Baliga, 2006; Konrad, 2007).

2.3 Factors promoting Medical tourism in Asia

The primary reason of growth of Medical tourism is the considerable cost differential between medical care available in Asia and the developed countries. For example, a cardiac angioplasty costs US \$ 60,000 in U.S., but the same procedure costs only US \$ 15,000 in Singapore and US \$ 8,000 in India. Similarly, a knee replacement surgery costs US \$ 60,000 in U.S., whereas the same costs only US \$ 15,000 in Singapore and US \$ 9,000 in India. Such cost advantages exist in case of Asia for most medical procedures, creating a significant opportunity to attract medical travelers. More significantly, in recent years, the difference between the quality of medical care available in Asia and the Western world has distinctly narrowed down, allowing costs to become a decisive factor.

The low cost of medical care in Asia stems from several factors, primarily the availability of cheap skilled labour. The wages for skilled labour deployed in medical care are dependent on the willingness of consumers to pay for such medical care, which in turn is largely governed by their income levels. With low per capita levels of income, cost of medical care as well as wages of skilled labour employed in the medical care industry are significantly lower in Asia. Other factors which support this phenomenon include government funded medical education system, a

surplus of unskilled labour and low cost of professional liability insurance. In some countries state participation and regulation of medical costs also plays a role.

Another factor that is favouring medical tourism is the rising cost of medical care in developed world. It is most apparent in the United States, where per capita annual health care expenditure is almost US \$ 6000² or the double of other developed countries, and is still rising, taking medical care outside the scope of around 40 million people with inadequate insurance cover. The reasons for rising health care costs in these countries include rising life spans, ageing population, high prevalence of geriatric diseases and increasing health awareness. In author's opinion, one of the most important reasons for this rise may be the supplier driven nature of the medical care market and its inherent information asymmetry between the supplier and consumer of medical care, which allows leveraging of high incomes and consequent high willingness to pay by the supplier in a manner that is beyond the scope of control by ordinary market forces of competition, demand and supply.

2.4 Factors constraining medical tourism

The biggest constraint in the acceptance of medical tourism is the uncertainty associated with the quality of services, and the lack of legal remedies and accountability in case of lapses or failure. To assure quality, more and more hospitals are opting to get themselves accredited by J.C.I.³, the international arm of J.C.A.H.O. which is given a unique status under the American law, by restricting the allowability of fiscal benefits only to hospitals accredited by it. Other international agencies for accreditation include the Canadian Council on Health Services Accreditation or C.C.H.S.A., the Trent Accreditation Scheme T.A.S., United Kingdom and the Australian Council on Healthcare Standards or A.C.H.S. In most Asian countries, obtaining legal remedies and compensation is more difficult compared to the developed world. Other constraints include difficulties in travel, differences in culture and language, problems of infrastructure, somewhat

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² As per the Human Development Report, 2008 released by United Nations, per capita healthcare expenditure in United States is US \$6096, though as per the National Coalition on Health care (N.C.H.C.), Washington, it was \$7900 for 2007. N.C.H.C. reports that in 2008, health care spending in the United States reached \$2.4 trillion, and was projected to reach \$3.1 trillion in 2012 and \$4.3 trillion by 2016.

³ J.C.I. or Joint Commission International is the international arm of J.C.A.H.O, the Joint Commission on Accreditation of Healthcare Organizations, a U.S. based organisation.

poorer image of sanitation and hygiene, and the existence of local endemic diseases like malaria and tuberculosis.

2.5 The profile of medical travelers

The medical travelers can be divided into six main categories⁴.

- (i) Residents of high cost medical care countries, with insufficient health insurance cover, whose resources are adequate to procure medical care in low cost developing countries, but not enough for procuring the same in their local market.
- (ii) Residents of countries with overburdened National Health Programmes, who prefer medical care abroad, to circumvent delays in getting treatment in their own countries. Their resources are sufficient for low cost countries but inadequate to procure private medical care locally.
- (iv) Persons who seek medical care by way of procedures like cosmetic surgery that are typically not covered either by the usual health insurance policies or the National Health Programmes.
- (iii) Persons who are not short of resources, but are residing in countries where adequate quality of advanced medical care sought by them is not available.
- (v) Persons who seek such medical care or procedure like stem cell treatment, fertility clinics and organ transplants, whose availability is restricted in their home countries due to legal or ethical considerations, but which is more easily available in some other country.
- (vi) Persons who combine their recreational travel with non-emergency or even non-essential medical care like executive check-ups and traditional therapies, which is combined with tourist excursions and vacations, making the package more attractive.

Except the last category, all others seek high quality and standards, and prefer reputed hospitals with accepted accreditations like J.C.I. The quality of medical care of the destination country is invariably of utmost importance, and unlikely to be compromised on cost considerations alone. Thus, the growth in the incidence of medical tourism is in itself a testimony to the improving

⁴ This classification is an attempt to demonstrate the heterogeneity of medical travelers as a group. Since such classification has not been attempted earlier, little data is available on the relative proportion of the six groups.

availability of internationally accepted quality and standards of medical care in developing countries.

