# CROSS-BORDER MEDICAL TOURISM: A TYPOLOGY AND AGENDA FOR RESEARCH FOR THE SOUTH-EAST ASIAN REGION

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Cross-border medical tourism can be broadly divided into two types, i.e. price-sensitive and quality sensitive. Price-sensitivity increases the likelihood of "lower cost overseas treatment" and quality-sensitivity promotes "higher cost overseas treatment". As medical tourism grows in Southeast Asia, home and host countries (a country may be both simultaneously) will be differentially affected. Medical tourism, in actuality an increase in demand for certain kinds of medical services (albeit by foreigners), may accelerate movements of health personnel, i.e., from poorer to richer countries, from the public sector to the private sector within host countries, and from less lucrative to more lucrative sub-sectors within the private sector. Foreign medical care investment may also be enhanced in certain countries. An agenda for research on specific issues such as patient characteristics and treatments likely to be sought is proposed in this article.

Medical tourism, health tourism, typology, agenda for research, Southeast Asian region

# INTRODUCTION

In recent years, there has been significant growth in a new sub-sector of the health care industry, i.e., medical care of short term foreign visitors whose primary purpose for the visit is to seek medical treatment. This phenomenon - the seeking of medical care in foreign countries - has been called "medical tourism" or "health tourism".

Medical tourism lies squarely within the mode of trade in services called "consumption abroad" by the General Agreement on Trade in Services (GATS) of the World Trade Organization (Phua, 2004; WTO and WHO, 2002). In this article, a typology of two broad types of medical tourism, i.e. price-sensitive medical tourism and quality-sensitive medical tourism, is introduced and a discussion of their possible impact on the health care sector of Southeast Asian nations is made. There will also be a brief discussion of foreign investment in the health sector ("commercial presence" in WTO jargon). This article will not include the "presence of natural person", e.g., doctors who travel overseas to treat the local people on a voluntary or paid/contract basis (Bishop, 2000). An agenda for research on specific issues such as patient characteristics and treatments likely to be sought is also proposed in the article.

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#### Types of cross-border medical tourism

It should be noted that medical tourism is actually not a new phenomenon. Third World elites have always sought treatment in developed countries with reputations for high quality medical care such as Australia, Britain, the United States, France, etc. An example would be affluent citizens of Latin American countries who fly to Miami, Florida to seek medical care (Moore, 1997). In regions such as Southeast Asia, elites from countries such as Indonesia often seek treatment from specialists and hospitals in neighboring, more economically developed countries. This type of medical tourism is quality-sensitive and results in "higher cost overseas treatment".

What is new and interesting is the phenomenon of ordinary people from more developed countries traveling to less developed nations to seek treatment (such as Americans going to Thailand for medical care) because of significant cost differentials between treatment in the more developed, home country and treatment overseas in the less developed, host country (Online NewsHour, 2005,:Walker, 2006). This type of medical tourism is price-sensitive and results in "lower cost overseas treatment". The phenomenon of citizens of one developed country being sent for treatment in another (lower cost) country by administrators of national health schemes, e.g., Britain's National Health Service (NHS) sending patients to continental Europe for treatment, ostensibly to clear backlogs of patients waiting for care (BBC News, 2002), may actually be influenced by price considerations too.

Table 1. A Comparison of Price-Sensitive Medical Tourism and Quality-Sensitive Medical Tourism

Type of Medical Tourism	Patients Involved	Main Reasons for Seeking Treatment Overseas
Price-sensitive	Less affluent people	To reduce the cost of medical care received
Quality-sensitive	More affluent people	To receive medical care of perceived "higher quality"; to obtain sophisticated medical services currently unavailable in the home country

