

Chapter 2

Developing Health Service Hub in ASEAN and Asia Region Country Report on Healthcare Service Industry in Malaysia

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CHAPTER 2

Developing Health Service Hub in ASEAN and Asia Region Country Report on Healthcare Service Industry in Malaysia

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The health status of Malaysians has been comparable to some developed country, with her successful dual healthcare system and equal shares of healthcare financing. The government pro-industry orientation has boosted up the tourist industry in general and health tourist industry specifically, which has shown tremendous achievements since the last decade. Malaysia is the preferred destinations for medical tourism nowadays, given the low exchange rates, highly qualified medical specialist, high technology medical devices, international credentialed safety and quality services, and the comparable medical cost around the regions. Her multi ethnics, various respectable cultures, beautiful country with peaceful and politically stable environment, good climate around the year, friendly and English speaking population are among other factors that have made Malaysia popularly visited for health reasons. The market attracts not only the people from neighboring countries like Indonesia and Singapore, but also from Japan. The recognition of halal hub in Malaysia had widens the market to clients from the Middle East and African Muslim countries.

1. Introduction

Malaysia is unique with her multi-ethnic population and a diversity of culture. In 2009 Malaysia with a population of 28.3 million, had reached the level of health status that it can be proud of. The incidence of diseases related to lifestyles is at par with the developed world. The life expectancy of females and males, were 76 years and 72 years, respectively while the maternal and infant mortality rates were 0.3 and 6.4 per 1000 live births, respectively. In 2009, the principal cause of death for both females and males was ischemic heart disease (IHD) and cerebrovascular diseases (CVD), and the top 3 of disease burden were IHD, mental illness, and CVD (2006). In general, the health status of Malaysians is better than that of other developing countries and is comparable to the developed countries like Singapore. The total expenditure on health is only 4.45% of GDP (2009).

The achievement of health status of Malaysia was associated with its economic development. Since its independence in 1957, Malaysia's economic record has been one of Asia's best. Real gross domestic product (GDP) grew by an average of 6.5% per year from 1957 to 2005. Economic performance peaked in the early 1980s through the mid-1990s, as the economy experienced sustained rapid growth averaging almost 8% annually. In 2009 the GDP grew slightly low at 5.4%, amounting to RM562.6 billion. Both foreign and domestic private investment played a significant role in diversifying and modernizing the economy. Once heavily dependent on primary products such as rubber and tin, Malaysia today is a middle-income country with a diversified economy based on services and manufacturing. In 2009, the service and manufacturing sectors contributed to 55% and 30% of the total GDP, respectively. Malaysia is one of the world's largest exporters of semiconductor components and devices, electrical goods, solar panels, and information and communication technology (ICT) products. The per capita income stood as USD6,916 in 2009, and IN purchasing power parity terms estimated at USD17,549.

In order to be a developed country by year 2020, Malaysia undertook several strategies since the early nineties; some were successful while others were not realistic and had to be abandoned. Under the 10th Malaysian Development Plan, a new and comprehensive approach had been initiated to transform Malaysia into a

high-income nation by 2020. The Vision 2020 implemented through a strategy, named as the Economic Transformation Program (ETP), has been widely publicised by the Government and frequently debated by the public.

The programme provides strong focus on a few key growth engines; National Key Economic Areas (NKEAs) that would bring Malaysia boost up its economy and achieve the Vision 2020. The initial 12 NKEAs are expected to make substantial contributions to Malaysia's economic performance, and they receive strong public investment and policy support. The NKEAs are; Oil, Gas and Energy; Palm Oil; Financial Services; Tourism; Business Services; Electronics and Electrical; Wholesale and Retail; Education; Healthcare; Communications Content and Infrastructure; Agriculture; and Greater Kuala Lumpur/Klang Valley. The ETP is led by the private sector, while the Government continues to play the primary role of a facilitator. Most of the funding comes from the private sector (92 percent), with public sector investment being used as a catalyst to spark private sector participation.

To ensure that the program is carried out, 131 entry point projects (EPPs) were identified which outlined concretely the steps or actions required to grow the economy. The EPPs and other business opportunities identified under each NKEA are anchored on their contribution to Gross National Income (GNI); they were selected based on public and private sector contributions. Any public spending will be allocated on the basis of maximising GNI per ringgit of public expenditure. Finally, the ETP was designed to be rigorous and transparent, guided and monitored by the PEMANDU (Performance Management and Delivery Unit) within the Prime Minister's Department. The Unit reports to government leaders, the business community and the public on the progress of ETP in general, and EPPs, specifically.

The implementation of the ETP if successful will see Malaysia's economy undergo significant changes towards developed nation. Malaysia will continue her shift towards a service-based economy, with the services sector contribution growing from 58 percent to 65 percent by 2020. The expected incremental GNI impact in 2020 is RM66.7 billion with more than 3.3 million new jobs being created spread across both the urban and rural areas. The nature of these new jobs will result in a shift towards middle and high-income salary brackets. Greater Kuala Lumpur/Klang Valley will be transformed into a world-class city. Finally, growth will be achieved

in a sustainable manner, without cost to future generations, through initiatives such as alternative energy capacity and environment of conservation.

Tourism and Health are among the 12 NKEAs that will be discussed in this report since they are interdependent. On tourism, Malaysia is one of the world's top destinations, in the top 10 in arrivals and top 15 in global receipts. Tourism is our fifth largest industry, generating RM37 billion in GNI in 2009. The industry is expected to continue growing with arrivals rising from 24 million in 2009 to 36 million in 2020. The healthcare industry too has become a powerful engine of economic growth, due to demographic shifts such as extended longevity and a rise in lifestyle diseases, such as hypertension, cardiovascular ailments and diabetes. Malaysia's spending on healthcare, at less than 5 percent of GDP, is above her regional peers, and public spending is a disproportionate contributor to healthcare costs. Currently, the sector contributes to RM15 billion in GNI.

Given the potential economic gain from health tourism, the Malaysian Government has taken the lead in promoting the concept of health tourism. The Government has made aggressive efforts to market health tourism abroad via campaigns, road shows, and trade and investment missions so as to create and promote awareness of Malaysia as a medical destination. Countries in the Southeast Asian region and those in the Middle East have been identified by the Government as potential markets to sell the country's health tourism.

This country report is made in response to the call by EAC to propose Malaysia as the health service hub for the regions of ASEAN and EAST ASIA, if not on its own, perhaps together with Singapore and Thailand. The objectives of this report are to:

1. Undertake a SWOT analysis for the health care and wellness sector as well as in the creative services sector in selected countries in the ASEAN.
2. Undertake an analysis of policies/regulatory/institutional support for the above mentioned services sectors in selected countries in the ASEAN.
3. Develop a profiling of firms which are considered key players for the designated services industry.
4. Provide recommendations drawn from the results of the SWOT analysis as well as from the results of the analysis of policies/regulatory/institutional support on how country(s) could enhance its respective positions to be part of the global service hub in the region.

Some definitions:

Health Tourism: “the organized travel outside one’s local environment for the maintenance, enhancement or restoration of an individual’s wellbeing in mind and body” (Carrera and Bridges). It includes medical tourism, traditional and complementary medicine, spa and wellness salon.

Medical Tourism: a subset of health tourism, “the organized travel outside one’s natural health jurisdiction for the enhancement or restoration of individual’s health through medical interventions” (Carrera and Bridges).

2. Methodology

Numerous reports on medical tourism had been prepared by the Government and by the private sector affiliated to health industry on medical tourism. Certain sections of this report were actually the compilation of those reports and the authors would like to acknowledge the tremendous work performed by them under each section. Under the SWOT analysis section, the cooperation of all the participating agencies (government agencies, associations and industries) in the interview sessions is much appreciated. The findings of the interviews with various agencies had been grouped according to sub headings and were actually the summary of all feedback and opinion sought. The recommendations given were of the authors themselves and they were made based on authors’ perception on the applicability and the capability of the agencies in Malaysia to implement them.

3. Malaysia and its Healthcare System

To be the hub of health industry in the region, Malaysia has to prove that the welfare of her people with regard to health is well looked after before it can open up its health industry to the region or the world. The evidences are not difficult to see; the status of her people’s health, her healthcare system and the financing of her healthcare system are well developed and Malaysians can be proud of them.

Malaysia practices a dual healthcare delivery system. Both the public and private sectors are important players in Malaysia's healthcare delivery system. About 70% of healthcare services are provided by the public sector, and is considered one of the best in the region. The public sector is heavily subsidized and it focuses on healthcare promotion as well as on rehabilitative and curative care at the primary, secondary, and tertiary levels. The rapidly-growing private sector, on the other hand, offers mainly curative and rehabilitative services, and is financed strictly on a non-subsidized, fee-for-service basis. There are three types of public hospitals namely the general hospitals, district hospitals and specialised/referral medical institutions such as the National Respiratory Institute. Each of Malaysia's fourteen state capitals has a general hospital, with 600 to 700 beds each providing a full range of healthcare service. Because of their size, comprehensive range of care and low charges, general hospitals are the most preferred public hospitals in Malaysia. District hospitals, which are much smaller, consist of 250 to 400 beds each, providing more basic diagnostic and curative healthcare service. Finally, the specialised medical institutes/centres are dedicated for the treatment of specific diseases, such as heart diseases and tuberculosis. A network of health clinics provides primary healthcare to the population and a comprehensive referral system providing secondary and tertiary care is also in place in district and urban hospitals. Generally, the majority of big public hospitals together with 8 private hospitals are concentrated in urban areas, and they contribute to a total of 12,216 hospital beds. Nevertheless, Malaysia can be proud of its equitable healthcare delivery services which provide accessibility and balanced distribution of the healthcare facilities, comprehensiveness in its healthcare package, and the universal coverage of its healthcare system.

