Global Outsourcing of Healthcare:  
A Medical Tourism Decision Model

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ABSTRACT

The demand for global healthcare services is experiencing tremendous growth. US patients are seeking to reduce their expenditures on healthcare through obtaining treatment on an internationally competitive basis. This trend, known as medical tourism, is on the rise, and US legislators and policy makers must be aware of the issues facing American patients. This paper seeks to model factors that influence a patient's decision to seek healthcare services abroad. We develop a two-stage model for medical tourism – the first stage being the evaluation of the foreign country and the second stage choosing the healthcare facility. We argue country-specific characteristics influence the country of choice – including economic conditions, political climate, and regulatory policies. We also argue that certain factors -- including costs, hospital accreditation, quality of care, and physician training - impact the choice of healthcare facility. The model suggests that no one factor is dominant in the decision, but all play a crucial role in choosing healthcare on an international basis. Policy makers must use these factors to evaluate the impact medical tourism will continue to have on the US healthcare system in order to effectively compete in today's global, consumer-driven healthcare market.

Keywords: Medical tourism; global outsourcing; decision model; healthcare services; health policy; health costs

INTRODUCTION

Many argue the United States is facing a healthcare crisis, since according to the US Census Bureau over 46 million Americans were uninsured in 2005 (DeNavas-Walt et al. 2006). Combined with this dramatic level of uninsured patients, healthcare spending is projected to exceed $4.1 million by 2016 (Centers for Medicare and Medicaid Services 2006). Rising healthcare costs coupled with staggering figures for the uninsured raises the question – where are Americans seeking medical treatment? Over the past several years, American patients have sought medical and surgical care on an internationally competitive basis. This is known as medical tourism, and government regulators are beginning to take notice. For example, recent hearings held by the US Senate Special Committee on Aging investigated the implications of medical tourism on the US healthcare system (US Senate 2006). The committee is charged with...
establishing why American patients are seeking treatment internationally and what impact this may have on national economic policies.

The emerging trend of medical tourism raises numerous concerns for the US healthcare system. Legislators are attempting to determine whether lower international costs are the sole driving force behind the movement to seek medical care globally. Furthermore, concerns over the quality of care provided by international medical facilities abound. Rising US healthcare costs, as compared to other countries, continue to fuel the debate surrounding the medical tourism issue. The US accounts for over $1.7 trillion of the $3.3 trillion spent annually for worldwide healthcare — yet the US ranks 37th in certain quality of care measures (US Senate 2006). Consumers are faced with escalating healthcare costs in the US and are forced to comparison shop in order to seek alternative sources for treatment. The medical tourism trend will only continue to grow unless government officials determine ways to attract patients to stay in the US for treatment. This challenge is complex and multifaceted considering more than 55,000 Americans visited the Bumrungrad Hospital in Thailand for various elective procedures during 2005 alone (Kher 2006). In total, the Bumrungrad Hospital treated over 430,000 non-Thai patients during 2006 (Anonymous a 2007). Other countries are also counting on the medical tourism trend, including Dubai and other United Arab Emirates states. For example, Harvard Medical International plans a $472 million, 410-bed medical center in Dubai to capture the tourism success in healthcare (Blesch 2007).

This paper seeks to model the factors that may impact an American patient to seek medical treatment abroad. Legislators and policy regulators will not be able to curtail this trend until costs are contained and health insurance is made available to all patients. The Chairman of the US Senate Special Committee on Aging stated “Americans should not have to travel overseas to obtain affordable healthcare” (US Senate 2006). In order to properly address the issue, regulators must understand the motivation behind a patient willing to travel thousands of miles for treatment. We argue that American patients are likely to evaluate the qualities of the foreign country, and then take into consideration the characteristics of the international facility. Our model follows the two-stage model for selecting vendor countries and companies for outsourcing information technology (IT) developed by Palvia (2007). On a global basis, patients are attracted to facilities that are located in countries with sound economic conditions, stable political culture, and reliable regulatory oversight. We also argue that several factors contribute to the choice of international facility for medical treatment. These factors include costs, hospital accreditation and infrastructure, quality of care, and physician training. Legislators and policy makers may use these factors to evaluate the growing trend of medical tourism on the US healthcare system, and develop policies to compete effectively in today’s global, consumer-driven healthcare market.

