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## Introduction

Medical tourism – also called health tourism or medical travel – is a rapidly growing industry catering to patients who travel across national borders to receive medical treatment. This treatment could be an elective procedure like cosmetic surgery, specialist treatments such as chemotherapy for cancer, major and minor surgeries, dental care, or even routine health checks. Very often, aside from receiving medical treatment, leisure activities are integrated into a package for the patient, thus the phrase "medical tourism."

In Southeast Asia, medical tourism is an increasingly common phenomenon. While comprehensive statistics for the industry are not readily available due to varying calculation methods, consider the following:

- In Thailand, according to the Kasikorn Research Centre, about 1.28 million foreigners visited hospitals in 2005, generating revenue of about 33 billion Thai baht. Also, Approximately 60 percent of patients treated at Bumrungrad Hospital and 40 percent of patients at Samitivej Hospital are foreigners.<sup>1</sup>
- The number of foreign patients in Malaysia tripled from 2001 to 2006, reaching nearly 300,000 and generating revenue of about US\$59 million in 2006. The Association of Private Hospitals in Malaysia projects that this number will grow by about 30 percent yearly until 2010.<sup>2</sup>
- About 410,000 foreigners visited Singapore for health care purposes in 2006, an increase of 28 percent for the period from 2004 to 2006.<sup>3</sup>

Overall, the number of medical tourists visiting Asia is expected to grow by more than 20 percent annually, creating an industry worth about US\$4 billion by 2012. Although India is estimated to account for about half of that,<sup>4</sup> the medical tourism market remains a sizeable opportunity for South East Asia. Singapore, Malaysia, and Thailand are already promoting their medical tourism industries, even as the market continues to change and evolve. Gaining a clear picture of the industry's drivers, potential, and risks will be critical to any efforts to capitalize on this burgeoning market.



<sup>1</sup> Webpage http://www.thaiwebsites.com/medical-tourism-thailand.asp accessed 5 Sep 2008.

<sup>2</sup> Webpage http://www.tourism.gov.my/corporate/mediacentre.asp accessed 5 Sep 2008

<sup>3</sup> Webpage source: http://blog.newmedicalhorizons.com/2007/08/dr-jason-yap-interview-singapore.html accessed 20 Jul 2008.

<sup>4</sup> Webpage http://www.healthtourisminasia.com accessed 27 June 2008.

## Why medical tourism?

## Affluence, access, and age

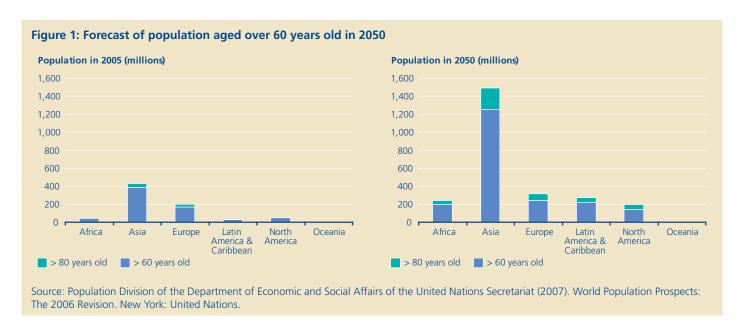
There are many factors contributing to the growth of medical tourism in recent years. In Asia, overall economic growth has yielded significant technology advancement in communications, providing better access to health care information and improved logistics. Health care standard convergence, increased cost efficiency, and the increasing adoption of sophisticated medical technology are also contributing factors.

The rising affluence of the middle class is also playing a significant role. More patients are seeking and are able to afford higher quality medical care. These patients, who are part of an overall aging population in Asia, are willing to travel to access specialized treatment or better technology not available in their own country. The expansion of the travel industry and of budget airlines has also facilitated medical tourism by making travel easier and cheaper within the region. The pool of patients seeking treatment overseas, therefore, expands naturally and drives the growth of the medical tourism market. In Singapore, while the traditional source of patients in the past came from Indonesia and Malaysia, the pool has expanded to include such Asian countries as Bangladesh, Vietnam, and Myanmar – with some patients coming from as far away as the Middle East and the Ukraine.