With the exception of some areas in Sabah and Sarawak, the geographical accessibility and transport system are good. The healthcare financing system of Malaysia is also a dual contribution and similar proportion; tax based public and private out of pocket or private health insurance financing. The public and private share of the total healthcare expenditure has been almost in equal proportions in the last decade.

The provision of public healthcare services is the responsibility of various ministries and local authorities, with the Ministry of Health (MOH) as the main

health care provider. It provides preventive, curative, public health services and rehabilitative services. The Ministry of Higher Education provides 3 teaching hospitals, which are affiliated to 3 public medical schools in the country. They provide hospital services, training of health personnel and research on health. Other Government agencies involved in care provision include the Ministry of Defence which maintains health facilities mainly catering to the health needs of the armed forces personnel and their families, the Department of Aboriginal Affairs of the Ministry of National Unity and Social Development which provides health services for the aborigines and the Ministry of Housing and Local Government which provides environmental health services within the local council boundaries. The Department of Social Welfare from the Ministry of Women, Family and Community Development provides long-term care for the indigent, old age in several Welfare Homes while the Ministry of Home Affairs manages several drug rehabilitation centres in the country (MOH provide medical service).

Consequent upon the equal roles of the public and private healthcare delivery services, there is a high competition for health professionals, especially on doctors/specialists between the public and private hospitals. The high pay and the better working environment at the private hospitals are the pulling factors for the private hospitals. In 2005, the doctor to population ratio for the nation was 1 doctor to 1387 populations. With her current population, Malaysia aims to achieve doctor to population ratio of 1:400. However, for the metropolitan Kuala Lumpur, the ratio had reached 1:397 in 2005.

The government had come up with various strategies to ensure that there is a fair distribution of doctors in the 14 states of Malaysia. In 2009, based on the annual practicing certificates issued by the Malaysian Medical Council, there were a total of 22,355 doctors registered, with 55% and 45% of them in the public and private sectors, respectively. In addition to increasing the intake of medical students in public and private universities (by a total of 34 medical schools in 2011), “high performance” students are also sent abroad to study medicine at several medical schools recognised by the Public Services Department, Malaysia. This is possible since the government offers full scholarships to all sponsored medical students to the public universities and those sent for study at Egypt, Jordan, Russia, Australia, New

Zealand and United Kingdom. Non-sponsored medical students at local private universities may apply for a low interest study loans, which they have to pay only when they start working.

Malaysian doctors working abroad had been encouraged to come back to Malaysia. In early 2000, the Government had offered various incentives to those who came home i.e by offering AP (approval permit) to import cars, exempted from house-man ship if they had been working as medical officer at overseas hospital, and also those with experience working as specialists overseas are freed of the 3 year compulsory service at public hospitals. Additionally, if their spouse is an expatriate, she/he will be given permanent resident status. There is also no restriction to offer foreign doctors to practice in Malaysia, as long they are able to register with the Malaysian Medical Council, i.e they must be graduates from recognized medical schools. They also must be under the supervision of a Malaysian specialist for six months before being allowed to practice.

The government allows locum practice from public to private, provided the locums are conducted at their own workplace and out of official working time; this means that doctors working at the public hospitals can earn extra income while serves the Government. The public hospital also invites specialist from the private hospitals to practice at the public outpatient clinics or team up with the public hospital clinicians in performing complex operation or special procedures on unique cases. Thus, both the public and private patients can benefit from the expertise of super specialists for unique and complicated cases (a good example was the team up of cardiac surgeons from National Heart Institute and Kuala Lumpur Hospital for the first heart transplant in Malaysia). As a social contribution, all private hospitals are mandated to open up one or two wards for the poor or economic class wards so that those who could not afford to pay for the luxury "hospital beds", but need the expert services from the specialist available only at the private hospitals, are able to get their services (usually the specialist would charge very little for this service; again as part of their personal social obligations). A good example was in the case of liver transplant which was performed by the specialist from Subang Jaya Medical Centre on a patient from the general hospital.

The Government had also allowed university hospitals to open private wings, granting the specialists to charge private patients for elective operations performed under the private wings, these are normally conducted during weekends. This consent had helped reduce the salary gap between specialists at the public and private sectors.

4. An Analysis on Overall Business Climate of the Sector

Over the past several decades, the tourism industry has become one of the fastest growing industries within the service sector. Backed by a steady rise in the number of tourist arrivals, especially those from countries like Singapore, Thailand, China and India, the tourism industry has rapidly become one of the prime sectors in the Malaysian economy. In a statement by Tourism Malaysia, in 2009 the country recorded a 4% increase in the number of inbound travellers, making tourism industry the second largest income spinner for the national economy and contributing nearly RM43 billion to the nation's Gross Domestic Product. The focus on the tourism sector as potential growth areas will certainly help to diversify the economy and reduce the over-dependence on manufacturing sector, which has suffered setback in these times of global economic uncertainty.

Previously confined to travel packages and tourist attractions, the tourism industry now covers a variety of new sectors, which the government has identified as key growth areas. Twelve potential areas for growth, including tourism and health tourism, have been earmarked by the government under the NKEAs (National Key Economic Areas) which are to become the key money spinner for the country. The government realises the large economic gain that could be reaped through health tourism. Neighbouring countries like Thailand and Singapore have already been aggressively promoting health tourism through various medical care packages. While the idea of mixing leisure together with healthcare is not a new concept in the tourism scene, health tourism is still relatively new in Malaysia and is in the early stages of development.

According to the Health Ministry, all healthcare cum-tourism activities, which can generate wealth to the local economy, are categorized under health tourism. Thus any healthcare programme, which covers medical care, wellness and fitness, are

included as components of health tourism. Simply put, health tourism can also be defined as travels for the purpose of enhancing the well-being of the mind, body and spirit of the individual, families and groups.

The focus on tourism and medical tourism was a right move. Tourist arrivals increased by 300% from 5.5 million in 1998 to 22.1 million in 2008, accompanied by increase in medical tourist arrivals by 856%; from 39,114 to 374,063. Revenue per patient has also grown 2.5 fold from 2 in 1998 to 41 in 2008, while the private hospitals' revenue grew from RM58.9 million to RM299.1 million in 2003 and 2008, respectively. This signifies the growth of foreign confidence in the advanced medical care services in Malaysia. Most international patients come from neighbouring countries, with less developed medical infrastructure (mainly Indonesia), and other developed countries from the West. Malaysia is also a preferred destination for these international patients due to the higher costs in Singapore and unstable political scene in Thailand.

The Malaysian Travel Health Council forecasts that Malaysia will receive about 689,000 medical tourists by 2012. The Ministry of Health reported that Malaysia has achieved US\$101.65 million from the medical tourism sector in 2010. The revenue is expected to further grow to about US\$ 116.5 million in 2011. The main markets for medical tourism have been Indonesia (72.0%), Singapore (10.0%), Japan (5.0%) and West Asia (2.0%). The majority of them travel to Penang (61 %), while Malacca and Kuala Lumpur received 19 percent and 11 percent of health tourists, respectively.

Malaysia is now looking for more new markets for medical tourism, competing especially with her neighbouring countries like Thailand and Singapore which have aggressively promoted health tourism. Malaysia is now focusing particularly on the Middle East market, given the large annual medical expenditures in these countries. As mentioned by the Malaysian Ambassador to Abu Dhabi, the United Arab Emirates alone spent RM3billion of medical expenses in 2002. With the advantages of being a Muslim country (giving some indication of Islamic practices at hospitals), and the recognition of Malaysia as one of the 'halal'hub in this region, Malaysia is able to ride on its Islamic credentials to attract medical patients from the Middle East. The government had long realized that Middle East is a lucrative market that could contribute substantially to the local health tourism industry, hence even in 2001, the

government had already undertaken trade missions to several Middle-Eastern countries to market its health tourism services.

Also working towards Malaysia's advantage is the current geopolitical situation. Malaysia is a preferred destination for medical tourists from countries, like United Arab Emirates, Kuwait, Bahrain and Bangladesh. The government has also organized trade missions to Southeast Asian countries, like Myanmar and Vietnam, to promote the Malaysia as a health tourism destination. Down the pipeline, MATRADE has announced plans to organize healthcare missions to Cambodia and Brunei.

So far, the efforts have been rewarding, based on the increasing number of foreign patients entering the country to seek medical treatment. A large majority of foreign patients, especially those from Indonesia, flock to Penang, Malacca and around Klang Valley to seek medical treatment in view of the availability of high quality healthcare facilities at competitive prices in these areas. Besides being hot tourist spots, both Penang and Malacca are also favourite destinations for patients from Indonesia mainly because of the proximity of the two states that are in close proximity to Indonesia. In recent years, the health tourism industry has also gained prominence in other states including Johor, Sabah and Kelantan.