GLOBAL HEALTHCARE OUTSOURCING

The ease of seeking medical treatment and services overseas contributes to the globalization of the healthcare market. Segouin et al. (2005, 277) refer to globalization as “the circulation of goods and services in response to criteria of efficiency”. Both the insured and uninsured in America are continuing to seek various healthcare treatments on an international basis. Cortez (2007, 21) argues that healthcare services are one of the most “rapidly growing markets in the

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world". The growing trend of medical tourism is not merely seen on an individual patient basis – many corporations are also investigating the potential benefits. For example, employers are considering medical outsourcing as an option for their employees, in order to experience significant cost-savings. Numerous employer-sponsored insurance plans are comparing the cost savings of offshore healthcare with the unknown risks of treatment abroad (Marlowe & Sullivan 2007). US insurance companies are also increasing the level of outsourcing of medical claims processing and even diagnostic test interpretations (Chandra 2002). Furthermore, healthcare biotechnology advances also contribute to the global market for healthcare services.

The global healthcare market has created a new breed of world-class physicians, surgeons, and even patients. Many doctors are now becoming licensed in multiple countries, with admitting privileges at hospitals in more than one country. Doctors who are foreign nationals find this particularly advantageous – because they earn their medical degree and practice in the US, while maintaining their medical licensure in their home country. All of these global aspects of the growing healthcare market make it appealing for US patients to seek treatment from foreign doctors in various foreign countries. American patients are the recipients of aggressive marketing campaigns by many foreign hospitals touting their low-cost services, coupled with the opportunity for an exotic vacation. Global marketing techniques are on the rise, causing many of these hospitals to partner with travel agencies to further promote the benefits of a complete turnkey package of medical tourism services. One dedicated medical tourism agency is PlanetHospital – launching its website in August 2005. The agency advertises that they are “in the business of making healthcare affordable” through locating the “best hospitals and surgeons around the world” (www.PlanetHospital.com).

CHARACTERISTICS OF THE COUNTRY OF CHOICE

Figure 1 depicts a conceptual two-stage model of the factors impacting the decision to seek medical services globally. The model suggests that no one factor is dominant in the decision, but all play a crucial role in choosing healthcare on an international basis. Once a patient has considered the foreign country, he/she must consider the international facility. Our two-stage model is based on the work of Palvia (2007) for choosing vendor and foreign country for the outsourcing of IT services. He argues deciding on the foreign country occurs first, with various factors impacting that decision, including political system, infrastructure and legal system. We use this conceptual model and apply it to the medical tourism domain, with American patients focusing on the economic stability, political culture and regulatory oversight of the foreign country.
Figure 1: Medical Tourism Factors Affecting Choice of Facility and Country

- Economic Conditions
- Political Climate
- Regulatory Standards

Choice of International Country Location

Choice of International Medical Facility

- Costs
- Accreditation
- Physician Training
- Quality of Care

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Economic Conditions

Medical tourism can provide substantial revenue for the host country. For example, India is considered one of the leading promoters of medical tourism and is on the cutting edge of medical outsourcing (CBC News 2004). Projections indicate medical tourism will generate over $1 billion in revenue for the country. Economic stability of both the medical facility and the host country are attractive features for the American patient. One signal of economic stability is the potential for growth. Dubai has seen tremendous economic growth recently, with an average of 13.4% per year from 2000 to 2005 (Blesch 2007). Medical tourism is part of this growth experience, where the Dubai Healthcare City was developed, and economic stability is heavily advertised (www.dhcc ae en/default.aspx?type=1&id=1). Countries experiencing economic stability and growth have an advantage with American patients since stable economic markets can respond rapidly to stimuli and facilitate the provision of services to a broader sector of clients.

Political Culture

In the wake of recent terrorism threats and political insurgency, American patients are more attuned to the political climate of the host country. Safety is a priority for the patient, both in terms of hospital and travel safety. Numerous travel agencies focusing on medical tourism promote that the decision to travel overseas is not an easy one, and safety is an important priority. Medical tourists will be attracted to regions without risks of revolutions or uprisings. Furthermore, American patients are attracted to regions where corruption is not prevalent and government authority is exercised. This stable political culture will cultivate an environment that is not conducive to threatening the personal safety of patients.