Chee argues that the rise of medical tourism in Malaysia (and in neighboring countries such as Thailand and Singapore) is an example of the "commodification" of medical care. Commodification involves product standardization, market expansion as well as the active marketing of healthcare to consumers (Chee, 2007). In addition to more usual forms of medical care, medical tourists may also seek any of the following services: cosmetic surgery, gender reassignment surgery, treatment for infertility, dental surgery, induced abortion, or even other therapies that are unavailable at home because of their controversial or experimental nature (Connell, 2006). Motivations for seeking some of these types of medical care may go beyond price and quality considerations alone:

Table 2.
Other Possible Motivations for Medical Tourists

Motivation	Example
To reduce waiting time	Hip replacement patient or organ transplant patient who avoids a
	long waiting list by seeking treatment overseas
To seek experimental	Terminally-ill patient desperate for a "cure"
care or controversial care	
Convenience/privacy	Person who travels overseas for gender-reassignment surgery
	because the entire process is easier (less procedural hurdles) and
	quicker to undergo in the foreign country
To seek care that is	Pregnant female seeking induced abortion overseas because the
unavailable or illegal in	procedure is illegal in her home country
the home country	

It has also been noted that governments can encourage medical tourism not only for economic reasons but also for political/diplomatic reasons, e.g. Cuba. In the case of Cuba, medical tourism as well as medical missions sent out to foreign countries are being used to promote its image overseas (Schweimler, 2001; Fawthrop, 2003).

#### Medical tourism in Southeast Asia and in South Asia

The three main destinations for medical tourists in the South Asia and Southeast Asia regions are Singapore, India and Thailand. Malaysia and the Philippines are less important destination for medical tourists. According to Runckel (2007), 374,000 medical tourists visited Singapore, about 600,000 went to India and 1.2 million went to Thailand in 2006. The overwhelming majority of medical tourists made use of private sector services in these three countries.

In Singapore, 60% of the patients of one its major private sector healthcare corporations are medical tourists and other foreigners (Straits Times, 2007). In the case of India, estimates of medical tourist (some of whom are Non-Resident Indians) arrivals vary. One source mentions that 150,000 medical tourists arrived in 2002. This number increased to about 500,000 in 2005 and then to approximately 600,000 in 2006. The rate of increase per year has been estimated to be about 30% (Hutchinson, 2005). India is not only actively promoting its medical tourism sector, e.g. Indian consulates abroad are currently issuing M visas (medical visas) valid for one year for patients and their companions (Chinnai and Goswami, 2007). It is also promoting "medical outsourcing", i.e. subcontractors located in India provide (cheaper) support services to the medical systems of Western countries such as overnight computer services to US insurance companies and hospitals. The largest Indian corporation involved in medical tourism treated 60,000 medical tourists between 2001 and early 2004 (CBC News Online, 2004).

As for Thailand, two private hospitals treat as many as 400,000 and 150,000 foreign patients per year respectively. According to Runckel (2007), one of these two hospitals handles a third of all of Thailand's medical tourists. It treats more patients per year than all of Singapore's hospitals combined. This high volume translates into better equipment, more experienced doctors (many of whom are trained in the US and other Western countries) and lower prices.

In the case of Malaysia, from 2000 to 2001, ten private hospitals reported that the number of foreign patients they treated rose from 56,133 to 75,120. The income generated from these patients rose from RM 32.6 million to RM 44.3 million (Che, 2007). In 2006, an estimated 150,000 medical tourists sought treatment in Malaysia. Malaysia expects to earn up to US\$1 billion from medical tourists by the year 2010 (Gupta, 2007). The Malaysian government has also been assisting its private sector by helping to promote the country's medical tourism services in foreign countries. These foreign countries include Muslim-majority countries located in the Middle East whose affluent citizens may feel more comfortable in Malaysia (with its large Muslim population) than in Thailand or Singapore (Chee, 2007; Barraclough and Phua, 2007).

The Philippine Medical Tourism Program was created in 2004. It is a multi-agency, multi-sectoral undertaking involving public-private partnerships aimed not only at foreign citizens but also *balikbayans* (Filipino citizens working or residing overseas) (Olarte, 2006).