The Malaysian government has set up several referral gateways to assist medical tourists. One of them is the health tourism website that assist medical tourists globally. The Malaysian Healthcare Travel Council (MHTC) was established by the Government of Malaysia to formulate strategic plan activities for Malaysian healthcare service industry. The council consists of various relevant government agencies (Ministry of Health, MATRADE, MITI) and private bodies (MSC, APHM) to promote smart partnerships between the government and healthcare travel industry. Serving as a focal point on all matters relating to healthcare travel, the council ensures the provision of quality healthcare. The Immigration Department has facilitated medical tourists to obtain visa which can be extended from one month to six months stay depending on the period of patient's recovery. There are many available flights for transportation at Kuala Lumpur International Airport and several others international airports such as in Penang and Kota Kinabalu. The low cost in/out bound flights of Air Asia are in favour of attracting more medical tourist.

5. Privatization OF Healthcare and Medical Tourism in Malaysia

Entrepreneurial innovation was one of the main drivers of growth for the Malaysian economy in the 1990s. The private healthcare industry too did not lack in its initiatives. The larger providers leveraged their unique strengths to successfully 'plug in' to the ever-increasing numbers of foreign tourists. Health or medical tourism, 'sold' through many creative screening tests and procedures, was identified to be one of the areas that promised sustainable revenue. The unprecedented growth of the private healthcare sector, seen by the increase in the number of private healthcare facilities in recent years, has wide-ranging implications on the public healthcare sector and overall healthcare costs.

The share of private ownership in overall healthcare expenditure began to rise from 1982, increasing from 5.8 per cent in 1981 to 7.6 per cent in 1982 and rising fairly rapidly from then on to reach 53.84 per cent in 2009, as reported in the Ministry of Health Report. Policy focus by then had shifted towards expanding the private sector, including in the provision of public utilities such as power, water and healthcare. The launching of the Privatization Master Plan (PMP) in 1991 after it was drafted in 1988 (Malaysia, 2001: 183-201) formally included healthcare for private ownership. Twelve public hospitals were among 149 agencies identified for privatization in Peninsular Malaysia. The Mid-Term Review of the Sixth Malaysia Plan published in 1993 indicated that: "While the government will remain a provider of basic health services, the role of the Ministry of Health will gradually shift towards more policy-making and regulatory aspects as well as setting standards to ensure quality, affordability and appropriateness of care"

The formalization of privatization in general had quickened the proliferation of profit-based private healthcare facilities from a total of 174 to 242 in 1992 and 2009, respectively. Parkway Holdings and Pantai Holdings have expanded throughout Malaysia since the 1990s, with the latter becoming one of the biggest healthcare providers in Malaysia after a decade. Khazanah Holding, an investment arm of the Government already has significant ownership rights in India's Apollo Hospital chain. Listed at the Kuala Lumpur stock Exchange (KLSE) in 1997, it operated seven hospitals with a capacity of 1,000 beds in 2005. With its recent acquisition by the

Malaysian government investment vehicle, Khazanah Nasional, the healthcare provider has embarked on further expansion of its participation in healthcare provision. Khazanah Nasional also acquired majority control of the International Medical University in 2006.

The promotion of healthcare, further expanded markets for private health care providers in the 1990s. Subang Medical Centre is increasingly targeting rich tourists who contributed RM0.9 Billion of revenue in Malaysia in 2005, an amount expected to rise to RM2 billion by 2010 (Malaysia, 2006). In fact, medical tourism has become an important business in Asia since the 1990s and has seen aggressive expansion.

In terms of revenue, the private hospitals' revenue grew from RM58.9 million incurred by 103,000 medical tourists in 2003, to RM299.1 million in 2008 spent by around 374,000 medical tourists. Among the factors making Malaysia the preferred healthcare travel destination of choice, are its friendly and highly professional medical staff; internationally accredited, world-class hospitals with state-of-the-art medical facilities; affordable costs of procedures; English-speaking population, and a safe and friendly environment for visitors. In addition, cultural similarities and short distance attract Indonesians while the halal hubs attract the Arab Muslims.

The recent announcement by the Government of Singapore to allow its residents to use Medisave for hospitalization and day surgeries at 12 hospitals in Malaysia is testament to the growing reputation of Malaysia's quality healthcare services in this region. In 2006, the bulk of foreign patients came from Indonesia (65-70 percent), followed by Japan (5-6 percent), Europe (5 percent) and India (3 percent). There are an increasing number of patients from Middle Eastern countries (particularly U.A.E., Qatar and Saudi Arabia). Major hospitals in Malaysia are targeting new markets such as Vietnam and Cambodia. Africans are now coming to Malaysia because it is cheaper to do so rather than go to Europe where they used to go previously.

The major private hospitals had taken several efforts to promote their medical services; among which was the setting up of departments to deal with international patients. Gleneagles Intan Medical Centre and Pantai Hospitals are among those that have set up international customer departments specifically for the admission and support of international patients. KPJ Medical Group, Mahkota Hospital and Subang Jaya Medical Center have established tie-ups with several travel agencies and hotels

to provide comprehensive tourism packages in conjunction with healthcare services, as well as setting up representative or referral offices.

The formation of the Association of Private Hospital of Malaysia had team up most of the private hospitals which enable them to be equipped for competing with the international healthcare industry. Among other things is to ensure quality and safety in delivering healthcare. Fourteen hospitals had strived to achieve the Malaysian Society for Quality in Health (MSQH) accreditation. This continuous quality improvement effort is an imperative to compete in the market as more players recognize the potential of this industry.

In becoming the health service hub of the ASEAN region, Malaysia expects fierce competition from well-established players like Singapore and Thailand, the two traditional favourite medical tourist destinations in the region. Nonetheless, Malaysia still has the potential to become one of the popular centres for medical services in Asia. One of the main advantages that Malaysia is able to capitalize on is the cost factor. The cost of healthcare in Malaysia is by comparison cheaper than her regional competitors. For example, based on figures given by the Association of Private Hospitals of Malaysia, a cardiac bypass surgery at a top-notch private hospital in Malaysia costs an average of US\$6,300 as opposed to US\$10,400 charged in Singapore. Besides being lower in cost, the healthcare industry in Malaysia is well equipped with adequate, highly trained specialists, up-to-date facilities and supporting services that are comparable to overseas hospitals.

Over the years, with the current favourable currency exchange, Malaysia has seen a surge in foreign patients from Singapore, Australia and European countries seeking health services including those in the area of cardiology, haematology, dermatology and neurology. In addition, the short waiting period for surgery is also another key factor that enhances the ability of private hospitals to attract foreign patients to Malaysia. Around the region, Malaysia has also been successful in attracting patients from such countries as Indonesia, Vietnam, China, Myanmar and Cambodia where top-notch medical facilities are not readily available.

6. The Practice of Traditional and Complementary Medicine (TCM) in Malaysia

“Traditional medicine” has been defined by the World Health Organization (WHO) as the sum of total of the knowledge, skills and practices based on the theories, beliefs, and experiences indigenous to different cultures, whether explicable or not, used in the maintenance of health as well as in the prevention, diagnosis, improvement or treatment of physical and mental illness. The terms “complementary medicine” or “alternative medicine” are used interchangeably with traditional medicine in some countries. They refer to a broad set of health care practices that are not part of that country’s own tradition and are not integrated into the dominant health care system.

In Malaysia, the term “traditional and complementary medicine” (TCM) is used instead of complementary and alternative medicine (CAM). TCM is defined as a practice other than the practice of medicine or surgery by registered medical practitioners, as defined in the Medical Act 1971.

Traditional and complementary or alternative medicine in Malaysia includes both health care practices of the various cultures as well as those which are outside the society’s tradition but which have been imported and adopted as a matter of practice (Talib, 2006).

As in most developing societies, where complementary or alternative and traditional medicine is widely practiced, in Malaysia too, many individuals depend on these alternative medicines, whether as complementary medicine to be taken together with conventional medical treatment or as an alternative medicine, as their primary healthcare. Both alternative and traditional Malay, Chinese and Indian systems of medicine are practiced widely. Cross-cultural utilization of traditional systems of medicine is also popular.

A nationwide study conducted by Siti,*et al* (2009) on the prevalence and frequency of various TCM modalities that are being used by the Malaysian population showed that biological-based therapies, which included herbal use therapy, were most commonly used for health problems (88.9%) and for health maintenance (87.3%). Under this category, herb-based application/ herb-based

beauty product/ herb-based hygiene product was most commonly used for health issue (23.6%) while pure herbs were the ones most commonly used for health maintenance (29.6%). The dominant use of herbs in a variety of ways was naturally due to the fact that Malaysia is diverse in ethnicity that still follows generations of traditional healing practices supported by vast natural resources.

Meanwhile, the major complementary or alternative systems of medicine practiced in Malaysia include Ayurvedic, Siddha, Unani, homeopathy, naturopathy, aromatherapy, reflexology, chiropractic and traditional Chinese medicine. Traditional medicines provided by traditional medicine practitioners included traditional birth attendants, spiritualists, and others who use home remedies.

