Consumer Decision Components for Medical Tourism: A Stakeholder Approach

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ABSTRACT

In this paper we discuss the demand triggers and the components of consumer decision making to undertake medical tourism i.e. travel to a foreign destination for the purpose of availing medical treatment and also engaging in a vacation experience. We develop a model that describes the macro facilitating factors, the pre-decision propensities, and the role of the different entities involved in the tourism experience that impact the travel decision from a stakeholder perspective. Our conceptual model provides several propositions for empirical testing as well as directions for future research on medical tourism, a rich context for tourism scholars.

Keywords: Medical tourism, consumer, decision making

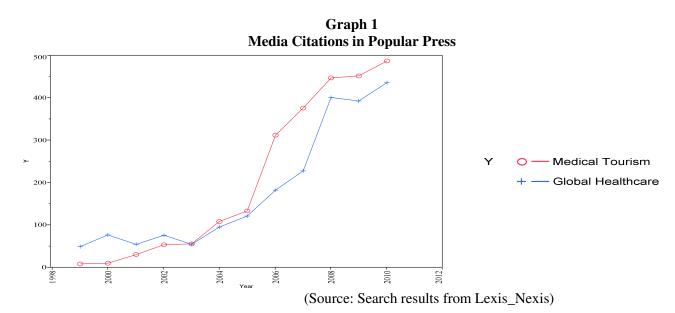
INTRODUCTION

Travel for health, medical and medicinal purposes can be traced back to the Sumerian, Greek and earlier civilizations, whose elite members traveled to experience hot springs, bathe in mineral waters and for general rest and relaxation. While modern civilizations still travel to hot springs and spas, the concept of medical tourism has evolved considerably from those early times. As a niche industry within the tourism domain, medical tourism is generally understood to occur when "people travel often long distances to overseas countries to obtain medical, dental and surgical care while simultaneously being holidaymakers, in a more conventional sense" (Connell, 2006).

While people from less developed countries have often visited, and continue to visit, developed countries such as US and UK to avail of cutting –edge medical facilities and highly skilled physicians, this trend began to reverse in the 1990s and the term medical tourism came to refer to people from developed countries travelling to emerging economies with the intention of combining health care with holidaying. With the aging population demographic in developed countries that increases demand, and the shortage of trained doctors (Suzanne Satalien, April 12, 2010), leading to increasing health care costs results in an unfulfilled demand for medical services, a gap occurs, one that several countries seek to fill. According to World Health Organization (WHO), in 2000, U.S. spent 13.2 percent of the GDP on its health care, by the 2007 this went up to 15.7 percent (WHO, 2010), and is estimated to be 19.3% by 2019 (Truffer et al., 2010). Not only are the expenditures and the costs of health care rising but there are growing numbers of people without health insurance coverage; the US Census Bureau shows that the number of such persons rose from 45.7 million in 2007 to 46.3 million in 2008, and an estimated 120 million people did not have any dental insurance (Census, 2009).

This demand-supply gap has resulted in a lucrative business development opportunity for several countries like India, Thailand, Singapore, Turkey, Dubai and others where labor, both skilled and unskilled, and infrastructural facilities costs are considerably lower. Prices therefore differ widely between U.S. and some of these destinations; for example in 2009 a heart valve that cost \$100,000 in the U.S. cost only \$10,000 in India (Anand, 2009); eye surgery that cost \$3700 was only \$730 in Thailand; a knee replacement surgery that cost \$50,000 in the U.S. cost \$6000, and heart surgery that cost \$60,000-80,000 in the U.S. cost 10,000 in the Philippines (Awadzi & Panda, 2007).

Medical tourism thus has resulted in a 60 billion dollar global industry impacting consumers, suppliers, destinations, governments, and third party facilitators (Singh, 2008). As a field of study it is multidisciplinary; drawing from fields of tourism, hospitality, medicine, law, ethics, sociology, and psychology, among others. In recent years it has received extensive media attention and has been the subject of numerous conferences.



The Deloitte report on medical tourism projects that outbound medical tourism from the US alone could reach upwards of 1.6 million patients by 2012, with sustainable annual growth of 35 percent (Deloitte, 2009). Given the importance and potential of medical tourism, surprisingly it has not received much scholarly interest as there has not been a systematic stream of research in the tourism and hospitality domain. While scholars from fields of medicine and law have examined specific issues like health impacts, fiduciary requirements, applicability of existing laws for medical tourism (Balaban & Marano, 2010; Brady, 2007; Burkett, 2007; de Arellano, 2007) and there is research regarding medical tourism in individual countries, like India, Thailand, Malaysia (Aizura, 2009; Chee, 2007), a stakeholder approach to medical tourism is currently lacking.