3. Medical tourism in Asia

The available data on medical tourism is neither standardized, nor accurate due to variations in definition of medical traveler, as well as methods of collecting data. While Singapore collects this data by way of exit polls at the airport, and includes only medical travelers arriving with the primary purpose of medical care, other countries like Thailand collect data of number of foreigners seeking medical care at the hospitals, thereby including the incidental visit of foreign tourists and expatriates in the figures. In view of these constraints as well as a lack of authentic countrywide data, reliance is placed on statements and figures appearing in the media, which suggest that Thailand, Singapore, India, Malaysia and Philippines are having a major share of the existing medical tourism market in Asia. While other Asian countries are also attracting medical travelers, this paper will place a larger focus on these five countries. The estimated size of the medical tourism market in Asia is approximately U.S. \$ 3.4 billion, consisting of about 12.7% of the global market. More significantly, it is projected to grow at a compounded annual growth rate of 17.6% between 2007 and 2012, making it one of the most rapidly growing industries.

3.1 Medical tourism in Thailand

Thailand was one of the first Asian countries to position itself as an advanced medical care provider, and has created a niche for itself, while garnering the largest share of medical tourism in Asia. It owes some of its success to the royal connection with US healthcare. Many Thai physicians have graduated in the United States, enabling a highly efficient medical care sector. The Bumrungrad Hospital is one of the leading hospitals and is reported to have treated 4,00,000 foreigners in 2005. In August 2008, it opened a dedicated Bumrungrad International Clinic with 22 floors and a capacity of 6000 outpatient visits a day. Other major players include Bangkok Medical Hospital and Phyathai hospital group. The Thai medical care centers have paid a lot of attention for mitigating cultural factors like language and food. The Phyathai hospital has

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⁵ Prince Mahidol of Songla, father of the king graduated with a MD from Harvard Medical School in early 20th century, and was instrumental in royal sponsorship of Thai students to United States for learning medicine, as well as building modern medical facilities in Thailand, with the help of funds from the Rockefeller foundation of US.

interpreters for 22 languages, while Bangkok hospital has a dedicated Japanese wing. Another significant advantage of Thailand lies in its costs, which are even cheaper than Singapore, while being only marginally higher than India. Thailand is reported to have provided medical care to 1.28 million expatriates in 2005, generating around 33 billion baht in the process.

3.2 Medical tourism in India

India is a relative newcomer to the arena of medical tourism but has picked up very rapidly. In 2005, it attracted over 150,000 foreign patients, who together contributed around \$ 677 million to its economy. By 2012, the revenue from medical tourism in India is projected to be US \$ 2 to US \$ 2.5 billion. Its main strengths lie in the high quality of its medical care professionals, prevalence of English and very low wages that make it one of the cheapest destinations of comparable quality medical care in the world. Indian diaspora also contributes significantly to the growth of its medical tourist sector. Over 30,000 physicians in the United States, almost one seventh of the total, originate from India, providing it a significant opportunity for network building. Important players include the Apollo group of hospitals, the Wokhardt hospitals and the Fortis group. Some Indian hospitals have reported a mortality rate better than that in the United States.⁶ However, India also faces significant constraints in terms of physical infrastructure and international perception about poor hygiene and sanitation.

3.3. Medical tourism in Singapore

Singapore has established itself as a major medical care provider in Asia, attracting patients from both within Asia and outside. It offers reliable international quality, with the highest number of J.C.I. accredited hospitals in Asia. In 2005, it received 374,000 patients from abroad⁷, a growth of around 20%. It plans to attract over 1 million patients by year 2012, and expects medical tourism to contribute over US \$ 3 billion in revenue and over 13000 jobs. Singapore is also shaping to become a regional bio-medical hub, with 40% of all conferences being on bio-medical

⁶ The mortality rate for cardiac surgeries in Fortis Hospital is 0.8%, compared to the average rate of approx. 1.5% in the United States.

⁷ as reported by Singapore Medicine, 2007.

topics⁸. In addition to hosting the Asian headquarters of J.C.I., Singapore has been ranked as having the best healthcare system in Asia, and has developed a niche for itself in some highly sophisticated procedures like stem cell transplants, living donor liver transplants and advanced robotic surgery. One of its advantages lies in its successful healthcare financing, and corporatized hospital management allowing a healthy regulated competition which keeps the costs of medical care low. The hospitals involved include Pacific Healthcare, Raffles Hospital and National University Hospital. Another successful sector in case of Singapore is its private dental sector, where foreigners constitute between 15 to 60% of patients in different clinics⁹. One of the objectives of the emphasis on medical tourism in Singapore is to attain a critical mass of patients in the city state that can sustain its highly sophisticated and specialized medical care setup.

