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An Analysis of Competitiveness of Medical Tourism in Malaysia and Thailand: A Strategic Management Approach

Cheng Wei Hin, Abdul Manaf Bohari and Lim Theam Pu
College of Business, Universiti of Utara Malaysia, 06010 Sintok, Kedah, Malaysia

Abstract: In this age of globalization and escalating medical costs patients around the globe, especially in developed countries have to consider comparing different countries to seek for medical care. Medical tourism encompasses all the industries in catering to patients seeking health care outside their home region. These industries include health care, travel, accommodation and also recreation. This study examined the competitiveness of Malaysia (in particular, State of Penang) with Thailand in the medical tourism industry using a conceptual approach derived from strategic management discipline. The approach used were SWOT analysis, Porter's 5 forces analysis and competitive positioning matrix. Medical tourism has both strengths and weaknesses to both countries with Thailand being more competitive in medical treatment like plastic surgery, they have developed their medical tourism earlier than Malaysia while Malaysia (Penang) has more competitive advantage in heart surgery wide usage of English, Penang as a tourist destination attraction and reasonable cost.

Key words: Medical tourism, competitive advantage, strategic management approach, heart surgery, Malaysia

INTRODUCTION

According to Deloitte Center for Health Solutions in 2007, an estimated 750,000 Americans traveled abroad for medical care this number is anticipated to increase to 6 million by 2010 (Keckley and Underwood, 2008). While some outbound travelers seek treatments unavailable in the United States, the majority of medical travel has been explained by financial logic: A hip replacement costs about $37,000 in the United States and about $13,000 in India. An $80,000 US heart bypass is $16,000 in Thailand (Higgins, 2007). Using weighted average procedure price, Deloitte put the average savings from the US perspective at about 85% (Keckley and Underwood, 2008). Moreover, care procured at certified facilities is generally of equal or better quality than the US standard (Milstein and Smith, 2006).

Medical tourism in Thailand and Penang started due to a fit between a growing demand in Western countries for cosmetic and other elective treatments which were not covered by health insurance schemes and their availability in these cities at affordable rates.

According to Edey (2002) dsyIn Southeast Asia, Thailand enjoys a well developed medical system with about 700 governmental and 300 private hospitals the country also possesses the most highly developed medical sector. The number of foreign patients using its medical services has been steadily rising over the years and is expecting to be close to 550,000 in 2007, up from 40,000 in 1996, making it one of the largest private medical provider in Asia.

While in Penang, medical tourism brings home two-thirds of the RM 250 million profit nationwide. In year 2008, Penang recorded a revenue of RM 171 million from medical tourism (Mohamed and Sirat, 2009). The most popular hospital for medical tourism is the Penang Adventist hospital due to its accredation by Joint Commision International (JCI). It is part of an international network of some 500 non-profitable hospitals, clinics and dispensaries worldwide operating under the adventist health network. Under this network includes the world famous Loma Linda University and Medical Centre in California, USA. They are the 1st private hospital in Northern Malaysia to perform micro-vascular, coronary bypass, laser heart surgery (TMR) and open-heart surgery (Mohamed and Sirat, 2009).

The medical tourism industry in Malaysia, Thailand, Singapore and India, currently worth around half a billion dollars a year in Asia (Mohamed and Sirat, 2009) and is projected to generate more than US $4.4 billion by 2012. One of the key factors in success of medical tourism in Asia, particularly Thailand and Penang is the escalating costs and growing waiting lists of patients in developed countries that are seeking for many treatment.

Competitive success is more likely in an industry for which there is strong local demand (Porter, 1998). In the

Corresponding Author: Cheng Wei Hin, College of Business, Universiti of Utara Malaysia, 06010 Sintok, Kedah, Malaysia