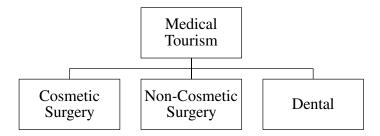
The purpose of this paper therefore is to focus on the most salient stakeholder, the consumer, and examine the components of the consumer's decision to seek medical tourism. This paper also identifies several other stakeholders in the industry and their role in influencing the consumer's decision, and in facilitating or inhibiting the actual travel. Our main contribution lies in analyzing the stages of consumer decision-making for medical tourism and developing testable propositions for future empirical work. Our study has implications for policy makers both in the host and destination countries and also for marketing professionals in stakeholder institutions.

The rest of the paper is organized as follows: Section 2 describes the common types of medical tourism, identifies some of the motivations and demand triggers for the travel, and the prevailing facilitating factors. Section 3 explains the components of decision-making and the role of the various stakeholders involved. Section 4 provides the conclusions, limitations, and suggestions for future research.

TYPES AND NEED FOR MEDICAL TOURISM

Medical tourism is generally delineated into three broad types: cosmetic, dental and general. Cosmetic surgery was the most popular form of medical travel until the advent of modern medical tourism. Travel to seek dental care (root canals, cosmetics, implants etc.) and general care (knee and hip replacement, eye surgery) form the other types of medical travel. While health and wellness tourism like travelling to health resorts, spas, hot springs etc., is common and people often settle down in reasonable priced retirement homes with luxurious amenities like massage etc. such travel is not commonly considered medical tourism especially when the purpose is long-term stay.

Graph 2 Medical Tourism Branches



The motivation for medical tourism can be attributed to several reasons:

Cost: Consumers from developed markets, particularly from United States with discretionary medical needs seek lower cost (Ehrbeck, Guevara, & Mango, 2008). The price differential for various medical procedures and the desire to reap cost advantages is the primary motivation for medical tourism (Marlowe & Sullivan, 2007). Table 1 provides a comparison of costs of various procedures in different countries. While the primary reason for the difference in costs is lower salaries for doctors, nurses, and staff, other factors like low cost or no medical malpractice insurance or low infrastructural and overhead costs also play a role in lowering costs and prices, which are sometimes a fraction of those in developed countries. The cost factor is especially important to the millions of uninsured (the U.S. Census Bureau puts this figure at 46 million in 2009) who can ill-afford even simple surgical procedures in developed countries that do not provide universal health coverage, for e.g. U.S.

Table 1
The Cost of Medical Procedures in Selected Countries (In U.S. Dollars)

	U.S.	U.S.			
	Retail	Insurers*	India**	Thailand**	Singapore**
Procedure	Price	<u>Cost</u>			
Angioplasty	\$98,618	\$44,268	\$11,000	\$13,000	\$13,000
Heart bypass	\$210,842	\$94,277	\$10,000	\$12,000	\$20,000
Heart-valve replacement (single)	\$274,395	\$122,969	\$9,500	\$10,500	\$13,000
Hip replacement	\$75,399	\$31,485	\$9,000	\$12,000	\$12,000
Knee replacement	\$69,991	\$30,358	\$8,500	\$10,000	\$13,000
Gastric bypass	\$82,646	\$47,735	\$11,000	\$15,000	\$15,000
Spinal fusion	\$108,127	\$43,576	\$5,500	\$7,000	\$9,000
Mastectomy	\$40,832	\$16,833	\$7,500	\$9,000	\$12,400

^{*}Retail prices and insurers' cost represent the mid-point between low and high ranges

^{**} U.S. rates include at least one day of hospitalization; international rates include airfare, hospital and hotel

P1: The greater the difference in cost between the medical procedure in home country versus destination country, greater the probability of the consumer undertaking medical tourism, ceteris paribus.