3.4 Medical tourism in Malaysia, Philippines and other Asian countries

Apart from Singapore, Thailand and India, other countries actively promoting medical tourism include Malaysia and Philippines. Malaysia has traditionally catered to patients from surrounding countries, receiving over 70% of its 340,000 medical travelers from Indonesia. In 2007, medical tourism contributed revenue of RM 253.84 million, which is expected to rise to RM 540 million by 2010. Philippines catered to 250,000 non-resident patients in 2006, generating US \$ 350 million in revenues. The medical tourism sector in Philippines is boosted by the large Filipino diaspora in the United States and other countries, the large number of its doctors and nurses working abroad and the expatriate retirees that have come and settled in Philippines after retirement. The government of Philippines has also attempted to encourage medical tourism by way of Philippine Medical Tourism Program (P.M.T.P.), a public-private program launched in 2004.

Among other Asian countries, U.A.E. is developing a medical city that is likely to be completed in 2010, and many leading hospitals catering to foreign patients are considering having a center there. Taiwan and Hong Kong have developed their own niche of expertise, focusing to a large extent on patients from mainland China, though their focus may not be as much on the medical

⁸ Yap, Jason (2006), Medical Tourism/ Medical Travel Part 2, SMA News, July 2006 Vol 38 (7) pp-13-16

⁹ Refer 7 supra

traveler. The total medical revenue from medical tourism in Asia is expected to grow to up to US \$ 7 billion in 5 years, while global medical tourism business will be worth over US \$ 40 billion. Clearly, it is a growing sector that can have significant implications for the growth of local medical care sector, opportunities for foreign exchange earnings as well as adverse impacts like rising costs of medical care in local markets.

4. Recent global developments

4.1 Increasing acceptance in the United States and other countries

United States is the largest potential market for medical tourism in Asia, not only because it accounts for more than half the global healthcare market, but also because the trends in United States provide very strong signals for the rest of the world. A favourable acceptance of Asian medical care there can provide a great boost to this sector. Gradually, the significance of cheaper medical care for the over 40 million uninsured Americans is being increasingly recognized and even subtly advocated and debated. Its cost advantages for the insurers and the self insured employers is raising deliberations and discussions on the possibility of formulating marketable plans for overseas medical travel packages and offering such plans under insurance schemes. United Group Programs (U.G.P.), a third-party employee benefit program administrator in Boca Raton, Florida, has introduced 'OptiMed Health Plan', which includes an overseas surgery benefit at Bumrungrad, Thailand. There have been many other similar developments. West Virginia's state Legislature has been reported to be considering a bill encouraging state

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¹⁰ In the words of Josef, D Woodman, the author of the book titled 'Patients beyond borders', released in March 2007, "Many of the 85 million uninsured and underinsured in this country are one diagnosis away from having to put a second mortgage on their homes to pay for an unaffordable treatment."

¹¹ McKee Benefits Service Corp., a unit of McKee Heritage Holding Co. is planning an overseas option to selected employers who receive group health insurance through one of its two insurance companies-Benicorp Insurance Co. in Indianapolis and Municipal Insurance Co. of America in Arlington Heights, Ill – it plans to waive all co-payments & deductibles & cover all travel expenses apart from medical care and offer medical stipend as an additional incentive.

¹² Blue Cross Blue Shield Association has included Bumrungrad & Wockhardt Hospitals in India among its worldwide network of participating hospitals.

¹³ Many U.S. health insurers are investigating the possibility of allowing patients to travel overseas – e.g.. CIGNA HealthCare, Aetna Inc. as reported in 'Health Plans Are Preparing for Possible Growth in Overseas Medical Tourism', Managed Care Week, December 4, 2006.

employees to have non-emergency medical surgeries overseas, by allowing them to fly first class, stay at four-star hotels to recuperate and receive cash bonuses for helping the state save thousands of dollars.

The case of Carl Garret, an employee of the Blue Ridge Company Inc. (BLPP), North Carolina illustrates many of the complexities involved in cross-border medical travel, and its implications for different stakeholders in medical care. ^{14,15} Garret, like 61% of non-elderly in the United States, is insured by his employer, and required surgeries for removing his gall bladder stone and for rotator cuff tear, which in the local market, would have cost him US \$ 20,000 out of his pocket, as co-payments and deductibles, in addition to the cost paid by his employers, amounting to over \$ 50,000. BLPP, being self-insured, was to bear the cost. So it offered Garret the option of flying to Delhi, and get his surgeries done there, with all expenses paid, including air travel, stay and treatment, with no co-payments, and in addition receive \$ 10,000 as a share of saving for the company. ¹⁶ Garret was willing, but when BLPP started considering an offer of an overseas surgical program with IndUShealth, a Raleigh N.C. company, to its 2000 employees, the resistance from the unions was so strong that it not only shelved its considerations but also backed out from the offer it had made to Garret, much to his disappointment. Garret's case demonstrates the opportunities and threats that exist for medical tourism for Asia in a nutshell.