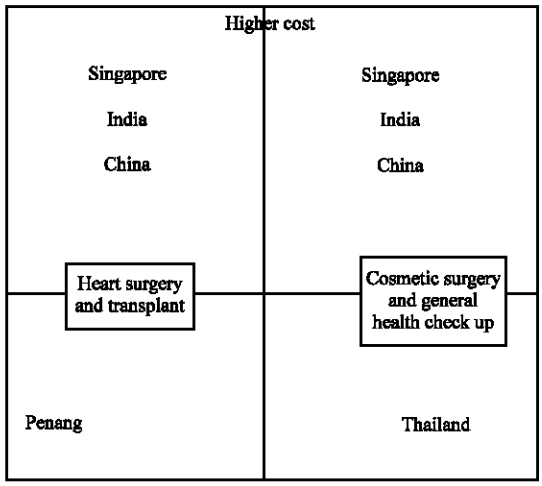

Fig. 1: Competitive positioning map (The figure shows, Thailand, Malaysia, Singapore, China and India in terms of cost and treatments (Mohamed and Sirat, 2009). Costs and type of medical treatment) (Mohamed and Sirat, 2009). The business environmental factors consists of: External environmental ustry

case of medical tourism, local and regional demand has been instrumental in the development of medical capability. Singapore for example, has long been recognized as the preferred Asian location for those in the region seeking medical intervention. Similarly, Thailand's leading hospitals draw heavily on local and regional demand (Cohen, 2007). Specialist pockets of demand, such as gender reassignment treatment have created areas of high-level competence as in the case of Penang adventist hospital in providing cardiac care (Fig. 1).

In addition, rapidly rising costs and increasing waiting lists in developed economies mean that emerging markets have appeal for global consumers. International demand for medical tourism appears to be both strong and stable (The and Chu, 2005). International demand is also facilitated by the falling costs of cross-border travel, as well as the ease of obtaining comparative information from the internet on alternative offerings. Modern media also provides much richer data with more than simply price comparisons for example, patient testimonials and simulated.

Political legal: Politic stability, medical policy for foreigner, protection of law such as product safety, legal, such as sex change and cosmetic surgery, health and environment safety.

Economic: Cost of medical, currency exchange, low wages, money supply (e.g., servicing bank).

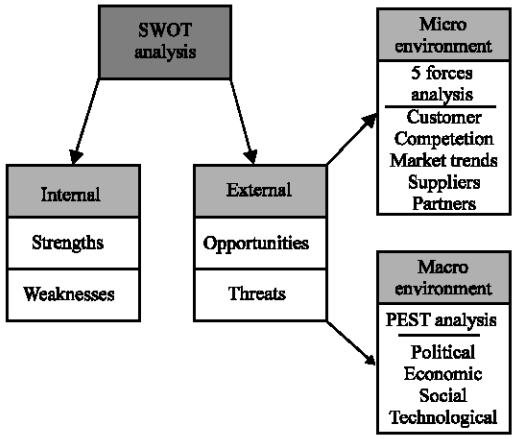

Fig. 2: Analysis of PEST

Social cultural: Capability in multi-language, attitude to work, transportation, religion, level of qualification (competency surgeon), recognition.

Technological: The sophisticated of the technology, new discovery/development of the medical procedure, industry focus on the technology effort. These factors earliar may affect the medical industry in terms of their competitiveness and they are also known as the PEST factors (Fig. 2).

MICHAEL PORTER 5 FORCES AND HOW COMPETITIVE IS THE COMPETITION IN THE INDUSTRY

The 5 forces analysis examines micro-environmental factor (customer, competitors, market trend, supplier, partner/dealer) to understand both the industry in which their organization operates and their competitive position within that industry (Fig. 3).

Competition the threat of new entrants: The threat of new entrants is not significant (rated as low) as Thailand has started it medical tourism much earlier (since 1970 from Cornell (2006) compared to Malaysia in 1997 and it is one of the top tourism destinations in Asia beside Singapore. Thailand has estimated earning 1 billion USD in 2006 base on Table 1. Government policy, such as sex change is a restriction in Malaysia and will cause Malaysia lose it competitive advantage (Table 1).

Table 1 shows the name of the country and the origin of the arriving medical tourists, as well as their estimated earnings from medical tourism for each countries. From Table 1, researchers can say that Thailand has an earning well earliar the the other countries in terms of medical tourism around 2006 which

Table 1: Medical travel overview

Country	Arriving from	Estimated earnings	Strengths
India	Middle east, United kingdom, Canada, developing countries	US$ 480 million (2005)	Cardiac surgery, joint replacement, eye surgery
Malaysia	Indonesia, United States, Japan	US$ 40 million (2004)	Cardiology, cardio-thoracic surgery, cosmetic surgery
Singapore	Indonesia, Malaysia middle, East United States	US$ 560 million (2004)	Liver transplant, joints replacements, cardiac surgery
Thiland	United states, United kingdom, Middle East, China, Japan	US$ 1 billion (2006)	Cosmetic surgery, organ transplant, dental treatment, joint replacements