Waiting Lists and Availability: Even though several developed countries have nationalized health care systems such as Britain and Canada, waiting time for certain procedures can be greater than 18 months (see Tables 2 and 3) and treatment in private clinics can be expensive or unavailable. Furthermore, patients seeking alternative medicinal treatments may have to travel overseas as their home countries may not have the technology, equipment and facilities, while still others require the approval of a government agency. For e.g. if FDA approval for certain procedures is not forthcoming, but alternative treatments are available in other countries, patients may choose to travel instead of waiting for FDA's lengthy approval process. Society and regulatory agencies may impose restrictions on certain treatments like stem cell therapy, surrogate pregnancies, organ transplants, sex determination of unborn child etc., (Horowitz and Rosensweig, 2007) leading to the need for travel to seek such treatment.

Table 2
Waiting times for treatment in Canadian Hospitals
Median numbers of weeks

	Quebec	New Brunswick	Nova Scotia	Prince Edward	Newfoundland & Labrador
Plastic Surgery	26.1	33.9	46.3	13.6	16
Gynecology	6.4	8.3	8.1	17.8	11.1
Ophthalmology	11.8	11.7	8.4	17.4	11.7
Otolaryngology	6.1	9.3	13.6	26.6	5.8
General Surgery	7.2	5	6.6	2.8	3.8
Neurosurgery	12.7	32.3	11		3.2
Orthopedic Surgery	20.3	18.1	87.4	23.2	18.8
Cardiovascular Surgery					
(Urgent)	0.6	4.2	1.4		2.4
Cardiovascular Surgery					
(Elective)	4.7	11.5	5.7		2.9
Urology	4.4	10.1	13.7	4.3	17.7
Internal Medicine	9.4	7.5	7.1		17.5
Radiation Oncology	4.7	4.6		1.8	
Medical Oncology	1	1.6	2.6	2	2.2

Source: (Fraser-Institute, 2008)

Table 3
Average waiting time for admitted patients in United Kingdom

Admitted Patients Average waiting time in weeks in UK				
Cardiology	5.2			
Cardiothoracic Surgery	6.6			
Dermatology	6.8			
Ear, Nose & Throat	8.4			
Gastroenterology	3.6			
General Medicine	3.1			
General Surgery	7.4			
Geriatric Medicine	1			
Gynaecology	6.1			
Neurology	3.3			
Neurosurgery	9.5			
Ophthalmology	9.3			
Oral Surgery	10.5			
Plastic Surgery	7.5			
Rheumatology	3.2			
Thoracic Medicine	2.6			
Trauma & Orthopaedics	10.9			
Urology	6.2			
Other	5.4			

Source: (Department-of-Health, 2009)

P2a. The greater the waiting time in the home country for the desired medical procedure, the greater the probability of the consumer undertaking medical tourism abroad, ceteris paribus

P2b. The lower the availability of, and access to, the desired treatment in the home country, the greater the probability of the consumer undertaking medical tourism abroad, ceteris paribus.

Privacy and Confidentiality: There are privacy concerns of the patients when own country used to perform the procedure (Vitalis & Milton, 2009). Although the U.S. has laws that safeguard the privacy of medical records under HIPAA, insurance companies, courts etc. can have access to these records. Procedures undertaken in other countries that have no reporting requirements can ensure privacy and confidentiality of services like drug rehabilitation, cosmetic/plastic surgery, sex change etc.

P3: The greater the desire for privacy and confidentiality of the desired treatment, the greater the probability of the consumer undertaking medical tourism abroad, ceteris paribus.

While the above mentioned demand triggers impact a consumer's need for medical travel there are several facilitating or enabling factors that need to be considered when evaluating the decision process.

Lower travel costs, and the lure of a vacation: The ease and affordability of the international travel has increased in recent years with discount packages available through third party vendors like online travel agents. Moreover, the idea of combining recuperation in an exotic vacation spot along with a medical procedure seems appealing to many people (Conell, 2006). Similarly, with the increasing demographic diversity and globalization of the workforce in developed nations combining a visit "home" with medical treatment augments demand for medical tourism.

Access to information via the internet to hospital sites, travel agents specializing in arranging medical tours, blogs of past patients, reduces the information asymmetry normally associated with seeking treatment in hitherto unknown places. Moreover several host countries and airlines provide incentives for travel like expedited visa processing, discounted airfares and free extra baggage allowances.

Travel intermediaries: An ordinary search on Google for medical tourism generated more than 10 million hits, several of which relate to third party intermediaries who plan and execute the entire itinerary- (from selecting the hospital for the procedure, the destination for holiday as well as to making arrangements for post-procedure care upon return to the home country). These tour operators act as brokers between the consumers and providers of medical tourism and thus reduce transactions costs, inducing travel.