Regulatory Standards

American patients seeking international treatment often consider the legal and regulatory environment of the host country. The US healthcare system provides patients with patient protection through the Health Insurance Portability and Accountability Act of 1996 (HIPAA). This Federal law was established to protect patient information and limit how patient health information can be shared or used. The laws are very stringent and must be followed by all parties, or civil and/or criminal penalties may be assessed (US Department of Health & Human Services Office for Civil Rights 2003). The stringent HIPAA laws apply in the US, and US based health plans must follow these rules, even for service providers in another country (Marlowe & Sullivan 2007).

For American patients obtaining treatment overseas, they must be aware that neither HIPAA nor any near-equivalent informational security provision, applies in most foreign countries. There are exceptions in Europe, where privacy protection is generally thorough. It is recommended that patients consider whether HIPAA business associate agreements are in place between the US health plan and the foreign vendor (Marlowe & Sullivan 2007). Furthermore, patients should determine whether the foreign hospital complies with HIPAA, or can address the foreign patient’s...
privacy concerns – particularly since these hospitals are targeting US patients that are accustomed to these stringent privacy laws.

The US healthcare system also provides patients with some regulatory recourse through medical malpractice laws. Most states require physicians to have liability insurance, where the insurance is regulated by each separate state (Mello 2006). The purpose of medical malpractice insurance is to “cover doctors and other professionals for liability claims arising from the treatment of patients” (Insurance Information Institute 2007). The laws are established in order to provide some form of compensatory relief if doctors deviate from accepted practice standards and cause injury to patients.

Unlike the US, many of the developing countries offering medical services to American patients have lower costs because they lack well-established malpractice laws. Mudur (2000) points out that proving doctor negligence in India is quite difficult since many hospitals do not have established mechanisms to manage complaints from patients. In Singapore and Malaysia, the courts defer to the doctors to determine whether the standards of care have been breeched (Amirthalingam 2003). For those countries that do offer some form of malpractice relief for patients, damages are often limited (Roth 2006; Cortez 2007). In Dubai, claims of medical malpractice are handled by tribunals, and non-economic damages are capped at less than $300,000 (Blesch 2007). If a patient is injured by a doctor or hospital overseas, US providers and insurers may be reluctant to bear the risk and cost burden of trying to correct the medical problem.

CHOICE OF INTERNATIONAL HEALTHCARE PROVIDER

Technological advances in communication via the Internet make consumer-based choices and services easy to establish and maintain. American patients are lured by ‘client facilitation teams’ to ease all aspects of their foreign travel, while promoting great savings. Technological advances in healthcare, coupled with advances in Internet marketing strategies, will continue to fuel the interest in medical tourism among American patients. Marlowe & Sullivan (2007) argue that US citizens who have traveled abroad for healthcare treatment fall into one of three categories:

1. Cosmetic surgery patients
2. Patients who lack health insurance
3. Patients who belong to a limited benefit medical plan that reimburses only a small fraction of the medical costs associated with complex surgeries.

The low-cost availability of services has made it possible for these types of patients to receive treatment that would have been unaffordable otherwise. An examination of factors that lead to the decision to seek treatment on an international basis is crucial for US legislators. Policy makers must be aware that the following factors, which are inherent in certain foreign medical facilities, make American patients more likely to use these facilities for treatment:

- Cost
- Hospital accreditation/infrastructure

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- Quality of care
- Physician training

Costs

The steadily rising healthcare costs within the US continue to fuel the demand for medical tourism. The number-one factor cited for why Americans travel abroad for healthcare is cost. The cost differential for medical treatment between the US and other countries is extraordinary. Research conducted by the World Bank indicates that healthcare costs are significantly higher in the US than other countries (Mattoo & Rathindran 2005). It is documented that per capita health spending in the US in 2002 was 140 percent above the median Organization for Economic Cooperation and Development (OECD) countries (Anderson et al. 2005). Many of the dedicated medical tourism travel agencies advertise costs savings as high as 50 to 90 percent, which may lead to international health arbitrage (Cortez 2007). Examples of costs for surgeries performed in foreign hospitals, such as heart bypasses and knee surgeries, are one half to a quarter of the cost for the same procedure performed in a US facility. Hospital administrators also tout the significant cost savings available from foreign facilities. For example, the chief executive officer of Bumrungrad Hospital in Thailand has estimated charges at his hospital are as little as one-tenth of American fees (Tasker 2000).

