MODELING THE MARKET FOR MEDICAL TRAVEL

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Abstract

Medical (also called medical travel, health tourism or global healthcare) is the practice of traveling abroad to obtain healthcare services. Typically, by traveling abroad patients not only can save a substantial amount of money but also receive world-class service. There are different opinions as to whether medical tourism is still an emerging industry or can be considered firmly established.

In any case, the industry is being followed and promoted by several reputable organizations, including the Medical Tourism Association (MTA), the Deloitte Center for Health Solutions, and the Joint Commission International. The MTA is an industry group actively involved in promoting the industry, especially through it publication, Medical Tourism. The Deloitte Center is a research arm of the global accounting firm. The JCI is a division of the Joint Commission which is involved in accrediting health care facilities outside the United States. These and similar organizations provide much of the raw material for analyzing the development of this industry.

Keywords: medical tourism, medical travel, inbound demand, outbound demand

1. DEMAND FACTORS LEADING TO INBOUND MEDICAL TOURISM

Availability of specialized medical treatment. The availability of specialized medical treatment is the initial reason for the emergence of medical tourism. Ancient Greek patients could travel from all over the Mediterranean to health spas which treated some conditions that could not be effectively treated at home. It is no different in modern societies. To treat certain diseases, people will spend money and time traveling to other places. In the last century, with their advanced medical technologies, the United States and Europe became the center of the healthcare world. Persons came to the United States for higher quality treatment than they could receive in their home country.

Although medical technologies have been improving quickly in the other countries, we often hear that some well-known individuals, often athletes and political dignitaries, come to the U.S. seeking treatment because the United States is still leading the world in certain medical areas, such as sports injuries, cancer/oncology, orthopedic, cardiovascular, and cosmetic treatments. Since medical tourists usually pay more than domestic patient, many U.S. health

facilities expanded their marketing to attract international patients and developed international patient departments.

Several U.S. states have been especially active in promoting medical travel to their health facilities. For example, in Michigan, hospital systems such as Spectrum Health, the University of Michigan Health System and the Detroit Medical Center are positioning themselves as medical tourism destinations for certain specialty programs. Florida is another state that puts considerable effort in the development of medical tourism. World class facilities like the Mayo Clinic, the Cleveland Clinic, and Sloan-Kettering Hospital are also involved.

Some Data. In its 2008 report on medical tourism, Deloitte suggested that in 2008 there would be more than 400,000 non-U.S. residents that would receive care in the United States and spend almost $5 billion for health services. International patients currently make up almost 3.5% of all inpatient procedures performed in the U.S. By 2011, Deloitte suggested that those numbers could rise to as much as 800,000 patients annually **(Deloitte, 2009)**.

A McKinsey & Co. reported much lower estimates of medical travel, on the order of 60,000 to 85, 000 inpatients per year. (Ehrbeck et al. 2008). These included 5,000 to 10, 000 US patients seeking non-US treatment. The lower estimates are due to a much stricter definition of the medical travel market. Needless to say, the two reports vary widely. However, even this study believed the US market potential to be in the range of 500,000 to 700,000 per year if payers covered medical travel. The most common medical treatments sought abroad are dentistry, cosmetic surgery, orthopedic surgery, and some cardiac procedures.

Income and wealth. The inbound demand for specialized medical treatment, which is normally quite expensive, is primarily from international patients who are in the upper strata of income and wealth. For these patients, the cost of treatment is much less significant than the availability of the requisite medical procedure. Health insurance is not a factor for this group. They often come to the U.S. despite having a national health insurance program.

Macroeconomic Conditions. Since income and wealth are significant demand variables, the state of the global economy is an important factor. In the face of the current slow global recovery from the recent recession, there has been a decline in inbound medical tourism. On the other hand, a poor economy can be a stimulus to outbound medical travel as patients who lose their jobs or health insurance seek lower costs.

The Quality of Treatment. The inbound demand is largely for services provided in world class health facilities that can provide the full array of services needed by the patient. Especially for surgical procedures, both pre-operative and post-operative care is of very high quality. These facilities are typically highly accredited by the Joint Commission and inbound patients can use them with a high degree of confidence. The medical treatments are usually provided with an extensive array of amenities.