Employer and Insurance Company endorsements: Due to the financial savings realized through medical tourism, several employers and insurance companies have endorsed institutions in other countries for treatment overseas. For e.g. Blue Cross Blue Shield in South Carolina and Wellpoint in Wisconsin have tie-ups with Bummugrad International Hospital in Thailand and Apollo Hospitals in India where expenses can be reimbursed in full, including the airfare for the patient and a companion (Deloitte, 2009).

While the personal need to undertake medical tourism and the facilitating factors establish the impetus to seek medical travel, the decision to actually undertake the travel has several other components that we describe below.

COMPONENTS OF DECISION MAKING AND STAKEHOLDER ROLE

Contrary to purchase decisions for simple products or services (like eating in a fast food restaurant), the decision to undertake travel abroad, and especially travel to seek medical treatment is highly involved, complex, multi-faceted, and often emotional in nature (Crouch & Louviere, 2001). The decision affects both the physical (the success of the medical procedure) and mental well-being (the vacation/ tourism portion) of the consumer for an extended time. Moreover, the decision involves not only the quality of the actual service itself, but also the perceptions of several stakeholders and related service providers, in addition to input and support

from family members. Figure 1 depicts a model of the consumer's decision components involved for medical tourism.

Pre-Decision **Information Search Evaluation and Decision** Personal Factors Openness to Experience Travel Experience Macro Facilitating Factors Exposure to language, Role of Stakeholders other cultures etc. Family and Friends Income/Demographics **Insurance Company** Endorsement **Destination Country Profile** Physician Skills **Hospital Reputation** Accreditation Travel Intermediaries **Demand Triggers** Cost? Travel Experience and Post Travel Evaluation Waiting Time? Privacy?

Figure 1 Decision Components

The Pre-decision phase of the model establishing consumer need for the travel and the facilitating factors has been discussed in Section 1. We now proceed to discuss the information search and evaluation of alternatives that eventually lead to the decision to travel.

Role of Stakeholders:

While stakeholders are understood as persons, groups, systems or entities that affect or are affected by an organization's actions, in this context we use the term stakeholders to describe entities that are integrally involved in the medical tourism industry and are interconnected such that they form a choice set for the consumer (Crouch and Louviere, 2001). While there are relational, psychological and demographic variables that may affect the propensity of a consumer to engage in medical tourism (role and support of family and friends, personality characteristics like openness to experience; or level of income and education) we restrict this discussion to identifiable influences on the potential consumer.

Destination Country Profile: While the economic, political, legal, socio-cultural, and technological profile of the destination country would play a role in the decision-making process

for any tourist activity, these dimensions assume even greater importance in the context of medical tourism (see (Forgione & Smith, 2007).

P4: The lower the institutional and cultural distance between the destination country and home country of the consumer, the greater the probability of the consumer seeking undertaking medical tourism in that country, ceteris paribus.

Hospital / Treatment facility accreditation and reputation: Selecting the appropriate doctors and hospital is generally considered an important decision for selecting a medical facility, although Carabello (2008) posits that most of the American travelers chose a facility based on destination interest combined with medical services. Rating agencies like JCI, Patients Beyond Borders, Trent Accreditation Scheme, International Organization for Standardization etc. play a vital role in increasing consumer trust in the facilities providing treatment (Heung, Kucukusta, & Song, 2010). The general reputation of the institution providing the medical services in terms of cleanliness, safety, service quality, amenities, nursing staff competencies will also affect the consumer trust and the likely selection of the facility.

P5: The higher the rating of the treatment facility and the perception of service quality of the treatment, the greater the probability of the consumer undertaking medical tourism at that facility, ceteris paribus

Personal Factors: Seeking medical treatment in unfamiliar surroundings can increase anxiety and generate greater feelings of vulnerability than when surroundings are known and familiar. Hence personal dispositions like openness to experience and prior experience to the culture and language can be enabling factors in the decision to undertake medical travel abroad. Similarly we believe that demographic variables like age, income and education can also impact the decision to travel to another country for medical and tourism services.