Integration of TCM into the Mainstream Healthcare

The official healthcare system that is adopted and implemented by the Malaysian government is the conventional western medicine. However, the practice of alternative medicine has been given recognition in statutory form. The role of the traditional and complementary medicine in the provision of a "formal alternative treatment" to western medicine has increased over the years with a total of 11,691 registered practitioners in 2009.

One of the objectives of the WHO Strategy on Traditional Medicine 2002- 2005 is the rational use of traditional medicines, which is to promote therapeutically sound use of such medicines by both providers and consumers. Existing conventional medicine practitioners are to be provided training in order to give them a basic knowledge in traditional, alternative and complementary medicine. Within the WHO definition of the different types of health systems practiced, Malaysia is said to practice what is described as a tolerant system, where the healthcare system is based entirely on conventional medicine but some alternative medicine practiced is tolerated by the law. It is arguable that Malaysia has reached the status of being an inclusive system, such system where alternative medicine is recognized but not fully integrated into the healthcare system, integration here encompassing delivery, education, training and regulation. In a system where both conventional and traditional medicines are integrated, both types of therapies would be available at both public and private hospitals and clinics. Ultimately traditional medicine will be

covered by health insurance and formal education on traditional medicine would be made available.

The objective is towards the integration of alternative medicine into the existing conventional medicine system. In 2000, the national health policy on traditional and complementary medicine was launched. The overall aim of the policy is to ensure the safety and quality of traditional and complementary medicine practices and products, which will be regulated by the Traditional and Complementary Medicine Council. In 2004 the Malaysian Minister of Health (MOH) said that Malaysia was actively looking into developing traditional and complementary medicines and the possibility of integrating them with mainstream medicines.

Hence, in 2007, the first Traditional and Complementary Medicine Unit was started in Kepala Batas Hospital, Pulau Pinang. This was the pilot project which provided traditional and complementary medicine services. Two more hospitals, Sultan Ismail Hospital, Johor Bahru and the Putrajaya Hospital started the traditional and complementary medicine units in 2008. The remaining integrative hospitals being Duchess of Kent Hospital, Sabah, Sarawak General Hospital, Port Dickson Hospital, Negeri Sembilan, Sultanah Bahiyah Hospital, Alor Setar Kedah and Sultanah Nur Zahirah Hospital, Kuala Terengganu. The numbers of hospital which have traditional and complementary unit have increased to 6 units by 2009.

Overall, traditional and complementary medicine is getting more popular in our community and it will become an important component in our healthcare system that will improve the level of health and quality of life of Malaysians in concert with modern medicine. The Malaysian government is striving to develop this field further since our country has an abundance of natural resources that could be developed into health products. Moreover, the Ministry of Health, Malaysia (MOH) has taken positive and proactive steps to make sure traditional and complementary medicine is of high quality and safe to be used by the consumers.

7. Malaysian Spas and Wellness Retreat

According to the Association of Malaysian Spas (AMSPA), Malaysia, with its diversity of cultures and abundance of natural resources, provides an excellent

backdrop for wellness rituals that are amongst the oldest in the world. Be it Malay, Chinese or Indian, Malaysian health rituals bring about the much needed rejuvenation and revitalization that is vital for overall wellness.

Traditional Malay body massage, herbal baths, facials and a host of treatments based on ancient healing rituals use a combination of various indigenous herbs and plants that contain natural vitamins, minerals and curative properties. Many of these herbs are found only in the region's 130-year-old rainforests. Traditional cream bath hair treatments which use a mixture of coconut milk, aloe vera and crushed hibiscus leaves, the *jamu* experience where medicinal plants and local herbs such as *tumeric* are mixed with the natural sweeteners like honey or palm sugar, consumed for its detoxifying and health enhancing properties are some of the healing modalities found in traditional Malay spas. Besides, Malay traditional postnatal treatments are also known to be highly effective in bringing back woman's post natal figure to its pre-natal state and for restoring the new mother's wellbeing.

Ayurveda, believed to be the oldest system of medicine on earth, originated from India some 5,000 years ago. In Malaysia, while some establishments specialize in providing a range of Ayurvedic treatments for curative needs, some ayurvedic wellness modalities like Ayurvedic massage and the Shirodhara are also performed as wellness rituals in spas in Asia. Yoga and meditation are both enjoying great following as people need to find ways to unwind and to release their stress.

Chinese wellness modalities such as tuina massage, as well as acupressure massage in the form of foot reflexology and the Japanese Shiatsu massage are very popular treatments found in spas in Malaysia.

In conjunction with the "Malaysia Truly Asia" fashion, Malaysian spas besides offering treatments that are indigenous, there are spa modalities from around the region. Thai Massage, the Balinese Massage and Lulur, the Heliot Massage from the Philippines, even the Lomi-lomi massage from Hawaii have found their way into some Malaysian spas.

A case study of Spa Village Tanjong Jara, which has been awarded as Best Destination Spa during the Malaysia Spa & Wellness Awards 2009, is used to describe the uniqueness of Malaysian spas and wellness in terms of its physical facilities, philosophical concept, the use of local ingredients and integration of local

cultures and custom. Ultimately, the spa village is not a spa centre offering body treatment, but the total experience that make it special (Tanjong Jara Resort, 2000).

Wellness Retreat

The Banjaran Hot Springs Retreat which located at historic Tambun in the Malaysia state of Perak, is the Malaysia's first luxury natural wellness hot springs retreat within a 16.59 acre valley, in an area of remarkable natural beauty. It is a place of rest, renewal and rejuvenation as it is nestled amid lush tropical jungle and embraced by magnificent limestone cliffs.

The Banjaran Hot Springs Retreat is the place where the three strands of Malay, Chinese and Indians traditions intertwine, breathing new life into contemporary wellness practices and creating a unique and authentic wellness experience. It made use of its natural wonders which included hot springs, limestone cliffs, rainforest scenery and various caves to develop into a series of wellness packages for the visitors.

Borneo Massage

Massage is generic term that encompasses a wide range of touch therapies. Essentially massage is manipulation of soft tissue (Fritz, 1995). A wide variety of techniques are used in massage treatments including pressure, kneading, rubbing and mobilization (Hemmings, 2001). Many cultures have a touch-based therapy or form of bodywork. Cultural philosophy has influenced the evolution of therapeutic bodywork over time (Jahnke, 1985).

A case study of Jari-jari Spa in Sabah is used to describe an award-winning traditional Dusun Lotud Inan massage (also known as paddy field massage). This is an example of traditional treatments used by the indigenous population in Malaysia as a form of wellness therapy that passed down from generations to generations.

8. Malaysian Government Policies in Support of Health Industries

The government's pro-business political culture continued to lure more expatriates to the country and the top item on their list always seemed to be

healthcare. With the National Key Economic Areas (NKEAs) identified, various strategies had been planned under the Entry Point Projects (EPP) which, as a whole is to ease and enable the realization of the Economic Transformation Program (ETP).

To support the growth of industries in Malaysia in general, and the health industry specifically, various policies had been put in place while existing policies were changed to gear up the growth of health industry. In line with this, the government had come up with policies to enhance and facilitate the growth of the all the industries stipulated as the NKEAs (National Key Economic Areas); improving the infrastructure of the country especially the transport system, investing in high technology to increase the production of fuels, gas and electricity, reducing red tapes in government administrative procedures, redefine the roles and scope of the various ministries for an integrative and collaborative efforts towards enhancing each industry, encouraging more involvement by providing tax incentives, transparency in the provision and easily access government and conventional entrepreneur loans, took numerous initiatives in promoting the industry for exportation, providing clear and easily abiding rules and guidelines by the Custom Department on the importation of equipment and immigration, and many others.

The various ETPs (Economic Transformation Programme) under health tourism were to enhance the industry by widening the market and its usage; mandating private insurance for foreign workers, creating a supportive ecosystem to grow clinical research, reinvigorating health travel through better customer experience, proactive alliances and niche marketing, creating a diagnostic services nexus to achieve scale in telemedicine for eventual international outsourcing, and seven others which are inclined towards manufacturing of health devices.

Changes in government policy helped further the expansion of private healthcare providers. For example, enjoying control over the largest forced savings institution, i.e. the Employees' Provident Fund, the government instituted reforms in 1994 to allow contributors to withdraw up to 10 per cent of their balances for medical treatment. In addition, new taxation policies were introduced granting individuals tax relief on medical expenditures for self, spouse, children and even parents. Although these policies are for the welfare of the people in general, they have helped boost the private health services by increasing the domestic demand.

The Government is moving towards a more business friendly environment by setting up a special task force to facilitate business called PEMUDAH, which means "simplifier" in Malay. Highlights includes easing restrictions and requirement to hire expatriates, shorten time to do land transfers and increasing the limit of sugar storage (a controlled item in Malaysia) for companies. The efforts of PEMUDAH are beginning to show fruits as the economy's ranking improved to number 20 in 2009, with marked improvement in four areas: getting credit; dealing with construction permits; paying taxes; and enforcing contracts (World Bank Report).

Under the Eighth Malaysia Plan, the Government has targeted more private sector initiatives to promote Malaysia as a healthcare hub for both traditional and modern medical treatment. The consequences of these developments had resulted in a further outflow of doctors, laboratory technologists and nurses from public to private healthcare establishments. The private healthcare providers enjoy accounted for 45 per cent of the doctors, 22 per cent of the beds, 26 per cent of the admissions and 54 per cent of the overall health expenditure (2010). To overcome the imbalance in the distribution and to increase the supply of healthcare professionals, the Government had strengthened the Human Capital Development by implementing several strategies. Among which were the improvement in education quality and accessibility, introduced types of various youth programs to provide entrepreneur skills, and facilitates academia-industry collaborations for internships and training (train the trainers program).