# AN AGENDA FOR RESEARCH ON THE IMPLICATIONS OF THE GROWTH IN MEDICAL TOURISM

There is a dearth of comprehensive data on medical tourism in the South-East Asian region. Therefore, in the rest of this article, an agenda for research on the phenomena of the two broad types of medical tourism and their implications is proposed.

# The Characteristics of Medical Tourists

In the case of quality-sensitive medical tourism resulting in higher cost overseas treatment, those who are most likely to go would be the elites or more affluent citizens of the home countries, e.g. leaders of the Myanmar (Burma) military junta and wealthy Indonesians seeking care in private hospitals in neighboring, more economically developed countries and better off Malaysians (including members of the various royal houses) traveling overseas to Western countries for medical care. They seek care overseas because specific services may be unavailable in their respective home countries but mainly because of the perception that medical services provided in the host countries are of higher quality.

As for price-sensitive medical tourism, the people who are most likely to go overseas for treatment as medical tourists would be middle class citizens who are reasonably well-informed about foreign countries. The working poor are unlikely to seek treatment overseas on their own (even if their insurance companies cover all medical care costs) because of the associated costs of treatment overseas such as air tickets and hotel expenses. The wealthy are also unlikely to seek care in less developed foreign countries because they can afford the "best" care available in the home country or in more developed nations.

# Kinds of Medical Treatment Likely to be Sought Overseas

In the case of quality-sensitive medical tourism, the kinds of medical care most likely to be sought overseas would be highly sophisticated medical services such as open heart surgery provided at world renowned institutions.

As for price-sensitive medical tourism, the kinds of medical care that are most likely to be sought overseas would, most logically, be non-urgent medical procedures that are very expensive if carried out in the home countries. "Non-urgent" in the sense that the care can be postponed for a while without resulting in major harm to the patient, e.g., hip replacement or knee replacement surgery. Another example would be the more expensive types of plastic or cosmetic surgery or dental surgery. Thailand is a popular destination for plastic surgery of the gender reassignment surgery (Hutchinson, 2005).

The medical care sought overseas would be unlikely to require an extended period of treatment (e.g. less than a month of treatment) and unlikely to require extensive followup treatment.

Organ transplants may be sought overseas if there is a shortage of organs in one's home country. However, it should be noted that in countries like Iran, in order to prevent "transplant tourism", foreigners are not permitted to undergo renal transplants using kidneys from unrelated Iranian donors (Ghods and Nasrollahzadeh, 2005). Terminally-ill patients in search of a miracle cure may also seek care overseas – including experimental treatments that are not available in the home country.

Medical care that is unlikely to be sought after in foreign countries include emergency care (unless it is a case of medical evacuation of a foreigner by plane from a poor country to better facilities in a nearby country) and chronic disease care.

#### **Favored Destinations and Treatment Sites**

The most likely places that medical tourists will go to would be countries that rank high in terms of perceived medical care quality or where the care delivered is believed to be of reasonable quality.

Countries that also posses the following characteristics will have an edge in attracting foreign medical tourists – a major language such as English, Spanish, French etc. is widely-spoken within the country; foreign visitors feel welcome and safe; the country is politically stable with a relatively high standard of living; it is located not too far away (or relatively easy to fly to) from the medical tourist's home country.

The following doctors and hospitals will be sought after in the foreign country:

- Doctors possessing credentials from the medical tourist's home country e.g. Thai doctors
  who received their basic medical education or graduate medical training in the United
  States (Online NewsHour, 2005).
- Hospitals accredited by the accreditation agency of the medical tourist's own home country agency
- Hospitals owned by the medical tourist's own home country health care corporations
- Hospitals or medical centers with worldwide reputations

# **Motivations for Seeking Treatment Overseas**

In the case of quality-sensitive medical tourism, as mentioned earlier, care is sought overseas because specific services may be unavailable in the home countries but mainly because of the perception that medical services provided in the host countries are of higher quality.