Unless otherwise referenced, information referred to is referenced elsewhere in this study

Table 2: Major medical procedures w/average total medical/hospital cost in Western-level hospital

	Countries					Cost as % to US			
Procedures	US	India	Thiland	Singapore	Malaysia	India	Thiland	Singapore	Malaysia
Heart bypass	130,000	10,000	11,000	18,500	9,000	8	8	14	7
Heart valve replacement	160,000	9,000	10,000	12,500	9,000	6	6	8	6
Angioplasty	57,000	11,000	13,000	13,000	11,000	19	23	23	19
Hip replacement	43,000	9,000	12,000	12,000	10,000	21	28	28	23
Hysterectomy	20,000	3,000	4,500	5,000	3,000	15	23	30	15
Knee replacement	40,000	8,500	10,000	13,000	3,000	21	25	33	20
Spinal fusion	62,000	5,500	7,000	9,000	6,000	9	11	15	10

US cost from patient beyond border by Josef Woodman. The table used in this book is available from ability magazinc at http://www.ability magazinc.com/pbb.html. Costs are for surgery including hospital stay only. Costs assumptions taken for India (20%); Malaysia (25%), Thiland (30%); Singapore (35%)

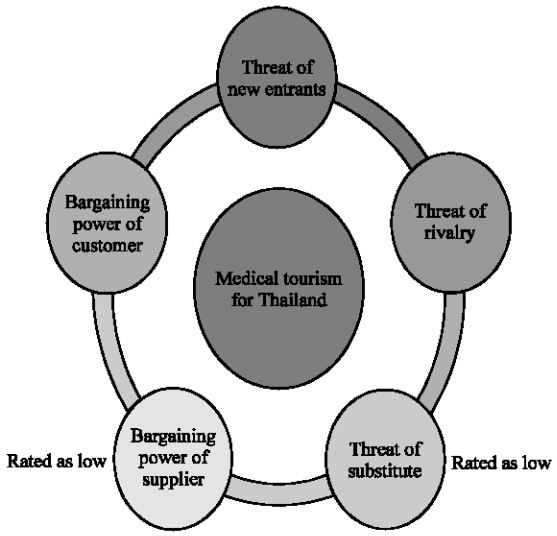

Fig. 3: Michael porter's 5 forces of analysis

was about US1 billion while Malaysia only had an earning of about US 40 milllion. Singapore ranked second after Thailand in terms of medical earning with a US 560 million while India had an earning of US 480 million. Each countries has different strengths in terms of medical surgery. Thailand was famous for its cosmetic surgery, organ transplant, dental treatment and joint replacements while Malaysia has its strengths in cardioloty, cardio-thoracic surgery and to a certain extent cosmetic surgery.

Rivalry rivalry among competitive firms: Rivalry is a significant force (rated as medium) and most importantly there are many competitors in the industry. The pressure will be on Thailand as the medical cost at Thailand is higher compares to Malaysia. Table 2 has shown the cost charges of major medical across Asia hospital.

Table 2 shows that costs of surgery in Malaysia is relatively the lowest among most countries as compared to USA, India, Singapore and Thailand. Malaysia has lowest cost in terms of heart bypass, hysterectomy, knee replacement and spinal fusion compared to the other 5 countries.

Substitute potential development of substitute products: The substitution force is not significant (rated as low) in the medical industry because most of the major medical procedures are very much depend on the specialist/surgeon to perform the operation. Even though, they have best medicine and technology but still required a qualify person to operate or prescribe the medicine.

Customer/buyer bargaining power of consumers: This is a significant force (rated as high) because customer has plenty of choice to select their medical tourism destiny which meet their requirement such as medical fee, medical expertise, latest technology, waiting time, accreditation, advertising and promotion which include (natural environment, safety, language, food, etc.).

Suppliers bargaining power of suppliers: The bargaining power of the supplier is not significant (rated as low) due to multiple of medical suppliers are available in the market from various country and company. If the supplier raises costs, the medical firm will not remain with the supplier due to minimal switching cost.