The commitments by the Government of Malaysia on enhancing the growth of tourist industry in general and medical tourism in particular were evidenced by the budget allocation under 10th Malaysian Plan, whereby the government allocated a total of RM899 million in 2010 to implement several programs in boosting the industries. In particular to further promote the medical tourism industry, program to attract more participants from United Kingdom, Japan, Republic of Korea, Middle east, India and China to participate in the Malaysia 'My Second Home'; hence creating a foreign market for the health industry, also the provision of tax incentives for healthcare service providers who offer services to foreign health tourists and increased the income tax exemption from 50% to 100% on the value of healthcare exports had been realized.

The Government had also taken the initiative in establishing the Malaysia Healthcare Travel Council (MHTC), which is the primary agency to promote and develop healthcare travel. MHTC works with industry players to formulate strategic plans for the promotion of healthcare travel services and coordinates promotional activities for Malaysian healthcare providers and related stakeholders. The establishment of this council is testimony of the Government's commitment to work together with all relevant stakeholders to further develop the healthcare travel industry. In 2008, about 375,000 healthcare travelers visited our promoted hospitals, bringing in revenue of RM299 million from this activity (MTHC). During the first half of 2009, the promoted hospitals recorded 165,095 foreign patients with revenue of RM142.3 million. Compared to the first half of 2008, there is a reduction of 13 percent in foreign patients and a 2 percent reduction in revenue. But in terms of revenue per patient, we see a growth of 12 percent, from RM769 to RM862 per patient (MTHC).

9. Regulations pertaining to Healthcare Services and Healthcare Products in Malaysia

There are several Acts and Regulations in place either to protect the people/clients and the industrial sectors in Malaysia. Some Acts and Regulations are specific for healthcare industry (services and products) while others are indirectly applicable but important to ensure the compliance towards optimum safety and of highly quality healthcare services delivery and healthcare products.

1. Pharmaceutical Regulations

In 1998, Malaysia's Drug Control Authority (DCA) registered 22,085 drugs and traditional medicines out of about 40,000 applications received. Of the total number of registered products, 8,187 were prescription drugs, 5,415 over-the-counter (OTC) drugs, and 7,819 traditional medicines.

Over 65% of Malaysia's pharmaceuticals are imported, in part because most doctors are reluctant to switch to local brands as they prefer the higher quality imported drugs. Thus, compared to imported drugs, most local drugs are

common/general pharmaceuticals such as painkillers and antibiotics since it is not economically feasible to target a specialized segment.

Recently, the Pharmacy Board of the MOH has been encouraging additional improvements in the dose drug distribution system, clinical pharmacy component, total nutrition services, and patient medication counseling. It is also trying to increase the purchases of pharmaceutical preparations in the market, reduce the manufacture of pharmaceuticals in hospitals, and implement Good Manufacturing Practices (GMP) in hospital manufacturing laboratories.

2. Medical Device Regulations In Malaysia

Since the early 1990s, Malaysia's medical device market has been growing at 15 - 20% annually. The country's medical device market is currently worth about \$300 million, with imports accounting for more than 90% of this total. Because of the significant ringgit depreciation from the 1998 financial crisis and the subsequent increase in import prices, Malaysia's medical device market suffered a setback between 1997 and 1998. However, the economic recovery in Malaysia has rejuvenated import growth (particularly for electronics and high-technology products), and thus the outlook for medical device imports - especially high-technology equipment - is positive.

There are currently very few trade barriers or regulations for imported medical equipment in Malaysia. Only latex rubber products (i.e. condoms, surgical gloves) require certification by the Ministry of Health, and the government also maintains some safety-related regulations on certain devices - for example, it is government policy not to buy used/refurbished medical equipment, or allow new, experimental products into the country without FDA or other international standard approval.

Under the country's Atomic Energy Act (which among other things requires radiation-emitting equipment to be handled by authorized persons only), any x-ray equipment must be specially examined and approved by the Ministry of Health before being used by doctors and radiologists.

The Ministry of Health (along with the Association of Malaysian Medical Industries) is drafting a more comprehensive regulatory framework for medical devices that should be implemented by 2002. Reasons for this decision include the

government's growing concerns over the quality of imported devices as well as the urgency of meeting the European Union's new CE Mark approval standard for all medical devices in the EU (the destination for 39% of Malaysia's total medical device exports).

3. Public and Private Sector Medical Equipment Purchases

In the public sector, health equipment purchases are classified into two groups - those over and under RM50,000 (US\$11,800). For purchases greater than RM50,000 (which make up the majority of public medical device acquisitions), the MOH will issue a tender that is advertised in local newspapers. Distributors are then requested to provide specifications and prices for their products.

Once tenders are closed, an evaluation board (made up of one member of the MOH and at least two other members that are usually heads/department heads of the purchasing institutions) will consider the bids. In purchases less than RM50,000, hospitals and public institutions will tenders on their own.

In the private sector, tender processes tend to work somewhat differently. Where healthcare groups are the purchasers, equipment will be procured through a procurement arm or an equipment consultant firm. In this case, the equipment consultant will be a storehouse of information for their client and thus provide an important link for the supplier to access the market. Alternatively, they may allow their component hospitals to purchase equipment individually, with a member of the central office on the individual hospital board. Thus, the manufacturer and/or its distributors would be better off communicating with the department heads of the individual hospitals as well as the equipment divisions of the central office.

Public and private hospitals, while using different methods to procure medical equipment, maintain relatively similar standards for their purchases. While price is very important (and has played a greater role recently due to the ringgit's depreciation), the most important factor is still quality and the equipment's specifications. After-sales service (i.e., maintenance and training) offered by a firm is also very important, especially for purchases of electro-medical and other high-tech equipment. Finally, both sectors tend to favour local distributors and local companies registered with the Malaysian Ministry of Finance in cases where prices are similar.

Thus, if a foreign firm wants to concentrate on the public sector, it might consider aligning itself with a listed distributor that has extensive sales offices and maintenance facilities in the country.

4. Intellectual Property Protection

The Malaysian government plans to implement new measures in the enforcement of intellectual property rights, including the creation of new legislation and conducting reviews of existing legislation. These actions are intended primarily to conform to the Trade Related Aspects of Intellectual Property Rights (TRIPS) Agreement implemented by the World Trade Organization in 1995. They are also in response to growing concern over the widespread production, distribution and use of illegally produced software and technology. The implications of TRIPS for Malaysia are:

- i. Stimulating an increase in cross-border trade and investment as well as technology transfer.
- ii. Improved confidence would create a more favourable trading and investment environment in Malaysia.

However, changes on the existing IP laws are needed to enhance these efforts, with new IP laws will need to be created. The budget allocation should be increased for personnel and improved technology. Currently, the government measures that have been planned or are underway include;

- i. The recent transition from the United Kingdom Designs Protection Act 1949 to the Industrial Design Act 1996 (Malaysia).
- ii. Reviewing section 42 of the Copyright Act 1987 in an effort to establish a more practical method for proving copyright ownership, as well as making it easier to initiate legal action against copyright pirates.
- iii. Establishing an independent Intellectual Property Training Center in Malaysia designed for recognition and use by all ASEAN member countries.
- iv. Amending the Trademarks Act 1976 and Patents Act 1983.

- v. Creating a new law specifically to protect layout designs of integrated circuits, geographical indications and plant varieties.
- vi. The implementation of recent "cyberlaws": the Telemedicine Act 1997, the Computer Crimes Act 1997, the Digital Signatures Act 1997, the Communications and Multimedia Act 1998.
- vii. Implementation of the Technology Action Plan for industrial development programs: installing a document imaging system (DIP) to increase the efficiency of search and examination functions.

5. Patents

The current legislation governing patents is the Patents Act (Amended) 1983. This legislation currently requires that anyone applying for a patent must do so through a patent agent. The patent agent takes care of all the necessary paperwork; however, the "inventor" must fill out an Authorization of Agent Form to empower the patent agent to act on behalf of the applicant.

The application goes through several stages of examination, and it generally takes between 3 - 5 years before the patent is approved depending on the complexity of the invention. Once approved, the protection period for the patent is for 15 years from the date of patent approval. The patent owner has exclusive rights to exploit, assign or transmit as well as conclude license contracts in relation to the patent. This includes making, importing, offering for sale, selling, or utilizing the invention.

6. Utility Innovations

A "utility innovation" is defined as "any implement, tool, product or process which is of practical utility by reason of its form, configuration, construction or composition." A utility innovation does not have to fulfil the same requirement of inventiveness as a patent. Therefore, any invention that does not meet the inventiveness requirement may have the item registered instead as a utility innovation.

The application process for obtaining a Utility Innovation Certificate is the same as that for a patent. The certificate provides the same protection as that of a patent, but is only valid for 5 years from the date of approval.