As for price-sensitive medical tourism, the main reason would be because of significant savings when a medical procedure is done overseas even after taking into account the costs of the air ticket (more affordable nowadays because of budget airlines and cheaper tickets), hotel expenses etc. (Online NewsHour, 2005). If the savings are small, then the overseas trip is less likely to occur. Hutchinson (2005) notes that:

For many medical tourists, ....... the real attraction is price. The cost of surgery in India, Thailand or South Africa can be one-tenth of what it is in the United States or Western Europe, and sometimes even less. A heart-valve replacement that would cost \$200,000 or more in the U.S., for example, goes for \$10,000 in India—and that includes round-trip airfare and a brief vacation package. Similarly, a metal-free dental bridge worth \$5,500 in the U.S. costs \$500 in India, a knee replacement in Thailand with six days of physical therapy costs about one-fifth of what it would in the States, and Lasik eye surgery worth \$3,700 in the U.S. is available in many other countries for only \$730. Cosmetic surgery savings are even greater: A full facelift that would cost \$20,000 in the U.S. runs about \$1,250 in South Africa.

As mentioned earlier, people desperately searching for a "cure" in the face of a terminal illness would also be likely to seek care overseas. Examples would be Americans who go to Mexico to be treated with laetrile for cancer (American Cancer Society, 2006) or Malaysians of Chinese ancestry who travel in desperation to China for treatment of terminal cancer.

Unavailability of an organ (necessary for a life-saving organ transplant) such as a kidney in the medical tourist's home country would also encourage medical tourism to places such as India. This has been called "transplant tourism" or more bluntly, the global traffic in human organs (Scheper-Hughes, 2000).

# Organization and Financing of Trips Overseas

The following are some possible ways in which trips overseas are organized and financed:

- By individual patients and their families using personal savings or borrowed money
- By self-insured employers eager to reduce the cost of health care generated by their employees and covered family members
- By insurance companies or administrators of national health systems in Western countries
  who realize that they are able to reduce costs by contracting with a lower cost health care
  organization located in a foreign country
- By "cultural brokers" such as tour operators and other business people who work together with overseas hospitals and foreign health care providers to tap this new market. The cultural brokers can increase the attractiveness of medical tourism by facilitating the process and by reducing the apprehension some patients may feel with respect to getting treatment overseas. If permitted to do so by the governments of the target markets, these providers may advertise their services using the mass media of the targeted countries. Examples include one major Singaporean private medical care corporation with 50 agents in 12 countries and another major corporation with marketing offices in 15 countries including China, India, Bangladesh, the United Arab Emirates, Russia, Canada and other neighboring Southeast Asian countries (Gupta, 2007).

By public agencies in countries such as Singapore and Malaysia that have been established
or pushed by their governments to promote medical tourism to help boost economic growth
(Chee, 2007). The public entity in Singapore is called "Singapore Medicine" while its
Malaysian counterpart is called the "National Committee for the Promotion of Health
Tourism in Malaysia".

# Possible Impact on the Health Care Industry in the Home Country

If price-sensitive medical tourism becomes significant as an option in the eyes of health care consumers in high cost developed countries, the resulting reduction in demand in the home countries may impact the organization, financing, delivery, prices, and quality of medical services provided in the home country. There will be supply side and demand side impacts. Specialist doctors and high cost hospitals may lose patients and witness a relative reduction in income.

In the face of lower demand for certain types of medical care, health care corporations and other health providers in the high cost countries will be forced to react. Thus, it is possible that, in order to make up for lower demand in the domestic market, US health care corporations may open up branches overseas to serve medical tourists from the United States. These lower cost branches overseas will be staffed mostly by local people. US corporations may step up investment in GP clinic chains, hospitals etc. overseas to serve the medical tourist market.