Strengths	Weaknesses
Penang:	**Penang:**
Major language-English	International accreditation
Political stability	Lack of branding
Cost	Visit pass
Thailand:	**Thailand:**
Cost	Political stability
Easy to fly	Language barrier
Perceived medical quality	Visit pass
Opportunities	**Threats**
Penang and Thailand:	**Penang:Thailand:**
Encouragement and support by government	Regional competition
Escalating health care cost in Western countries	Quality of treatment
Aging baby boomers	Communicable diseases (dengue)

Fig. 4: SWOT analysis

Penang and Thailand wishing to succeed in health tourism must study the environment and implement strategic management process to maximize the potential of existing assets and hence maximizing the gain. There are some of the identified Strengths, Weaknesses, Opportunities and Threats (SWOT) for Penang and Thailand (Fig. 4).

STRENGTH OF PENANG

The labour cost in Penang is relatively low. The average basic monthly salary ranged from RM 2,769 (US$ 781) (executives) to RM 10, 105 (US$ 2,851) for senior managers to RM 16, 793 (US$ 4,730) for top executives. Low labor cost will result in very affordable price of medical treatment. This is an attractive bargain for medical tourists to this country as the remaining money can be used for leisure activities, such as shopping and sightseeing. Malaysia has already established itself as a tourist destination. Penang is famous for its beautiful scenery, diverse culture and modern cosmopolitan cities can be a very appealing place to recuperate. Strong promotional strategies and activities can ensure Penang becoming not only a tourist destination but also a world class medical hub. The political stability in the country is also the key factor in contributing to the strength of the medical tourism industry in Penang.

English language is used widely in Malaysia, making it easier for tourists to communicate with the health professionals. In fact, this multilingual ability of the health care workers has been cited in an article by an international journalist, Greg Harris of the magazine Malaysian Business in (2007). Another advantage in Malaysia's favour is language, with English being the lingua franca and doctors who are able to converse in Bahasa Malaysia, Mandarin and Tamil, thus catering to visitors from Indonesia, China and India.

STRENGTH OF THAILAND

The low medical cost in Thailand is also the key strength for Thailand to be a medical tourism hub. Apart from that Bangkok is the main city in the world for stop-over flights. Thus, this makes Bangkok accessible to medical tourists around the world. The perceived medical treatment quality from the medical experts in Thailand is widely known. This contributes the the strength of its medical tourism industry as well.

Weaknesses of penang: One of the weaknesses of Penang in medical tourism is the lack of international accreditation of the private hospitals. Apart from that the lack of impressive promotional activities and customer service unlike those in countries, such as Thailand and India, Penang also faced rising medical cost and shortage of manpower like doctors, specialists and nurses. In Penang, impressive websites and portals detailing medical and social services are sadly lacking. Penang also lack focused provision of medical treatment or branding. Branding is the key to marketing, as pointed out by Philips Malaysia chairman and chief executive officer Dr. Rajah Kumar whose company aims to play an enabling role in promoting medical tourism in the country, researchers need to brand the sector so medical tourism in Penang can be known worldwide like in Thailand (Marjuni, 2008). Other weaknesses include the inconvenience of obtaining extension of the social visit pass. The procedures for extension of the social visit pass in Malaysia are tedious. Apart from being required to complete an application form, the applicant must submit it along with his/her passport and confirmed flight ticket to the home country in person. Obviously such requirements may be impossible to fulfill by a person recuperating in a hospital bed, such as in the case of a medical tourist.

WEAKNESSES OF THAILAND

In the recent years, Thailand has been clouded with political instability (red group versus yellow group) and terrorists bombings. This factor is one of the weaknesses to Thailand. Although, English is a mandatory school subject in Thailand but the number of fluent speakers remains very low, especially outside the cities. This poses as a weakness for Thailand in terms of language barrier. Just like Penang, the procedures for extension of the social visit pass in Malaysia are tedious.

OPPORTUNITIES FOR PENANG AND THAILAND

Encouragement by both governments contributed to the growth of medical tourism in Penang and Thailand. In

2005, the Ministry Of Health (MOH) of Malaysia has been given a special allocation of RM 1.65 million by the Finance Ministry to the Malaysian Society for Quality in Health (MSQH) for the accreditation activities of private hospitals. MOH also organized a workshop on branding and quality of services for 35 private hospitals in the country in December, 2006 followed by road tours and promotional trips to neighbouring countries. The reputation of medical services in Thailand has also been bolstered by various government sponsored promotional campaigns prominent among them, the amazing Thailand campaign highlighting the attractions of spas, hospitals and herbal products (Russell, 2006), launched in the wake of the government's decision to turn the country into a regional medical hub (The Nation, 2006).