7. Trademarks

Trademarks must be registered through the same application process as a patent, utilizing a patent agent. There is a three-stage approval process, which can take from 3 - 5 years. Currently, once registration is approved, trademark protection is granted from the date of filing for a period of 7 years, after which it is renewable for 14 years. The Trade Marks (Amended) Act 1994, which has not yet gone into effect, will extend the initial protection period to from 7 years to 10 years. The registered owner of the trademark has the exclusive right to utilize the mark in relation to the goods for which it is registered.

8. Industrial Designs

An industrial design only refers to the shape, configuration or pattern that has been applied to a particular article, not the article itself. In order to be registered, the design must be able to be "judged solely by the eye". The design must not have been used or published prior to the submission of the registration application.

Previously, industrial designs were covered under the United Kingdom Designs Protection Act 1949. However, the Industrial Design Act 1996 (Malaysia) will now allow applicants to file directly with the Malaysian government. Protection is extended for three consecutive (renewable) five-year terms, after which, anyone can use the design.

10. Quality Assurance of Healthcare Provision by Private Sectors

The setting up of associations pertaining to healthcare and various committees comprising of the government officials and representatives of the private healthcare providers had showed that there is commitment from both parties to ensure the safety of the people utilizing the healthcare services and products. In Malaysia, the Ministry of Health (MOH) is directly responsible for the healthcare regulatory system, with some help from several government bodies such as the Malaysian Medical Council (MMC), Malaysian Medical Association (MMA) and Association of Private hospitals of Malaysia (APHM). In 2003 and 2009, the system saw the establishment of Patient Safety Council of Malaysia (PSCOM) and the Malaysian Healthcare

Travel Council (MHTC), respectively. These bodies engendered from Malaysia's burgeoning private healthcare facilities.

The Malaysian Medical Council enforces the Medical Act 1971 into action by ensuring the highest standards of medical ethics, education and practice, in the interests of patients, the public and the profession.

The Malaysian Medical Association serves as the voice and arbiter for medicine and medical professionals. This non-governmental body organizes education events, promote social, cultural and charitable initiations in the industry as well as encourages business, trade, joint venture and other commercial openings for the association.

The Association of Private Hospitals of Malaysia's role includes guidance, promotions and representing private institutions on the formation, operation and management of healthcare related staff, patients, institutions, pharmacies, and facilities. It is also responsible for ensuring that patient's interest are served and are able to continue to receive effective, safe and appropriate treatment at all times.

The Patient Safety Council of Malaysia (PSCOM) was set up as directed by the Malaysian Cabinet. It is responsible for leading the national effort to improve patient safety by raising the awareness of patient safety issues while enabling, empowering and motivating the stakeholders about their rights.

The Malaysian Society for Quality in Health (MSQH), formed through the initiatives of the MOH, APHM and the MMA is an independent, not for profit organization working actively in participation with healthcare professional to ensure safety and continuous quality improvement in the services provided by healthcare facilities in the country. The society conducts voluntary quality accreditation program for Malaysian Healthcare organizations, develop and review healthcare standards in consultation with the industry and professional bodies, conduct education program and provides information for accreditation. Other quality standards adopted by the private healthcare providers are the International Hospital Federation and the ASEAN Society for Quality in Healthcare, Asian Hospital Federation.

11. SWOT Analysis of Healthcare Industry in Malaysia

In listing the issues under SWOT analysis, recommendations are given where appropriate especially to overcome the identified weaknesses and threats of/to the healthcare industry in Malaysia. The recommendations given were based on the feedback and suggestions from the stakeholders and of the authors.

I. Internal factors

A. Opportunities

- i. Promising return of investments
 - Malaysia's private healthcare industry is a hidden jewel that has a strong potential to compete successfully and to be an earner of foreign exchange. The top 35 private hospitals of Malaysia's healthcare industry have been able to collectively see their revenue grow from RM58.9 million with around 103,000 medical tourists in 2003 to RM299.1 million in 2008 with around 375,000 medical tourists. In terms of growth, medical tourists grew at an average of 30 percent per annum while revenue grew at an average of 35 percent per annum during that period. This is despite the performance during the first half of the year which had been affected by the global economic slowdown and the Influenza A (H 1 N 1) pandemic. Most recent achievement was showed during first half of 2011 whereby the number of foreign patients grew from 22.6% (2010) to 26.1 %, with 255,291 (2010: 202,374), generating revenue of RM229.1 million (2010: RM202.5 million). For 2012, number of foreign is targeted to reach 440,000 with expected revenue of RM431 million (2010: 392,956; RM379 million). (Ref: Economic Report 2011 /2012, Ministry of Finance)
- ii. Strong Support from Government
 - Just like many other state-driven entrepreneurial efforts, health tourism initiatives in Malaysia are very much government driven. The Ministry of Health takes the driver's seat along with its traditional regulatory role. Tourism Malaysia heads the promotional subcommittee with backings from MATRADE and MITI. Down the line, APHM and MATTA as the implementers or the enablers had showed good outcome. During overseas

missions, the diplomatic missions have never failed to provide logistics and other necessary support. This synergy is further enhanced by the other pieces in the jigsaw namely the Immigration Department, Ministry of Finance, the National Economic Action Council and the Malaysian Association of Hotels.

- The government of Malaysia has good ties with almost majority of the countries in the world and has many bilateral business deals with countries in the ASEAN and Asia regions. These efforts should be doubled, especially to get more active involvement of the Association of Private Hospitals, Malaysia.
- The government of Malaysia had declared and taking steps on their support in favour of health tourism. There are many opportunities given by the government as incentives to boost the growth of Malaysia's healthcare travel industry; which includes tax exemptions for the expansion or refurbishment of participating hospitals, revising existing advertising regulations and guidelines related to hospital promotions, double tax deduction for hospital that apply for domestic or internationally-recognized accreditation, employment opportunities for spouse of specialists returning or coming from overseas to practices locally, and special permits for hospitals vehicles to ferry patients and relatives to and from the hospital, to airports and hotels.
- The Ministry of Health is continuously bringing potential buyers of healthcare travel services to Malaysia by providing foreign facilitators, insurance brokers and agents, and reportersexposure to the healthcare facilities and capabilities available in Kuala Lumpur, Penang and Melaka. Although the issue of medical insurance portability hinders many promoters of trans-border medicine, government-to-government arrangements could be set as the one seen in European countries. A more liberal approach by the insurers and third-party administrators will pave the way for a wider usage of healthcare funds. We can learn from the experience of the EU in the provision and consumption of modern healthcare across the national boundaries.

- iii. Malaysia has been declared as one of the Halal Hub in the region and in the world; this would attract more tourists from the Arab world and from other Muslim countries, apart from others. Agencies such as Tourism Malaysia and MATRATE should hold more healthcare exhibitions, promote healthcare service in these countries and develop bilateral ties to enhance easy entrance to Malaysia for health tourism.
- iv. People are now more concerned with maintaining/boosting health and wellness; they are more concerned and conscious about their own health, by practicing healthy lifestyle instead of only seeking medical treatments when ill. There is a promising shift of health and wellness users to family members instead of women and older visitors, and also a shift in the usage of spa and wellness salon, besides screening for medical illness. All these services are available in Malaysia at cheap price and of high quality.
- v. Malaysia is fast catching up with India, Indonesia and Thailand to cater for 'wellness tourism' and provide traditional and complementary medicine (TCM). Wellness or rejuvenation components include spa resorts, reflexology centres and sauna, aromatherapy and massage services.
- vi. The available and relatively cheaper healthcare labour market in Malaysia especially for specialised care for the elderly frail and those in need of rehabilitations, made Malaysia the best place for such cares. In addition the politeness and high respects to elderly in Malaysian culture, the varieties of food from many countries and the infrastructure designs could make foreigners feel at home.

B. Strengths

1. Multi-ethnics population

- Malaysia has multi-ethnics Malays, Indians and Chinese with multi-cultures that are of interest to many especially her mother language which is almost similar to Indonesia, India and China
- English speaking community (by all levels of people; even the retailers at the wet market are able to communicate with basic English), signage are dual language (Bahasa Malaysia and English) and customer friendly

- Tourist attractions for varieties of food "Food Paradise and Halal Hub especially to Muslim tourist
2. Peaceful and stable political environment - Which allows continuous foreign investments - Encourages foreign workers/immigrant - Tourists are secured and feels comfortable
 3. Geographical in favour
 - Main markets: Indonesia (72.0%), Singapore (10.0%), Japan (5.0%) and West Asia (2.0%) (UNESCAP, 2007).
 - The majority of medical tourists travel to Penang (61%), while Malacca and Kuala Lumpur received 19 percent and 11% of health tourists respectively (Ormond, 2011).
 - Penang is known as attracting primarily lower-middle income patients from the nearby Indonesian island of Sumatra (Ormond,2011)
 - Air Asia and Malaysia Airlines has spread its wings to every continent of the globe, making Malaysia one of the most accessible destinations among the emerging economies. All the states in the country are connected by excellent infrastructure and healthcare facilities are available at every tourist destination.
 4. The number and range of specialist hospitals, clinics and dental surgeries have increased tremendously all over the nation in the last decade. The health care services throughout the country, is of world class standard and the medical cost in Malaysia is one of the most competitive in the world. Today, with support from the Malaysian government, a large number of Malaysian private hospitals are actively participating in health tourism. The country offers medical services in a wide range of fields, including cancer treatment and pain management, cardiology and cardiothoracic surgery, fertility treatment, general screening and wellness, orthopedics surgery and rehabilitative medicine, to name a few. There are more than two hundreds private hospitals that are registered in Malaysia, providing almost 13,000 beds for inpatients.
 5. Promising human capacity in the delivery of healthcare service;