2. DEMAND FACTORS LEADING TO OUTBOUND MEDICAL TOURISM

Higher Cost of Medical Treatment. Although U.S. hospitals attract a large number of international patients by their high-end medical technologies, they are also facing a serious problem, that is, many domestic patients go abroad seeking less expensive medical treatment. According to one study, U.S. patients who have hip replacement surgery in India or Costa Rica will save approximately 75% of cost, compared to the prices that patients could get in the U.S. (Horowitz, 2007).

The Deloitte Center (2008) reported on World Bank research by Mattoo and Nathindran (2005) that estimated price differences for 15 surgical procedures frequently used in outbound programs. The prices vary widely by countries, so the prices in the table are average. When extraordinary travel and insurance costs are added, the relative cost advantage for medical tourism is 28 to 88 percent, depending on the location and procedure.

With the price advantage, many Asian and Latin American countries have become destinations for medical tourism. Approximately 900,000 to 1.2 million foreign patients traveled to hospitals in Thailand. In Bangkok's prestigious Bumrungrad International Hospital, 58,000 U.S. patients sought treatment in their facilities in 2005, which increased to 64,000 Americans the following year. Singapore benefited with the increase in medical tourists from 270,000 in 2004 to 410,000 foreign patients annually. It is estimated that this will increase to a million patients by 2012. Latin America, particularly Costa Rica and Panama, are fast becoming tourist spots for medical travelers with close to 150,000 foreign patients seeking healthcare in Costa Rica in 2006. Due to its close proximity to the U.S., Mexico has become a top medical tourism destination with 40,000 to 80,000 American seniors spending their retirement there with a considerable number receiving nursing home and health care. (http://www.health-tourism.com/medical-tourism/statistics/)

Long Wait Times. A May 2008 McKinsey and Company report indicates that 15% of medical travelers seek faster medical services. The medical services delivery systems in many developed countries are overburdened and patients have to wait a long time to see a doctor or specialist, even longer ones for general surgeries, orthopedics, or cardiology. In Britain and parts of North America, for example, the waiting time for a hip replacement can be a year or more, while in India a patient can begin treatment shortly after arrival (Muddle Feb. 2008).

The Health Insurance Factor. The lower cost of these surgical procedures is very attractive to those who are uninsured. In the U.S., there are an estimated 47 million persons without health insurance and 120 million without dental coverage ( ). The use of medical tourism programs can save money when compared to U.S costs. The impact of the recent health care reform legislation must be monitored as to its effect on outbound demand.

Visiting the Home Country. Many immigrants have no problem seeking medical treatment abroad. U.S. residents originating in places such as India, China, Korea, and various Latin American countries are comfortable in an environment where they know the language and

culture. Often, they have close relatives with whom to stay both before and after their medical treatment.

Potential Revenue Losses. To US providers of healthcare, the potential losses from outbound medical travel could be very significant. Deloitte reports that US residents spent $2.1 billion to 2.4 billion for overseas medical care in 2008. Moreoever, assuming a 3% annual medical cost inflation, the amount is projected to be between $30.3 billion and $79.5 billion by 2017 (Underwood and Makadon 2007).

3. ISSUES IMPACTING OUTBOUND DEMAND

Service Quality as a Supply Factor. Receiving safe and high quality medical care is the primary issue for patients considering medical tourism as an alternative treatment. When patients choose other countries instead of the U.S. for medical care, they don't consider just the price. Patients also have to consider the quality of medical care that the international medical facilities provide because medical standards may vary widely from one medical care facility to another and from one country to another. It is important to know about assurances that a medical care organization has publicly committed to safe, quality patient care.