The lure of significant costs savings will continue to fuel demand for medical services in developing countries. The cost discrepancy is more profound on a specific medical procedural level. Based on 2002 data, an inpatient knee surgery would cost of $10,000 in the US and only $1,500 at hospitals in Hungary or India (Mattoo & Rathindran 2005). India is one of the more popular destinations for American patients, particularly since there are significant cost differences between their facilities and those in the US. For example, significant cost discrepancies exist for the following surgeries:

- Full hip replacement - $36,000 difference
- Gall bladder surgery - $52,500 difference
- Orthopedic surgery - $13,500 (CBC News 2004).

Some of the reasons cited for these costs discrepancies are lower labor costs, little to no malpractice costs, and lower pharmaceutical costs. Mattoo & Rathindran (2005) report that according to the Centers for Medicare and Medicaid Services (CMS), more than 70 percent of hospital costs within the US are labor related.

Hospital Accreditation

American patients are often familiar with the hospital accreditation procedures for US facilities. When seeking treatment internationally, they seek to choose hospitals with similar standards in the quality of care. Foreign patients are often relying on hospitals to provide a level of care that equals, or exceeds, that provided by US hospitals. This demand has forced numerous developing countries to market their exceptional quality healthcare services. Hospitals in developing countries that actively target US patients seek to meet or exceed Western standards and

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expectations. A study conducted by the World Bank found that healthcare quality in many developing countries is "above the minimum acceptable standards in industrial countries" (Mattoo & Rathindran 2005).

Accreditation standards are a vital factor when evaluating the quality of care provided by a foreign hospital facility. Facilities in foreign countries often seek to meet or exceed the quality standards of US hospitals. The premier standards-setting and accrediting body in healthcare within the US is the Joint Commission (JC) [formerly the Joint Commission of Accreditation for Health Care Organizations (JCAHO)]. The JC evaluates and accredits over 15,000 healthcare organizations and programs in an attempt to improve safety and quality of care (Joint Commission 2007).

The growing interest in accreditation on an international basis sparked the creation of the Joint Commission International (JCI). The JCI accreditation program began in 1999 in order to meet the worldwide interest in quality improvement. The JCI accreditation standards seek to establish uniform expectations for "structures, processes and outcomes for hospitals" (JCI International 2007). Over 120 hospitals and healthcare facilities have received accreditation by JCI in numerous countries in Europe, India, Asia, the Middle East, South America and the Caribbean. The most popular destinations among US patients are Singapore and India, which have eleven and six accredited hospitals, respectively (JCI International, 2007). Many international facilities received JCI accreditation in late 2005, early 2006. The Bumrungrad Hospital in Thailand was the first to receive accreditation in 2002 (Ramirez 2007), and recently received reaccreditations in April 2005. In addition to the JCI standards, many other premiere accreditation organizations exist outside the US. For example, the Trent Accreditation Scheme (TAS) in the United Kingdom and Hong Kong (www.trentaccreditationscheme.org) and the Australian Council on Healthcare Standards (ACHS) (www.achs.org.au) are leaders in healthcare quality standards. The readily available information via the Internet allows American patients to research accreditation standards of foreign hospitals, which impact their decision to choose a foreign facility for treatment.

**Quality of Care**

Despite the establishment of international accreditation standards, quality of care issues are concerns for American patients seeking treatment in a foreign facility. Many of the hospitals heavily advertised to medical tourism patients are in low-cost, developing countries where infectious and parasitic diseases are present. Even though the hospital may be accredited, with surgeons practicing world-class sterile techniques, other quality of care issues abound. Some hospital employees may live in areas where conditions are poor and may be exposed to various endemic diseases, such as hepatitis A or B, HIV, malaria, typhoid, tuberculosis, or influenza (Knapp 2007). A patient would prefer to seek treatment from a facility that contributes to reducing the likelihood of contracting a serious infectious disease during the procedure or during follow-up treatment in the country.