In the West, access and affluence are fueling medical tourism as well. But while patients in these areas may have the ability to pay for treatment, access can be problematic. In many developed European countries, the lack of access in constrained health care systems is resulting in long wait times for procedures. This is driving patients towards the option of treatment overseas.

Similarly, in the United States, the health insurance crisis is also limiting access, with about 47 million citizens without health insurance in 2006, according to the U.S. Census Bureau. In fact, it is reported that more health insurers in the United States are offering packages with the option to receive cheaper treatment in overseas centers. Even more telling is the founding of the Medical Tourism Association, which brings together U.S. hospitals, medical facilitators, and insurers. While there have been many media reports regarding the potential for this group to address unmet healthcare needs, they have yet to be translated into actual results in the Asian medical tourism industry.

There are also developed countries that have lagged behind in the adoption of technology that would provide quality care to an increasingly sophisticated population. And with the retiring baby boomers and an overall aging population, Western economies will continue to strain the healthcare systems in their countries. This is true globally and also applies to the population in Asia as lifespan increases with improvement in basic healthcare.



### The role of cost and quality

Cost is, of course, a major driver in the medical tourism industry. The price for a medical procedure in Asia is sometimes only 20 percent to 30 percent of that in the United States or United Kingdom. This cost differential together with a sophisticated travel industry ensuring ease and affordability of travel, provides the backbone of medical tourism.

However, the element of cost includes more than treatment, travel, and accommodations. Other elements to be taken into consideration include productivity loss due to untreated medical conditions, turnaround time, and total recovery time for treatment. Hence, the industry promoters need to consider all elements of cost in communicating cost benefits.

Another less mentioned but critically important reason for the growth of medical tourism in Asia is the improvement in the healthcare standards and available technology. Many hospitals in South East Asia, in particular Malaysia, Thailand, and Singapore, have adopted and invested in the latest medical technology to provide state-of-the-art care for patients who can afford such services. Many facilities now:

- Employ U.S. or European-trained physicians and care teams
- Use clinical information technologies
- Use evidence-based clinical guidelines
- Are affiliated with reputable, top-tier U.S. and European provider organizations
- Coordinate pre- and post-discharge care

- Provide for adverse events requiring services unavailable in the facility
- Are certified for safety and quality by the Joint Commission International, which accredits hospitals around the world, or another accrediting institution.<sup>5</sup>

Although cost and quality is prompting increased medical tourism from the United States, many factors may temper growth, including supply capacity constraints in foreign countries; a decision by U.S. health plans to not cover offshore services or to compete more aggressively with outbound programs; and potential government policies that might curtail demand. Additionally, many large U.S. health insurance providers have not yet embraced medical tourism because they are worried about potential lawsuits linked to bad outcomes.<sup>6</sup> As medical tourism increases, however, these insurers must find ways to cope with consumers who look to them for liability and to address other issues. Providers, therefore, need to anticipate and scale their services to meet the potential needs of this group of patients. Otherwise, they will miss this opportunity by not being able to cope with a large influx of patients with very different needs as well as fulfill the documentation requirements that may be imposed by payers and insurers.

With increased medical standards and cost efficiency in South East Asia, paired with accessibility issues in home countries, medical tourism will continue to flourish. However, companies and providers need to develop strategies and business processes to support the needs of this rapidly growing industry.

Figure 2: Table illustrating the cost of various surgeries in USA and Asia

(All in USD)	USA	India	Thailand	Singapore
Heart bypass	80K-130K	6.7K-9.3K	11K	16.5K
Heart valve replacement	160K	9K	10K	12.5K
Angioplasty	57K	5K-7K	13K	11.2K
Hip replacement	43K	5.8K-7.1K	12K	9.2K
Hysterectomy	20K	2.3K-6K	4.5K	6K
Knee replacement	40K	6.2K-8.5K	10K	11.1K

Source: Medical Tourism Magazine, Issue 2

<sup>5</sup> Medical Tourism: Consumers in Search of Value, Deloitte United States publication, 2008.

<sup>6</sup> Medical Tourism: Consumers in Search of Value, Deloitte United States publication, 2008.