The Joint Commission International (JCI) was launched by the Joint Commission in 1999 after a growing demand for a resource to effectively evaluate quality and safety (Deloitte 2008). JCI standards are developed with the input of experts from around the world to assess and accredit in more than 30 countries. JCI has accredited nearly 260 organizations in countries throughout the globe. **(Timmons, 2009)**. Several other organizations, such as the International Society for Quality in Health Care (ISQUA), the National Committee for Quality Assurance (NCQA), the International Organization for Standardization (ISO), and the European Society for Quality in Healthcare (ESQH), have taken steps to ensure that medical tourism facilities provide the highest-quality clinical care. The number of accredited facilities has been steadily increasing which gives outbound patients many more options.

Accreditation is particularly important because it evaluates the most significant factors and concerns that patients should consider when seeking medical care outside their home country. Though accreditation is important, it should not be the only decision making factor in choosing a medical care organization. Patients should take time to communicate directly with the hospital and with the physician that will be responsible for their care.

To reduce overall risks, despite the accreditation process, American patients traveling abroad would be wise to do their own research before signing up for surgery overseas. Communication issues as well as cultural differences might also affect qualitative patient care and should not be overlooked **(Retzlaff, 2008).**

Care coordination for patients returning home is another dimension of quality that is central to a host organization's performance. Many U.S.-based opponents of medical tourism worry that patients who receive treatment abroad may not receive proper follow-up care when they return to their home country. As a result, care plans that facilitate the handoff from overseas

providers to providers at the patient's home are critical, since domestic providers are often hesitant to take on complicated and open cases from unknown providers – let alone care from a foreign one **(Deloitte 2008)**.

Legal and Ethical issues. Although medical tourism offers significant cost savings to U.S. patients, it comes with increased risk to them **(Van Demark, 2007)**. For example, some countries, such as India, Thailand, or Malaysia have very different infectious disease-related epidemiology to U.S. and Europe. Another consideration is the quality of post-medical care which can vary dramatically, depending on the hospital and country, and may be different from U.S. and European standards. A further risk factor relates to the resolution of litigation in the event of a problem. If U.S. patients receive medical care abroad that is less than satisfactory outcome, what recourse do they have? Of course, the patients could work through the host country's legal system. However, this could be difficult and burdensome if the patients live far from the place they received medical treatment.

If patients take the matter to U.S. courts, the lawsuit will not commence until the defendant is served with a summons and complaint. Service can be facilitated if there are any treaties, conventions or international agreements between U.S. and the country where treatment occurred, but not all countries are signatories to such international agreements. Even if the countries have some form of agreement for cooperation in civil litigation, serving a summons and complaint on the healthcare providers may be difficult, expensive and extremely time consuming **(Entin Feb. 2008)**.

Before a U.S. court enters a valid judgment it must have personal jurisdiction over a defendant. The foreign hospitals or medical care providers which are located outside U.S. and have no offices or employees in the state where the suit is filed, can easily challenge the U.S. court's jurisdiction. Even if the court finds that "minimum contracts" exist, a defendant physician or hospital can argue that the exercise of personal jurisdiction may be unreasonable or unfair **(Entin Feb. 2008)**. Even some U.S. states, such as Illinois, Idaho, Washington and New Jersey, have refused to exercise personal jurisdiction when patients traveled to one state to seek medical care and then sued in another state for compensation. Thus, patients who are thinking about medical tourism must be clear that limited compensation in the event of a unsatisfied outcome is one of the tradeoffs for going abroad for medical care.

Privacy Concerns. Privacy protection is another legal issue. The U.S. privacy law for the protection of health information is the Health Insurance Portability and Accountability Act (HIPAA). HIPAA protects health information that is "individually identifiable" or that can be tied to the subject of the information. HIPAA does not apply to medical information obtained outside the U.S. Thus, the security of a patients' medical information would be at greater risk. On the other hand, when someone who needs medical care in the United States from someone who is not his/her usual medical provider may find that HIPAA may adversely impact the sharing of medical information unless it is clear that the subject of the information has authorized its disclosure **(Bentley & Bourque 2008)**. Therefore, patients should take

complete medical records when they travel abroad seeking medical care. If not, the sharing of medical information for medical treatment will be difficult.