In spite of such hurdles, there is clearly a lot of interest and increasing acceptance to the inevitability of medical tourism as an option. A recent Deloitte Report, 'Medical Tourism-Consumers in Search of Value' estimates that by 2017 as many as 23 million Americans could be traveling internationally for medical care and spending up to \$80 billion annually. It also predicts a 100% annual rise in outbound medical travel from United States between 2007 and 2010.

4.2 Initiatives in destination countries in Asia

¹⁴ Karen Pollarado (2006), Insurers investigate medical tourism to save money on care - Questions remain about quality of care in overseas facilities, Business Insurance, December 11, 2006, Benefits management; Pg. 17, Contra Costa Times, Walnut Creek, California

¹⁵ Ann Tatko-Peterson (2006), Medical tourism expanding among Americans, Walnut Creek, Contra Costa Times, October 5, 2006, Distributed by McClatchy-Tribune News Service

¹⁶ The total costs of treatment in Delhi amount to approx \$ 10,000 compared to \$ 60-70,000 in US.

There are many developments in Asian countries that aim to improve their competitiveness. The leading players are expanding capacity and looking to open new centers, some in different cities or countries. Bumrungrad hospital, having its existing facilities, is now building new centres in Philippines and Dubai. Pacific Healthcare, Singapore is considering expansion to other cities in Asia. More and more hospitals are now looking to get themselves accredited. In India, a local accreditation agency, the National Accreditation Board for Hospitals (N.A.B.H.), a member of the Quality Council of India (Q.C.I.) has come into existence, and many applicants seeking J.C.I. accreditation prefer to first obtain N.A.B.H. accreditation to help itself have adequate standards for J.C.I. accrediting. India's National Health Policy, 2002 has granted the medical tourism industry the same status as 'exports' making it eligible for similar fiscal benefits. Pakistan has been reported to provide fiscal incentives on renal transplantation equipment. Philippines has initiated a Philippine Medical Tourism Program (P.M.T.P.) to improve its share in the global medical care pie.

4.3 The Singapore approach

"Most threats are opportunities in disguise" these words of Dr Jason Yap aptly summarize Singapore's approach on medical tourism. Singapore has constituted a multi agency government initiative, 'Singapore Medicine', a partnership of Ministry of Health, Economic Development Board, International Enterprise Singapore and Singapore Tourism Board to guide the efforts in developing medical tourism in a manner conducive for the local consumers. One of the main concerns of medical care in Singapore has been the fact that the cost of medical care is rising faster than the subsidies because of rise in local demand, so allowing Singapore to attract more

¹⁷ Pacific Healthcare has already opened a joined venture in Hyderabad, India in 2004 and is now planning to open a beauty clinic for cosmetic surgeries in Mumbai, India as well as a five-storey facility in Shanghai. "Pacific Healthcare plans Mumbai beauty clinic." Straits Times (Singapore) – September 26, 2006

¹⁸ details available at http://www.qcin.org/html/nabh/nabh guide.php March 24, 2007

¹⁹ Pakistan has been reported to have received over a thousand patients for renal transplantation, mainly from the Middle East. Muhammad Rashid, The network consumer report on medical tourism-I, Financial Times Information Limited - Business Recorder, January 21, 2007 Sunday.

²⁰ Philippines earns 200M USD from medical tourism this year, Xinhua General News Service, November 6, 2006

²¹ Dr Jason Yap, during his presentation in LKY SPP, Singapore on March 19, 2007.

foreign patients can allow the hospitals to attain the critical mass required for sustaining sophisticated facilities, retaining the best medical practitioners and also provide some crosssubsidization to local patients, creating a win-win situation²². The corporatized nature of public hospitals in Singapore, and their virtual dominance in the market enables it to successfully implement this policy that helps resolve most of the social issues concerned with medical tourism encouragement.

4.4 Concerns of impact of medical tourism on local health care services

While medical tourism industry grows, there are also concerns being raised about its impact on the availability of health care services to the local residents of the destination countries. The rise in costs of private medical care in some hospitals in Thailand is being associated with shifting of medical personnel to expanding medical tourism sector.²³ In countries like India, where as per W.H.O. estimates, almost 80% of the medical care expenses relate to the private sector, there are concerns being raised as to whether the growth of medical tourism will make the availability of medical care in the private market even more unaffordable for the poor. These concerns have often been countered with the argument that increasing revenue from medical travelers can be used to subsidize the medical services for the local residents and actually help in bringing the costs down, an argument that is not universally shared. The failure of enforcement of social obligations undertaken by many large private service providers in India, while being allotted land at a highly subsidized rates only reinforce such concerns. Similar concerns have been raised in Philippines and other countries. Till now, these concerns are more in the form of academic debate, and have not taken a form of large public protest, but once the full impact of medical tourism is actually felt, the possibility of public protests cannot be ruled out.