# Medical tourism going forward

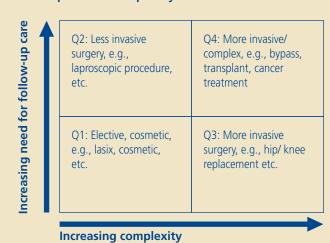
With medical tourism now firmly taking root as a treatment option around world, the market continues to evolve. Changes in the type and profile of the patients can potentially influence integrated package offerings, including networks with primary care providers from the countries where the majority of patients originate; after-care processes; hospitals' electronic medical records systems; and billing systems. All of these hold enormous potential for medical tourism and will have a significant impact on plans to develop this market.

## The changing profile of patients

Medical tourists can be categorized based on the complexity of procedures or treatments and the extent of follow-up care needed after leaving the country where treatment was received.

In the past, many medical tourism destinations targeted patients in the lower left quadrant (Q1), competing on accessibility, cost efficiencies, and the tourism angle. These patients required little or no follow-up care after the medical procedure and upon return to their home country. Increasingly, the patient base is broadening and hospital providers are targeting the patients in the other quadrants, where more complex procedures and follow-up care are required. The aging population profile and health care access issues will attract more and more patients from these quadrants. Additionally, health care cost pressures coupled with wider acceptance of medical tourism by payers and insurers will require health care providers

Figure 3: Classification of patients by requirement for follow-up care vs. complexity of treatment



in the destination country to be equipped to cater to patients requiring more follow-up care. They will also have to integrate aftercare with primary care providers overseas in the patient's home country.

Currently, there are a number of programs that guide and assist medical tourists and can help address issues of aftercare. Some programs facilitate the overall process, such as Commonwealth Travel in Singapore, which helps with planning and organizes logistics. CanHOPE, offered by Parkway Group's hospitals in Singapore, is a non-profit cancer counseling service for those receiving cancer treatment abroad. CanFRIEND, also offered by Parkway, is a support program for patients and family members. While the medical professionals behind these programs are mainly Singapore-based, their presence has expanded overseas to patients' home countries, such as Thailand, Indonesia, and Cambodia. To ensure foreign patients enjoy the continuum of care aside from the acute treatment phase, the center has also helped set up patient support group programs abroad.

### The new service delivery models

As today's patients travel to medical tourism destinations due to access and cost issues, many private hospitals in Asia are expanding beyond national borders. This expansion allows them to tap directly into the pool of patients in the "subsidiary" countries. Outreach also helps establish a referral framework for the main hospital in the home country and provides the opportunity to balance patient loads against medical resources availability. This overseas expansion and investment necessitates providers to, among other matters, understand the operating environment of the chosen country, be familiar with the medical legislation in place, and anticipate the healthcare needs of the country's population.

Supplementing this outreach, institutes in Asia are now benefiting from institutions reaching out to them from abroad. Memorial Sloan-Kettering Cancer Center, one of the world's premier cancer centers, has partnerships with facilities in Singapore and Cornell Medical School has opened a research and advisory institute in Korea.<sup>8</sup>

<sup>7</sup> Medical Tourism: Consumers in Search of Value, Deloitte United States publication, 2008.

<sup>8</sup> Medical Tourism: Consumers in Search of Value, Deloitte United States publication, 2008.

## Governments as partners in development

About half a million U.S. citizens traveled abroad to receive medical treatment in 2007, while 1.29 million citizens from the United Kingdom had dental treatment outside of the country.9 With these numbers growing, the contribution to national economies by medical tourism will increase accordingly. As a result, government agencies in Asia are becoming more active in helping to promote the medical tourism industry. An example of this involvement is SingaporeMedicine, a multi-agency government-industry partnership that includes the Singapore Ministry of Health, the Economic Development Board (EDB), and International Enterprise (IE) Singapore. SingaporeMedicine is working with industry providers to strengthen the country's position as a leading medical hub in Asia through publicity and branding of the healthcare industry's quality and standards.

Other groups have also been taking action to promote medical tourism. The Tourism Authority of Thailand's official website offers information on medical tourism and has a direct link to a page promoting medical tourism in Thailand. The Malaysia Tourism Promotion Board and Ministry of Health in Malaysia works with the Association of Private Hospitals in Malaysia to promote itself as a destination for medical tourism. The government has also increased the allowed stay under a medical visa from 30 days to six months. And the government of Singapore has formed a collaboration of industry and governmental representatives to create a medical hub in Singapore. <sup>10</sup> In most instances, these agencies represent their national industry and support the marketing efforts of healthcare providers packaging services to attract tourists. They also participate in conferences and events to actively market the destination.