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Physician Training

Numerous international facilities that aggressively target US patients advertise the number of physicians trained in US medical schools. For example, the Bumrungrad Hospital in Bangkok, Thailand advertises that over 200 physicians are board certified in the US (PBS 2005). The hospital also advertises that it is “managed by a team of experienced hospital administrators from America, Australia, Singapore and Thailand” (http://www.bumrungrad.com/Overseas-Medical-Care/About-Us/Management.aspx). Another important aspect for patients is the ability of the physician to speak English and have specialty training in the US. Continuing medical education, particularly in specialty areas, also contributes to the choice of facility. Foreign hospitals are now offering specialty and complex procedures including coronary artery bypass surgery, mitral valve replacement, herniated disc surgery and joint replacement (Marlowe & Sullivan 2007).

A related aspect to physician training is the existence of global networks of US-based hospitals. The California-based Adventist Health System operates a network of hospitals and clinics in more than 10 developing countries (Cortez 2007; Adventist Health International 2006). Bon Secours is another health system with global impact, including facilities in the US, UK, France, Ireland and Peru. Facilities that are affiliated with a US-based hospital network also permit the American patient to feel comfortable with opportunities for continuity of care. Patients that are treated at the foreign facility often feel more comfortable knowing post-surgery services are available upon their return. Further academic research should investigate the number of American patients that receive treatment at a foreign hospital that is part of a US-based healthcare network.

REAL WORLD EXAMPLES

The growing number of uninsured or underinsured Americans has increased their awareness of healthcare outsourcing opportunities. Our model suggests that American patients evaluate the qualities of the foreign country, and consider the characteristics of the international facility. Recent media attention to the growing trend of medical tourism highlights elements of various American patients’ decision model techniques. A recent Public Broadcasting System (PBS) Jim Lehrer report illustrates that American patients are concerned with the country-specific and healthcare facility characteristics when evaluating foreign medical treatment. The report details a fifty-two year old uninsured patient needing knee replacement. The patient admitted concerns about traveling to a foreign country, but “those reservations about infectious disease, the quality of care or doctors went away as he learned more” (PBS 2005). The patient researched Thailand and its Bumrungrad Hospital in order to learn it has “the same requirements for accreditation as most US hospitals” (PBS 2005). Other patients are documented as being “unnerved” by some of the economic conditions of certain developing countries, but they would not hesitate do return to the foreign medical facility for future treatment (Knapp 2007).

Much of the research on the foreign country and facility is done on the Internet. According to a recent Harris Poll, over 80% of adult web users in the US have searched for health information (Harris Poll Interactive 2006). According to Kher (2006), one such example of an internet-savvy patient is a forty-five year old uninsured chiropractor who turned to the Internet for more
information on the Bumrungrad Hospital in Thailand. The patient used the information to make an informed decision to seek treatment for a herniated disk in his neck – which constituted his first trip outside the US. Other patients turn to the Internet to seek specific information using the assistance of the dedicated medical tourism travel agencies (Kher 2006). These examples illustrate that American patients do evaluate various conditions of the foreign country and the specific facility before traveling abroad for medical treatment.

THE US HEALTHCARE SYSTEM RESPONSE

Medical tourism is a multibillion dollar, unregulated, for-profit industry. An internet search reveals 695,000 Google hits in 0.09 seconds. Many of the medical tourism websites found had poor English grammar, offered free medical opinions via email without the doctor even examining the patient in person. Many offer commissions up to 20 percent or more for patient referrals – a felony crime if accepted directly or indirectly by a doctor in the US. Some websites even require the patient to sign a waiver of all liability and an agreement not to sue. These issues, combined with the luxurious advertisements of vacations on the beach, add to the complexity in the decision-making process for American patients.

Rising healthcare costs in the US will continue to drive American patients to seek treatment on a global basis. The US Senate Special Committee on Again must seek information from the global healthcare community in order to address the issue. Legislators and policy makers must seek alternative measures to address the rising trend of medical tourism. More recently, hospitals in the US are taking action to broaden their appeal to patients. Some facilities are making their facilities more ‘tourist friendly’ through renovations to make facilities more hotel-like. The Dr. P. Phillips Hospital in Florida has sought the aide of local hotel managers for recommendations to make their facility more tourist-friendly, while also staffing its emergency room with guest service representatives (Anonymous b 2007). If this trend continues, US hospitals may attempt to profit from medical tourism – but only in the reverse – by attracting foreign visitors to popular US destinations. The global market for healthcare will continue to force US medical facilities to examine alternative ways to efficiently remain competitive.

REFERENCES

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