Another ethical issue in medical tourism involves illegal organ transplants. The illegal purchase of organs and tissues for transplantation is very rampant in some developing countries. This is one reason that why medical tourism grows rapidly in some countries. Currently, many Indian cities have become hubs for kidney transplants, despite a 1994 nationwide ban on human organ sales (the Transplant of Human Organ Act states only relatives of patients can donate kidneys). So many patients, mainly foreigners, seeking kidney transplants have stimulated the demand for illegal organ transplants.

The British Transplantation Society said that "an accumulating body of evidence suggests that the organs of executed prisoners are being removed for transplantation without the prior consent of either the prisoner or their family". Many patients travel to China seeking kidney or liver transplants because of the shortages of donor organs in their own country. Most patients come from Japan and Korea.(http://future.iftf.org/2006/04/the_dark_side_o.html) Treatment based on embryonic stems, not available in the US, can sometimes be obtained legally or illegally in some foreign locations.

THE FUTURE OF MEDICAL TOURISM

The economic recession has had a significant negative effect on the medical tourism industry. The total number of U.S. patients who went abroad seeking medical care declined from 750,000 in 2007 to 540,000 in 2008. An increase of transportation costs may be another factor contributing to the decline in U.S. patients traveling for care and rate at which foreigners are traveling to the U.S. for medical care **(Deloitte 2009).**

Recently, the weakening dollar probably causes many U.S. patients to reconsider plans to travel abroad for medical care. For example, in 2005 a patient who has been considering cosmetic surgery in Thailand received a price quote of 110,000 baht, equal to $2,683 at that time (12/14/2005 exchange rate = 41.005 baht per dollar). If she decided to delay having surgery for two years, she was shocked to realize that her procedure would cost $3,625 in 2007 (12/14/2007 exchange rate = 30.349 baht per dollar). Although the surgery provider has not increased the price, the patient has to pay almost one thousand dollars more than two years prior because of the exchange rate fluctuation (**Horowitz, 2008).**

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The potential impact of the recent U.S. healthcare legislation also has to be evaluated. Some analysts believe that the objective of providing healthcare at “lower costs” has not been addressed. According to some, the legislation not only doesn’t lower costs, but has a huge chance to significantly increase the already high cost for healthcare in America. Thus, healthcare costs will continue to rise and continue to become even more unaffordable than before. This would present a huge opportunity for medical tourism, and the passing of this legislation could lead to even greater adoption of medical tourism as one of the only ways to reduce healthcare costs (**Stephano & Edelheit 2009)**

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The future of medical tourism in the U.S. is extremely positive. Deloitte estimates outbound medical tourists could reach upwards of 1.6 million by 2012, with sustainable annual growth of 35 percent. Concurrently, inbound medical tourists will have slow growth to report up to 561,000 by 2017.

Some insurers have launched High deductible Health Plans (HDHP), sometimes referred to as Consumer Driven health Plans (CDHP) and they hope medical tourism will help to reduce treatment costs and improve margins, while employers are seeking reduced health care costs. The International Foundation of Employee Benefits 2008 research shows that "73% of companies thought they would be offering a CDHP within the next five years." Also, the International Federation of Health Plans did a recent survey in 2008 of US employers and found that 11% of US employers are currently offering medical tourism benefits **(Stephano & Edelheit 2009)**.

Travel or Tourism? It might be a stretch to call trips to a foreign destination for medical treatment "tourism." Certainly, for less serious procedures such as dentistry and certain forms of cosmetic surgery and orthopedic surgery, there could be the opportunity to include some pre-or post- vacation activities. If so, there are facilitators and health-travel planners available to provide such services.

For those dealing with more serious surgeries, it will not be very easy to turn such a trip into a dream vacation. Some companies, such as the International Hotel Group, do provide facilities that focus on recovery needs as well as leisure recovery. And there are recovery retreats that provide the patient with high-end services (Gasparoni, 2007).

Final Thoughts. Though the economic recession has caused a temporary slowdown in the growth of medical tourism, the industry is still young. Many legal, regulation, and ethical issues are being addressed and resolved by governments and medical institutions. As long as differences in medical techniques and costs exist among countries, medical tourism should continue to develop.

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