- The government had taken various strategies and steps to ensure enough and continuous supply of health professionals for this industry, as well as assuring their quality.
 - There are 35 medical schools and 18 allied health sciences colleges that are able to produce big volume of doctors, nurses and other biomedical personnel.
 - Every year, the Department of Civil Service provide about 200 scholarships to medical officers at the Ministry of Health to do clinical master program of various specialties at 3 top local universities; affiliated with teaching hospitals for the training of specialists. Some of these specialists will join the private hospitals once their bonded service is completed. Therefore, although there is an internal brain drain of the specialist from the public to private hospitals, the number of specialist at the public hospitals is always replenished by more medical officers becoming specialists.
6. Most private hospitals offer modern treatment with high technology medical equipment and all sorts of specialized medical treatment. Some of the private hospitals like KPJ has branches in Singapore and Indonesia and offers latest and updated treatment and investigations for certain diseases.
7. High standards medical care
- Having inherited the standards and system from the British gives Malaysian healthcare two distinct advantages - medical and nursing 'lingo' is still English, and the medical curriculum and qualifications are very much UK-orientated. Certification by the various Royal Colleges of the UK is a norm for the medical specialists. The effects of this 'inheritance' are seen directly in the mode of treatment and the medical technology available for the patients in the local healthcare delivery system (Hooshmand M Palany, APHM, 2010).
 - Another recent development in assuring quality and high standards medical care is the hospital benchmarking project jointly undertaken by the National Productivity Corporation and National University of Malaysia.

8. Relatively cheaper charge of medical treatment

- compared to many countries (developed and developing countries), Malaysia healthcare costs are very competitive. An angioplasty which costs around US\$57,000 in the US and US\$13,000 in Thailand, is only about US\$1 1,000 in Malaysia. A knee replacement procedure which costs around US\$40,000 in the US and US\$13,000 in Singapore, is only US\$8,000 in Malaysia. These indicate prices illustrate her competitiveness in the region. It is no surprise then that Nuwire Investors (2008) an online news source has ranked Malaysia amongst the world's top five medical tourism destinations in terms of quality, affordability as well as receptiveness to foreign investment. Indeed, our competitive cost of treatment, along with excellent service has enabled Malaysia to provide quality healthcare service.

9. Strong association of private hospitals

- There is a strong Private Hospital association which collaborates with the government agencies in ensuring the delivery of safe and high quality medical treatment, enhancing its growth and look after the well being of its members especially the practitioners in terms of providing the latest acceptable practice/treatment with continuous medical education

10. Traditional and Complementary Medicine (TCM)

- The country is blessed by various natural healing assets such as climates, caves, rainforests, sea, and waterfalls on hill. The dominant use of herbs and plants by the indigenous population that follows generations of traditional healing practices will further enhance the integration of traditional and complementary medicine into the national health system as well as the development of wellness industry in the country.

- The efforts of Ministry of Health (MOH) in promoting the use of traditional and complementary medicines for illness. Foreexample, the policy of integrating traditional and complementary medicines into the conventional medicine system.

- There are various types of TCM in Malaysia, some adopted traditional treatment from China and India, but most are uniquely from Malaysia i.e by the local Malays and Aborigines.
- The treatment mainly for illnesses related to mind and spiritual, i.e the famous Islamic Spiritual treatment; Darul Shifa which offer treatment and cure for those with mental illnesses, including mental disturbances related to drug dependences or drug addictions.

11. Established Quality Assurance program

- There are various safety and quality program that could be followed by the private healthcare providers in Malaysia. These are encouraged by the sectors for credentialing, accreditation and recognition locally and internationally
- The stringent qualifying standards were able to provide integrated or specialised tertiary care along with either ISO or accreditation as a quality benchmark.
- It is worth noting that the number of medico-legal cases in this country is still negligible, though there are sufficient provisions in the law to protect the interests of the patient.

12. Malaysia's investment promotional agency; MIDA (Malaysia Industrial Development Authority), with over 25 branches worldwide is ready to promote investments in healthcare widely from foreign investors. MIDA has a complete set of incentives, for example tax concessions, for this purpose (research and development, training and tax holidays).

13. Cost of energy is cheap especially for social purposes like the hospital.

14. Hotels are also cheap especially it is priced in Ringgit compared to other countries price in US Dollar.

C. Weaknesses

i. Internal and external brain drain

Malaysia is not free of this issue on brain drain especially of the specialist moving from the public to private sectors due to higher pay and better working environment (with modern facilities and less taxing workload and ability to

focus or master on a specific illness). However many strategies had been taken by the government to reduce this migration as mentioned under the strengths in the SWOT analysis. In addition, there are several strategies specially developed to prevent or reduce the migration of public doctors to private or to overseas such as;

- the government has revamped the salary scheme for doctors with a special promotion incentives i.e “Time Based Promotion” according to seniority, gives tax exemption on allowances (such as civil service, critical professional service, housing and entertainment allowances) which could be of equal amount to their basic salary.
- The government also allows the public sector doctors to do locum at their own health premises after the normal working hours or do locum at private health facilities.
- Those working at public hospitals are offered scholarships to do their Master in their choice of specialty at the local tertiary/university hospitals.
- Issue on external brain drain is not as serious as internal brain drain since those practicing abroad are mainly those who had been doing their under graduate medical studies overseas as private students and continued their education for specialization and training at overseas. They would eventually come back especially with the incentives given by the government, unless they had decided to apply for permanent residence or citizenship in other country.
- Of really a concern is the challenge faced by the universities (which provide training to medical officers to become specialist), to look for experienced specialist to train the young doctors.

Most experienced specialists that had decided to stay with the public hospitals preferred to practice in the Ministry of Health hospitals, rather than the university hospitals, although university hospitals are also public hospitals. This is because as lecturers they are expected to do research and publications other than providing patient service and teaching/training while the pay is similar at both hospitals, since they are all civil servants. To overcome this, the government should allow the university hospitals to pay their specialist with

their own scheme of salary or provide more incentive such as teaching and research allowances or provide several career pathways for the specialist; such as pathway for those who prefer to provide services and training at higher time weight age or pathway for those interested to do research and publication more than service and teaching. The university hospitals should also be allowed to employ more foreign specialist at their own terms.

ii. TCM is not well organized and expanded

- No full registration or database on this sector in the country
- The establishment of this sector has no specific support from the government
- There is no strong association on this sector; the existing associations of each TCM do not merge as a strong body
- No established regulations for this sector on its practice in the country
- The safety and quality of this sector lacks assurance from Ministry of Health
- The over saturation of a certain wellness segment in the country, for example, wellness services that concentrated in physical healing (e.g. spa, massage) but not spiritual and emotionally well-being.

iii. Concern on the quality of health professional

- The mushrooming of private nursing colleges with massive production of nurses raised concern on their quality especially the fairly loose lenient intake criteria; anyone can get admitted after secondary school, and on the curriculum of the nursing certificate. The Nursing Board and the Association of Private Hospital of Malaysia have proposed that the minimum intake to get admitted at nursing school be set and that the curriculum should not contain less than 5 credits.
- Of concern is also the training for medical doctors. There are quite a big number of fresh medical graduates either from local or overseas medical schools and the infrastructures as well as the qualified trainers are not able to cope with the training for house men/interns in Malaysia.

D. Threats

- i. Malaysia is engaging herself to reform to a social based healthcare financing scheme following the privatisation of her primary and secondary healthcare.

With this reform, the domestic demand would be competing with medical tourist, with the market/supplier in favour of the latter.

- ii. Bio-security and nosocomial risks to both the patient's home country and the medical tourism destination. Higher rates of cross infections, spread of pandemics, transplant failures.
- iii. Concern on legal issues with regards to the negligence of medical service providers in developing nations

In conclusion, the evolving economic forces have created an opportunity for Malaysia to move up the value chain of economic activities. Malaysia potential is being recognized both at home and abroad and we need to seize the opportunity. The factors leading to the growth of global healthcare travel will keep evolving and challenging healthcare travel industries around the world to remain competitive.

II. External factors

A. External market environment

- Singapore and Thailand are competitors for Malaysia for medical tourism as Singapore is well known for its high technology while Thailand for longer history of medical tourism
- China and India are well known with their ancient traditional and complementary medicine

B. Domestic market environment

The domestic environment of healthcare industry in Malaysia is very oriented towards the growth of health tourism, given the evidences on its return of investment and potential economic boost.

Pro health industry policies

i. On the healthcare providers to facilitate and encourage them:

- a) Tax exemption on health sector companies
- b) Setting up of Medical Tourism Council to promote medical tourism
- c) Special medical tourist visa for easy entry and longer stay

ii. On the people of Malaysia in spending for health:

- a) The people of Malaysia is allowed to withdraw their Employee Provident Fund for them or their dependents to pay for medical expenses at private hospital
- b) There is about RM5,000 of tax exemption on premiums paid for medical insurances for everyone who have to pay income tax
- iii. On boosting the growth of industries in general:
 - a) Improvement in the government administrative procedures and less bureaucracy i.e licensing, development of transparent and customer friendly guidelines
 - b) Better transport and communication system; no restrictions on advertisement in internet

Modes of Delivery of Health Services Trade (Malaysia)

Mode 1: Cross border supply of services

- There is free movement of healthcare services, Malaysian is allowed to obtain healthcare services at overseas, without boundaries and

Mode 2: Consumption of services abroad

- Foreigners are allowed and welcome to buy the services in Malaysia.