However, the medical tourism industry is currently largely driven by the private sector, and government agency support is largely through information provision. Further involvement of government agencies could improve the competitive advantage for a country's medical tourism providers in terms of their marketing efforts. For the providers, this type of national endorsement from a government agency could increase the confidence of patients preparing to travel to the country for treatment.

### Balancing growth and risk

The rapid growth of the medical tourism industry creates its own set of risks. More healthcare providers, including individual practitioners, are getting involved. Therefore, quality and standards of medical procedures may vary widely due to the diverse set of providers. In this Internet age, negative news reports are picked up quickly across borders, as displayed by the news article in the 26 July 2008 Singapore Strait Times discussing a Malaysian doctor being sued for the death of a patient.

#### Briton sues KL doctor over wife's death

KUALA LUMPUR — A British man, whose Malaysian wife died while undergoing surgery to remove excess fat in her abdominal area, is suing the cosmetic surgeon and anesthetist for negligence in her death.

Singapore Strait Times 26 July 2008

Individual cases of medical procedures gone wrong may create adverse publicity that could quickly spin out of control, affecting the industry's reputation and undermining the confidence of patients. Currently, there are no resources or professional boards available to verify the claimed experience of the physician and word-of-mouth is the most important channel. Therefore, bad publicity could affect a country's overall reputation, having an impact even on the well-established hospitals and providers.

Publicity also extends to the safety and overall desirability of a destination. Recent media coverage of the political situation and mass demonstrations in Bangkok are examples of adverse publicity.

### MFA advice: Avoid Bangkok

SINGAPORE — Yesterday, the Singapore Ministry of Foreign Affairs (MFA), along with several other countries, advised citizens to postpone travel to Bangkok after the Thai government declared a state of emergency in the capital following deadly street clashes overnight.

Singapore Strait Times 3 September 2008

<sup>9</sup> Health Tourism, The growth phenomenon, Asia Hospital and Healthcare Management Magazine, Issue 16, 2008.

<sup>10</sup> Medical Tourism: Consumers in Search of Value, Deloitte United States publication, 2008.



Based on information from sources in the industry, both the coup two years ago and the current situation in Thailand did not significantly affect foreign patient arrivals. However, statistics from public sources showed that tourist arrivals in Thailand overall dropped significantly. While the real situation may not always be as severe as portrayed by the media, continued negative publicity on the perceived state of political stability and safety could cause patients to hesitate to travel to the country in the long run. While the industry cannot control such issues, providers should consider these factors and mitigating strategies in their business planning.

The rate of growth of medical tourism will also be restricted by the availability of healthcare professionals within individual countries. Medical tourism is usually provided by the private sector through premium hospitals that cater to wealthy local patients and "cash rich" foreign patients. As the private sector grows exponentially, there will likely be an outflow of healthcare professionals from the public sector seeking better opportunities. This would further stress the already burdened public healthcare infrastructure in Asia, possibly resulting in policy makers taking steps to limit the movement of healthcare professionals. It will be important for the private sector to work closely with governments to support the growth of medical tourism by ensuring availability of sufficient healthcare professionals.

Coordination between private and public healthcare needs may include gauging student enrollment in medical, pharmacy, nursing and other medical related programs of local universities. Taking steps to accept and attract foreign trained professionals may be necessary as well. Otherwise, the growth potential of medical tourism is limited and cost would escalate due to resource constraints. Some experienced providers like Parkway Group in Singapore have established an educational arm that conducts training courses for healthcare professionals in order to ensure quality and supply, supporting their own growth needs. As cost savings are one of the key drivers for medical tourism, a country experiencing shortages of resources and skills would lose competitiveness and may be overtaken by other more cost-effective destinations.

<sup>11</sup> Asia News Network, http://www.asianewsnet.net (accessed 15 Sep 2008

based on article from The Straits Times, 13 Sep 2008).