There are about 77 million aging baby boomers in the US alone. Of this, 12% are not insured (Fraser Institute, 2007). In the US, these elderly patients are not getting the care they need and deserve, partly because their healthcare system has low reimbursement rates, focuses on treating short-term health problems rather than managing chronic conditions and lacks coverage for preventive services or for health care providers' time spent collaborating with a patient's other providers. Naturally, with lower price and a holiday package included, health tourism is one of the better alternatives in getting the medical care they need.

THREATS FOR PENANG AND THAILAND

Malaysia faces many threats in the health tourism industry. Among them are competition from neighbouring countries, caution about the quality of treatment and communicable diseases, such as the H5N1 viral infection and dengue. Coronovirus which gives rise to Sudden Acute Respiratory Syndrome (SARS) shocked Asia in 2003 when the virus infected 1,755 people in Hong Kong, and killed 299. The economy nose-dived as investors and tourists stayed away. Consequently economists pessimistically forecasted that the region's economy would deteriorate due to this SARS outbreak and its lingering presence (ADB, 2003). Apart from these, the quality of health care provided by Penang and also Thailand are also in questioned. Media in developed countries tend to portray developing countries like Malaysia and Thailand as health hazard countries. This negative view threatens the growth of medical industry for Penang and Thailand.

Thailand and Penang are both beautiful places with lots of travel destination, foods and shopping area for tourists. But, Penang tend to attract more patients from Indonesia especially Medan, as the culture, food and especially language in Penang is similar with Indonesia. Even the travel distance from Indonesia to Penang is much nearer. On the list of tourist arrivals into Penang, Indonesians have the highest number of tourist followed by Singaporeans, Chinese national, Japanese and the Americans. Some of the patients like Indonesian regularly visit these hospitals for quality and luxurious medical treatment in Penang. As for patients who come with their families, they can travel around because Penang and Thailand have beautiful beaches, seasides, lots of shopping complex and delicious food.

In medical industry, Penang offer high quality of services with reasonable and affordable pricing compared to other countries according to the Penang Health Association Chairman Datuk Dr. Chan Kok Ewe. In fact, Penang has steady growth of 15% in medical industry every year. A part from this, Penang provide 5 times lower cost compare to country like US and European countries without compromise quality of medical treatment and services (Penang medical tourism increase in revenue). Besides that the hospitals in Penang have highly educated doctors and nurses, as well as sophisticated and modern medical equipment and facilities. Most of the doctors are excellent with trained, educated and board certified from US, Europe and Australia. All private medical centres in Penang are strictly monitored and controlled by Ministry of Health with their approval of license. In addition, most of the private hospital in Penang achieved certification for internationally recognized quality standard and accreditation by Malaysian Society for Quality in Health (MSQH) (Penang medical tourism increase in revenue).

Sex reassignment surgery in Thailand is very popular around the world, both male to female and female to male surgeries can be performed in Thailand by some of the most experienced surgeon in Thailand with cost much lower than Western country. Other than this, the other popular medical treatment in some hospitals in Thailand is cosmetic/plastic surgery treatment, such as lip augmentation, breast augmentation, eyelid surgery, chin augmentation and liposuction and so on. Eyelid surgery, facelift, botox injections a common procedure performed by Thai doctors, as are rhinoplasty (nose jobs), abdominoplasty (tummy tucks), hair transplants and liposuction. The Treatments offered include breast augmentation, facial feminizing, body contouring and gender reassignment surgery, all of which are performed by surgeons utilizing some of the most advanced techniques in the field. Other category of medical treatment In Thailand include dermatology, dental, lasik, holistic/anti-aging, general treatment and etc. (Thailand medical tourism portal). The state of the art technology in the hospital and highly qualified medical professionals in Thailand help them to provide high quality and services to their patients.