Mode 3: Commercial presence

- Except for general practitioners (GP), (foreign doctors are not allowed to open up general practice clinic), foreigners are allowed to set up hospitals. However, APHM is yet to decide on the size of hospital that can be set up.
- MIDA is ready to promote investment while Matrate is ready to do marketing.

Mode 4: Movement of natural persons

- Similarly, the practice foreign doctors as GP are not allowed in Malaysia, however foreign specialists are allowed to practice at the private hospitals, provided they register with Malaysian Medical. Again, APHM is to set the qualification and type of specialties that can be imported (e.g. nuclear med, traumatology, brain surgery).

12. Profile of some of the Prominent Private Hospitals in Medical Tourism of Malaysia

i. Gleneagles Intan Medical Centre

Gleneagles Intan Medical Centre located at Ampang comprises a 330- bed tertiary care hospital and a separate Medical Office Building which hosts 110 specialists of various specialties and sub-specialties for outpatient services. The patients are regarded as important individuals and each patient's needs, well being and comfort is their priority. Their specialties are: maxillofacial/facial cosmetic surgery, neurosurgery, plastic & reconstructive surgery and many more.

ii. KPJ AmpangPuteri Specialist Hospital

Ampang Puteri Specialist Hospital (APSH) is owned and managed by KPJ Healthcare Bhd. APSH is one of the most modern of its kind in Malaysia and South East Asia and obtained MSQH accreditation and MS-ISO 9001:2000. The hospital is surrounded by the lush greenery of the Ulu Kelang hills from afar providing patients an ideal, interactive and serene environment in which to recuperate. With 226 beds, both private and semi-private patients can enjoy the privacy and comfort managed by expert managerial and medical staff.

iii. National Heart Institute (IJN)

IJN was corporatized and established as a specialist entity committed to delivering the most advanced standards in cardiovascular and thoracic medicine for adult and paediatric heart patients in August 1992. It is an integrated one-stop centre offering comprehensive cardiac services under one roof. They have an experienced and committed team of specialist cardiologists, surgeons, anaesthesiologists, paramedics and clinical support staff to deliver the highest standards of clinical excellence. The 390-bedded institute performs angiogram and angioplasty procedures via radial artery, implantation of AICDs, bypass surgery on "awake patients and many more.

iv. Sime Darby Medical Centre Subang Jaya

Sime Darby Medical Centre Subang Jaya (SDMSJ) was opened in 1985. This award winning tertiary-care hospital has 393 beds, 93 clinic suites and 14 operating theatres. Majority of the 160 specialists were trained in UK, Australia or the US and many international patients from various countries seek treatment at SDMC. The hospital's International Patient Services Centre serves the special needs of medical travellers. SDMC offers complimentary interpretation and translation services to

foreignpatients upon request. It has obtained JCI accreditation, ISO 9001-2000, MSQH accreditation etc.

v. Sunway Medical Centre

Sunway Medical Centre (SUNMED) is a private hospital offering specialized tertiary healthcare services located within a well-developed township in Selangor. The Medical complex is an eight-level building with 240 beds and 45 specialist consultation suites. They provide professional clinical expertise and patients will have access to a wide range of inpatient and outpatient specialised healthcare facilities, health promotion programmes and 24 hour emergency services.

vi. Loh Guan Lye Specialists Centre

Established in 1975, is a 265 bedded private hospital. It is located in the heart of Georgetown, Penang, about 30 minutes from the Penang International Airport and 20 minutes from the pristine beaches at Batu Ferringhi. LSC is a "One-Stop" Medical Centre providing a very comprehensive and up-to date quality healthcare services and facilities ranging from prevention, diagnosis and treatment of a wide range of diseases and medical conditions to aesthetic procedures and health screening packages in a warm and caring environment ideal for rest and recovery.

vii. Columbia Asia Hospital, Seremban

Columbia Asia Hospital Seremban is a premier specialist medical centre located within 5 minutes of town. In addition to 77 beds, the centre provides multidisciplinary healthcare services covering outpatient and inpatient specialist services, 24-hour clinic and emergency services utilizing the latest, effective and affordable medical technology. The centre is well-prepared to deliver on its motto - Columbia Cares.

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APPENDIXES

Malaysian Healthcare Facilities in 2009

Public Healthcare Facilities		2009	
*Hospitals (MOH and Non MOH)		138	
*Special Medical Institutions		6	
Health Clinics		808	
Mobile Health Clinics		196	
Dental Clinics		2,952	
Community Clinics (Klinik Desa)		1,920	
*A total of 41,249 beds			
Private Healthcare Facilities		2009	
Licensed	Specialist Hospitals	187 (11,689)	
	Maternity Homes	12 (102 beds)	
	Nursing Homes	12 (273 beds)	
	Hospice	3 (28 beds)	
	Ambulatory Care Centre	21 (108 beds)	
	Blood Bank	5	
	Haemodialysis Centre	75 (848 beds)	
	Community Mental Health Centre	1	
	Registered	General Practitioners	6,307
		Dental Clinics	1,484

List of Universities and Colleges with Medical Faculty

(Some offer two programmes per year)

- 1) University Malaya (UM)
- 2) Universiti Kebangsaan Malaysia (UKM)
- 3) Universiti Sains Malaysia (USM)
- 4) Universiti Putra Malaysia (UPM)
- 5) UiTM
- 6) University Sains Islam Malaysia (USIM)
- 7) Universiti Darul Iman
- 8) Universiti Sarawak Malaysia (UNIMAS)
- 9) Universiti Sabah
- 10) Universiti Malaysia Kelantan
- 11) Melaka-Manipal Medical College: 2 programmes
- 12) Monash University Malaysia
- 13) International Medical University (IMU)
- 14) SEGI University College
- 15) Allianze College of Medical Sciences (ACMS): 2 programmes
- 16) Penang Medical College (PMC)
- 17) Mahsa University College
- 18) Masterskills University College of Health Sciences
- 19) Royal College of Medicine Perak (UNIKL) : 2 programmes
- 20) Universiti Islam Antarabangsa (UIA)
- 21) Newcastle University Malaysia
- 22) Perdana University : Graduate Medical School
- 23) Perdana University : RCSI
- 24) Inssaniah University College
- 25) Quest International University Perak (starting soon)
- 26) RCSI Trengganu (starting 2012)
- 27) KPJ University College (starting soon)
- 28) Cyberjaya School of Medical Sciences
- 29) AIMST
- 30) Taylor's University College
- 31) Management and Science University (MSU)
- 32) University Tunku Abdul Rahman (UTAR)
- 33) University College Sedaya International (UCSI)
- 34) Lincoln University College(started in 2011)
- 35) University Pertahanan Nasional Malaysia (started in 2009)

Hospitals Participating In Healthcare Tourism In Malaysia

1. Assunta Hospital
2. Bains Physio Columbia Asia Hospital (Bkt Rimau)
3. Dental Pro Group
4. Fatimah Hospital
5. Gleneagles Intan Medical Centre
6. Gleneagles Medical Centre
7. Global Doctors Specialist Centre
8. Golden Horses Health Sanctuary
9. How□s Orthodontics & Dental Surgery
10. HSC Medical Centre
11. iHeal Medical Centre
12. International Specialist Eye Centre(ISEC)
13. Island Hospital
14. KPJ Ampang Puteri Specialist Hospital
15. KPJ Damansara Specialist Hospital
16. KPJ Ipoh Specialist Hospital
17. KPJ Johor Specialist Hospital
18. KPJ Kajang Specialist Hospital
19. KPJ Penang Specialist Hospital
20. KPJ Selangor Medical Centre (S'gor Specialist Hospital)
21. Lam Wah Ee Hospital
22. Lifecare Diagnostic Medical Centre
23. Loh Guan Lye Specialists Centre
24. Mahkota Medical Centre
25. Mawar Renal Medical Centre
26. Mount Miriam Hospital
27. National Heart Institute
28. Pantai Hospital Ayer Keroh
29. Pantai Hospital Ipoh
30. Pantai Hospital Penang
31. Pantai Medical Centre Sdn Bhd
32. (Pantai Hosptal K. Lumpur) Penang Adventist
33. Hospital Prince Court
34. Medical Centre
35. Pusat Tawakal
36. Hospital Puteri Specialist
37. Hospital (Johor) Putra Specialist

38. Hospital Sabah
39. Medical Centre Sentosa
40. Medical Centre Sime Darby Medical
41. Centre Subang Jaya
42. Sunway Medical Centre Taman Desa
43. Medical Centre Timberland
44. Medical Centre Tropicana
45. Medical Centre Tun Hussein Onn
46. National Eye Hospital Tung Shin Hospital
47. UM Specialist Centre (UMSC)
48. NCI Hospital
49. Normah Medical Specialist Centre