4.5 Impact of recent economic recession on medical tourism

²² Dr. Jason Yap, during his presentation in LKY SPP, Singapore on March 19, 2007, argued that without the overseas patients, it would have been difficult to make the latest technological additions like Proton therapy unit cost effective. Similarly, attracting foreign patients has enabled retaining some top medical specialists and surgeons, who otherwise may not have stayed on in Singapore, and their presence in Singapore actually reduced the cost of treatment for the local patients.

²³ Medical tourism in Thailand, Available: http://www.thaiwebsites.com/medical-tourism-thailand.asp Accessed April 3, 2009.

So far, there has been little indication of any negative impact of recent downturn of economic growth globally on medial tourism in Asia. The impact of the recession is greatest in developed countries, and thus is theoretically expected to lead to two primary responses. While the response of the public authorities is likely to be an endorsement of protectionism, the struggle for survival of employers and individuals is more likely to force them to consider the cost advantages of medical travel as an increasingly viable option. There were expectations of a fall in purely elective medical procedures like cosmetic surgery resulting from falling incomes, but recent reports from the Indian city of Chandigarh²⁴ suggest that such fears have not materialized. As the Deloitte report also suggests, the recent recessionary trends in economic growth may actually fuel further adoption of medical tourism as a means of survival. In November 2008, one of the largest health benefit company in the United States, Wellpoint, announced a new international medical tourism product aimed at helping Americans adversely affected by recession that allows them to opt for non-urgent procedures in India.

5. Economic, ethical and legal issues

5.1 Economics of medical tourism

In the context of this paper, there are two economic aspects of medical tourism that need attention. The first is the impact of availability of medial travel as an option on the microeconomic choice of the individual residing in a developed country like the United States, as depicted in figure 1A, 1B and 1C. Figure 1A depicts the case of an uninsured person whose budget constraint is GA, if he avails medical care in local market and GB, if he decides to undertake medical travel. As his utility is maximized by the latter option, he will choose to travel. Figure 1B depicts the case of a person who is ensured. OA' depicts the quantity of medical care available to him under insurance plan. GG' depicts the copayments and deductions that he will have to bear and A'A and A'B depict the medical care that is not covered under insurance, like dental care, cosmetic surgery, reproductive clinics and stem cell therapy for which he will be better off if he choose to travel. Figure 1C depicts the case of an insured person, whose insurer gives him an option of medical travel overseas with no copayments or deductions

²⁴ according to newsreports by TNN and Oherald available at http://www.medinetindia.com/news.php?n_id=77 and http://www.medinetindia.com/news.php?n_id=77 and http://www.medinetindia.com/news.php?n_id=77 and http://www.medinetindia.com/news.php?n_id=77 and http://www.medinetindia.com/news.php?n_id=78 Accessed March 14, 2009.

and instead a bonus for saving money for insurer. Because of the bonus paid by the insurer, his budget constraint will be GCB in case of medical travel, which is up sloping for the medical care covered by insurance. As evident from these figures, medical travel seems a rational economic choice for the medical traveler.

The second economic aspect is the impact of medical tourism in Asia on the local healthcare market. As depicted in figure 2, the growth of medical tourism will inevitably divide the local medical care market into a high end market for overseas medical travelers and a low end market for local patients. The rising demand by foreign medical travelers may push up the prices and profits, leading to shift of more and more new players in the medical tourism market from the market for local populace. Their entry will draw resources from the market for the locals and increasing supply will prevent price rise for the foreign medical traveler, but in the process will reduce the supply in the less sophisticated local medical care market, leading to price rise for locals that would adversely affect the affordability of medical care within the destination country. Thus an expansion of medical tourism industry can put pressure on the provision of medical care available to the locals. The empirical evidence of this theory seems to be available in the form of reported rise in healthcare costs, and shift of medical manpower from the public to the medical tourism sector, in Thailand, the largest player in medical tourism in Asia²⁵ and Philippines.

5.2 The policy dilemma of choosing between equity and growth

The inevitability of this economic impact on domestic healthcare sector gives rise to the policy dilemma of choosing between income generating capacity of medical tourism and the desired equity in the provision of healthcare, which apart from being a 'merit good' has significant positive externalities for the economy. It poses significant challenges for policy makers, governments and healthcare providers, as it has the potential to create opposition from within the destination country. The likely existence of 'dual' nature of medical care market creates ethical and moral issues about the desirability of creating a sector allowing high quality, expensive and personalized medical care to the foreigners while few locals are able to access the same facilities, because of its high costs.

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²⁵ refer 23 supra.