DISCUSSION, LIMITATIONS, AND FUTURE DIRECTIONS

The propositions derived above describe only some of the main factors influencing the consumer's decision components with respect to medical tourism. The evaluation of alternatives will eventually lead to the travel /purchase and post experience evaluation. The next logical step is to empirically test the model both through qualitative and quantitative research. While large scale quantitative data may be difficult to come by due to the sensitive nature of the data and reluctance both by consumers and providers to disclose medical information, it is possible to interview and survey consumers and obtain secondary data from blogs and provider sites. Future research can also identify the several limitations of medical tourism, the ethical and legal issues, the detrimental or positive impact on host and destination medical providers, and the economic impact on destination countries. As such, medical tourism provides a rich context for conducting tourism research.

REFERENCES

- Aizura, A. (2009). Where Health and Beauty Meet: Femininity and Racialisation in Thai Cosmetic Surgery Clinics. *Asian Studies Review*, *33*(3), 303-317.
- Anand, G. (2009). The Henry Ford of Heart Surgery Retrieved September 13 2010, from http://online.wsj.com/article/SB125875892887958111.html
- Awadzi, W., & Panda, D. (2007). Medical Tourism: Globalization And The Marketing Of Medical Services. *The Consortium Journal*, 75.
- Balaban, V., & Marano, C. (2010). Medical tourism research: A systematic review. *International Journal of Infectious Diseases*, 14(Supplement 1), e135-e135.
- Brady, C. (2007). Offshore Gambling: Medical Outsourcing versus ERISA's Fiduciary Duty Requirement. *Washington & Lee Law Review*, 64, 1073.
- Burkett, L. (2007). Medical Tourism. Journal of Legal Medicine, 28(2), 223-245.
- Carabello, L. (2008). A medical tourism primer for US physicians. *The Journal of medical practice management: MPM*, 23(5), 291.
- Census, U. (2009). Income, Poverty, and Health Insurance Coverage in the United States Retrieved April 1 2010, 2010, from http://www.census.gov/Press-Release/www/releases/archives/income wealth/014227.html
- Chee, H. (2007). Medical Tourism in Malaysia: International Movement of Healthcare Consumers and the Commodification of Healthcare.
- Connell, J. (2006). Medical tourism: Sea, sun, sand and... surgery. *Tourism Management*, 27(6), 1093-1100.
- Crouch, G., & Louviere, J. (2001). A review of choice modelling research in tourism, hospitality and leisure. *Consumer psychology of tourism, hospitality and leisure*, 2, 67-86.
- De Arellano, A. (2007). Patients without borders: the emergence of medical tourism. *International Journal of Health Services*, *37*(1), 193-198.
- Deloitte. (2009). Medical Tourism: Update and Implications 2009 Report Retrieved September, 10, 2010
- Department-of-Health. (2009). Department of Health Annual Report 2009.
- Ehrbeck, T., Guevara, C., & Mango, P. (2008). Mapping the market for medical travel. *Health Care*.
- Forgione, D., & Smith, P. (2007). Medical tourism and its impact on the US health care system. *Journal of health care finance*, *34*(1), 27.
- Fraser-Institute. (2008). Waiting Your Turn: Hospital Waiting Lists in Canada.
- Herrick, D. (2007) Medical tourism: Global competition in health care. Vol. 304. Policy Report.
- Heung, V., Kucukusta, D., & Song, H. (2010). A Conceptual Model of Medical Tourism: Implications for Future Research. *Journal of Travel & Tourism Marketing*, 27(3), 236-251.

- Marlowe, J., & Sullivan, P. (2007). Medical tourism: the ultimate outsourcing. *HR. Human Resource Planning*, 30(2), 8-10.
- Singh, P. (2008). Medical tourism: global outlook and Indian scenario: Kanishka Publishers.
- Suzanne Satalien, S. W. (April 12, 2010). Medical Schools Can't Keep Up, *The Wall Street Journal*. Retrieved from online.wsj.com
- Truffer, C., Keehan, S., Smith, S., Cylus, J., Sisko, A., Poisal, J., et al. (2010). Health spending projections through 2019: the recession's impact continues. *Health Affairs*.
- Vitalis, J., & Milton, G. (2009). Medical Travel—Threat or Opportunity for US Providers? It Depends on Your Perspective. *Journal of The Center for Health Innovation WINTER* 2009, 9.
- WHO. (2010). World Health Statistics 2010 Retrieved September 14 2010, 2010, from http://www.who.int/whosis/whostat/2010/en/index.html