# Planning and forecasting: the globalization of healthcare

The current pace of the medical tourism industry's growth and development is reflective of the pace of globalization in general. The issues of outsourcing, infrastructure, talent, and standardization that influence the global economy overall will also play integral roles in the medical tourism industry going forward. This is evident in the other term often used to describe medical tourism – global healthcare, that is, a manifestation of globalization and a natural stage in the life cycle of the healthcare industry.

## Lessons from outsourcing

There are many parallels between the outsourcing of manufacturing and other processes and medical tourism, with each driven by cost efficiencies, technological advances, and a convergence of standards globally. Outsourcing models have already started with the services associated with electronic medical records; hospitals in the United States have streamlined and are now using more cost-effective services provided by medical companies based in India. Therefore, companies involved in medical tourism could take some lessons from outsourcing in other industries in planning and forecasting their business opportunities.

When IT outsourcing began about 15 years ago, the market in India was relatively unsophisticated in the areas of business practices, governance, and quality controls. Even basic infrastructure like networks was inadequate. However, the industry was able to transform itself by aggressively investing in infrastructure and rigorously applying the Western model. Today, the leading Indian IT outsourcing companies are ahead of the curve and have set a global standard for efficiency and quality. One of the key challenges they faced was how to introduce Western methods without destroying the cost advantage they possessed over Western competitors. One way they did this was by adopting the Lean Six Sigma concept: Lean to strip out waste and Six Sigma to continually improve quality.

Similarly, Lean Six Sigma methodology can be applied to providers in the medical tourism industry. The inherent nature of health care requires a certain level of predictability in the outcome and quality of the services focused on patients. The Six Sigma concept definitely supports providers in minimizing process output variation and refocusing processes on patients. Consequently, Lean Six Sigma can certainly be used by health care providers in the medical tourism industry to drive quality and consistency in both front- and back-end processes while maintaining cost efficiency.

# Enabling infrastructure and human capital

Globalization has put pressure on many developing economies in terms of infrastructure. Likewise, medical tourism must gauge its impact on public health care infrastructure. If the growth of the private sector drains resources in the public health care infrastructure, as cited above, it may result in policy changes that could limit growth opportunities. It will take both the involvement of the private sector and government policy makers to ensure medical tourism's continued growth. A closer examination of that growth potential, resource requirements, and impact on public health care infrastructure should facilitate better business decisions and help determine the strategic direction for the service providers in the medical tourism industry.

The importance of human capital and talent management is also an issue faced by all industries today. The quality of the healthcare professionals available is critical to the delivery and maintenance of quality medical service. In the South East Asia medical tourism industry, this is particularly critical, especially with the global shortage of nursing staff. Nurses from Asia are being lured away to the United States and Europe by better pay packages and benefits. How can the industry structure compensation and performance-based incentives to retain and motivate health care professionals? Providers need to have a strategy that will address the supply of these scarce human resources. What is the market expectation now and how will it change as the industry evolves? Providers also have to understand and address the potential gap between the current and future availability of talent.

### The customer experience

Globalization of health care will also require further transparency and standardization of medical outcomes and quality of care. Receiving safe, quality care is a primary concern for patients considering medical treatment abroad. Presently, hospitals and medical facilities involved in medical tourism voluntarily seek JCI accreditation. Such accreditation gives consumer and employers, especially those in the United States, a level of confidence that the services provided are comparable to those available back home, especially if it is accompanied by an affiliation to a reputable U.S. teaching hospital, such as those mentioned above.

Transparency and standardization are also critical in terms of legal protections. Medical insurance for licensed physicians may be limited to their country of practice and where they are licensed. While local patients can seek recourse for malpractice via local courts and the relevant medical boards, this avenue is prohibitive for foreign patients. As healthcare delivery globalizes, whether any form of international arbitration may be established remains to be seen. An example of the drive towards standardization by the industry is the "Quality of Care" project, which is spearheaded by the Medical Tourism Association in the United States. However, results from the project are yet to be clearly defined and their expected impact is uncertain. Pursuing significant growth may involve a more concerted industry-supported framework on standards and patient protection.

For patients to feel safe about traveling abroad for medical treatment, medical excellence has to be a given. Providers in the industry need stringent standards and continuous review of internal processes to ensure that medical excellence and differentiate themselves from their competitors. The medical tourism industry is still maturing and it is expected that there will be further evolution of the service delivery model in the years to come.



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