6. A SWOT analysis

The factors affecting medical tourism in Asia discussed so far can be summarized in the form of a SWOT analysis as depicted in figure 3. The greatest strengths of Asian medical tourism industry are its low costs for high quality medical care that it can provide. Its other strengths are availability of unskilled manpower that can be trained to ensure supply of personnel for the growing industry. Its greatest weakness is in the lack of its acceptance by the medical insurers and National Health Programmes in the developed countries. Its other weaknesses include inadequate accreditations, lack of adequate follow up services, inadequate legal remedies, cultural and linguistic constraints, infrastructural limitations and poor perception about its sanitation and hygiene. As highlighted by the recent reports published by RNCOS and Delloitte, medical tourism is having a great opportunity for growth in the next decade. It also faces several threats, the most important of which is its adverse impact on the local healthcare markets, resulting from shift of resources to medical tourism sector. It may lead to significant rise in medical care costs for the local people, and precipitate public opposition and protests. Other threats include bad publicity that can result from an unscrupulous negligent service provider or even from an inevitable occasional adverse medical result. There also exist the threat of a backlash from the medical service providers in the developed countries, adversely affected by the growth of medical tourism.

7. Policies for medical tourism

The SWOT analysis highlights the need for policies that will help maintain its strengths, minimize the impact of its weaknesses and prevent the risk of threats. The quality needs to be maintained by greater adoption of accreditations, while maintenance of cost advantage will require adequate policy measures. The institutional weaknesses like infrastructure, sanitation and lack of legal remedies will need to be taken care of, but the immediate remedy may lie in creating islands within the country where these weaknesses are less apparent. Among the threats, the most important is the opposition from the local people who may be adversely affected by growth of medical tourism, a phenomenon that can only be prevented by appropriate selection of public policies in advance. In most countries, the major players in the medical tourism market

are private entities.²⁶ These hospitals also give rise to a dual structure of the medical care market, with one segment catering high priced sophisticated and advance services to the foreign medical travelers, while another caters lower quality, cheaper services to local patients. Since healthcare is considered a merit good, attracting concern for equity, government needs to design its policies that will mitigate local concerns, while being faced with several issues regarding facilitation, restriction or regulation of medical tourism. The role of the government can be divided into policies designed to facilitate medical tourism development, and those designed to mitigate the possible adverse impacts of medical tourism growth on local healthcare.

7.1 Facilitating medical tourism

The author recommends the following set of measures to facilitate medical tourism.

(i) **Regulatory facilitation** – The overall regulatory environment created by the government agencies in various spheres may need to be modified to make traveling inwards convenient. There is a case for easing visa restriction for medical travelers. India has introduced the concept of M visa for this purpose, however there are reports that it may not be always preferred because of requirements of mandatory reporting and registration with certain designated agencies. Procedures and permits for the healthcare providers should be liberalized to facilitate entry of new providers, which is essential for competition and price control. Allowing foreign medical graduates by recognizing foreign medical qualifications can help increase manpower supply. Overall medico-legal environment reassures incoming patients, so expedient legal remedial system, by special tribunals / courts can be helpful. For many countries, liberalizing entry of foreign providers of healthcare can boost their medical tourism sector, help provide additional capital and resources and provide 'dynamic gains' in the form of improved skills, technology and management practices.

(ii) **Quality regulation** - While most countries have their own systems of regulating quality of medical care, the acceptable standards of quality for medical tourism are likely to be higher, and

²⁶ Singapore is a notable exception, as many public hospitals like National University Hospital (NUH) are also playing a significant role in attracting foreign medical travelers. This is partly due to the corporatized structure of public hospitals.

²⁷ According to Aditya Bahadur, CII spokesman, as reported by Chinai and Goswami in their article 'Medical visas mark growth of Indian medical tourism' in Bulletin of World Health Organisation, March 2007.

regulating them is important to avoid unscrupulous fly-by-night operators, who can immensely damage the industry by a few incidents. Thus there is need for stricter regulation. One option could be to make certain accreditations, like J.C.I. or N.A.B.H. mandatory for those catering to medical travelers.

- (iii) **Financial regulation** There is an increasing likelihood of international healthcare institutions from developed countries entering Asian. Their presence can greatly facilitate growth of medical tourism and hence should be facilitated by relevant financial policies, like liberalizing capital inflow and outflow and repatriation of profits, wages and royalty.
- (iv) Fiscal incentives Some governments already provide fiscal incentives for medical tourism.²⁸. It is important to provide these incentives for medical equipment imported by institutions. All quantitative restrictions must be abolished, and tariffs minimized to zero. In addition, there is a strong case of corporate tax exemption or similar incentives that can bring down the cost of medical care further and promote investment in the sector. However, such fiscal incentives are also likely to magnify the impact of growing medical tourism on the local medical care costs and adversely affect the local population, thereby precipitating stronger resistance within the country. One major argument that has been made is that growing revenue from medical tourism can be used to subsidize medical care for the local poor. However, there is little reason to expect that this will happen voluntarily, on egalitarian notions alone. Figure 4 depicts the quantum of cross subsidy for locals that will be required to offset the adverse impact of growing medical tourism. However, it will not be easy to estimate the exact amount of cross subsidy that will be justified. A very small subsidy, spread over too many recipients would serve little purpose, while a forced subsidy that is too high will create disincentive for growth of medical tourism. In addition, in most countries, it will require monitoring by a regulating agency, thereby leading to significant administration and compliance costs for the economy. Given these constraints, it may not be feasible to link fiscal incentives with cross-subsidies to locals, and other means of countering the negative impacts of these fiscal measures will need to be identified.