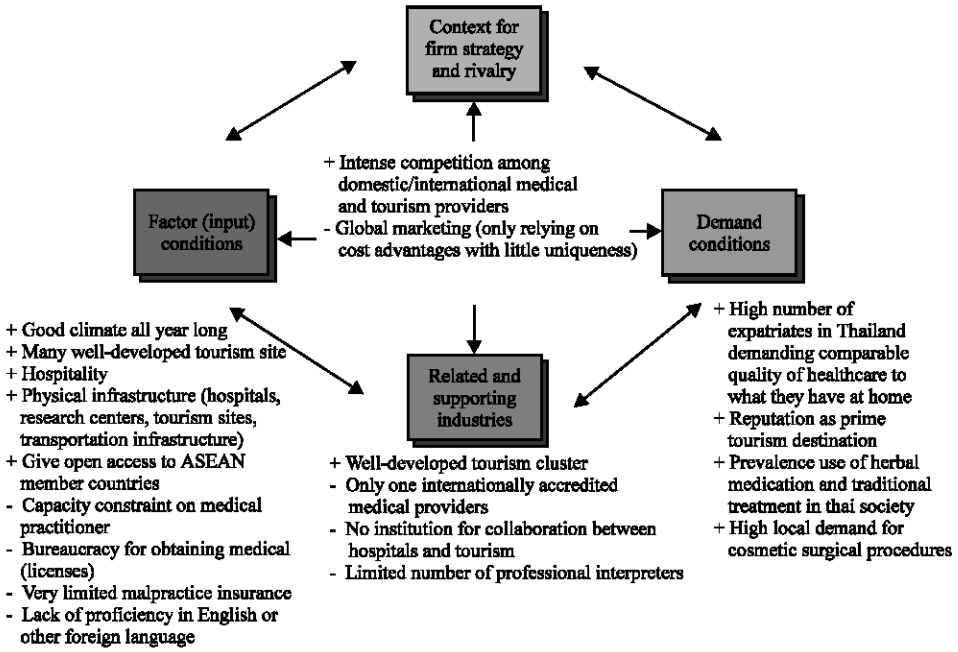

Fig. 5: Strategies analysis

Table 3: Type of medical treatment

Countries	Estimated earnings	No. foreign patients	Origins of patients	Specialty
Thailand (2006)	Bath 36 billion (US$ 1.1 billion)	1.4 million	Japan, USA, South Asia, UK, Middle East, Asian countries	Cosmetic and sex change surgery
Malaysia (2007)	253.84 million MYR (US$ 78 million)	341288	Indonesia, Singapore, Japan, India, Europe	Cardiac, cosmetic and orthopaedic surgery (knee replacement, hip replacement and so on)

Pocock and Phua globalization and health in 2011

Both Penang and Thailand has compatible cost compared with country like US for medical treatment likes knee replacement, spinal fusion, heart valve replacement, hip replacement and so on. With the compatible price in country like Thailand and Malaysia (Penang), foreigner from Indonesians, Singaporeans, Japanese and etc prefer to choose Penang or Thailand for their medical treatment as this may help them to save lots of cost. According to Woodmen (n.d.) >150,000 Americans, Canadians and Europeans packed their bags and headed overseas for nearly every imaginable type of treatment heart valve replacement in Thailand and other's of the medical treatment in country all around the world (Fig. 5 and Table 3).

How Malaysia can compete in this industry with other countries? Most of the doctors, surgeons or sub-specialist in Malaysian hospitals has possessing international recognized degree and with vast experience. Not forgetting their supporting staffs who can speak multi lingual.

Most of the big hospitals are located in town area and easily accessible by tourism patient by plain follow by taxi or public transport (e.g., MRT bus or train). On top of that through the arrangement by outside agency, the patient does not need to worry about the travel, transportation, treatment and accommodation too.

Most of the big hospital has possess modern diagnostic equipment's, such as ultrasound and MRI imaging, CT scan, PET scan, x-ray machinesetcto help examining a patient's condition.

There are some medical tourism package available at affordable price followed by medical fee in Malaysia which are among the lowest in the Asia region compared to countries like Singapore, Thailand and India. Private hospitals provide accommodation at affordable and the out-patient may just stay in nearby hotel ranging from 3-6 stars.

Malaysia known as tourist destination for its cultural, historical and natural attractions such as islands, beaches, green forest and mountain this definitely will attract the foreign patient besides of strict regulation in medical industry and quality of medical treatment.

CONCLUSION

The future of the medical tourism augurs well for both countries as medical tourism is predicted to become one of the fastest growing fields of the tourism industry in a number of developing countries.

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