It is not inconceivable for US health care personnel (especially younger and less well-established ones) to move overseas to seek patients to treat. This can be done on a short term or long term basis. Thus, a situation such as this – an American doctor (such as a Thai who is a naturalized US citizen) working in foreign country X (Thailand, for example) and treating American medical tourists in a US-owned health facility located in foreign country X – may even occur.

In countries such as Britain with a National Health Service that is burdened by rising costs and long waiting lists, administrators may be able to reduce costs and eliminate long waiting lists by sending patients overseas to lower cost countries for treatment on a case-by-case or even contract basis, e.g. to India.

# Possible Impact on the Health Care Industry in the Host Country

In the host countries, the effect of a big influx of foreign medical tourists is equivalent (in economic terms) to an increase in the domestic demand for higher end medical services. An increase in demand is likely to translate, at least in the short run, into higher prices for such services for local people. The rise of medical tourism in host countries such as Thailand, Singapore and Malaysia may also accelerate movements of health personnel, i.e., from poorer to richer countries (such as from Burma to Malaysia and from Malaysia to Singapore, from the public sector to the private sector within countries experiencing a boom in incoming medical tourists, and from less lucrative to more lucrative sub-sectors within the private medical care sector (such as from general surgery to plastic surgery). The allocation of health care resources may also be affected, i.e., more resources will be devoted to tertiary care in the host countries (De Arellano, 2007). Foreign medical care investment may also be enhanced in host countries such as Thailand, Singapore and Malaysia. One positive effect of a rise in incoming medical tourists numbers could be that the "brain drain" of local health personnel to higher income countries (such as from Malaysia to Singapore) would be

reduced. However, Dr Manuel Dayrit, director of the Human Resources for Health department of the World Health Organization states that,

"... initial observations suggest that medical tourism dampens external migration but worsens internal migration ... it does not augur well for the health care of patients who depend largely on the public sector for their services as the end result does not contribute to the retention of well-qualified professionals in the public sector service." (quoted in Chinai and Goswami, 2007, pp. 165).

#### CONCLUSION

Medical tourism is one aspect of the phenomenon of globalization. It has been facilitated by rising income levels in countries such as Indonesia, greater ease of international travel, better information on medical facilities of good quality overseas, and high standards of medical care in other countries. However, the seeking of medical care overseas does have possible drawbacks for the medical tourist, e.g., the lack of followup care and the difficulties that medical tourists are likely to experience if they want to seek additional care, redress or compensation for complications, side effects or medical errors (CBC News Online, 2004).

Medical tourism of the two broad types discussed in this article will affect demand and supply patterns within the home country of the patients and the host country where they are treated. In the home countries, both quality-sensitivity and price-sensitivity will result in higher currency outflow. In the home countries, price-sensitivity may lead to significant reductions in the demand for certain types of expensive medical services and medical procedures in the private sector and thus, lower the incomes of certain kinds of medical specialists and particular hospitals. It may also reduce the pressure on the health systems of nations such as Britain and Canada by allowing people on waiting lists to be treated overseas. On the other hand, the actual reductions in demand may be lessened by continued population aging in the developed countries.

In the host countries, increased demand will have effects on prices and the allocation of healthcare resources. Both domestically and across international borders, these may include higher prices for services in demand and the shifting (or misallocation?) of more financial and human resources into tertiary medical services in countries that are experiencing a significant influx of foreign medical tourists. Whether this will result in reduced access for the less well-off citizens of the host countries such as the Philippines (Olarte, 2006) is a question worthy of investigation (De Arellano, 2007).

# REFERENCES

American Cancer Society. Questionable cancer practices in Tijuana and other Mexican border clinics. 2006.

h t t p : / / w w w . c a n c e r . o r g / d o c r o o t / E T O / c o n t e n t / ETO 5 3x Questionable Practices In Tijuana.asp?sitearea=ETO

Barraclough S, Phua KL. Health imperatives in foreign policy: the case of Malaysia. Bill of World Health Organization 2007, 85(3):225-229.