²⁸ National health policy of India, 2002 provided the revenue from medical tourism with the same incentives as those provided to 'exports'.

(v) **Infrastructural facilitation** – In some countries, Infrastructural bottlenecks can pose serious impediments to the growth of medical tourism market, and private sector is too small to address them. So the public sector needs to take initiatives in improving theses constraints, like patient friendly services at airports, expressways to expedite local travel, improvements in overall sanitation, hygiene and the general law and order environment.

7.2 Mitigating adverse impacts on local healthcare

- (i) Adequate supply of resources As discussed earlier the additional demand for resources by the growing medical tourism sector can lead to shifting of manpower away from public healthcare sectors, which can lead to rise of costs in the private healthcare market, and reduce the capacity of public healthcare systems further. To avoid this, it will be necessary to expand supply of resources either by increasing the capacity for training local manpower, as in case of countries like India and Philippines, or to liberalize immigration, as in case of countries like Singapore and Malaysia. The manpower supply will need to focus on highly skilled specialists, doctors, nurses, paramedical staff and hospital managers. Equally important is regulating the quality of manpower, including immigrants, by recognizing certain foreign medical qualifications, or devising examinations for testing standard of skills. In view of this author, these measures, if implemented successfully, can largely take care of the negative impacts of fiscal incentives, thereby doing away with the need of linking fiscal incentives with cross-subsidy to local healthcare.
- (ii) **Public sector participation** Singapore is an example of incentivising public sector hospitals for improving their capacity, allowing them to upgrade their standards and compete with the private sector hospitals for attracting foreign patients. In other Asian countries too, it may be possible to improve standards of selected public hospitals with adequate medical capacity, by rearranging of incentives, to enable them to cater to medical travelers. If successful, it can facilitate revenue generation for public healthcare, and help in expansion of public healthcare facilities.
- (iii) **Improve public healthcare** There can be no substitute for improving public healthcare, specially in countries like India, to prevent some of the adverse reactions from local people. It

would require greater allocation of resources, management reforms, and rearranging incentives to maximize performance.

(iv) **Social & Ethical issues** – Many of the social issues pertain to provision of medical care for local patients, especially poor. The policies should aim for uniformity of medical care while allowing price differentials for premium non-medical services. There can be other issues like organ donation involving exploitation of poor and needy, by unscrupulous practitioners. Such sensitive issues require careful consideration before finalizing the policies, which in any case must be implementable and should aim to promote transparency.

8. Summary and conclusions

The future of medical tourism in Asia will be significantly affected by public policies adopted for its growth. While the major players will belong to private sector, government has an important role. It would need to ensure quality by way of regulations that make accreditations mandatory, maintain cost advantage by ensuring adequate supply of skilled personnel and facilitate the growth of the sector by different means including infrastructure and facilitation of entry by foreign players. Fiscal incentives can help sustain the growth of the sector, but its impact on local healthcare can be adverse if adequate supply of skilled manpower is not ensured by expanding the medical education sector. Linking fiscal incentive with cross subsidy to local patients may not be feasible and should be avoided.

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APPENDIX – 1: Figure 1A

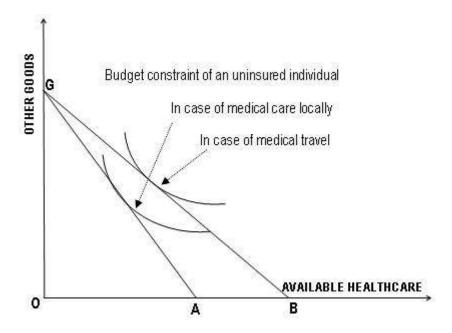


Figure 1A: The budget constraint of an uninsured individual depicted in terms of healthcare that he can avail and other goods that he can consume. GA depicts his budget constraint in respect of healthcare availability in his home country, while GB depicts his budget constraint in respect of healthcare that he can avail on medical travel abroad.

APPENDIX – 2: Figure 1B

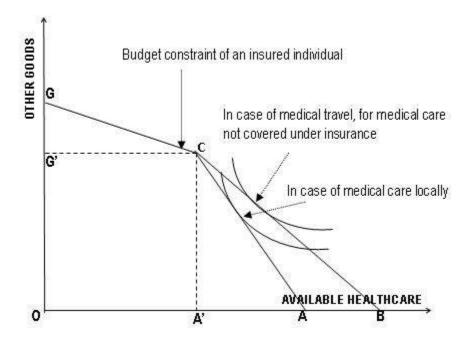


Figure 1B: The budget constraint of an insured individual depicted in terms of healthcare that he can avail and other goods that he can consume. GCA depicts his budget constraint in respect of healthcare availability in his home country, while GCB depicts his budget constraint in respect of healthcare that he can avail on medical travel abroad. GG' denotes the out of pocket expenses that he has to bear in the form of copayments and deductions. OA' refers to healthcare covered under his insurance policy, while A'A and A'B refers to healthcare not covered under insurance.

APPENDIX – 3: Figure 1B

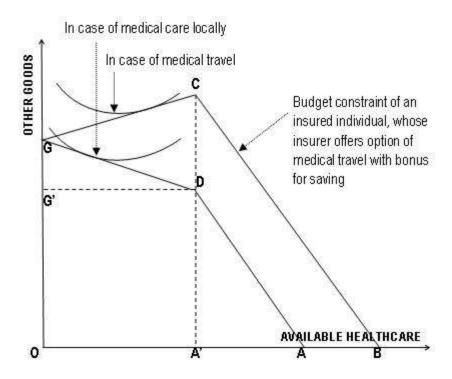


Figure 1B: The budget constraint of an insured individual whose insurer offers special incentives for availing healthcare in another country. GDA depicts his budget constraint in respect of healthcare availability in his home country, while GCB depicts his budget constraint in respect of healthcare that he can avail on medical travel abroad. GC is up sloping because his insurer pays him additional bonus on medical travel, as part of saving accruing to the insurer. In all three figures, a higher indifference curve denotes greater utility and will be a rational choice.

APPENDIX – 4: Figure 2

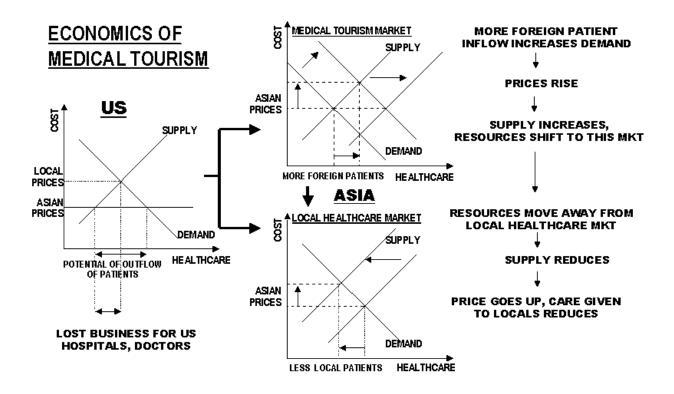


Figure 2: The economics of medical tourism.

The price differential between a developed country (e.g., U.S.) and developing country in Asia creates a potential for outflow of patients. The rising demand leads to medical tourism, which creates a dual health care market in the destination country – a market for high cost, sophisticated, advanced medical care for foreign traveler, and another low cost market for the local patients with lesser ability to pay. The growth of the high end medical tourism market will shift more and more resources away from the local market and tend to create a mismatch between demand and supply there, thereby leading to cost escalation that can make health care unaffordable for the local people.

APPENDIX – 5: Figure 3

<u>STRENGTHS</u>	WEAKNESSES		
COST ADVANTAGE	LACK OF RELIABILITY		
COMPARABLE QUALITY TRAVEL OPPORTUNITY AVAILABILITY OF	NOT ACCEPTED BY INSURERS, N.H.P. INADEQUATE F/U		
		MANPOWER	NO LEGAL REMEDIES
		<u>OPPORTUNITIES</u>	THREATS
ADVERSE IMPACT ON LOCAL			
RAPID GROWTH	MEDICAL CARE MARKET		
CAGR OF 17%	UNSCRUPULOUS PROMDERS		
HUGE POTENTIAL	BACKLASH FROM OTHER		
	STAKEHOLDERS		

Figure 3: SWOT analysis of Medical tourism industry in Asia

APPENDIX – 6: Figure 4

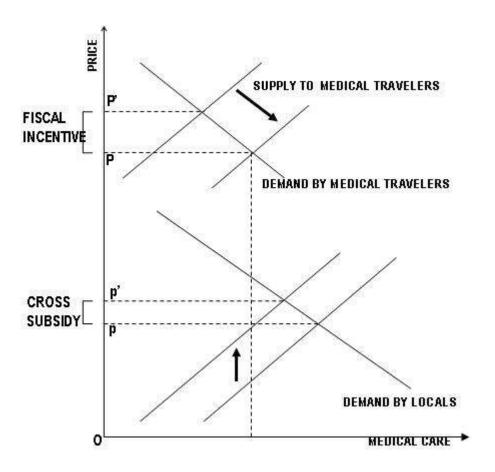


Figure 3: Cross subsidy to local healthcare to compensate the adverse impacts of fiscal incentives. An incentive of PP' will need to be neutralized by a cross subsidy amounting to pp', which will exactly negate the rise of prices brought about by fiscal incentive. Another way of countering this adverse impact may be by increasing supply of resources, i.e., medical and para medical manpower.