BBC News. Doctors' concern at overseas care plan. 2002. <a href="http://news.bbc.co.uk/2/hi/in\_depth/health/2002/bma\_conference/2076661.stm">http://news.bbc.co.uk/2/hi/in\_depth/health/2002/bma\_conference/2076661.stm</a>

Bishop RA, Litch JA. Medical tourism can do harm. BMJ 2000; 320:1017.

CBC News Online. Medical tourism: need surgery, will travel. 2004; June 18. <a href="http://www.cbc.ca/news back-ground/healthcare/medicaltourism.html">http://www.cbc.ca/news back-ground/healthcare/medicaltourism.html</a>

Chee HL. Medical tourism in Malaysia: international movement of healthcare consumers and the commodification of healthcare. Working Paper Series No. 83. Singapore: Asia Research Institute, 2007.

- Chinnai R, Goswami R. Medical visas mark growth of Indian medical tourism. Bill of World Health Organization 2007; 85(3):164-165.
- Connell J. Medical tourism: sea, sun, sand and ... surgery. Tourism Management 2006; 27(6):1093-1100.
- De Arellano R. 2007. Patients without borders: the emergence of medical tourism. International Journal of Health Service 2007; 37(1):193-198.
- Fawthrop T. Cuba sells its medical expertise. 2003; 21 November. <a href="http://news.bbc.co.uk/2/hi/business/3284995.stm">http://news.bbc.co.uk/2/hi/business/3284995.stm</a>
- Ghods AJ, Nasrollahzadeh D. Transplant tourism and the Iranian model of renal transplantation program: ethical considerations. Exp Clin Transplant 2005; 3(2):351 4.
- Gupta P. Medical tourism in Asia. Asharq Alawsat 2007; May 16. <a href="http://aawsat.com/english/news.asp?section=3&id=7643">http://aawsat.com/english/news.asp?section=3&id=7643</a>
- Hutchinson B. Medical tourism growing worldwide 2005; July 25. <a href="http://www.udel.edu/PR/UDaily/2005/mar/tourism072505.html">http://www.udel.edu/PR/UDaily/2005/mar/tourism072505.html</a>
- Moore JD Jr. Medical Mecca. Foreign patients flock to Miami seeking care and service. Mod Healthc. 1997; 27(22):30 7.
- Olarte AM. And now, hospitals as tourist spots. 2006. <a href="http://www.pcij.org/i-report/2006/medical-tourism.html">http://www.pcij.org/i-report/2006/medical-tourism.html</a> Online NewsHour. Traveling for treatment. 2005; Feb 21. <a href="http://www.pbs.org/newshour/bb/health/jan-june05/thailand/2-21.html">http://www.pbs.org/newshour/bb/health/jan-june05/thailand/2-21.html</a>
- Phua KL. World Trade Organization (WTO) negotiations: possible effects on health and health services in Malaysia. Jurnal Kesihatan Masyarakat 2004; 10:7 13.
- Runckel CJ. Where to go for medical tourism? 2007. <a href="http://www.business-in-asia.com/asia/medical tourism2.html">http://www.business-in-asia.com/asia/medical tourism2.html</a>
- Scheper-Hughes N. The global traffic in human organs. Current Anthro 2000; 41(2):191 224.
- Schweimler D. Cuba's medical success story. 2001; September 10. <a href="http://news.bbc.co.uk/2/hi/americas/1535358.stm">http://news.bbc.co.uk/2/hi/americas/1535358.stm</a>
- Straits Times. Medical attraction. 2007; March 24.
- Walker T. Consumers go abroad in pursuit of cost-effective healthcare. Managed Healthcare Executive 2006. <a href="http://www.managedhealthcareexecutive.com/mhe/article/article/article/eatil.jsp?id=357668">http://www.managedhealthcareexecutive.com/mhe/article/article/article/eatil.jsp?id=357668</a>
- World Trade Organization and World Health Organization. WTO agreements and public health. Geneva: WTO and WHO, 2002.